TRUIST

To: McKnight Brain Research Foundation Trustees
Angelika Schlanger, PhD, Executive Director

From: Melanie Cianciotto

Subject: MBRF Meeting May 3 – 5, 2023

Date: April 21, 2023

Enclosed you will find the meeting package for the May 3, 2023, Trustees' meeting in Birmingham, Alabama. Included in this package for your review are the following items: the agenda, final draft of the minutes of the February 16, 2023, Trustees' meeting, minimum distribution calculation and other supporting materials for the agenda items.

The meeting will be held at the Hilton Birmingham Downtown at UAB. The hotel is located at 808 20th Street South.

Reservations have been made at the Hilton Birmingham Downtown UAB. Following are the room confirmation numbers:

Dr. Patricia Boyle	3363736001
Dr. John Brady	3356135273
Dr. Allison Brashear	3354831898
Dr. Michael Dockery	3356116439
Dr. Madhav Thambisetty	3356383245
Dr. Angelika Schlanger	3356258377
Ms. Valerie Patmintra	3362054978

I look forward to seeing you in Birmingham!

MCKNIGHT BRAIN RESEARCH FOUNDATION (MBRF)
Meeting of the Board of Trustees
Wednesday, May 3, 2023
12:00 pm CT – 5:00 pm CT
Montgomery Boardroom
Hilton Birmingham Downtown at UAB
808 20th Street South | Birmingham, Alabama 35205

12:00 pm	1. Call to Order /Welcome/Lunch Guests: Dr. Ron Lazar and Dr. Kristina Visscher	Dr. Mike Dockery
1:00 pm	2. Approval of Minutes	Dr. Mike Dockery
ACTION	a. February 16, 2023	
ACTION	b. April 17, 2023	
1:15 pm	3. Chair's Report a. Cognitive Aging Summit IV b. MBI Annual Report – Follow Up Items c. Conversations with MBI Directors d. Update on Legal Counsel e. Recognition for Completion of Service for Dr. Richard Isaacson f. Society for Neuroscience Poster Session	Dr. Mike Dockery
ACTION	g. Executive Director Performance Goals	
1:45 pm	4. Executive Director's Report	Dr. Angelika Schlanger
2:15 pm	5. Corporate Trustee's Report a. Minimum Distribution Report b. Gifts and Grants Report c. Travel Award Report d. Operating Expense Report e. Proposed 7/1/23 – 6/30/24 Operating Budget	Ms. Melanie Cianciotto
2:45 pm	6. Investment Review	Mr. Mike Hill
3:15 pm	Break	
3:30 pm	7. Committee Reports	
	a. Membership and Governance i. Updated Committee Activity Timeline ii. March 31, 2023 Minutes iii. Interviews of Trustee Candidates iv. Timeline for Recruitment of an Additional (Third) Trustee	Dr. Mike Dockery
ACTION	v. Election of MBRF Chair and Vice Chair	Ms. Melanie Cianciotto

b. Finance Committee — Dr. Allison Brashear
- i. Updated Committee Activity Timeline
- **ACTION** ii. Cognitive Aging Summit IV Budget

c. Education Committee — Dr. John Brady
- i. Updated Committee Activity Timeline
- ii. Update on Education Initiative — Dr. John Brady
  - Primary Care Providers — Dr. Angelika Schlanger
  - Consumers

d. Research Committee — Dr. Madhav Thambisetty
- i. Updated Committee Activity Timeline
- ii. March 28, 2023 Minutes
- iii. 2023 Pilot Grants
- iv. McKnight Clinical Translational Research Scholarships
- v. McKnight Innovator Awards

e. Communications Committee — Dr. Patricia Boyle
- i. Updated Committee Activity Timeline
- ii. April 19, 2023 Minutes
- iii. 2023 Q1 Website and Media Tracking Report — Ms. Valerie Patmintra
- iv. MBRF Website Navigation Updates
- v. May's Mental Health Awareness Social Campaign
- **ACTION** vi. Proposals and Budget levels submitted in response to the 2023-2024 Communications Plan RFP

8. Future Meetings and Events (Attachment 1) — Dr. Mike Dockery

9. Other Business — Dr. Mike Dockery

5:00 pm

ACTION 10. Adjournment — Dr. Mike Dockery

Attachment 1

MCKNIGHT BRAIN RESEARCH FOUNDATION (MBRF)
FUTURE MEETINGS AND EVENTS

July 23 – 24, 2023	**Trustees' Meeting** **Dallas, Texas**
July 23, 2023	7:00 PM – Dinner
July 24, 2023	8:00 AM – 3:00 PM Trustees' Meeting
October 23 – 24, 2023	**Trustees' Meeting** **TBD**
October 23, 2023	7:00 PM – Dinner
October 24, 2023	8:00 AM – 3:00 PM Trustees' Meeting
TBD November, 2023	**Society for Neuroscience Poster Session**
March 20-21, 2024	**Cognitive Aging Summit IV** **Bethesda, MD**

MINUTES
MCKNIGHT BRAIN RESEARCH FOUNDATION
BOARD OF TRUSTEES MEETING
Hyatt Regency Orlando International Airport
February 16, 2023

The Trustees' meeting of the McKnight Brain Research Foundation (MBRF) was called to order at 8:15 a.m. EDT on February 16, 2023.

The following members were present:
Dr. Michael Dockery, Chair
Dr. Madhav Thambisetty, Vice Chair (via WebEx)
Dr. Patricia A. Boyle, Trustee
Dr. Allison Brashear, Trustee
Dr. John Brady, Trustee
Dr. Richard Isaacson, Trustee
Dr. Susan Pekarske, Trustee (via WebEx)
Dr. J. Lee Dockery, Chair Emeritus (via WebEx)
Ms. Melanie Cianciotto, Corporate Trustee,
Truist Foundations and Endowments Specialty Practice

Others attending:
Mr. Henry H. Raattama, Legal Counsel
Mr. Mike Hill, Truist Foundations and Endowments Specialty Practice (via WebEx)
Dr. Angelika Schlanger, Executive Director
Ms. Valerie Patmintra, Senior Communications Advisor

1. Approval of Minutes

The minutes of the October 27, 2022, Board of Trustees Meeting of the McKnight Brain Research Foundation were reviewed and approved as amended (Attachment 1). The changes are:

Item #2, third paragraph, add "virtually" after met
Item #7, third sentence, replace "this" with "analysis"
Item #7, fourth sentence, replace "this into" with "the"
Action Item 19, remove "etc."

Action Item 1: The minutes of the October 27, 2022, Board of Trustees Meeting were approved as amended (Attachment 1).

2. Chair's Report

Dr. Dockery provided an update on the Leadership Council and Cognitive Aging and Memory Interventional (CAMI) Core. The Leadership Council membership is made up of the head of the MBIs and one or two additional representatives from each Institution. The UF MBI had multiple members and the hope is the UF membership will be consolidated now that Dr. Bizon has been named the Director. Additionally, five pilot grant applications submitted through the CAMI Core were shared with the MBRF the week prior, and these applications were originally submitted to the CAMI Core in July. It is hoped that the CAMI Core – to include a representative leader from each MBI – will be reconstituted.

The agenda for the Inter-Institutional Meeting has been shared in the Meeting packet, and the MBRF Vice Chair Madhav Thambisetty has been invited to join the closing panel.

Dr. Dockery thanked the trustees for submitting their self-assessments and sharing input with him during one-on-one conversations regarding the MBRF.

The trustees discussed the letter from Dr. Henri Ford, Dean and Chief Academic Officer, University of Miami Leonard M. Miller School of Medicine, outlining the transition of the EMBI Executive Leadership from Dr. Ralph Sacco to Dr. Tatjana Rundek effective immediately. Dr. Schlanger will draft a response from the Trustees expressing excitement and support for the decision to name Dr. Rundek as the Director of the EMBI with the subsequent appointment of an Associate Director.

Dr. Jennifer Bizon has been named the Director of the Evelyn F. and William L. McKnight Brain Institute at the University of Florida. The trustees support Dr. Bizon, and this decision, and will monitor to see how leadership develops.

The Cognitive Aging Summit IV will be held in March 2024, in the DC/Bethesda area. Another planning meeting is scheduled to firm up the meeting details, agenda, cost, etc. Once received, the budget will be reviewed by the Finance Committee and if approval is recommended, shared with the full Board for review and approval.

3. Executive Director's Report

Dr. Schlanger highlighted MBRF-related accomplishments since the last trustees meeting, including the conclusion of the SCP study for the Primary Care Provider (PCP) initiative, the launch of planning for the next Cognitive Aging Summit, and development of proposed plans for the MBRF's Communications Strategy and Budget, which would begin next fiscal year. She thanked the trustees for their continued engagement and input, as well as the additional support from Valerie.

Dr. Schlanger surveyed the trustees regarding their interest in meeting the Innovator Award Recipients from this and last year's grant cycles through a dedicated virtual meet and greet. The Trustees suggested the idea of inviting the four winners to the Inter-Institutional Meeting, which Dr. Schlanger said she would do on behalf of the MBRF.

Dr. Schlanger shared an update on the charity registration requirements related to an online donate button (Attachment 2). Each state has different requirements, and the law is not settled yet. The best practice advice recommended in the memo by Hank Raattama, MBRF Legal Counsel, was to start by registering in Florida and Alabama. However, considerations of registering in additional states would have to be made on a case-by-case basis, requiring regular monitoring of donations. Dr. Schlanger share the operational considerations and estimated costs of adding a donate button to the web site and recommended that a donate button should be considered in the future as part of a comprehensive fundraising strategy with dedicated staff that would drive donors to the MBRF web site. After discussion, the trustees decided to table adding a donate button to the MBRF website.

Dr. Schlanger shared the Proposed Membership Association and Budget (Attachment 3) with the trustees. She shared that joining Grantmakers in Aging (GIA) could help the MBRF build relationships with like-minded organizations to advance strategic priorities and to facilitate the sharing of best practices. The trustees approved the proposed budget of $7,000 for the Grantmakers in Aging one-year membership and for the estimated costs of attending the 2023 Conference.

Action Item 2: The trustees decided to table adding a donate button to the MBRF website.

Action Item 3: The trustees approved the proposed budget of $7,000 for the Grantmakers in Aging Annual Membership and 2023 Conference.

4. Investment Review

Mr. Hill presented the investment review and commented on key economic and investment factors through December 31, 2022 (Attachment 4).

A. Market Environment

- We expect the volatility in the equity market to continue in 2023. We maintain our long-standing bias to US equities and have no direct international emerging market exposure.

- The 3-month/10 year US Treasury yield curve and the 2 year/10 year US Treasury yield curve have both inverted. These are typically strong indicators of recession. These along with a number of other indicators are now signaling higher probability of a recession in 2023. The labor market remains strong, but we will likely start to see the lagged effect of Fed tightening policy on unemployment and weekly jobs claims going forward.

B. Portfolio Review

Asset Allocation: The asset classes of the investments are within the portfolio of the MBRF remain within the guidelines established by the trustees in the Investment Policy Statement of the Foundation.

Portfolio Performance: For the one-year period ending December 31, 2022, the total return for the portfolio was minus 14.74% versus minus 15.26% for the Investment Policy Statement.

5. Communications Committee

Dr. Isaacson provided the trustees with the updated Communications Committee Activity Timeline (Attachment 5). Ms. Patmintra shared the Media Tracking Report (Attachment 6) for information. Ms. Patmintra shared the 2023 – 2024 Communications Planning Goals and Budget Outline (Attachment 7). The MBRF currently engages Ms. Patmintra as its communications consultant, and she works with a web agency – WhereoWare - to make small social media pushes a couple of times a year. The proposed 2023-2024 plan and budget increases would enable the hiring of a full-service agency to develop and implement a comprehensive, year-long media campaign that would promote key messages to the public and drive visibility of and traffic to the MBRF's web site. Based on the groundwork already laid with the existing website, newsletter and social media platforms, in order to take the communications initiative to the next level, she shared that now is a good time to consider launching a three-year communications plan in partnership with a media agency partner.

6. SCP – Final Presentation on Primary Care Provider Initiative Landscape Analysis and Scoping Document

Mr. John Beilenson from SCP joined the trustees to provide the preliminary findings of the Educating & Empowering Primary Care Providers Around Cognitive Assessment & Intervention (Attachment 8). Mr. Beilenson summarized the objectives of the scoping project, the research process, what was learned and four education initiative options for the MBRF to consider. He emphasized that the MBRF currently has limited dissemination capacity. To get the impact the MBRF is seeking, it will need partners in community education and dementia-care models. As such, strategies one and two involve developing partnerships with existing consumer wellness initiatives and with existed integrated care models, respectively. Strategy three centers around a public information campaign. Strategy four recommends partnerships to advance an advocacy initiative to develop CPT codes that would enable PCPs to received reimbursement for proactively managing and assessing the cognitive aging of their patients.

7. Reflections on Proposed Communications Budget Levels and Outcomes

Mr. Beilenson and Ms. Patmintra provided their thoughts on the proposed Communications Budget Levels and Outcome (Attachment 9).

Mr. Beilenson feels the investment levels are robust and will influence a larger consumer audience and Primary Care providers (PCPs) to pay more attention to brain health. The higher budget levels will make an impact on consumers but will not be transformative. Therefore, he suggested focusing the budget to advance the strategic goals of the foundation, such as investing in the education of PCPs.

Ms. Patmintra reminded the trustees that the communications pillar is not an initiative that will exist in a silo and will be integrated with our PCP education initiative. The priorities of the communications pillar are to build awareness, get education information into the hands of targeted consumers, and to change people's behavior.

8. Committee Reports

A. Education Committee

Dr. John Brady provided the trustees with an updated Education Committee Activity Timeline (Attachment 10). Dr. Brady provided the trustees with the MBRF PCP Education Initiative – Proposed Next Steps document (Attachment 11), which included three recommendations that Dr. Schlanger summarized for the Trustees. After a lengthy discussion, the trustees voted to pursue strategies #1 (Consumer Health/Consumer Education Initiative) and #2 (Primary Care Education and Practice Models/Approaches) from the SCP Scoping Document and to incorporate strategy #3 (PCP Public Information Campaign) within the Communications plan. Dr. Isaacson abstained from voting.

Action Item 4: The trustees voted to pursue strategies #1 (Consumer Health/Consumer Education Initiative) and #2 (Primary Care Education and Practice Models/Approaches) from the SCP Scoping Document and to incorporate strategy #3 (PCP Public Information Campaign) within the Communications plan. Dr. Isaacson abstained from voting.

B. Communications Committee Continued

The trustees discussed the 2023 – 2024 Communications Planning Goals and Budget Outline at length. A motion was made to seek RFPs from communications agencies that would include a 3-year communications plan at the $400,000 and $650,000 budget level. The motion passed. Ms. Patmintra and Dr. Schlanger will draft the RFP and share it with the Communications committee for their review and approval before sending it out to several agencies that are highly recommended by trusted colleagues and with whom Ms. Patmintra and Dr. Schlanger have worked in the past.

Action Item 5: The trustees approved sending out an RFP to communications agencies that would include a 3-year communications plan at the $400,000 and $650,000 budget level.

Action Item 6: Ms. Patmintra and Dr. Schlanger will draft the RFP and share it with the Communications committee for their review and approval.

Dr. Isaacson shared the McKnightBrain.org Navigation document (Attachment 12) for information. The committee will evaluate how the design change impacts the site. This will be facilitated by a user-testing strategy that will be conducted by WhereoWare and Ms. Patmintra.

Dr. Isaacson shared the Recommendations for Repurposing the Brain Mind Video Series for use on the McKnightbrain.org (Attachment 13). Dr. Isaacson has offered to speak to Brain Mind about a licensing arrangement that will allow the MBRF to add its logo and make slight modifications to ten of the videos to be featured on McKnightbrain.org. The $40,000 discretionary communications budget that was approved at the October 28, 2021, Trustees' meeting will be used to repurpose the videos.

C. Membership and Governance

Dr. Pekarske provided the trustees with the updated Membership and Governance Activity Timeline (Attachment 14). The committee met on January 30, 2023, to review the twelve nominees/candidates suggested by the Trustees and ranked the top four in each discipline/area of expertise. The committee recommends the top two candidates in each discipline/area of expertise for consideration as Trustee candidates for further vetting and outreach. If one of the candidates in the discipline is not able to serve as a Trustee, it is recommended that the other candidate be pursued. The trustees accepted the recommendation of the committee that included the top two candidates for each area of expertise. Dr. Lee Dockery will reach out to Drs. Dubal, Hamilton, Brangman and/or Boyd and then report back to the committee on their interest.

Action Item 7: Dr. Lee Dockery will reach out to Drs. Dubal, Hamilton, Brangman and/or Boyd and then report back to the committee on their interest.

D. Finance Committee

Dr. Brashear provided the trustees with the updated Finance Committee Activity Timeline (Attachment 15). The committee met on January 24, 2023, with the primary purpose of reviewing the financial information provided in the MBI Annual Reports (Attachment).

The committee also reviewed the proposal for funding the Evelyn F. McKnight Clinical Translational Scholars Dinner at the 2023 AAN Annual Meeting. The committee recommends funding the dinner at the proposed cost of $4,400. The trustees accepted the recommendation of the committee.

It is time to schedule the next installment of Investment Training. Dr. Dockery will reach out to Mr. Hill to discuss.

E. Research Committee

Dr. Thambisetty provided the trustees with the updated Research Committee Activity Timeline (Attachment 16). The committee met January 20, 2023.

MBRF Innovator Awards in Cognitive Aging – Dr. Thambisetty shared the draft 2023 Guidelines, Application, and the Institutional Commitment form (Attachment 17) with the suggested addition of item 8, "Describe overall annual research funding for the department that the investigator is primarily affiliated with." He also shared updates to next year's review process, which would include a full two weeks for MBRF's review of the proposed slate; adding more clinically-focused reviewers to the review committee; and separating out the ranking process into two categories—basic science and clinical translational research. All of these changes were approved by the trustees.

Action Item 8: the trustees approved the update to the Innovator Awards Institutional Commitment form, the Guidelines and Application.

Action Item 9: the trustees approved the changes to the Innovator Awards application review process.

MBRF Clinical Translational Research Scholarships in Cognitive Aging and Age-Related Memory Loss – Dr. Thambisetty shared the marketing plan for the 2023 cycle.

FNIH/NIA 2022 Research Partnership in Cognitive Aging – Dr. Thambisetty shared the annual grant report prepared by the FNIH/NIA for information.

9. Corporate Trustee's Report

A. The trustees reviewed the projected minimum distribution calculation for information (Attachment 18).

B. The trustees reviewed the Gift & Grants Report for information (Attachment 19).

C. The trustees reviewed the Travel Award Report for information (Attachment 20).

D. Ms. Cianciotto shared the 2022 year-to-date Operating Expenses Report with the trustees (Attachment 21).

Action Item 10: The trustees reviewed, for information, the projected minimum distribution calculation (Attachment 18).

Action Item 11: The trustees reviewed, for information, the Gifts and Grants Report (Attachment 19).

Action Item 12: The trustees reviewed, for information, the Travel Award Report (Attachment 20)

Action Item 13: The trustees reviewed, for information, the Operating Expenses Report (Attachment 21).

10. Review of the Annual Reports of the McKnight Brain Institutes

a. University of Alabama at Birmingham

The trustees reviewed the annual report concerning the Evelyn F. McKnight Brain Institute at the University of Alabama at Birmingham (Attachment 22). The report was well organized and provided a good summary of the progress made over the last year. The trustees would like to request that the institute provide an organizational chart of the administrative structure of the EMBI, as well as an update on the new Dean of the Medical School when hired. The trustees would like to request biographical sketches of Dr. Karen Gamble and Dr. Michelle Gray, an update on the research activity of Dr. Junghee Lee, and an update on the advisory committee for the EMBI.

Action Item 14: Send thank you letter to Mr. Tom Brannon expressing the trustees' appreciation for the report and requesting the organizational chart of the administrative structure of the EMBI, an update on the new Dean of the Medical School when hired, biographical sketches of Dr. Karen Gamble and Dr. Michelle Gray, an update on the research activity of Dr. Junghee Lee, and an update on the advisory committee for the EMBI.

b. University of Arizona

The trustees reviewed the annual report concerning the Evelyn F. McKnight Brain Institute at the University of Arizona (Attachment 23). The report was well organized and the trustees were impressed with the many achievements of the EMBI during the year. The trustees also congratulate the University of Arizona on the progress made during the year to meet the balance of the match requirement for the EMBI's endowment. The trustees would like to request an organizational chart of the administrative structure of the EMBI and the university's administration. The trustees would like an update on the associate director of the EMBI and the advisory committee and its role in the management of the EMBI.

Action Item 15: Send thank you letter to Dr. Carol Barnes expressing the trustees' appreciation for the report and requesting an organizational chart of the administrative structure of the EMBI and the university's administration, an update on the associate director of the EMBI and the advisory committee and its role in the management of the EMBI.

c. University of Florida

The trustees reviewed the annual report concerning the Evelyn F. and William L. McKnight Brain Institute at the University of Florida (Attachment 24). The report is a comprehensive overview of the productivity and impressive accomplishments of the MBI during 2022. The trustees would like to request an organizational chart of the administrative structure of the MBI and its relationship to the Fixel Institute. It would be helpful if the chart also reflected the differed geographic locations of the Center for Cognitive Aging and Memory Clinical Translational Research. The trustees would also like to request that future annual reports include reports from the Deans of the College of Medicine and the College of Public Health and Health Professions, and that the report follows the structure of the annual report templates.

Action Item 16: Send thank you letter to Dr. David Nelson expressing the trustees' appreciation for the report and requesting request an organizational chart of the administrative structure of the MBI and its relationship to the Fixel Institute. The chart should also reflect the differed geographic locations of the Center for Cognitive Aging and Memory Clinical Translational Research. The trustees would also like to request that future annual reports include reports from the Deans of the College of Medicine and the College of Public Health and Health Professions, and that the report follows the structure of the annual report templates.

d. University of Miami

The trustees reviewed the annual report concerning the Evelyn F. McKnight Brain Institute at the University of Miami (Attachment 25). The report is very well written and is a testament to the influence Dr. Ralph Sacco had on the EMBI. The trustees would like an update on Dr. Agudelo's new faculty appointment and clarification on whether his Evelyn F. McKnight Neurocognitive Scholarship funding will be applied to another scholar, given his recent NIH Diversity Award Supplement. The trustees would also like an update on the selection of the next Evelyn F. McKnight Neurocognitive Post-doctoral Fellow.

Action Item 17: Send thank you letter to Dr. Tatjana Rundek expressing the trustees' appreciation for the report and requesting an update on Dr. Agudelo's new faculty appointment and clarification on whether his Evelyn F. McKnight Neurocognitive Scholarship funding will be applied to another scholar, given his recent NIH Diversity Award Supplement and an update on the selection of the next Evelyn F. McKnight Neurocognitive Post-doctoral Fellow.

11. Future Meetings and Events

2023 Inter-Institutional Meeting

The 14th McKnight Brain Research Foundation Inter-Institutional Meeting will be hosted by the Evelyn F. McKnight Brain Institute at the University of Alabama May 3 -5, 2023. The trustees will arrive the morning of May 3, 2023, and the Trustees' Meeting will begin at 12:00 noon. The Inter-Institutional Meeting will begin with a reception on the evening of May 3, 2023, followed by scientific sessions on May 4 – 5, adjourning at noon on May 5, 2023.

July Trustees' Meeting

The trustees agreed to hold their summer Board of Trustees' meeting on July 24, 2023. The meeting will be held in Dallas, Texas. The trustees will meet for dinner on July 23, 2023, at 7:00 p.m. The trustees' meeting will begin at 8:00 a.m. on July 24, 2023, and conclude no later than 3:00 p.m.

October Trustees' Meeting

The trustees agreed to hold their fall Board of Trustees' meeting on October 24, 2023. The meeting details will be worked out at a later date.

10. Adjournment

There being no further business, the meeting was adjourned at 3:00 p.m. EDT.

Summary of Action Items:

Respectfully submitted,

Melanie A. Cianciotto
Truist Bank, Corporate Trustee

MINUTES
MCKNIGHT BRAIN RESEARCH FOUNDATION
BOARD OF TRUSTEES
Via WebEx
April 17, 2023

The Trustees' Meeting of the McKnight Brain Research Foundation (MBRF) was called to order at 7:15 p.m. EDT on April 17 2023.

The following members were present:
Dr. Michael Dockery, Chair
Dr. Madhav Thambisetty, Vice Chair
Dr. J. Lee Dockery, Chair Emeritus
Dr. John Brady, Trustee
Dr. Patricia Boyle, Trustee
Dr. Sue Pekarske, Trustee
Ms. Melanie Cianciotto, Trustee
Truist Foundations and Endowments Specialty Practice

The following members were absent:
Dr. Allison Brashear, Trustee

Others Attending:
Dr. Angelika Schlanger, Executive Director

1. Drs. Sharon Brangman and Roy Hamilton Interview Debrief

The trustees discussed the interviews with Drs. Sharon Brangman and Roy Hamilton that were held earlier this evening. The trustees feel the candidates would bring skill sets that would balance each other well as well as contribute to the MBRF. Dr. Thambisetty reminded the trustees that as the board grows the trustees need to be mindful of conflicts of interest.

After discussion, a motion was made to extend an offer to Dr. Sharon Brangman to join the MBRF Board of Trustees. The motion passed unanimously. A second motion was made to extend an offer to Dr. Roy Hamilton to join the MBRF Board of Trustees. The motion passed unanimously.

Dr. Michael Dockery will inform Drs. Hamilton and Brangman of the trustees' decision.

Action Item: Dr. Michael Dockery will inform Drs. Brangman and Hamilton that the trustees' voted unanimously to invite them to accept a three-year term as a Trustees of the MBRF.

There being no further business, the conference call was adjourned at 8:05 p.m. EDT.

Respectfully submitted,

Melanie A. Cianciotto
Truist Bank, Corporate Trustee

4.17.2023
1st Draft 4.18.2023
2nd Draft 4.22.2023

McKNIGHT BRAIN
RESEARCH FOUNDATION
Preserving memory, enhancing life

March 1, 2023

Carol A. Barnes, PhD
Director, Evelyn F. McKnight Brain Institute
Evelyn F. McKnight Chair for Learning and Memory in Aging
University of Arizona Regents Professor
University of Arizona | PO Box 245115 | Tucson, AZ 85724

Dear Dr. Barnes,

At the February 16, 2023, meeting of the McKnight Brain Research Foundation (MBRF), the trustees reviewed the 2022 annual report submitted by the Evelyn F. McKnight Brain Institute (EMBI) at the University of Arizona (UA). The report was seen as a well-organized synopsis of the productivity of the EMBI. The trustees appreciate the role that UA played in hosting the first in-person Inter-Institutional meeting since the pandemic – it was a clear continuation of the high bar set in 2008 when UA hosted the first inter-institutional meeting. The trustees were impressed by your descriptions of the many research achievements at the EMBI in this first "post-pandemic" year and congratulate the eight investigators who received honors and awards this past year.

The trustees commend you on your success in receiving the renewal for the NIA Training Grant and for a favorable review with an outstanding priority score on the additional grant submission. It is impressive that these two awards and the others in your portfolio will support advancements in research on brain aging and cognition for the next five years. The trustees applaud your stimulating and collaborative leadership over many years, culminating in the receipt of the U19 grant and successful progress judged by the Program Officers at the NIA of the Precision Aging Network Project, at the end of its first year. Through this monumental effort, the scientific community is collectively inspired by the constellation of efforts and partnerships that are advancing this national initiative.

The trustees also noted the accelerated progress made this year to meet the balance of the match requirement for the EMBI's endowment. We are confident that with renewed fundraising efforts, the UA EMBI will be able to complete the match.

As a follow up to this letter, the trustees request an organizational chart of the EMBI to better understand the various roles and reporting structure between the EMBI and the University's administration. Additionally, the report does not mention the associate director of the EMBI or the advisory committee and its role in the management of the EMBI. The trustees will appreciate receiving additional information regarding these topics.

The trustees send their collective appreciation to you for your leadership and the tremendous efforts in continuing to advance the research initiatives of the MBRF, leading to the understanding and alleviation of age-related cognitive decline and memory loss.

Sincerely,

Angelika Schlanger

Angelika Schlanger, PhD
Executive Director

CC: Robert Robbins, MD, President, UA; J.P. Roczniak, President and CEO, UA Foundation; Peggy Nolty, Executive Assistant and Administrator, EMBI, Department of Psychology; MBRF Trustees

THE UNIVERSITY OF ARIZONA

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April 8, 2023

Angelika Schlanger, Ph.D.
Executive Director
The McKnight Brain Research Foundation
P.O. Box 620005
Orlando, FL 32862

Dear Dr. Schlanger:

Again, I apologize for the delay in getting the responses to your questions 'coordinated'. I have just now heard the details of how the EMBI interactions will work with the Administration, following EMBI's transfer from the Arizona Research Laboratories (under what was originally the Vice President for Research's [VPR] Office) to the Psychology Department that is in the College of Science.

With respect to the University Administration and the EMBI, my FTE (9-month salary) will come through the College of Science, and my Administrative Supplement to that salary for being Director of the EMBI will come from the Office of Research, Innovation and Impact (RII), which was formerly the VPR's office. There are, therefore, two main reporting lines between the EMBI and the UA Administration. One through the Head of RII, Dr. Betsy Cantwell, and the other through the Dean of the College of Science, Dr. Carmala Garzione.

Although I did not 'mention' the role of the Associate Director of the EMBI in my report, I did include her in several of the highlights of the Affiliate Faculty's accomplishments. With respect to her role as Associate Director of EMBI, she performs two functions: she actively participates in the Leadership Council zoom meeting discussions, and in the planning and execution of the McKnight Inter-Institutional meeting in Tucson. As Head of the Department of Psychology, many of Lee Ryan's department faculty are Affiliate Faculty of the EMBI, which she encourages.

With respect to your question about the Tucson EMBI External Advisory Committee, their role has 'lessened' over the years for several reasons. When I was setting up the Institute in 2006, the $10,000M gift was expendable (it was a requirement of the UA match dollars that the $1M match be spent each year), this Committee was extremely important for guidance and advice on these large expenditures and investments in the research of colleagues that I was able to make. For example, the building out of the McKnight Cognitive Aging Laboratory, and recruitment of Gene Alexander to the University of Arizona, was thoroughly vetted by this Committee. His recruitment was obviously a great advantage both to cognitive aging research at the University of Arizona, but also Gene has played an incredibly important role as a collaborative colleague to all the other McKnight Institutes. He was pivotal to the development of the imaging and MBAR cores across Institutions.

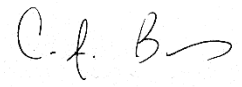
After the depletion of the first gift, and the award of the permanent endowment (the second gift, where neither the gift nor the match is expendable), the interest available to fund the EMBI has been much more modest. During the past several years I have used these funds to support the development of the large U19 Precision Aging Network grant, and to support pilot work to bolster the competitiveness of the three other RO1s on brain aging and memory that I have recently submitted (two are now awarded, another is going to be awarded in the next months). For this, I really did not require regular meetings of my Scientific Advisory Committee. Additionally, during the past several years two of my Committee Members have become emeritus (although still active), including Leslie Tolbert and Naomi Rance. Another one of the members has now moved away from the C-Path Institute, and rotated off the committee. Finally, sadly, Geoff Ahern passed away last year unexpectedly. Eric Reiman and my emeritus members remain, but I am currently rethinking how to structure this advisory group. I really depend on Reiman for his experience and wise advice, and will definitely want to include him in some way going forward.

Because of the comparatively small size of the funds coming to the EMBI yearly, I intend to invest these funds primarily in projects that are collaborative with my laboratory and those that support innovative experiments that will support the renewal of the Precision Aging Network, although I have and will continue to support Affiliate Faculty who need bridging funds for graduate students or post docs in their laboratories. In summary, I am considering engaging experts who can advise me on specific scientific or administrative questions as they arise, which will depend on the situation. These individuals may include my Associate Director, other McKnight Institute faculty or other trusted scientific colleagues, rather than a fixed Advisory Committee. I believe that this is a natural evolution of my Institute – since the pinnacle of the achievement of the Tucson EMBI will likely be the contributions I make through the Precision Aging Network, and the other basic science experiments I continue to conduct.

I hope these answers to your questions clarify the remaining issues the Trustees have about my yearly report.

Additionally, I greatly appreciate the kind words from the Trustees concerning the productivity of the Tucson EMBI – they are an enthusiastic group, and one that is truly very focused on understanding the normatively aging brain, the resulting impact on cognition, and the ways in which quality of life of older individuals can be optimized.

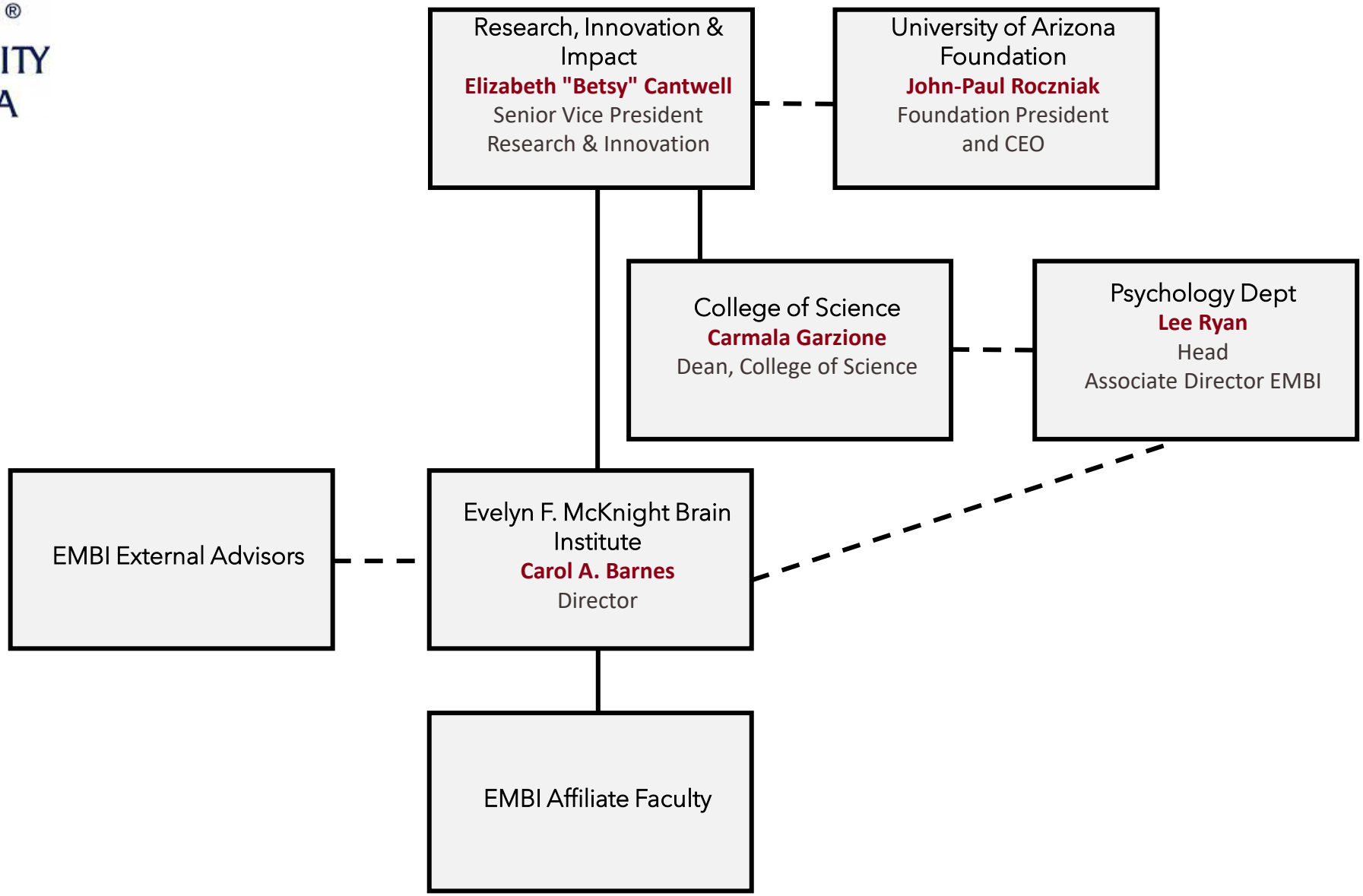
Sincerely,



C.A. Barnes, Ph.D.
Regents' Professor, Psychology, Neurology and Neuroscience
Evelyn F. McKnight Chair for Learning and Memory in Aging
Director, Evelyn F. McKnight Brain Institute
Director, Division of Neural Systems, Memory, and Aging

THE UNIVERSITY OF ARIZONA

Organizational Chart



McKNIGHT BRAIN
RESEARCH FOUNDATION
Preserving memory, enhancing life

March 1, 2023

Tom Brannan
Vice President for Development and Alumni
The University of Alabama at Birmingham
AB 1264 1720 2nd Ave. S | Birmingham, AL 35294-0112

Dear Mr. Brannan,

At the February 16, 2023 meeting of the McKnight Brain Research Foundation (MBRF), the trustees reviewed the 2022 annual report submitted by the Evelyn F. McKnight Brain Institute (EMBI) at the University of Alabama (UAB). The report was seen as a well-organized synopsis of the productivity of the EMBI. The trustees are pleased to see the EMBI's continued growth and increasing focus on cognitive aging, which is all the more impressive coming out of the pandemic. The report mentioned numerous collaborations and publications which demonstrate the continued productivity of the Institute.

The trustees were pleased to learn about the progress related to the Brain Health Advocacy Mission (BHAM) led by Dr. Ron Lazar and about Dr. Kristina Visscher's research award from the National Eye Institute and the NIH. The report outlined several notable and productive partnerships with investigators from other EMBIs, including Dr. Visscher's continued leadership of the McKnight Brain Aging Research (MBAR) project, and Dr. Lazar's innovative collaboration with the University of Miami EMBI's Dr. Michael Yung-Shun Wang. The trustees were also impressed with the EMBI's focused efforts to address health inequities with research initiatives such as Dr. Lazar's BHAM, Dr. George Howard's "REGARDS" study, and Dr. Michael Crowe's Puerto Rican Elderly Health Conditions (PREHCO) study.

As a follow-up to this letter, the trustees request some information, including an organizational chart of the administrative structure of the EMBI. The trustees were surprised to learn Dr. Selwyn Vickers is no longer Dean of the Medical School and look forward to hearing an update about the new Dean of the Medical School when hired.

The report mentions that Dr. Karen Gamble has been appointed the Kinney Endowed Chair in Geriatric Psychiatry replacing Dr. Adrienne Lahti. It is also noted that Dr. Michelle Gray has been appointed to the Lowder Endowed Professorship in Neuroscience. Please share biographical sketches of Dr. Gray and Dr. Gamble to inform the trustees about their background and research interests. The trustees also seek an update on the research efforts of Dr. Junghee Lee, the Geropsychiatry Research Chair, who is not listed on the faculty roster of the EMBI. Finally, please share an update on the advisory committee for the EMBI, as its activities this past year were not mentioned in the report.

The trustees send their collective appreciation to you for your leadership and the tremendous efforts in continuing to advance the research initiatives of the MBRF, leading to the understanding and alleviation of age-related cognitive decline and memory loss.

Sincerely,

Angelika Schlanger

Angelika Schlanger

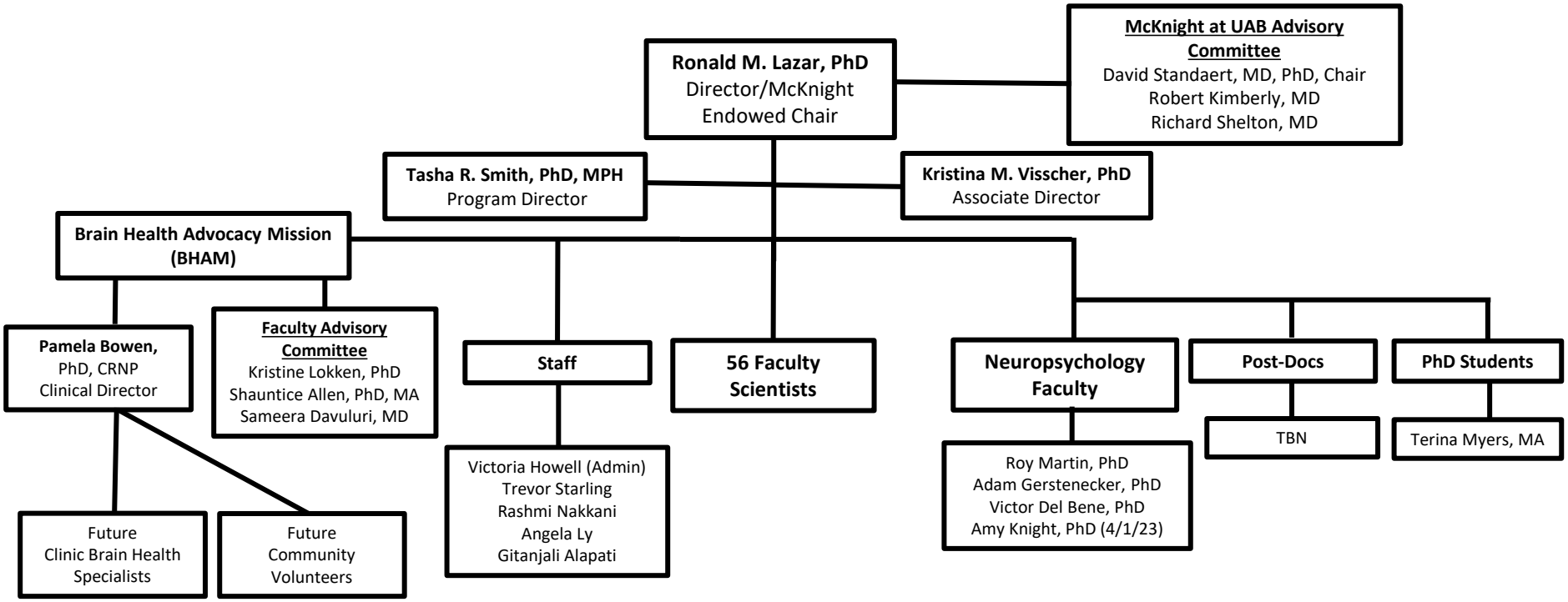
Executive Director

CC: Dr. Ronald M. Lazar; Dr. Ray L. Watts; Dr. Kristina Visscher; Dr. David G. Standaert; MBRF Trustees

The Evelyn F. McKnight Brain Institute at UAB

Organizational Chart

March 21, 2023



Requested Biographies by MBRF:

Dr. Anupam Agarwal is Senior Vice President for Medicine and Dean, Heersink School of Medicine at the University of Alabama at Birmingham (UAB). He served as Executive Vice Dean for the Heeersink School of Medicine (2014-2022) and served as the Director for the Division of Nephrology from Jan 1, 2008 to Sept 30, 2021. He also serves as the Program Director of the NIH/NIDDK funded O'Brien Center for Acute Kidney Injury Research. He has graduate faculty status in the Departments of Biochemistry and Molecular Genetics, Pathology and Cell, Developmental and Integrative Biology at UAB.

Dr. Agarwal has an active role in clinical medicine, teaching, research and administration. He is intensively involved in the teaching of medical students, internal medicine house staff and nephrology fellows and has been a recipient of Outstanding Teaching Awards from the Department of Medicine at the University of Florida (2003) as well as at UAB (2005, 2007).

Dr. Agarwal's research program has provided critical insights regarding the protective nature and significance of heme oxygenase-1 (HO-1) in vascular and renal inflammation, and the molecular regulation of the human HO-1 gene. In collaboration with Dr. James George, his laboratory is also studying macrophage subpopulations in the kidney during acute kidney injury. Through VA funding, his laboratory is also exploring the mechanisms of lymphangiogenesis in acute kidney injury.

Dr. Karen Gamble is the F. Cleveland Kinney Endowed Chair in Geriatric Psychiatry and Vice Chair of Basic Research in the Department of Psychiatry & Behavioral Neurobiology in the Heersink School of Medicine at the University of Alabama at Birmingham in Birmingham, AL. She received her PhD in Behavioral Neuroscience in 2004 from Georgia State University and completed a 5-year postdoctoral fellowship in 2009 at Vanderbilt University. Dr. Gamble was appointed to Assistant Professor at UAB in 2009. Dr. Gamble's research program is funded largely by NIH and includes both basic and translational research on sleep and circadian rhythms. Her basic research in mice has discovered that circadian rhythms in memory and hippocampal function vary across the time-of-day and are impaired by high caloric diets that lead to obesity.[1-6] Given that obesity and cardiometabolic syndrome is associated with age-related cognitive decline, these findings have important implications for the aging population. Dr. Gamble recently published that circadian aligned, time restricted eating improves memory in diet-induced obese mice,[3] and so this strategy holds significant promise for future investigation on chronotherapeutic strategies to improve cognition. Interestingly, Dr. Gamble and colleagues also found that time restricted eating improved synaptic plasticity in the hippocampus, the memory center of the brain, in an accelerated aging mouse model.[6] Ongoing clinical studies in the laboratory are investigating how internal biological timing and sleep restriction impact cognition, cravings and urgers in smokers. Since smoking is an important aging accelerator, the results of this study in a racially diverse sample across a large age span will likely reveal important implications for accelerated aging due to addiction, sleep disruption, and other environmental risk factors. Dr. Gamble is a member of the Sleep Research Society (SRS) and the Society Research in Biological Rhythms (SRBR). She served as the 2014 and 2016 SRBR Professional Development Day director and currently serves as Co-Chair of the SRBR Government Affairs Committee. Dr. Gamble currently chairs the Society for Neuroscience "Sleep and Circadian Biology" annual DataBlitz, which is sponsored by the NHLBI National

Center on Sleep Disorders Research. Dr. Gamble is a regular member of the NIH Behavioral Neuroendocrinology, Neuroimmunology, Rhythms, and Sleep (BNRS) Study Section.

Michelle Gray, PhD holds the Lowder Endowed Professorship in Neuroscience. She obtained her PhD at Ohio State University and performed post-doctoral studies at the University of California, Los Angeles focused on the adult-onset neurodegenerative disease, Huntington's Disease (HD). The Gray laboratory is focused on identifying and understanding the mechanisms that contribute to the pathogenesis Huntington's disease (HD). The laboratory uses the BACHD mouse genetic model conditionally expressing mutated human Huntingtin developed while Dr. Gray was at the University of California, Los Angeles. This model is a slowly progressing model and recapitulates many of the features of Huntington's disease, including brain atrophy and motor impairment at advanced ages. The studies in this model have shown that the most prominent features of disease are not observed early in the lifespan of this mouse model but appear at advanced age (>1 year). The present studies are focused on astrocytes and implicate neural circuit-based changes, in both neurons and astrocytes that contribute to the pathogenesis of HD. These circuit changes may be impinged upon by altered neuronal-astrocyte interactions in the circuit to efficiently manage the presence of the mutated protein at advanced ages.

Dr. Junghee Lee is an Associate Professor and the Geropsychiatry Research Chair in the Department of Psychiatry and Behavioral Neurobiology at the University of Alabama at Birmingham (UAB). Her research program aims to determine mechanisms of poor social functioning cross-diagnostically and throughout the lifespan. Consistent with this goal, for the past 15 years, she has systematically examined cognition and social cognition across the lifespan in severe mental illness by adapting novel paradigms from cognitive neuroscience and employing univariate and multivariate data analytic tools for structural and functional neuroimaging data. The results from her research projects have been recognized as key findings that advanced our understanding of mechanisms underlying poor social functioning in severe mental illness. She currently serves on editorial board of three scientific journals (i.e., Journal of Psychopathology and Clinical Science [formerly known as Journal of Abnormal Psychology], Neuropsychology, and Clinical Psychological Science), and as a standing member for the NIH Adult Psychopathology and Disorders of Aging Study Section.

Anupam Agarwal, MD, FASN is Senior Vice President for Medicine and Dean, University of Alabama at Birmingham (UAB) Heersink School of Medicine, Hilda B. Anderson endowed chair in nephrology and Professor of Medicine, Division of Nephrology, in the Department of Medicine at UAB. He also serves as the Program Director of the NIH/NIDDK funded O'Brien Center, one of eight centers funded nationwide. He has graduate faculty status in the Departments of Biochemistry and Molecular Genetics, Pathology and Cell, Developmental and Integrative Biology at UAB. Dr. Agarwal previously served as Executive Vice Dean for the Heersink School of Medicine (2014-2022), Division Director for Nephrology (2008-2021) and in successive appointments as Interim Chair, Department of Medicine, UAB (2011-2012), and Interim Senior Vice President for Medicine and Dean for the Heersink School of Medicine, UAB (2013 and 2022-2023).

Dr. Agarwal has an active role in clinical medicine, teaching, research and administration. He is intensively involved in the teaching of medical students, internal medicine house staff and nephrology fellows and has been a recipient of Outstanding Teaching Awards from the Department of Medicine at the University of Florida as well as at UAB. He is board certified by the ABIM in Internal Medicine and Nephrology. Dr. Agarwal's research program, funded by the NIH and Department of Veterans Affairs (>$2.4M in annual total federal funding), has provided critical insights regarding the mechanisms of acute kidney injury. His bibliography includes 197 peer-reviewed papers and 48 invited reviews/book chapters, the former appearing in journals such as the *Journal of the American Society of Nephrology, Journal of Clinical Investigation, JCI Insight, Journal of Exp Medicine, Proceedings of the National Academy of Sciences, Journal of Biological Chemistry, Circulation, Circulation Research, American Journal of Pathology* as well as others.

He has been recognized by the Max Cooper award for excellence in research, the Thomas Andreoli Professorship in Nephrology, election to membership in the American Society of Clinical Investigation, Association of American Physicians, American Clinical and Climatological Association, the Marie S. Ingalls Endowed Chair in Nephrology leadership, a Dean's Excellence award for leadership, the Graduate Dean's Excellence in Mentorship award at UAB and the Mentor of the Year award from the Southern Society for Clinical Investigation. He is the recipient of the UAB National Alumni Society Honorary Alumnus award and a Laureate Recipient for the Alabama Chapter of the American College of Physicians.

Dr. Agarwal has been invited to speak at national and international meetings including the Annual Gifford Symposium, American Society of Nephrology, International Society of Nephrology, International conferences on HO in Italy, Sweden and Krakow, Czech Republic, International Biometals Congress in Germany, Dutch Society of Nephrology, National Eye Institute and a state-of-the-art lecture at the Southern Society for Clinical Investigation. He has been invited to deliver several named presentations including the Craig Tisher lectureship, Mats Wahlstrom lectureship, Kirpal Chugh oration, Johnson McGuire lectureship, Paul Teschan lectureship, Phillip Liverman lectureship, Shaul Massry lectureship, Cunio Richardson lectureship and others. He has been recognized for his leadership by several awards including Young Investigator awards from the National Kidney Foundation, election to the Council of the Society for Free Radical Biology and Fellow of the American Heart Association's Council on the Kidney in Cardiovascular Disease, his serving on national and international review panels and editorial boards of prestigious journals. He served as a member of the council of the American Society of Nephrology serving as President in 2020 and Past President in 2021 and 2022.

CURRICULUM VITAE

ANUPAM AGARWAL, MD

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CURRICULUM VITAE

Date: February 6, 2023

PERSONAL INFORMATION

Name	Anupam Agarwal, MD
Citizenship	U.S. Citizen (Naturalized in July 2004)
Language(s):	English, Hindi, Kannada, Tulu
Home Address:	4264 Old Leeds Road Mountain Brook, AL 35213
Phone:	(205) 533 0126
Website:	http://www.nrtc.uab.edu/facultystaff.html
Twitter:	anupamuab
Date of birth:	November 19, 1962
Personal:	Married to Lisa M. Curtis, PhD, Children: Alex Curtis-Agarwal (age 14), Megan Curtis-Agarwal (age 13)
RANK/TITLE:	Senior Vice President for Medicine and Dean, Professor of Medicine, Biochemistry and Molecular Genetics, UAB Heersink School of Medicine
Department:	Department of Medicine, Division of Nephrology, University of Alabama at Birmingham, Birmingham,
Business Address:	Faculty Office Towers, FOT 1203 University of Alabama at Birmingham 510 20th Street South Birmingham, AL 35233
Phone:	(205) 996 6681 (Office) (205) 996 6690 (Lab) (205) 934 0333 (Fax) *Email: aagarwal@uabmc.edu*

HOSPITAL AND OTHER (NON ACADEMIC) APPOINTMENTS:

Attending Physician, Nephrology Outpatient Clinic, Kirklin Clinic, University of Alabama at Birmingham (2003-2007).
Attending Physician, Nephrology inpatient consultation Service, University of Alabama at Birmingham (2003-2010).
Staff physician, Birmingham VA Medical Center, Birmingham, Alabama (2010-2023)
Adjunct faculty, Kasturba Medical College, Mangalore, India (2022-present)

PROFESSIONAL CONSULTANTSHIPS:

2000-2003	Consultant, Bristol Myers Squibb
2016-2019	Member, Medical Advisory board for Reata
2016-2021	Member, Medical Advisory board for Angion
2018-2022	Member, Medical Advisory board for Goldilocks Therapeutics
2020-2021	Member, Medical Advisory board for Alpha Young
2022-Present	Member, Medical Advisory board for Creegh Pharmaceuticals
2022-Present	Member, Medical Advisory board for Vexev
2022-Present	Member, Medical Advisory board for Zydus Therapeutics

EDUCATION:

Year	**Degree**	**Institution**
1980-1985	MBBS	Kasturba Medical College, Mangalore University, India
1985-1986	Internship	Government Wenlock & Lady Goschen Hospitals, Mangalore, India
1986-1989	Junior Resident, MD, Internal Medicine	Postgraduate Institute of Medical Education & Research, Chandigarh, India
1989-1992	Senior Resident/Fellow DM, Nephrology	Postgraduate Institute of Medical Education & Research, Chandigarh, India (Head: Prof. K. S. Chugh, MD FACP)
1992-1995	Fellow in Nephrology	Division of Nephrology, University of Minnesota Hospital & Clinic, Minneapolis, Minnesota (Chief: Thomas H. Hostetter, MD; Mentor: Karl A. Nath, MD)
1995-1996	Fellow/Instructor	Division of Nephrology, Hypertension & Transplantation College of Medicine, University of Florida Gainesville, Florida (Chief: Craig Tisher, MD; Mentor: Harry Nick, PhD)

LICENSURE:

Florida Board of Medicine (Medical faculty certificate # 1243)
Kansas State Medical Board (#25078)
Alabama (#00025617)

BOARD CERTIFICATIONS:

American Board of Internal Medicine, Internal Medicine, August 2007-2017
American Board of Internal Medicine, Nephrology, November 2008-2029 (recertified in 2019)

POSTDOCTORAL TRAINING

Year	Degree	Institution
1989-1992	Senior Resident/Fellow DM, Nephrology	Postgraduate Institute of Medical Education & Research, Chandigarh, India (Head: Prof. K. S. Chugh, MD FACP)
1992-1995	Fellow in Nephrology	Division of Nephrology, University of Minnesota Hospital & Clinic, Minneapolis, Minnesota (Chief: Thomas H. Hostetter, MD; Mentor: Karl A. Nath, MD)
1995-1996	Fellow/Instructor	Division of Nephrology, Hypertension & Transplantation College of Medicine, University of Florida Gainesville, Florida (Chief: C. Craig Tisher, MD; Mentor: Harry S. Nick, Ph. D)

ACADEMIC APPOINTMENTS:

Year	Rank/Title	Institution
Sep 1996-Jan 1997	Instructor of Medicine	Division of Nephrology, Hypertension & Transplantation College of Medicine, University of Florida
Jan 1997-Jun 2002	Assistant Professor of Medicine	Division of Nephrology, Hypertension & Transplantation College of Medicine, University of Florida
July 2000 -Oct 2003	Adjunct faculty	Department of Biochemistry & Molecular Biology, College of Medicine, University of Florida
July 2002-Oct 2003	Associate Professor of Medicine (with tenure)	Division of Nephrology Hypertension & Transplantation College of Medicine, University of Florida

Feb 2003- Sept. 2003	Interim Co-Chief	Division of Nephrology Hypertension & Transplantation College of Medicine, University of Florida
Nov 2003- Sept 2005	Associate Professor of Medicine Associate Director for Research	Division of Nephrology University of Alabama at Birmingham Birmingham, Alabama
Oct 2005-	Professor of Medicine Associate Director for Research	Division of Nephrology University of Alabama at Birmingham Birmingham, Alabama
Feb 2004-	Adjunct faculty	Department of Biochemistry and Molecular Genetics, Department of Cell Biology, UAB, Birmingham, Alabama
Nov 2003- Sept 2009	Director, Nephrology Research and Training Center	Division of Nephrology University of Alabama at Birmingham Birmingham, Alabama
Oct 2009-	Associate Director, Nephrology Research and Training Center	University of Alabama at Birmingham Birmingham, Alabama
July 2007- Dec 2007	Associate Director,	Division of Nephrology, University of Alabama at Birmingham
Oct 2009-	Associate Director	Nephrology Research and Training Center University of Alabama at Birmingham
Jan 2008- Feb 2013 and Oct 2013-Sept 2021	Director,	Division of Nephrology University of Alabama at Birmingham
Oct 2009- Feb 2013 and Oct 2013-March 2014	Vice Chair for Research	Department of Medicine University of Alabama at Birmingham
Aug 2011- Aug 2012	Interim Chairman,	Department of Medicine University of Alabama at Birmingham
Feb 2013- Oct 2013	Interim Senior VP for Medicine and Dean	UAB Heersink School of Medicine
April 2014- August 2022	Executive Vice Dean,	UAB Heersink School of Medicine
Sept 2022- Jan 2023	Interim Senior VP for Medicine and Dean	UAB Heersink School of Medicine
Feb 2023-	Senior Vice President for Medicine and Dean	UAB Heersink School of Medicine

Awards/Honors:

2022	VA Senior Clinical Scientist Investigator award
2022	Philip Liverman Lectureship, University of Virginia, Charlottesville
2021	Ira Tublin lectureship, University of Maryland Medical School, Department of Medicine
2021	2020 Mentor of the Year, Postgrad division, Southern Society for Clinical Investigation
Jan 2021-2022	Past-President, American Society of Nephrology
Jan -Dec 2020	President, American Society of Nephrology
Jan-Dec 2019	President-elect, American Society of Nephrology
Nov 2019	Keynote Speaker, AHA KCVD 8th annual Young Investigator Symposium
Feb-March 2018	Meira and Shaul G. Massry Visiting Professor, University of Southern California
Feb 2018	Paul Teschan Lectureship, Vanderbilt University
April 2017	Distinguished Speaker, Department of Medicine Research Day, UT San Antonio
2014-2022	Council member, American Society of Nephrology
June 2014	UAB National Alumni Society Honorary Alumnus Award
May 2014	Cunio Richardson Endowed lectureship, University of Miami
April 2014	Elected to the Association of American Physicians
January 2014	2013 Laureate recipient for the Alabama Chapter, American College of Physicians
Oct 2013	Reaching for Excellence Outstanding Leadership award, UAB Health System
March 2013	C. Craig Tisher Endowed Lectureship, University of Florida, Gainesville, FL
Jan 2013	Inaugural Mats Wahlstrom Endowed Lectureship, University of Colorado, Denver, CO
Jan 2013	Alpha Omega Alpha
Dec 2012	2013 UAB Graduate Dean's Excellence in Mentorship Award
November 2012	Excellence Award in Academic Nephrology, American Nephrologist's of Indian Origin
August 2012	UAB Dean's award for Excellence in Leadership
October 2011	Elected to the American Clinical and Climatological Association
April 2011	Marie S. Ingalls Endowed Chair in Nephrology Leadership
Dec 2010	Chugh Oration award, 41st Annual meeting, Indian Society of Nephrology, India
Oct 2009	Johnson McGuire Endowed lectureship, University of Cincinnati, Cincinnati, Ohio
Mar 2007	Elected to the American Society for Clinical Investigation
Oct 2006-Apr 2011	Thomas E. Andreoli Professorship in Nephrology, UAB
June 2005	Max Cooper Award for Excellence in Research, Department of Medicine, UAB
June 2005	Outstanding Teacher in the Division of Nephrology, UAB
Nov 2003	Fellow, AHA and Council on the Kidney in Cardiovascular disease
Aug 2003	Outstanding Teaching Award, Department of Medicine, University of Florida
July 1999	Young Investigator Award from the National Kidney Foundation
July 1997	Howard Hughes Medical Institute Investigator award, University of Florida
Feb 1997	Young Faculty Award, Southern Section for Clinical Investigation
July 1996	National Institutes of Health - NIDDK Clinical Investigator Award
July 1996	Young Investigator Award from the National Kidney Foundation
July 1995	American Heart Association (Fl Affl.) Research fellowship award
July 1994	Juvenile Diabetes Foundation International fellowship
July 1994	National Kidney Foundation fellowship awarded for July 1994
Mar 1986	State Council Research Grant from KSCST, Indian Institute of Science
July 1986	Pfizer medallion in Medicine - for distinguished performance in medical school
Jan 1985	State youth services award for standing first in medical school in the state
Jan 1985	Dr T M A Pai Gold Medal for the Best Medical Graduate of the year
Jan 1985	University Gold Medal for standing first in the University in final MBBS
Jul 1984-85	Prizes for standing first in Ophthal., ENT, Surgery, Ob. & Gynecology
Jul 1983	Nantha Kumar memorial prize for standing first in Pathology
Jul 1982	Prize for standing first in Anatomy in first year of Medical school
Jul 1982	Prize for best outgoing graduate in first year of Medical school

PROFESSIONAL SOCIETIES:

* Alpha Omega Alpha
* Association of American Physicians
* American Clinical and Climatological Association
* American Society for Clinical Investigation
* American Society of Nephrology
* Southern Society for Clinical Investigation
* American College of Physicians
* International Society of Nephrology
* American Federation for Clinical Research
* National Kidney Foundation
* Society for Free Radical Biology and Medicine
* American Society of Biochemistry and Molecular Biology
* American Physiological Society
* Indian Society of Nephrology

COUNCILS AND COMMITTEES:

National Grant Review Panels and Participation in Committees:

2020 Chair, NIDDK Special Emphasis Panel, R01/R21 grants
2020 Member, NIDDK Special Emphasis Panel for Member Conflicts, R01 grants
2019 Member, NIDDK Special Emphasis Panel for F99/K00 grants
2018 Member, External Evaluation Panel, NIDDK Kidney Precision Medicine Project
2017 Member, NIDDK External review panel, Assessment, Serial Evaluation and Subsequent Sequelae to Acute Kidney Injury (ASSESS-AKI) study, July 11, 2017.
2017 Reviewer, NIDDK Pilot clinical studies in Kidney diseases, 2017/05 ZRG1 DKUS-L (55) R
2016 Reviewer, NHLBI/NIH Program Project Grant review committee
2016 Collaborative interdisciplinary team science in NIDDK research areas (ZDK1 GRB-S-M6)1
2016 NIDDK study section, ZRG1 DKUS-J (03) M, Member conflict, Kidney and Urology,
2015 Reviewer, NHLBI/NIH Program Project Grant review committee
2014 Ad hoc reviewer, NIDDK ZRG1 DKUS-06 M Member Conflict Nephrology review panel
2014-18 VA Merit review and Career Development Awards grants NEPH review panel
2014 Ad hoc reviewer, NIDDK R13 conference grants
2014 Chair, Ad hoc review panel, NIDDK GRB-J M3 R24 grant applications
2013 Ad hoc member, VA Merit review and Career Development Awards grants review panel
2012 Reviewer for The Fondation pour la Recherche Médicale, Paris, France.
2011-2014 Member, ASN Education Committee
2012-2013 Chair, Program Committee, Annual meeting of the American Society of Nephrology, 2013
2011-2012 Member Program Committee, Annual meeting of the American Society of Nephrology, 2012
2010 ZRG1 EMNR-C (55) R – RC4 Challenge grant review panel, Director's Opportunity
2010 Ad hoc member, VA Merit review and Career Development Awards grants review panel
2009 Member, Center for Disease Control-National Center for Health Marketing (R-03) Grant review panel "Surveillance System for Chronic Kidney Disease".
2008-2009 Chair, Organizing Committee, 6th International Congress on Heme Oxygenases
2008-2012 Member, NIH Pathobiology of Kidney Disease study section (PBKD)
2007-2008 Member Program Committee, ASN 2008
2007-2012 Member, ASN Acute Kidney Injury Advisory Group
2007 Reviewer for Joint Roche Organ Transplant Research Foundation/JDRF grant awards
2006-2007 Chair, Department of Medicine, Research Development Group, UAB
2006-2007 Member, Research Council, Department of Medicine, UAB
2007 Member, Search Committee for Division Chief of Endocrinology, UAB
2006 Ad hoc Member, Gene and Drug Delivery Systems study section (GDD), NIH, June 2007

2006 Elected Councilor, Society for Free Radical Biology and Medicine
2006 Scientific Organizing Committee, 5th International Congress on Heme oxygenases, Krakow, Poland, September 5-9th, 2007
2006 Moderator, Experimental vascular pathology: Atherosclerosis, hypertension and disease progression. 39th Annual meeting of the ASN, San Diego, California
2006 Ad hoc Member, Pathobiology of Kidney Disease study section (PBKD), NIH, June 2006
2006 Abstract Review committee, 39th Annual meeting of the ASN, San Diego, California
2006-2009 Review Board Member, Genzyme Renal Innovations Program
2006-2008 Chair, National Kidney Foundation, Basic Science Committee
2006- UAB Department of Medicine, Appointments, Promotion and Tenure Committee
2006 Member, Biomedical and Therapeutic Research Committee, Scottish Executive Health Department, Edinburgh, United Kingdom
2005 Chair, Session on HO-1 & Vascular diseases, 4th International conf. on HO, Boston, MA
2005 Member, NIH/NHLBI PPG Review Panel, "Vascular Biology of Sickle Cell Disease".
2005 Member, Review panel for the Dutch Diabetes Research Foundation
2004-2006 Vice-Chairman, National Kidney Foundation, Basic Science Committee
2004-2007 Member, Grants Review committee, American Society of Nephrology
2004 Abstract Review Committee, 11th Annual meeting of the Society for Free Radical Biology and Medicine. St. Thomas, Virgin Islands.
2004-2006 Member, Department of Medicine Research Development Group, UAB
2004 Member, NIH NRSA predoctoral fellowship review committee, June 2004
2004 Member, ASN Carl W. Gottschalk Research Scholar Grant review committee
2004 Abstract Review committee, American Heart Association Scientific Session
2004 Member, Wellcome Trust review committee
2002-2003 Member, National Kidney Foundation, Basic Science Committee
2003 Abstract Review committee, American Heart Association Scientific Session
2003 Abstract Review committee, 36th Annual meeting of the ASN, San Diego, California
2003 Co-Chair, Session on Signal transduction pathways in the regulation of heme oxygenase. International conference on Heme oxygenase – Regulation, functions and clinical applications. Uppsala, Sweden
2002 Ad hoc member, NIH General Medicine B study section, October, 2002
2002 Member, SEP, NIH, *Innovative partnerships in type 1 diabetes research*
2002 Chairman, Cardiovascular system II, 2nd International conference on heme oxygenase (HO/CO) and cellular stress response. Italy, June 6-9, 2002
2001 Member, Special Emphasis Panel, NIH, NIEHS, *Mechanisms of Environmental Oxidative Stress and Dietary Modulation*, July 15-18, 2001.
1999-2003 Member, Study section, AHA, Southern & Ohio Valley Research Consortium.
2000 Judge, 39th National Junior Science and Humanities Symposium, Orlando, Biochemistry, Health and Medicine, April 28, 2001.
2000 Grant Reviewer: Austrian Science Fund
2000 Ad hoc reviewer, Paul Teschan Research fund, Dialysis Clinic, Inc.
2000 Abstract Review committee, 33rd Annual meeting of the ASN, Toronto.
1999 Ad hoc reviewer, Dept. of Veterans Affairs, VA Palo Alto Health system.
1998 Co-chair, Renal and Electrolyte/Hypertension, Southern Section, AFMR, New Orleans.
1998 Judge, 35th Annual Junior Science, Engineering and Humanities Symposium, U of Florida.
1997-1998 Member, Search Committee, Nephrology chief, Division of Nephrology, Hypertension and Transplantation, University of Florida.
1997-2003 Member, Medical Advisory Board, National Kidney Foundation of Florida
1997 Co-chair, Session on Renal and Electrolyte/Hypertension I, Southern Section of the AFMR, New Orleans.

1996 Abstract Review committee, Renal and Electrolyte subspecialty, Southern Section of the AFMR, New Orleans.
1996 Abstract Review committee, 29th Annual meeting of the ASN, New Orleans.

UNIVERSITY ACTIVITIES:

Participation in Institutional Committees:

Sept 2022-present	Chair, Health Services Foundation Board
Sept 2022-present	Member, Southern Research, Board of Directors
2021-present	Chair, Internal Advisory Committee, NIH FIRST award
2021	Member, Search Committee for Dean, UAB School of Nursing
2021-2022	Co-Chair, Task force for joint program for Nutrition Sciences and Rehab Medicine between School of Health Professions and School of Medicine
2020-2022	Member, COVID-19 Incident Command Committee, UAB
2020	Co-Chair, School of Medicine Continuity of Operations Planning task force
2020	Co-Chair, Comm. for Reopening of Administrative Offices during COVID19
2019	Co-Chair, Informatics Institute Task force
2019	Member, Xenotransplantation implementation committee
2019	Co-Chair, Search committee for Chair, Department of Genetics
2018	Member, UAB Pharmacy Task Force
2018-present	Member, Health Services Foundation Stewardship committee
2017-2018	Co-Chair, Search committee for Chair, Department of Orthopedics, UAB
2017-present	Member, UAB Reputation and Risk Management Team
2016-2019	Member, UAB Strategic Planning Council
2017-present	Chair, Physicians and Faculty for the Alabama Symphony Orchestra
2016	Co-Chair, Search committee, Vice President for Research, UAB
2016	Co-Chair, Search committee for Regional Dean, UAB Huntsville Campus
2015	Member, Search committee, Tuscaloosa VA Medical Center, Chief of Staff
2014-2015	Chair, Search committee for Associate Dean for Global health, UAB SOM
2015	Co-Chair, Search committee for Chair, Dept of Biomedical Engineering
2014-present	Co-Chair, AMC21 Research Steering Committee, Heersink School of Medicine
2014-2015	Member, Search committee, Chair, Department of Surgery
2014-2015	Chair, Lung transplant program task force
2013-2014	Chair, UAB Medicine wRVU committee
2013-2016	Chairman, Doctors for the Alabama Symphony Orchestra
2012-2014	UASOM LCME Committee, Chair, Subcommittee: ER-3 – teaching facilities
2012-2013	Member, Search Committee, UAB President
2011-2012	Member, University of Alabama Health System Board
2011-2012	Member, UAB Health Services Foundation Investment Committee
2011-2012	Member, UAB Health System Medical and Dental Staff Committee
2011-2012	Member, UAB Health Services Foundation Executive Committee
2011-2012	Member, UAB Health Services Foundation Finance Committee
2011-2012	Member, UAB Health Services Foundation Audit and Compliance Committee
2011-2012	Member, Selection Committee for President, UAB Health Services Foundation
2011-2012	Member, Internal Advisory Committee, UAB Comprehensive Cancer Center
2011-2012	Member, Internal Advisory Committee, UAB Diabetes Research Center
2011-2012	Member, UAB Health Services Foundation Administrative Services Committee
2011-2012	Faculty supervisor, Junior Faculty Forum, UAB Department of Medicine
2011-2012	Member, Clinical Chairs Council
2011-2012 and 2014-present	Member, UAB-VA Partnership Affiliation Council
2012	Co-Chair, Obesity Medicine Task force, University of Alabama at Birmingham

2011-2012	Member, Search Committee, UAB Department of Medicine Chairman
2010-2011	Member, Search Committee, ACOS for Research, Birmingham VA Medical Center, Birmingham, Alabama
2010-2011	Member, Search Committee, Division Chief for Cardiology, Department of Medicine, UAB
2010-2012	Member, UAB Graduate Biomedical Sciences Steering and Oversight Committee
2009-Present	Member, Steering Committee, UAB Medical Scientist Training Program (MSTP)
2009-Present	Member, Steering Committee, Pathobiology & Mol Med Graduate Program
2009-2010	Member, Admissions Committee, Biochem & Struct Biology Graduate Program
2008	Member, Search Committee, Division Chief for Endocrinology, Department of Medicine, UAB
2009-2010	Member, Faculty Search Committee, Division of Endocrinology, Department of Medicine, UAB Endocrinology faculty members
2010	Member, Search Committee, Molecular and Cellular Pathology Division Chief, Department of Pathology, UAB
2010-2011	Member, Search Committee, Division Director, Cardiology, UAB

Graduate Student Committees:

2000-2002	Kevin S. Goudy Department of Molecular Genetics and Microbiology, University of Florida	Master of Science Thesis committee
2004-2007	Thomas Hock Department of Biochemistry and Molecular Genetics, UAB	PhD student
2004-2006	April White Department of Biology, UAB	Masters of Science student
2004-2008	Joo Yeun Oh Department of Pathology, Integrated Biomedical Sciences Program, UAB	PhD student
2005-2007	Jessy Deshane Department of Biochemistry and Molecular Genetics, UAB	PhD student
2005-2009	Marcienne Wright Department of Biochemistry and Molecular Genetics, UAB	PhD student
2006-2010	Subhashini Bolisetty Department of Cell Biology, UAB	PhD student (CMB graduate program)
2006-2010	Brian Danka Department of Pathology, Integrated Biomedical Sciences Program, UAB	PhD student
2006-2011	Sean McConnell Department of Biochemistry and Molecular Genetics, UAB	PhD student
2006-2009	Yongliang Huo Department of Biochemistry and Molecular Genetics, UAB	PhD student
2006-2011	Shanrun Liu Department of Biochemistry and Molecular Genetics, UAB	PhD student
2008-2012	Colin Reilly Department of Pathology, Integrated Biomedical Sciences Program, UAB	PhD student
2007-2010	Jungyun Kim Department of Pathology, Integrated Biomedical Sciences Program, UAB	PhD student
2009-2010	Sarah Baxley UAB MSTP and Department of Cell Biology	MD PhD student
2009-2012	Carl A. Frizell	Masters Student

	Department of Pathology, Integrated Biomedical Sciences Program, UAB	
2011-2015	Travis D. Hull UAB MSTP program, Immunology theme	MD PhD student
2012-2015	Melissa Pegues Department of Microbiology, Immunology theme	PhD student
2014-2019	Sergey Antipenko Department of Biochemistry and Molecular Genetics	MD PhD student
2014-2018	Cheng Song Cell, Developmental and Integrative Biology	PhD student
2015-2019	Jeremie Lever UAB MSTP Program, Immunology theme	MD PhD student
2016-2019	Crystal Taylor Cell, Molecular and Developmental Biology theme	PhD student
2016-2018	Joseph Ladowski Immunology Theme	PhD student
2016-2020	Rachel Jimenez Immunology theme	PhD student
2016-2020	Katelyn Dunigan Cell, Molecular and Developmental Biology theme	PhD student
2017-2021	Hayden Pacl Immunology theme	MD PhD student
2017-2022	Patrick Molina Immunology theme	MD PhD student
2018-2022	Gunars Osis Biochemistry and Structural Biology Theme	PhD Student (AMC21 Scholar)
2020-2022	Bharat Misra Genetics, Genomics and Informatics Theme	PhD student
2020-Present	Mary Bunten Genetics, Genomics and Informatics Theme	PhD student
2020-Present	Matthew Cheung Immunology theme	MD PhD student
2020-Present	Elise Erman Immunology theme	PhD student
2021-Present	Gelare Ghajar-Rahimi Immunology theme	MD PhD student
2021-Present	Han Eckenrode Pathobiology, Pharmacology and Physiology theme	PhD student
2022-Present	Arin Melkonian Biomedical Engineering	MD PhD student

EDITORIAL BOARD MEMBERSHIPS:

Jan 2017 – Present	Consultant editor, DynaMed
Dec 2015-July 2016	Acting Associate Editor, Nephron Clinical Practice
April 2013-Dec 2014	Deputy Editor, *Journal of the American Society of Nephrology*
July 2003-Present	Member, Editorial Board, *American Journal of Physiology, Renal*
2000-2006 2007-2013	Member, Editorial Board, *Journal of the American Society of Nephrology.*
2008-2022	Member, Editorial Board, *Kidney International.*
2009-Present	Member, Editorial Board, *Laboratory Investigation*
2010-2018	Member, Editorial Board, *Clinical and Translational Science.*
2001	Guest Editor, *Antioxidants and Redox Signaling*, Special Issue on "Hemopexin and Heme".

Ad hoc Reviewer

Journal of Clinical Investigation, JCI Insight, Nature Communications, Journal of Biological Chemistry, Diabetes, Kidney International, American Journal of Physiology, Human Gene Therapy, Journal of the American Society of Nephrology, Clinical Journal of the American Society of Nephrology, Kidney360, Free Radical Biology and Medicine, British Journal of Pharmacology, Proceedings of the National Academy of Sciences, Molecular Pharmacology, American Journal of Pathology, Experimental Nephrology, Nephrology, Dialysis and Transplantation, Molecular Therapy, Gene Therapy, International Journal of Biochemistry and Cell Biology

MAJOR RESEARCH INTERESTS:

Dr. Agarwal's laboratory focuses on the mechanisms of acute kidney injury, particularly focused on the significance of an anti-oxidant enzyme, heme oxygenase-1 (HO-1). Work from his laboratory elucidated the unique transcriptional regulation of the human HO-1 gene, a body of work necessary in translating HO-1 as a therapeutic strategy; the anti-apoptotic role of HO-1 and the governing influence of HO-1 on autophagy; the critical role of HO-1 in mediating the proangiogenic actions of stromal-cell derived factor-1; and the interactive roles of HO-1, ferritin, and ferroportin in safeguarding cellular iron homeostasis. His laboratory is also studying the role of lymphangiogenesis in the pathogenesis of acute kidney injury and chronic kidney disease.

TEACHING EXPERIENCE:

2016	TMS 714 – Translational medicine and Molecular Training Course
2005-2012	IBS 700 – Translational Research Series
2004-2010	Principles of Gene Therapy: Spring Semester, PAT 708, University of Alabama at Birmingham "Gene therapy for kidney disease"
2004-2014	Lecture series for Medical students - Sophomore Correlative Pathology, University of Alabama at Birmingham, -Acute renal failure-Pathophysiology -Acute renal failure-Management

-Diabetic Nephropathy

2003	Fundamentals of physiology and functional genomics. GMS 6008. "Gene therapy for kidney disease".
2000-2003	Course Director, Junior Honors Program in Cell Biology, BMS 4012, University of Florida
1998-2000	Board Review Course, Internal Medicine Housestaff, University of Florida
1996-2003	Instruction of medical students, Internal Medicine House staff, and Nephrology fellows as Attending Physician on Nephrology and Internal Medicine Services (three months/year)
1996-2003	Lecturer, Seminars in Renal Physiology and Pathophysiology for Nephrology fellows
1996-2003	Lecturer, Renal Fellow Orientation Seminars series
1996-2003	Instructor, Physical Diagnosis II, for 2nd year medical students.
1996-1998	Lecturer, Introduction to Medicine, Physician's Assistant Program

MAJOR LECTURES AND VISITING PROFESSORSHIPS:

International and National:

#AcuteKidneyInjury2022. Philip Liverman Lecture, University of Virginia, Charlottesville, VA, April 29th, 2022

The COVID-19 pandemic - Role of the Nephrologist. Medicine Grand Rounds, University of Chicago, Chicago, IL, April 12, 2022

#AcuteKidneyInjury2022. Speaker, World Kidney Day, Johns Hopkins, Department of Medicine, March 12, 2022.

Lymphangiogenesis in AKI and CKD. Renal Grand Rounds, Johns Hopkins, March 12, 2022.

New perspectives in acute kidney injury, Renal Grand Rounds, University of Cincinnati, December 17, 2021

New perspectives in acute kidney injury, Ira Tublin Visiting lectureship, University of Maryland, November 9, 2021

New perspectives in acute kidney injury, Department of Medicine Grand rounds, University of Toledo, October 28, 2021

Renal lymphangiogenesis in AKI. O'Brien Center Symposium, Yale University, May 7, 2021.

Adaptive responses in acute kidney injury. Renal Grand Rounds, University of Arizona, Tucson, AZ, February 24, 2021.

Top ten discoveries in nephrology. Grand rounds, Harbor-UCLA Division of Nephrology, January 11, 2021

What's new in acute kidney injury? Presentation to the New York Society of Nephrology, January 6, 2021.

Positive impact of COVID-19. Presentation to the American Academy of Yoga and Meditation, Ganges-Mississippi dialogue, December 5, 2020.

ASN Alliance for Kidney health in 2020 and Kidney Medicine in 2030. Presentation to the Chinese Society of Nephrology, December 16-18, 2020

ASN Alliance for Kidney health in 2020 and Kidney Medicine in 2030. Presentation to the Egyptian Society of Nephrology, September 26, 2020

Top ten discoveries in nephrology making a clinical impact. CME for the American Association of Physicians of India (AAPI), August 26, 2020.

ASN Alliance for Kidney health in 2020 and Kidney Medicine in 2030. Presentation to the Japanese Society of Nephrology, August 10, 2020

Top ten discoveries in nephrology making a clinical impact. Africa Healthcare Network Educational series. August 20, 2020.

Heme oxygenase-1 as a protective mechanism in kidney injury. University of Pittsburgh O'Brien Center Symposium, October 2019

What's new in Acute kidney injury? Renal Grand Rounds, University of Pittsburgh Medical Center, October 2019

What's new in Acute kidney injury? Invited Speaker, Central China Society of Nephrology, June 2019

What's new in Acute kidney injury? Renal Grand rounds, Emory University, January 2019

Nephrology in the 21st Century: A perspective for the future. The 1st Professor Kirpal Singh Chugh Oration, Chandigarh, India, September 2018

Targeting mitochondrial function in the pathogenesis of kidney diseases. Massry Lectureship, Harbor-UCLA, Los Angeles, February 2018

Heme oxygenase-1 in renal and vascular projection. Massry Lecture series, University of California, Irvine, February 2018

What's new in Acute Kidney Injury? Medicine Grand Rounds, Harbor-UCLA medical center, Los Angeles, February 2018

What's new in Acute Kidney Injury? Medicine Grand Rounds, University of Southern California, Los Angeles, February 2018

What's new in Acute Kidney Injury? Distinguished Speaker, Department of Medicine Research Day, University of Texas, San Antonio, May 17, 2017

Oxidative stress and the kidney. Invited presentation, World Congress of Nephrology, 2017, Mexico City, Mexico, April 23, 2017

What's new in Acute Kidney Injury? Renal grand rounds, Cleveland Clinic, September, 2016

Heme Oxygenase and Ferritin in Acute Kidney Injury, FASEB Summer research conference, June 2016

Speaker, 9th International heme oxygenase congress, Prague, Czech Republic, September 2016.

What's new in Acute Kidney Injury? Medicine grand rounds, UCSD, February 2016
Acute Kidney Injury – What's new? 2nd Next generation kidney research meeting for Young Nephrologists in Japan, Tokyo, August 8, 2015.

Oxidative stress in the pathogenesis of progressive CKD. Visiting Professor, Kanazawa University, Kanazawa, Japan, August 2015.

Acute Kidney Injury – What's new? Shanghai International AKI and CRRT meeting, Shanghai, China, July 2015.

Heme oxygenase-1 in renal and vascular injury. Visiting Professor, Fudan University, Shanghai, China. July 2015.

Heme oxygenase-1 in renal and vascular injury. Invited Speaker, Biomed 2015, Perspectives in medical biotechnology, Polish academy of arts and sciences, Krakow, Poland, May 23-25, 2015

What's new in Acute Kidney Injury? Grand Rounds presentation, New York Methodist Hospital, New York, January 2015

Pathophysiology of acute kidney injury. ASN Critical Care Nephrology Course, Philadelphia, PA, November, 2014

Pathogenesis and diagnosis of acute kidney injury. ASN Board review course, Chicago, August 2014

Oxidative stress in the progression of kidney disease: Target for therapeutic intervention? Cunio Richardson lecture, University of Miami, Miami, Florida, May 2014

Role of hypoxia inducible factors in acute kidney injury. Recovery Roundtable, CRRT 2014, San Diego, CA, March 2014.

Adaptive responses to renal and vascular injury: role of heme oxygenase-1. Renal Grand rounds. University of North Carolina, Chapel Hill, December 2013

Oxidative Stress and Inflammation – Therapeutic Targets for Chronic Kidney Disease? Inaugural Mats Wahlstrom Lectureship, University of Colorado School of Medicine, Division of Nephrology, Denver, CO, January 17, 2013.

Oxidative Stress and Inflammation – Therapeutic Targets for Chronic Kidney Disease? Nephrology and Hypertension Grand Rounds, Mayo Clinic, Rochester, Minnesota, October 9, 2012.

Adaptive responses to renal and vascular injury: role of heme oxygenase-1. Nephrology and Hypertension Research Forum. Mayo Clinic, Rochester, Minnesota, October 9, 2012.

New insights into human HO-1 gene regulation. 7th International Congress on Heme Oxygenases, Edinburgh, Scotland, May 28-June 1, 2012.

Role of HO-1 in the kidney. 7th International Congress on Heme Oxygenases, Edinburgh, Scotland, May 28-June 1, 2012.

Basic Mechanisms of acute kidney injury: Role of Heme Oxygenase-1. Invited presentation. 32nd International Symposium on Intensive Care and Emergency Medicine, Brussels, Belgium. March 20-23rd, 2012

Gas Therapy: Sepsis and Multiple Organ failure. Invited presentation. 32nd International Symposium on Intensive Care and Emergency Medicine, Brussels, Belgium. March 20-23rd, 2012

Pathophysiology of Acute Kidney Injury – Current Views. Invited presentation. 32nd International Symposium on Intensive Care and Emergency Medicine, Brussels, Belgium. March 20-23rd, 2012

Molecular regulation of heme oxygenase-1. Invited presentation at the Experimental Biology 2012 meeting – Pharmacology/Experimental Therapeutics. Session on Emerging role of heme oxygenase in cardiovascular and metabolic diseases. April 22, 2012.

Pathways leading to oxidative stress and inflammation as targets for chronic kidney disease. Medical Grand Rounds at the University of California San Diego, San Diego, CA, February 15, 2012

Adaptive responses to renal and vascular injury: Role of Heme oxygenase-1. Visiting Professor, Department of Physiology and Pharmacology, University of Toledo, Toledo, Ohio. September 7, 2011.

In vivo regulation of heme oxygenase-1 gene expression in humanized BAC transgenic mice. 4th Annual O'Brien kidney center symposium, UT Southwestern, Dallas, Texas, May 5, 2011

Mechanisms of Injury and Repair in AKI: Endogenous antioxidant systems. Invited Speaker, World Congress of Nephrology, Vancouver, BC, Canada, April 8-12, 2011

Oxygen, Hydrogen and Carbon Monoxide Gases with Therapeutic Potential? Invited Speaker, 16th International conference on Continuous Renal Replacement Therapies, February 22-25, 2011

New insights in Acute Kidney Injury – from pathogenesis to therapies. Prof. K. S. Chugh Oration at the 41st Annual Conference of the Indian Society of Nephrology, Kovalam, India, December, 2010.

Role of Keap1-Nrf2, Oxidative Stress, and Inflammation in Chronic Kidney Disease. Invited presentation at the 41st Annual Conference of the Indian Society of Nephrology, Kovalam, India, December, 2010.

Role of Keap1-Nrf2, Oxidative Stress, and Inflammation in Chronic Kidney Disease. Invited presentation at the 43rd Annual meeting of the American Society of Nephrology, Denver, CO, November, 2010.

Therapeutic application of the heme oxygenase system in acute kidney injury. Invited presentation at the 43rd Annual meeting of the American Society of Nephrology, Denver, CO, November, 2010.

Heme Oxygenase-1 in Renal and Vascular Injury. Renal Grand Rounds, Mount Sinai School of Medicine, New York, NY, November, 2010

Adaptive responses to renal and vascular injury: Role of Heme oxygenase-1. Renal grand rounds, Rhode Island Hospital, Providence, RI, October, 2010.

Adaptive responses in renal and vascular injury: Role of Heme oxygenase-1. Renal grand rounds, New York Medical College, Valhalla, NY, March 25, 2010.

Oxidative stress in the progression of chronic kidney disease. Medical Grand Rounds, New York Medical College, Westchester Medical Center, New York. March 24, 2010.

Heme oxygenase-1 and acute kidney injury: from molecular mechanisms to therapeutic opportunities. 15th International Conference on Continuous Renal Replacement Therapies. Pre-course on Acute Kidney Injury. San Diego, California, February 24, 2010.

Oxidative stress in progressive kidney disease. Medicine Grand Rounds, University of Utah, Salt Lake City, Utah. January 7th, 2010.

Adaptive responses in renal and vascular injury: Role of Heme oxygenase-1. Renal Research Seminar presentation University of Utah, Salt Lake City, Utah. January 6th, 2010.

From the molecule to the bedside research seminar series. Johnson McGuire Visiting Professorship, University of Cincinnati, Cincinnati, Ohio, October 22, 2009.

Adaptive responses in renal and vascular injury: Role of Heme oxygenase-1. Seminar presentation at Genzyme, Cambridge, MA, October 27, 2008.

Carbon monoxide rescues vascular thrombosis in aortic transplantation. Invited presentation at the 8th Annual Ray Gifford Jr. MD Symposium, Nashville, TN, March 2009.

Adaptive responses in renal and vascular injury: Role of heme oxygenase-1. Medical College of Wisconsin, Milwaukee, WI, March 18, 2008.

Heme oxygenase-1 in renal and vascular injury. Renal Grand Rounds, University of Texas at San Antonio, San Antonio, Texas, February 27, 2008.

Regulation of human heme oxygenase-1 gene expression in renal epithelial cells. 5th International Heme oxygenase meeting, Krakow, Poland, September 2007.

Academic Nephrology – Challenges and Opportunities. Thomas F. Ferris lecture, University of Minnesota, June 29, 2007.

Oxidative stress: Novel pathways for targeting and preventing diabetic complications. Invited Speaker, World Congress of Nephrology, Rio de Janeiro, Brazil, April 21-25, 2007.

Role of heme oxygenase-1 in stromal cell derived factor-1-mediated angiogenesis. Invited presentation at the 6th Annual Ray Gifford Jr. MD Symposium, Orlando, April 10, 2007

Heme oxygenase-1 in renal and vascular injury. Renal Grand Rounds, Massachusetts General Hospital, April 3, 2007.

Heme oxygenase-1 in renal and vascular injury. Renal Grand Rounds, University of Colorado Health Sciences Center, Denver, Colorado, December 14, 2006

Role of oxidative stress in the pathophysiology of kidney disease. Invited Speaker, The 13th Budapest Nephrology School, International Society of Nephrology and the ERA-EDTA, August 25-30, 2006.

Heme oxygenase-1 as a therapeutic target in renal and vascular disease. Department of Pharmacology Seminar series, University of Pittsburgh School of Medicine, Pittsburgh, May 5, 2006.

Heme oxygenase-1 in vascular injury. Invited presentation at the 5th Annual Ray Gifford Jr. MD Hypertension Symposium, Chicago, April 29, 2006.

Heme oxygenase-1 in renal and vascular injury, Renal Grand rounds, University of Iowa College of Medicine, Iowa City, Iowa, March 8, 2006.

Oxidative stress in kidney disease: lessons from interventions for cardiovascular disease. Medical Grand Rounds, University of Iowa College of Medicine, Iowa City, Iowa, March 9, 2006.

Obtaining Grant Support from Non-profit organizations. Invited presentation at the American Society of Transplant Surgeons Winter symposium, Scottsdale, Arizona, January 19-21, 2006

Management of acute renal failure in the ICU. Medicine Grand Rounds, University of Kansas School of Medicine-Wichita, Kansas, November 4th, 2005.

Diabetic Kidney Disease-New Perspectives. Grand Rounds, VA Medical Center, University of Kansas School of Medicine-Wichita, Kansas, November 3rd, 2005.

Invited Speaker, Heme oxygenase-1 and vascular diseases. 4th International Conference on Heme oxygenase, Boston, MA, October 6-9th, 2005.

Regulation of human heme oxygenase-1 gene expression in disease states. Neonatology Research Seminar, The Children's hospital of Philadelphia, University of Pennsylvania, Philadelphia, June 3rd, 2005.

Invited Speaker, Regulation of human heme oxygenase-1 gene expression in disease. From Molecular Biology to Biotechnology, XXXII Winter School of Faculty of Biotechnology, Zakopane, Poland, March 3-7th, 2005

Invited Speaker, AAV-mediated gene delivery to the vasculature and kidney. From Molecular Biology to Biotechnology, XXXII Winter School of Faculty of Biotechnology, Zakopane, Poland, March 3-7th, 2005

Invited Speaker, Annual Dutch Society of Nephrology meeting, Basic Science symposium, Novel adaptive mechanisms in renal injury-Role of heme oxygenase-1, Veldhoven, Netherlands, April 5-7th 2005.

Invited Speaker, Basic and Clinical Science symposia. New insights into renal disease: Focus on oxidative stress. Oxidative stress in glomerular and progressive kidney disease: New target for therapy? 37th meeting of the American Society of Nephrology, St. Louis, MO, Oct. 28-November 1, 2004.

Regulation of Heme Oxygenase-1 Gene Expression: Implications of heme degradation in disease states. Biometals 2004, Fourth International Biometals Symposium, September 3-5, 2004, Congress Center Garmisch Partenkirchen, Germany

Regulation of human heme oxygenase-1 gene expression in disease. Seminar series in Cell Biology and Biophysics, School of Biological sciences, University of Missouri-Kansas City, Kansas city, Kansas, February 12, 2004

Heme oxygenase-1 signaling pathways in human renal epithelial cells. International conference on Heme oxygenase – Regulation, functions and clinical applications. Uppsala, Sweden, September 28-October 3, 2003

Heme oxygenase-1 regulation in the kidney. Facultad de Quimica, Universidad Nacional Autonoma De Mexico, Mexico City, Mexico, August 27, 2003

Role of heme oxygenase-1 in atherogenesis. Facultad de Quimica, Universidad Nacional Autonoma De Mexico, Mexico City, Mexico, August 27, 2003

Recurrent Hemolytic Uremic Syndrome after renal transplantation. Department of Nephrology and Mineral Metabolism, Instituto Nacional de Ciencias Medicas y Nutricion, Salvador Zubiran, Mexico City, Mexico, August 28, 2003

Nutrient control of heme oxygenase-1 gene expression. Facultad de Quimica, Universidad Nacional Autonoma De Mexico, Mexico City, Mexico, August 29, 2003

Glucose deprivation induces HO-1 gene expression by a pathway independent of the unfolded protein response. 2nd International conference on heme oxygenase. Catania, Sicily, June 6-9, 2002

Adaptive responses to tissue injury: Role of heme oxygenase-1 gene expression. Research seminar, National Eye Institute, National Institutes of Health, Bethesda, MD, April 2001

Regulation of heme oxygenase-1 gene expression in renal injury. Department of Medicine, Research Seminar, University of Minnesota, Minneapolis, MN, October 2000

Heme oxygenase-1 gene ablation or overexpression modulates cisplatin-induced renal tubular apoptosis. 1st International Symposium on Heme oxygenase/Carbon monoxide, New York, NY, July 2000

Regulation of the human heme oxygenase-1 gene in oxidant renal injury. Research Seminar, Division of Nephrology, New England Medical Center, Boston MA, September 1998

Regulation of the human heme oxygenase-1 gene in oxidant renal injury. Research Seminar, Division of Nephrology, Johns Hopkins Univ School of Medicine, Baltimore, MD, March 1998

Management of Acute renal failure in the Intensive care unit. Postgraduate Institute of Medical Education & Research, Chandigarh, India, December 1997

Heme oxygenase and oxidant renal injury, *State-of-the-Art presentation,* Southern Society for Clinical Investigation, New Orleans, LA, February 1997

GRANT SUPPORT:

Current

NIH/NIDDK 1P30 DK079337-15 (PI: Agarwal) 20% effort
UAB-UCSD O'Brien Core Center for Acute Kidney Injury Research
Total costs: $5.7M
09/01/2008 – 07/31/2023

Veterans Administration Merit Award (I01BX004047) (PI: Agarwal) 5% effort
Lymphangiogenesis in the pathogenesis of acute kidney injury
Annual direct costs: $165,000 + $50,000 in year 1
10/1/17 – 03/31/2026
Role: PI

NIH/NINDS U54 ES30246 (PI: Athar, Project 3 PI: Agarwal) 20% effort
UAB Research Center for Excellence in Arsenicals
Project 3: Intercepting kidney damage following skin exposure to arsenicals
Total costs: $18.2M
Role: PI, Project 3
7/1/18 – 06/30/23

NIH/NIDDK R01 DK118932 (MPI: George/Agarwal)(George-Contact PI) 10% effort
Mononuclear phagocytes in the pathogenesis of acute kidney injury
Total costs: $1,826,284
Role: Co- PI
3/15/19 – 12/31/23

NIH/NHLBI R01 HL120338. (PI: Tita, A) 2.5% effort
Pregnancy as a Window to the Future: Outcomes of Antihypertensive Therapy and Superimposed Preeclampsia in Pregnant Women with Mild Chronic Hypertension (CHAP Maternal Follow-Up Study)
Total costs: $11,682,213
09/1/21– 08/31/26
Role: Co-I

UAB CCTS and ADDA program for Drug discovery and development 2.5% effort
Screening for novel modulators of heme oxygenase-1 expression in human disease
(PI: Agarwal)
Total costs: $80,000
01/01/2012 – 12/31/2022

Pending

NIH/NIEHS UG3 ES035474-01 (MPI: Agarwal/George)
Novel Brd4 inhibitors in lewisite-induced acute kidney injury
07/1/2023-6/30/2028
Total costs: $3,044,250
Role: Contact PI

NIH/NIDDK R01 DK136170-01 (MPI: Augelli-Szafran/George/Agarwal)
Early preclinical validation of small molecule heme oxygenase-1 inducers for acute kidney injury
04/01/23 – 03/31/2028
Total costs: $2,465,126
Role: Contact PI

DOD. Number not yet assigned (Mrug)
UAB PKD1 and PKD2 Variants Functional Characterization and Therapeutic Pathway Discovery Center, Project 3: Relevance of PKD1/2 variants to injury-induced cytogenesis.
Total costs: $10,691,988
10/01/23 – 09/30/27
Co-Investigator: Project 3

Previous

NIH/NIDDK R01 DK119497 (PI: Rutkowski)
Lymphatics and Lymphangiogenesis in Kidney Function and Inflammation

Subcontract costs: $46,390
Role Co-I
01/23/20 – 8/31/22

NIH/NIDDK 3P30DK079337-12S5 (PI: Agarwal)
UAB-UCSD O'Brien Core Center for Acute Kidney Injury Research
Research Supplement to promote diversity in health-related research
Total costs: $260,291
05/01/2020 – 04/30/2022
Project PI: Tennille Webb, Assistant Professor, Pediatric Nephrology

NIH/NIDDK 3P30DK079337-03S1 (PI: Agarwal)
UAB-UCSD O'Brien Core Center for Acute Kidney Injury Research
Summer students training program
Total annual costs: $51,840
08/01/2010 – 07/31/2021

NIH/NIDDK 3P30DK079337-12S3 (PI: Agarwal)
UAB-UCSD O'Brien Core Center for Acute Kidney Injury Research
Administrative Supplement for Research on Sex/Gender Influences in AKI
Total annual costs: $148,500
08/01/2019 – 07/31/2021
Project PI: Lisa Curtis

NIH/NIAID R01 AI111940 (PI: Steyn, A)
Heme oxygenase-1 and the bioenergetics threshold of latent TB and HIV co-infection
Total costs: $1,678,211
04/01/2015 – 03/31/2021
Role: Co-Investigator

NIH/NIDDK 5T32 DK007545-33 (PI: Agarwal)
Interdisciplinary Training in Kidney-Related Research
Total costs: $1,277,432
07/01/1987 – 03/31/2024

NIH/NIDDK R01 DK59600 (PI: Agarwal)
Human heme oxygenase-1 gene regulation in renal injury
Total costs: $1,812,500
04/01/2002 – 09/30/2021

Veterans Administration Program Project Grant (1IP1BX001595-01)
(PI: Sanders, Project 3 PI: Agarwal)
Novel regulators of vascular disease
Total costs: $2,980,369
10/01/2012 – 09/30/2016
NIH/NINDS R21 NS090024 (Multiple PI: Matalon/Agarwal)
Central role of heme oxygenase in reversing bromine morbidity and mortality
Total costs: $774,274
09/30/2014 – 09/29/2016
Role: Co-PI

NIH/NIDDK R01 DK083390 (Multi-PI: Agarwal/George)
The role of heme oxygenase-1 in the immune response
Total costs: $1,831,250
07/01/2011 – 06/30/2016

Complexa (PI: Agarwal)
CXA-10 in acute kidney injury
Total costs: $81,693
07/01/2012 – 06/30/2014

NIH/NIAID R01AI076389 (PI: Steyn)
Mechanism of Mycobacterium Tuberculosis Persistence
Total costs: $731,876
07/01/2009 – 06/30/2013
Role: Co-Investigator

NIH/NIDDK 3P30DK079337-02S1 (PI: Agarwal)
UAB-UCSD O'Brien Core Center for Acute Kidney Injury Research
ARRA Supplement
Total costs: $363,337
08/11/2009 – 08/10/2012

NIH/NIDDK R01 DK078038
Thrombospondin 1 antagonists in diabetic nephropathy
PI: Murphy-Ullrich, Co-I: Agarwal
Total costs: $1,814,200
04/01/2007 – 03/31/2012

NIH/NIDDK R01 DK75532 (PI: Agarwal)
Cytokine modulation of heme oxygenase-1 in chronic kidney transplant rejection
Total costs: $1,491,375
07/01/2006 – 03/31/2011

NIH/NIDDK R13 DK085914-01 (PI: Agarwal)
6th International Conference on Heme Oxygenases
Total costs: $5,000
08/01/2009 – 07/31/2010

United Negro College Fund - Merck Graduate Science Research Dissertation Fellowship
(PI: Marcienne M. Wright)
Regulation of Human Heme Oxygenase-1 by Modified Lipids in the Vasculature
Sponsor: Agarwal, Total Costs: $52,000
09/01/2008 – 09/01/2010
Declined due to anticipated completion of graduate work prior to award

American Heart Association, Southeast Affiliate Pre-doctoral fellowship (PI: Subhashini Bolisetty)
Site Specific overexpression of heme oxygenase-1 in acute kidney injury
Sponsor: Agarwal
Total costs: $43,540
07/01/2008 – 06/30/2010

NIH/NIDDK R01 DK071875 (PI: Agarwal)
Heme oxygenase-1 gene expression by TGF-β1
Annual direct costs: $150,000
06/01/2006 – 03/31/2010

National Kidney Foundation Fellowship (PI: Tambi Jarmi)
Role of heme oxygenase-1 in the pathogenesis of lupus nephritis
Sponsor: Agarwal
Total costs: $80,000
07/01/2007 – 06/30/2009

NIH/NHLBI R01 HL068157 (PI: Agarwal)
Human heme oxygenase-1 gene regulation by Oxidized LDL
Total costs: $1,185,000
07/01/2003 – 06/30/2008 (with one year no cost extension)

NIH/NIDDK R21 DK071023 (PI: Chen, Co-I: Agarwal)
Cytokine modified stem cells in kidney transplantation
Total costs: $290,000
04/01/2005 – 03/31/2008 (one year no cost extension)

NIH/NIAID K08 AI057362 (PI: Matthias Kapturczak, Co-mentor: Agarwal)
Role of heme oxygenase-1 in the immune response associated with allograft rejection
Total costs: $582,930
04/01/2005 – 06/30/2007

NIH/NIDDK R21 DK067472 (PI: Agarwal)
AAV type 1 and 5 vectors for gene delivery in the kidney
Total costs: $290,000
06/01/2004 -05/31/2007

Center Grant: Juvenile Diabetes Research Foundation
Principal Investigator: Mark A. Atkinson*: "JDRF Gene Therapy Center for the Prevention of Diabetes and Diabetic Complications at the Univ of Florida and the Univ of Miami"*.
Total costs: $10.6 million
01/01/2007 – 12/31/2005
Project 3: PI: Agarwal: K1-K3 angiostatin gene therapy for prevention of vascular endothelial cell proliferation and renal transplant loss.
Total costs: $182,554/year

NIH/NHLBI R01 HL64937 (PI: Freeman, Co-I: Agarwal)
Nitric oxide-dependent oxidative lung injury
Total costs: $2,117,005
02/01/2005 – 01/31/2006

UAB Department of Medicine, Planning grant (Co-PI's: Agarwal, Sanders)
Novel approaches to acute renal failure
Total costs: $60,000/year
05/01/2004 – 04/30/2006

National Kidney Foundation fellowship grant
Growth factor regulation of heme oxygenase-1 expression in renal epithelial cells

Principal Investigator: Dr. Eric M. Sikorski, PhD ($40,000/year)
Sponsor: Agarwal
07/01/2003 – 06/30/2006

American Heart Association Florida Affiliate fellowship grant
Regulation of heme oxygenase-1 expression by cadmium in renal epithelial cells
Principal Investigator: Dr. Eric M. Sikorski, PhD ($40,000/year)
Sponsor: Agarwal
07/01/2003 – 06/30/2005 (awarded, but declined due to NKF fellowship)

NIH/NIDDK Mentored Research Scientist Development Award (K01)
Heme oxygenase-1 gene expression by TGF-□
Principal Investigator: Dr. Nathalie Hill-Kapturczak, PhD
Co-Sponsor: Agarwal
Total costs: $272,532,
01/01/2002 – 12/31/2005

Juvenile Diabetes Foundation Center Grant:
Pilot project: Principal Investigator: Anupam Agarwal
Gene delivery to the vascular endothelium and the kidney using recombinant adeno-associated viral vectors, Total costs: $25,000
1/01/01-12/31/01

National Institutes of Health – NIDDK Clinical Investigator Award (K08)
Principal Investigator: Anupam Agarwal
Oxidative Renal tubular Injury – Molecular mechanisms
Total costs: $538,782
07/01/1996 – 06/30/2001

National Institutes of Health, R03 Small Grant Award
Principal Investigator: Anupam Agarwal
Heme oxygenase-1 regulation in oxidant renal injury
Total costs: $144,500
07/01/1999 – 06/30/2001

National Institutes of Health – NIDDK AASK study
Principal Investigator: C. Craig Tisher
Co-Investigator: Anupam Agarwal
Kidney Disease and Hypertension in African Americans
07/01/1997 – 04/30/1999

Sponsor for American Heart Association Florida Affiliate Fellowship Award
Principal Investigator: Fumie Shiraishi, MD
Total costs: $37,000
07/01/1998 – 06/30/1999

Sponsor for National Kidney Foundation of Florida Fellowship Award
Principal Investigator: Fumie Shiraishi, MD
Total costs: $25,000
07/01/1997 – 06/30/1998

Howard Hughes Medical Institute Pilot project funding
Principal Investigator: Anupam Agarwal
Total costs: $20,000
07/01/1997 – 06/30/1997

College Incentive Fund, University of Florida
Principal Investigator: Anupam Agarwal
Total costs: $25,000
07/01/1997 – 06/30/1999

American Heart Association, Florida Affl. Fellowship Grant
Principal Investigator: Anupam Agarwal
Molecular mechanisms of oxidized LDL mediated renal tubular injury
Total costs: $37,000
07/01/1995 – 06/30/1996

Juvenile Diabetes Foundation International (JDFI) Fellowship Grant
Principal Investigator: Anupam Agarwal
Role of oxidative stress in the pathogenesis of experimental diabetic nephropathy
Total costs: $30,000
07/01/1994 – 06/30/1995

National Kidney Foundation fellowship
Principal Investigator: Anupam Agarwal
Role of heme oxygenase-1 in nephrotoxin-induced renal injury
Total costs: $25,000
07/01/1994 – 06/30/1995 (awarded, but declined due to JDFI fellowship)

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30. Shiraishi F, Nick HS, Tisher CC, **Agarwal A**. Prior induction of heme oxygenase-1 attenuates cisplatin-mediated toxicity in human proximal tubule cells (HPTC). J Am Soc Nephrol 1997;8:610A*.

31. Balla J, Balla G, Kakuk G, **Agarwal A,** Nath KA. Endothelial cell heme oxygenase and ferritin induction by heme- and copper-catalyzed oxidation of LDL. J Investigative Med 1996;44:501A*.

32. Silkensen J, **Agarwal A**, Nath KA, Rosenberg ME. Temporal induction of clusterin in cisplatin nephrotoxicity. J Am Soc Nephrol 1995;6:1005*.

33. **Agarwal A,** Balla J, Croatt T, Nath KA. Oxidized LDL (LDLox) injures renal tubular epithelial cells (TEC): Implications for Tubulointerstitial disease (TID). J Am Soc Nephrol 1994;5:935*.

34. **Agarwal A,** Leventhal J, Kim Y, Matas A, Alam J, Nath KA. Infiltrating macrophages strongly express heme oxygenase in acute renal allograft rejection in the rat. J Am Soc Nephrol 1994;5:977*.

35. Castillo D, Guerra J, Jaimes E, **Agarwal A,** Raij L. Glomeruli do not downregulate nitric oxide (NO) synthesis during protracted endotoxemia (LPS). J Am Soc Nephrol 1993;4:547*.

Oral presentations:

Invited Lectures at Regional and Local meetings:

Acute Kidney Injury – 2022. Renal grand rounds, Baylor College of Med, Houston, TX, June 15, 2022

What's new in Acute kidney injury? Paul Teschan Lectureship, Vanderbilt Univ, January 2018

Heme oxygenase-1 in renal and vascular injury. Grand rounds, LSU, Shreveport, April, 2016

Oxidative Stress and Inflammation Therapeutic Targets for Chronic Kidney Disease, 10th Annual C. Craig Tisher lecture, University of Florida, Florida, March 25-27th, 2013.

Adaptive responses in renal injury: role of heme oxygenase-1. Department of Physiology seminar. University of Mississippi Medical center. September 12, 2012.

What's new in acute kidney injury? Invited presentation at the Conference for Independent Kidney Foundations, Birmingham, Al, August 2, 2012.

Impact of trainee-related research discoveries and the practice of medicine. 24th Alabama Chief Medical Resident's Society, Point Clear, Alabama. May 4-6th, 2012.

In vivo regulation of heme oxygenase-1 gene expression in humanized BAC transgenic mice. Center of Free Radical Biology seminar series, April 7th, 2011.

In vivo regulation of heme oxygenase-1 gene expression in humanized BAC transgenic mice. Genetics and Genomics Seminar series, UAB, February 18, 2011.

Heme oxygenase-1 in the regulation of the immune response: *Implications in transplantation.* UAB Program in Immunology seminar series. September 23, 2010

Acute Kidney Injury: Highlights from the American Society of Nephrology meeting. Anesthesiology Multi-disciplinary Critical Care Conference, UAB. September 14, 2010

Heme oxygenase-1 in renal and vascular injury. Renal Grand Rounds, Emory University, Atlanta, Georgia, February February 2, 2010.

Heme oxygenase-1 in maintenance of vascular homeostasis. UAB Seminar series in Vascular Biology and Hypertension Program. January 12, 2010.

Role of heme oxygenase-1 in renal and vascular injury. Renal research conference, Vanderbilt University, December 10th, 2008.

Oxidative stress in progression of chronic kidney disease: Lessons from interventions in cardiovascular disease. Renal Grand Rounds, Vanderbilt University, December 11th, 2008.

Adaptive responses to renal and vascular injury: Role of heme oxygenase-1. O'Brien center research conference, Division of Nephrology, Baylor College of Medicine, October 21, 2008.

Oxidative stress in chronic kidney disease: What have we learnt from studies in cardiovascular diseases? Renal Grand rounds, Baylor College of Medicine, October 22, 2008.

Role of heme oxygenase-1 in renal and vascular injury. Physiology research conference, Tulane University, May 8th, 2008.

Mediators of oxidative stress in progressive kidney disease. Grand Rounds, Tulane Univ, May 9th, 2008.

Heme oxygenase-1 as a target in angiogenesis. UAB Division of Hematology-Oncology seminar series, Monday, February 11, 2008.

Adaptive response to renal and vascular injury: focus on heme oxygenase-1. UAB autosomal recessive polycystic kidney disease research center seminar series. December 6, 2007.

Heme oxygenase-1 in renal and vascular injury. Molecular and Cellular Pathology seminar series, University of Alabama at Birmingham, January 18, 2007

Oxidative stress in the pathophysiology of progressive renal disease. Renal grand rounds. University of Florida College of Medicine, Gainesville, Florida, October 13, 2006.

Management of acute renal failure in the ICU. Medicine Grand Rounds. Carraway Methodist Medical Center, Birmingham, Alabama. October 3, 2006.

Role of heme oxygenase-1 in stromal cell derived factor-1 mediated angiogenesis. Center for Free Radical Biology seminar series, University of Alabama at Birmingham, September 28, 2006.

Role of heme oxygenase-1 in renal and vascular injury. Department of Cell Biology, University of Alabama at Birmingham, Alabama, September 20, 2006.

Heme oxygenase-1 in renal and vascular injury – Department of Cell Biology Research seminar, Medical College of Georgia, Augusta, Georgia, September 12, 2006

Heme oxygenase-1 in renal and vascular injury – Renal grand rounds, University of Virginia, Charlottesville, VA. January 9, 2006

Diabetic kidney disease – New perspectives. Grand rounds, Robert J. Dole VA Medical Center, Kansas University School of Medicine, Wichita, Kansas, November 3, 2005.

Management of acute renal failure in the ICU. Medical Grand Rounds. Kansas University School of Medicine, Wichita, Kansas, November 4, 2005.

Oxidative stress in chronic kidney disease: What have we learnt from studies for cardiovascular diseases? Vascular Biology and Hypertension seminar series, University of Alabama at Birmingham, Alabama, September 30, 2005.

Invited Speaker, The effects of nitrated lipids on heme oxygenase-1 expression in human endothelial cells. Session on Oxidative Stress, Atherosclerosis and Endothelial Function. 14th South Eastern Lipid Conference (SELRC), Callaway Gardens, GA, September 23-25th, 2005.

Heme oxygenase expression in disease states. Seminar presented to the MD PhD program at the University of Alabama at Birmingham, August 10, 2005

Gene Delivery for Kidney and Vascular Disease using Recombinant Adeno-Associated Viral Vectors. Gene Therapy Center Research Forum, University of Alabama at Birmingham, October 5, 2004

Heme oxygenase-1 expression in health and disease. Department of Medicine Clinical Research Seminar, University of Alabama at Birmingham, Alabama, September 27, 2004

Acute renal failure. Medicine Grand rounds, University of Alabama at Birmingham, June 9, 2004

Role of heme oxygenase-1 gene expression in atherogenesis, Vascular Biology and Hypertension seminar series, University of Alabama at Birmingham, Alabama, January 23, 2004.

Diabetic Nephropathy. American College of Physicians-American Society of Internal Medicine-Florida Chapter, St. Petersburg, Florida, September 2003

Regulation of heme oxygenase-1 gene expression in renal injury. Research seminar, Division of Nephrology, University of Alabama, Birmingham, AL, February 10-11, 2003

Regulation of heme oxygenase-1 gene expression in renal injury. Division of Nephrology Grand Rounds, Baylor College of Medicine, Houston, TX, April, 2001.

Heme oxygenase-1 and oxidant renal injury, Division of Renal Diseases and Hypertension research seminar, University of Texas, Houston, TX, April 2000

Heme oxygenase-1: A central enzyme in mammalian biology, Department of Medicine, University of Florida, Gainesville, FL, Research Seminar, September 2000

Heme oxygenase-1 in renal injury. Microbiology and Immunology seminar series, University of South Carolina, Columbia, SC, February 2000

Management of Diabetic nephropathy. 2nd CME, India Cultural and Education Center, Gainesville, FL, December 1999

Regulation of Heme oxygenase-1 by Oxidized LDL. Seminar presented at Atherogenics, Atlanta, GA, September 1999

Renal involvement in systemic vasculitis. Medical Grand rounds, Univ of Florida, Gainesville, June 1999

Heme oxygenase-1 attenuates cisplatin-induced apoptosis and necrosis in vitro and in vivo: Implications in toxic renal tubular injury. Nephrology research seminar series, Univ of Florida, Gainesville, FL, April 1999

Management of Acute renal failure in the renal transplant recipient. Transplant surgery conference, University of Florida, Gainesville, FL, March 1999

Regulation and functional significance of heme oxygenase in oxidant renal injury. Physiology seminar series, University of Florida, Gainesville, FL, February 1999

Regulation of heme oxygenase-1 gene expression in oxidant renal injury. Research Seminar, Division of Rheumatology, University of Florida, Gainesville, FL, October 1998

Nephrology- New Issues, Medical grand rounds, Professor in Attendance, Orlando Regional Medical Center, Orlando, FL, October 1998

Heme oxygenase and oxidant renal injury. Pathology research seminar, University of Florida, Gainesville, FL, November 1997

Acute renal failure in the Intensive care unit. Medical grand rounds, University of Florida, Gainesville, FL, September 1997

Adaptive mechanisms in acute oxidant injury: Role of heme oxygenase. GI Research conference, University of Florida, Gainesville, FL, October 1996

Distal renal tubular acidosis: A case presentation. Great cases, Medical grand rounds, University of Florida, Gainesville, FL, February 1996

Recurrent hemolytic uremic syndrome in a renal transplant recipient: Current concepts and management. Medical grand rounds, University of Minnesota Medical School, Minneapolis, MN April 1994

TRAINEE RECORD:

Training of graduate and undergraduate students:			
	Trainee name	***Period/Source of support***	***Subsequent position***
1.	Christopher A. Davis (Co-mentor with HS Nick) Graduate Student Biochem. & Molecular Biology	July 1998-May 2001 NIH Tumor Biology training grant	Postdoctoral fellow University of Texas, Southwestern (Dr. Eric Olson's lab.) Currently at Merck, R & D.
2.	Andrew Siedlecki 1st year medical student University of South Florida	June 2000-August 2000 Division of Nephrology funds	Assistant Professor, Brigham and Women's Hospital, Division of Nephrology.
4.	Rajeev Prabhakaran High School Student Fort Myers High school	June 1997-August 1997 Students Science Training Program, University of Florida	Fellow in Gastroenterology, Boston University, Practicing gastroenterologist, Fort Myers, Florida
5.	Laurie Archbald Undergraduate Student Johns Hopkins University	June 1996-August 1996 Summer Research Program	3rd year Internal Medicine resident, University of Virginia, Charlottesville, Currently, Associate Professor of Medicine, Geriatrics, UVA
6.	Thomas Hock Graduate Student, Department of Biochemistry and Molecular Genetics, UAB	January 2005-June 2007 NIH grant	Research Associate, Dept. of Biochemistry and Molecular Genetics, UAB; Currently, Instructor, Biology Department, Marion Military Institute, Marion, AL
7.	Jessy Deshane Graduate Student, Biochemistry and Molecular Genetics, UAB	April 2005-June 2007 NIH grant	Associate Professor, Division of Pulmonary Medicine, UAB
8.	Marcienne Wright Graduate Student Department of Biochemistry and Molecular Genetics, UAB	August 2005-Dec 2009 NIH grant	Postdoctoral fellow, National Biosafety and Biocontainment Training Program, NIH, Currently, Health Scientist at U.S. Department of Health and Human Services (HHS)
9.	Subhashini Bolisetty Graduate Student, Department of Cell Biology, UAB	June 2006-Dec 2010	AHA Pre-doctoral fellowship, Currently Assistant Professor of Medicine, Div of Nephrology, UAB
10.	John Roberts, Medical Student, UAB	June 2006-August 2006	AFMR Summer scholarship, Currently, Assistant Professor of Medicine, Nephrology, Duke Univ

11.	Vanisha Yarbrough, High School graduate	June 2006-August 2006	NIH/National High School Student Summer Research Program, Currently, Assistant Professor, Ob Gyn, Duke Univ
12.	Junghyun Kim, Graduate student, Molecular and Cellular Pathology Graduate Program, UAB	June 2007-Dec 2010	Postdoctoral fellow, Piero Anversa, MD, BWH, Harvard Med School, (2010-2013); currently, Research Scientist, Biotech company in Bethesda.
13.	Carl Frizell, Graduate student, Integrated Biomedical Sciences graduate program, UAB	July 1, 2009-April 2012	Cardiovascular Pathophysiology T32 training grant, Currently, Physician Assistant in practice
14.	Travis D. Hull, MD PhD Student, UAB MSTP program (co-mentor with James George, PhD)	July 1, 2011-June 2015	MD PhD student, Cardiovascular T32 (2012-2013) and AHA predoc (2013-2015) fellowship, Currently, Surgery resident, Massachusetts General Hospital, Boston
15.	Jeremie M. Lever, MD PhD Student, (co-mentor with James George, PhD)	July 1, 2015-June 2019	UAB MSTP program, AHA predoc (2016-2017), NIH F31 fellowship (2017-2021)
16.	Sarah Bowhay Graduate student	March 1, 2016-August 2017	UAB Biochemistry and Structural biology graduate program, Funded by T32 Training grant for Translational Medicine
17.	Laurence Black Graduate Student	March 1, 2016-June 2019	UAB T32 Training Grant – Postdoctoral fellow
18.	Gunars Osis Graduate Student	March 1, 2018-2022	UAB Biochemistry and Structural biology graduate program (AHA predoctoral fellowship)(AMC21 Scholar)
19.	Elise Erman Graduate Student (Co-mentor with Dr. James George)	July 2020-present	UAB Immunology graduate program. Funded by T32 Training grant
20.	Matthew Cheung Graduate Student (MD PhD program)(Co-mentor with Dr James George)	July 2020-present	UAB Immunology graduate program. Funded by Immunology T32 training grant (2020-2021), AHA Predoctoral fellowship (2021-2022), NIDDK F30 award (2022-present)

21.	Gelare Ghajar-Rahimi, Graduate Student (MD PhD program)(Co-mentor with Dr. James George)	August 1, 2021-present	UAB Immunology graduate program. NIDDK T32 Training grant (2022-present), F30 award pending.
22.	Han Eckenrode, Graduate Student, Co-mentor with Dr. Lisa Curtis	August 1, 2021-present	UAB Pathobiology, Pharmacology and Physiology theme, funded by NIDDK funded PRIME T32 training grant
23.	Arin Melkonian, Graduate Student, (MD PhD program)(co-mentor with Dr. James George)	August 2022-present	UAB Biomedical Engineering theme

Training of Postdoctoral research and Clinical fellows:

	Trainee name	***Period/Source of support***	***Subsequent position***
1.	Fumie Shiraishi, MD Postdoctoral fellow Division of Nephrology University of Florida	July 1997-June 1999 National Kidney Foundation fellowship (1997-1998) AHA Fellowship (1998-1999)	Assistant Professor, Anesthesiology, Kumamoto University, Japan
2.	Vijayalakshmi Thamilselvan, PhD Postdoctoral fellow Division of Nephrology University of Florida	July 1999-June 2000 National Kidney Foundation fellowship (awarded)	Research Associate, Wayne State University, Detroit, MI
3.	Koshy Abraham, MD Renal fellow University of Florida	July 1997-June 1998	Nephrology practice
4.	Marnie Marker, MD Renal fellow University of Florida	July 1999-June 2000	Nephrology practice
5.	Nathalie Hill-Kapturczak, PhD Research fellow Division of Nephrology University of Florida	December 1998-Present NIH T32 training grant NIH K01 research award (January 2002-Dec 2004)	Assistant Professor, Division of Nephrology, University of Alabama at Birmingham, currently, Assistant Professor, Department of Psychiatry, UT San Antonio
6.	Se-Ho Chang, MD PhD Research fellow Division of Nephrology University of Florida	July 2000-June 2002 Funds from Gyeongsang National University, Korea and NIH funds	Associate Professor of Medicine and Chief, Dept. of Medicine, Gyeongsang National University, Korea
7.	Rajendra Baliga, MD Renal fellow University of Florida	July 2002-2003	Transplant Nephrology fellowship, Univ. of Chicago, Currently, transplant nephrologist, University of South Florida, Tampa

9.	Matthias H. Kapturczak, MD PhD Nephrology Fellow (Co-mentor with Mark Atkinson)	July 2002-2009 NKF fellowship (2002-2003) NIH K08 (2005-2009)	Assistant Professor of Medicine, Division of Nephrology, University of Alabama at Birmingham, Currently, transplant nephrologist, San Antonio Kidney Disease Center
10.	Mahesh Basireddy, MD Postdoctoral fellow Division of Nephrology University of Alabama at Birmingham	Sept. 2004-October 2005	Private practice, Nephrology in Louisiana
11.	Bo Chen, MD Postdoctoral fellow, Division of Nephrology, UAB	July 2005-November 2008 NIH grant funds	Assistant Professor, Dept. of Urology, Yuhuangding hospital, Qingdao University, Yantai, China, Currently, pathology resident, UAB, Department of Pathology
12.	Tambi Jarmi, MD Nephrology fellow, UAB	July 2007-June 2009 NKF Fellowship (2007-2009)	Transplant Nephrologist, Mayo Clinic, Jacksonville, Florida
13.	Abolfazl Zarjou, MD PhD Postdoctoral fellow, Division of Nephrology, UAB	January 2009-June 2012 July 1, 2015-2016	Postdoctoral Scholar, ABIM research pathway resident at UAB, ASN Ben Lipps Fellowship (2015-2016), Currently, Assistant Professor of Medicine, Division of Nephrology, UAB
14.	Anjana Perianayagam, MD Nephrology fellow, UAB	July 2008-2010	Postdoctoral fellow Currently Assistant Professor of Medicine, Division of Nephrology, Univ of Arkansas, Little Rock
15.	Subhashini Bolisetty, PhD Postdoctoral scholar, Division of Nephrology, UAB	January 2011-2014	Postdoctoral Scholar (2011-2014) – AHA Postdoctoral fellowship, Instructor of Medicine (2014-2019) – NIH K01 award.
16.	Ravindra Boddu, PhD Postdoctoral Scholar, Division of Nephrology, UAB	July 2012-2017	NIH Training Grant – Interdisciplinary Training in kidney related research, Currently, Research Associate, Duke University.
17.	Vyvyca Walker, PhD Postdoctoral Scholar, Division of Nephrology,	January 2014-2017	UAB MERIT Program **[M**entored **E**xperiences in **R**esearch, **I**nstruction, and

	UAB		**T**eaching **(MERIT) Program** –an Institutional Research and Academic Career Development Award (K12) from NIH/NIGMS]
18.	Sangeetha Rao, MD	July 2014-June 2016	Fellow, Pediatric Critical Care Medicine, Dept of Pediatrics fellowship funds, UAB
19.	Oreoluwa Adedoyin, PhD (co-mentor with Dr. James George)	November 1, 2015-Dec 31, 2017	NIH Training Grant – Interdisciplinary Training in kidney related research (2015-2016) 2016 – 2017: UAB MERIT Program –an Institutional Research and Academic Career Development Award (K12) from NIH/NIGMS]
20.	Laurence M. Black, PhD Postdoctoral Scholar, UAB Division of Nephrology	July 1, 2018-August 2021	NIH T32 Training Grant – Interdisciplinary Training in kidney related research
21.	Yan Lu, MD PhD Renal fellow, UAB Division of Nephrology	July 1, 2020-June 2022	NIH T32 Training grant - Interdisciplinary Training in kidney related research
22.	Kyle Moore, PhD Postdoctoral Scholar, UAB Division of Nephrology (co-mentor with Dr. James George)	August 1, 2021-present	NIH T32 Training grant - Interdisciplinary Training in kidney related research

Mentorship for Junior faculty members:			
	Trainee name	***Period/Source of support***	***Current position***
1.	Nathalie Hill-Kapturczak, PhD, Assistant Professor of Medicine, Division of Nephrology, UAB	2002-2008 NIH K01 research award (January 2002-Dec 2004), NIH R01 award (2006-2008)	Associate Professor, Department of Psychiatry, UT San Antonio
2.	Matthias H. Kapturczak, MD PhD, Assistant Professor of Medicine, Division of Nephrology, UAB	2005-2007 NIH K08 (2005-2007)	Transplant nephrologist, San Antonio Kidney Disease Center
3.	Caroline Marshall, MD Assistant Professor of Medicine, Division of Nephrology, UAB	2013-2019 VA Career Development Award (2013-2019)	Associate Professor of Medicine, Division of Nephrology, UAB (deceased January 2022)
4.	Abolfazl Zarjou, MD PhD Assistant Professor of Medicine, Division of	2017-present NIH K08 (2017-2022) SSCI Young Scholar award	Assistant Professor of Medicine, Division of Nephrology, UAB

	Nephrology, UAB	(2019-2020)	
5.	Subhashini Bolisetty, PhD Assistant Professor of Medicine, Division of Nephrology, UAB	2014-2019 NIH K01 (2014-2019) ASN Carl Gottschalk award (2019-2021) NIH/NIDDK R01	Associate Professor of Medicine, Division of Nephrology, UAB
6.	Tanecia Mitchell, PhD, Assistant Professor, Department of Urology, UAB	2016-present NIH/NIDDK K01 award (2016-2021), NIDDK R03 award (2020-2022) Pending NIDDK R01 award	Assistant Professor, Department of Urology, UAB
7.	Tennille Webb, MD Assistant Professor, Pediatric Nephrology, UAB	2019-present NIH/NIDDK Diversity supplement (2020-2022)	Assistant Professor of Pediatrics, Pediatric Nephrology, UAB
8.	Yan Lu, MD PhD Assistant Professor, UAB Division of Nephrology	July 1, 2022-present	Assistant Professor of Medicine, Frommeyer award from Department of Medicine
9.	James Odum, MD Assistant Professor, UAB Department of Pediatrics, Division of Pediatric Critical Care (Co-mentor with Dr. Bolisetty)z	August 1, 2022-present	Assistant Professor, UAB Department of Pediatrics, Division of Pediatric Critical Care

MISCELLANEOUS:

Thesis

1987-1992 — Department of Nephrology
Postgraduate Institute of Medical Education & Research
Chandigarh, India
Thesis: Autonomic functions in chronic renal failure.
Mentor: K. S. Chugh, MD FACP

1984-1986 — *Thesis:* A comparative study of ESR by the Westergren method and Micromethods [Research grant from Indian Institute of Science, Bangalore]

PATENTS:

1. Compounds for the treatment of acute and chronic kidney disease, PCT/US2021/059787. (Pending)
2. Development of potential antidotes for arsenicals. Provisional patent application submitted, October 1, 2021

Personal interests:
I enjoy golf, gardening and SEC college football (Go Gators!). I enjoy playing Indian classical violin and the Alabama Symphony Orchestra.

People of UAB

UAB announces key Health System, Heersink School of Medicine leaders

by Alicia Rohan

The University of Alabama at Birmingham Marnix E. Heersink School of Medicine and the UAB Health System have announced key leadership appointments, effective immediately.

Dawn Bulgarella, CEO of the UAB Health System and CEO of the UAB/Ascension St. Vincent's Alliance.

At its Feb. 3 meeting, the University of Alabama System Board of Trustees unanimously named Dawn Bulgarella CEO of the UAB Health System and CEO of the UAB/Ascension St. Vincent's Alliance at the recommendation of UA System Chancellor Finis St. John in consultation with UAB President Ray Watts.

Also on Feb. 3, Watts named Anupam Agarwal, M.D., dean of the UAB Marnix E. Heersink School of Medicine, senior vice president of Medicine and chair of the Health Services Foundation Board. Agarwal's appointment follows a national search led by a 23-member search committee co-chaired by Department of Neurology Chair David Standaert, M.D., Ph.D., and Senior Vice President of Finance and Administration Brian Burnett, Ph.D., with assistance from health care executive search firm AMN Leadership Solutions.

Bulgarella and Agarwal have filled these respective roles in an interim capacity since June 2022 and assume the permanent roles effective Feb. 3, 2023. Bulgarella first joined UAB in 1993 in the Health Services Foundation. Agarwal joined the School of Medicine in 2003 and also served as interim dean and SVP of Medicine in 2013 when Watts vacated the role to become president.

“Dawn and Anupam proved to be extremely effective throughout their long careers at UAB and in these critical interim roles,” Watts said. “They both clearly exhibited the knowledge, talent and leadership required to ensure UAB Medicine’s continued ascent as a national leader in health care. They have played an invaluable role in our unprecedented success, and the continuity of their leadership will propel us even further.”

Known to be an innovative thinker and mentor, Bulgarella serves on numerous health care boards throughout Alabama and is active in multiple professional and community associations.

Bulgarella is a certified public accountant — formerly with Ernst & Young — and her 35-year career is highlighted by accomplishments in academic medical center administration, financial management and strategic planning. She spent 15 years in operations before becoming the senior associate dean of Finance and Administration in the Heersink School of Medicine and ultimately the first president and CFO of the UAB Health System. Most recently, she served as president of the UAB Health System and CFO for the UAB/Ascension St. Vincent’s Alliance.

“The UAB Health System is connecting more patients than ever to world-class care, and many opportunities remain for us to expand our reach and impact for our patients, UAB Medicine employees, community and state,” Bulgarella said. “I am grateful for the confidence of the UA System Board of Trustees, Chancellor St. John, President Watts and my valued colleagues for their confidence and support, and I look forward to continuing to build a sustainable health system that helps patients across Alabama.”

Agarwal served as executive vice dean from 2014-2022 and directed the Division of Nephrology from 2008-2021. He serves as the program director of the National Institute of Diabetes and Digestive and Kidney Diseases-funded O’Brien Center for Acute Kidney Injury Research, and his contributions providing critical insights regarding acute kidney injury have been recognized through honors including election to the American Society for Clinical Investigation, the Association of American Physicians, and the American Clinical and Climatological Association. He served as president of the American Society of Nephrology.

“I look forward to continuing to work with and serve Heersink School of Medicine students, faculty and staff and to collaborate with university, Health System and

Anupam Agarwal, M.D., dean of the UAB Marnix E. Heersink School of Medicine, senior vice president of Medicine and chair of the Health Services Foundation Board.

University of Alabama System leaders, as well as our many partners and supporters," Agarwal said. "I am proud to have been a part of this great institution's unprecedented growth for nearly 20 years and take very seriously this great responsibility to build on our strong foundation."

Chancellor St. John says UAB Medicine is fortunate to have retained key leaders like Watts, Bulgarella, Agarwal and others over a number of years.

"We have every confidence in our UAB Medicine leadership team because they — along with their talented and dedicated teams who care deeply about their patients, trainees, and fellow faculty and staff — have delivered undeniable results year after year," St. John said. "I congratulate Dawn and Anupam, who have both proved to be invaluable senior leaders. UAB Medicine provides world-class care to patients in every county in our state, educates future medical professionals at its internationally renowned academic medical center and is a treasured asset in Alabama."

UAB Medicine welcomed almost 2 million patient visits last year and continues to expand its presence throughout the state to improve access to health care for Alabamians. Last year, the UAB Medicine enterprise generated $6.4 billion in statewide economic impact and supported or sustained more than 57,100 jobs in Alabama.

Powered in large part by Heersink School of Medicine activity, UAB brought in a record $715 million in research funding last year, an 89 percent increase from $379 million in 2013, powering life-improving and lifesaving discoveries.

The UAB Health System includes UAB Hospital, UAB Hospital-Highlands, the University of Alabama Health Services Foundation, UAB Callahan Eye Hospital, affiliate relationships with Medical West and Baptist Health Montgomery, and management

relationships with Russell Medical, J. Paul Jones, Whitfield Regional, Northwest Regional Health and Regional Medical Center of Central Alabama. The system also includes Cooper Green Mercy Health Services and the UAB Health System/Ascension St. Vincent's Alliance.

With more than 800 medical students, approximately 1,100 residents and fellows, and a faculty of more than 1,600, the Heersink School of Medicine is one of the premier academic medical centers in the United States. UAB is among the top 25 schools in research funding from the National Institutes of Health and is routinely listed among the best in various national rankings. As the educational arm of UAB Medicine, the school trains students and residents in a world-class setting; UAB Hospital is the eighth-largest hospital in the country.

McKNIGHT BRAIN
RESEARCH FOUNDATION
Preserving memory, enhancing life

March 1, 2023

David R. Nelson, MD
Senior Vice President for Health Affairs, University of Florida (UF)
President, UF Health

Dear Dr. Nelson,

At the February 16, 2023, meeting of the McKnight Brain Research Foundation (MBRF), the trustees reviewed the 2022 annual report submitted by the Evelyn F. and William L. McKnight Brain Institute (MBI) of the University of Florida (UF).

The report is a comprehensive overview of the productivity and impressive accomplishments of the MBI in 2022. The trustees are grateful for the prioritization of the MBI's infrastructure needs. The consolidation of the Cognitive Aging and Memory Clinical Translational Research Programs (CAM) in expanded space in the Cumminicore – and the expected effort to house the labs of Drs. Foster, Bizon, Setlow, Burke and Maurer within the UF MBI – will support the research advancements and collaborations that are critical to the success of the broader MBI mission.

The summary information provided in the reports by Drs. Bizon, Burke, Cohen, and Foster reflects many achievements in the past year. It is impressive to see that, after several pandemic years, the research productivity, funding portfolio, mentorship of junior investigators, and interdisciplinary collaboration continues to grow at an exponential rate. The publication of 79 peer-review manuscripts and $10M in new awards is remarkable, as are the many awards and promotions received by CAM members, including Dr. Woods, Dr. Burke, and Dr. Bizon.

The efforts to recruit and train many high-caliber early career scientists are commendable. The trustees are pleased to learn of Dr. Burke's recently awarded NIH/NIA R25 grant to support research opportunities for diverse undergraduate students. It is notable that the work of Dr. Woods has extended to UF Jacksonville and that collaborative clinical research may develop with UF Scripps. The range of clinical trials at the MBI exploring the link between cognitive function and diabetes, bariatric surgery, the microbiome, nutritional supplementation, and mindfulness training is outstanding.

As a follow-up to this letter, the trustees request some additional information, including an organizational chart of the administrative structure of the MBI and its relationship to the Fixel Institute. It would also be helpful to see how the organizational charts reflect the different geographic locations of the Center for Cognitive Aging and Memory Clinical Translational Research. Looking to the future, we request that your annual reports will incorporate reports from the Deans of the College of Medicine and of the College of Public Health and Health Professions, and that the report follows the structure of the annual report template.

The trustees send their collective appreciation to you for your leadership and the tremendous efforts in continuing to advance the research initiatives of the MBRF, leading to the understanding and alleviation of age-related cognitive decline and memory loss.

Sincerely,

Angelika Schlanger

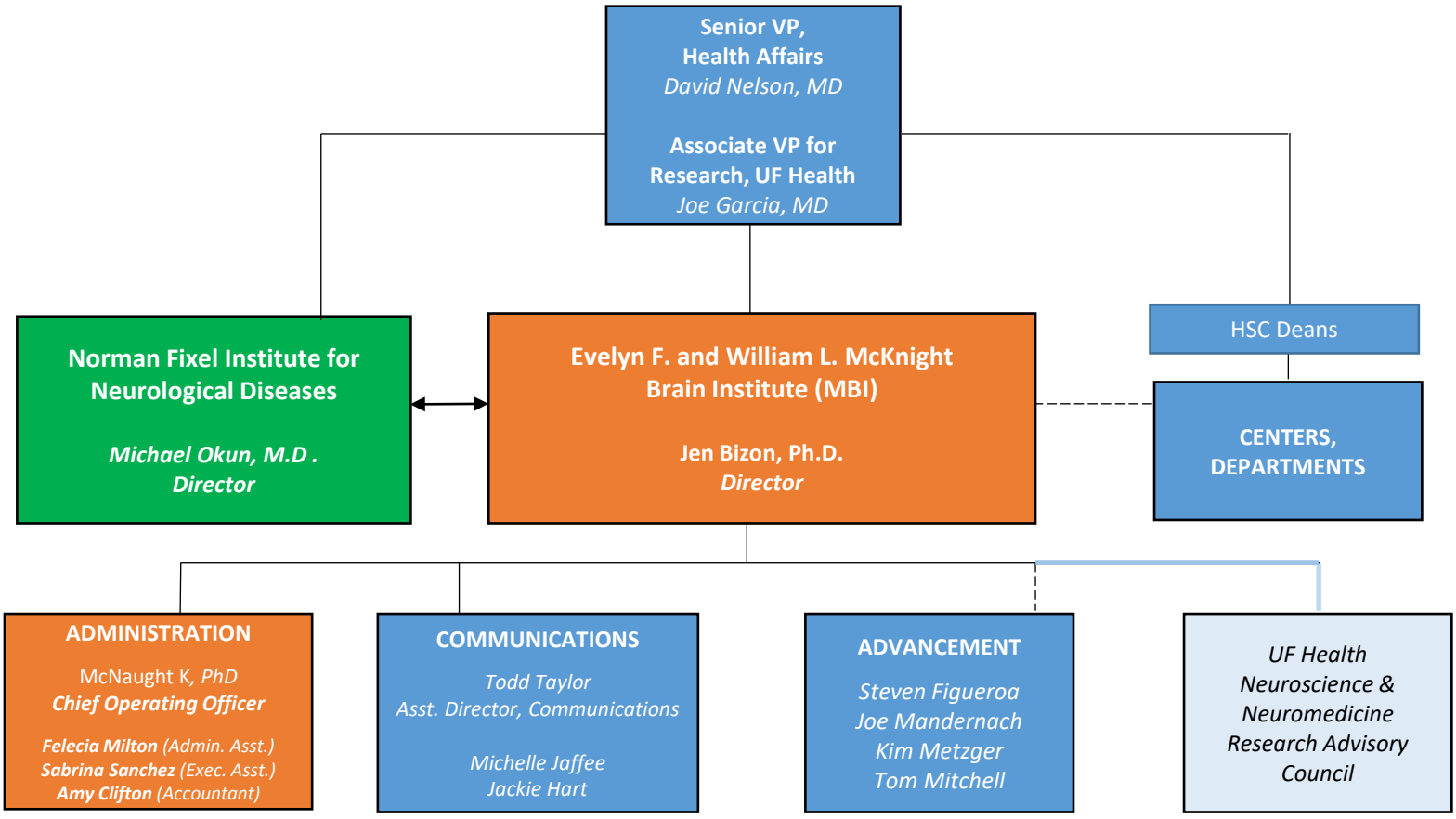
Angelika Schlanger, PhD

CC. MBRF Trustees; Colleen G. Koch, MD, MS, MBA; Beth A.Virnig, PhD, MPH; Steven T. DeKosky, MD; Jada Lewis, PhD; Ron A. Cohen, PhD, ABPP; Jennifer L. Bizon, PhD; Thomas C. Foster, PhD; Adam J. Woods, PhD; Sarah N. Burke, PhD; Joe Mandernach, JD

Please address all postal correspondence to:
Melanie Cianciotto ◆ Truist ◆ Post Office Box 620005 ◆ Orlando, Florida 32862 ◆ 407--237-4485

UF HEALTH NEUROSCIENCE & NEUROMEDICINE RESEARCH

ORGANIZATIONAL CHART



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Lewis, J. (*Assoc. Director*)
Mitchell G., PhD (*Assoc. Director*)
McNaught K, *PhD (Chief Operating Officer)*

Borchelt D., PhD
Burke S., PhD
Cohen, R., Ph.D.
Fillingim R, PhD
Flores C., PhD
Hoh B., MD
Jaffee M., MD
Lavoie M., PhD
Mathews C., MD
Nixon S., PhD
Okun M., MD
Otto K., PhD
Ranum L., PhD
Sayour E., MD PhD
Setlow B., PhD
Tansey M., PhD
Vaillancourt D., PhD

ORGANIZATIONAL CHART
Affiliated Centers, Departments, Colleges and Institutes

AMRIS: Advanced MRI and Spectroscopy Facility;
https://amris.mbi.ufl.edu

APK: Department of Applied Physiology & Kinesiology
http://hhp.ufl.edu/about/departments/apk/

ADRC: 1Florida Alzheimer's Disease Research Center
https://1floridaadrc.org/

BME: Department of Biomedical Engineering
https://www.bme.ufl.edu/

BRAIN: Brain Injury, Rehabilitation & Neuroresilience Center
https://braincenter.neurology.ufl.edu/

BREATHE: Breathing Research and Therapeutics Center
https://breathe.phhp.ufl.edu/

BRRC: Brain Rehabilitation Research Center of Excellence
https://www.brrc.research.va.gov/

CARE: Center for Addiction Research and Education
https://addictionresearch.health.ufl.edu/

CAM: Center for Cognitive Aging and Memory Clinical Translational Research Program
https://cam.mbi.ufl.edu/

CC: Cancer Center
https://cancer.ufl.edu/

CHP: Department of Clinical and Health Psychology
https://chp.phhp.ufl.edu/

CNG: Center for Neurogenetics
https://neurogenetics.med.ufl.edu/

COARD: Center for OCD, Anxiety and Related Disorders
https://coard.psychiatry.ufl.edu/

COD: College of Dentistry
https://dental.ufl.edu

COE: College of Engineering
https://www.eng.ufl.edu/

COM: College of Medicine
https://med.ufl.edu/

CON: College of Nursing
https://nursing.ufl.edu

COP: College of Pharmacy
https://pharmacy.ufl.edu/

CTRND: Center for Translational Research in Neurodegenerative Disease
https://ctrnd.med.ufl.edu/

EPI: Emerging Pathogens Institute
https://www.epi.ufl.edu/

FIXEL: Normal Fixel Institute for Neurological Diseases
https://fixel.ufhealth.org/

HHP: College of Health & Human Performance
http://www.hhp.ufl.edu/

HOBI: Department of Health Outcomes and Biomedical Informatics
https://hobi.med.ufl.edu/

IOA: Institute on Aging
https://aging.ufl.edu/

MBI: McKnight Brain Institute
https://mbi.ufl.edu/

MGM: Department of Molecular Genetics and Microbiology
http://mgm.ufl.edu/

NEUROL: Department of Neurology
https://neurology.ufl.edu/

NEUROSCI: Department of Neuroscience
https://neuroscience.ufl.edu/

NEUROSUR: Department of Neurosurgery
https://neurosurgery.ufl.edu/

NIMET: Nanoscience Institute for Medical and Engineering Technology
https://www.eng.ufl.edu/nimet/

PD: Department of Pharmacodynamics
https://pd.pharmacy.ufl.edu/

PHHP: College of Public Health and Health Professions
https://phhp.ufl.edu/

PSYCH: Department of Psychiatry
https://psychiatry.ufl.edu/

PT: Department of Physical Therapy
https://pt.phhp.ufl.edu/

PWCCTT: Preston A. Wells Center, Jr for Brain Tumor Therapy
https://braintumors.ufhealth.org

UFCST: Center for Smell and Taste
http://cst.ufl.edu/

UFHCC: UF Health Cancer Center
https://cancer.ufl.edu

UFGI: UF Genetics Institute
http://ufgi.ufl.edu

McKNIGHT BRAIN
RESEARCH FOUNDATION
Preserving memory, enhancing life

March 1, 2023

Tatjana Rundek, M.D., Ph.D.
Professor of Neurology | Evelyn F. McKnight Chair for Learning and Memory in Aging
Director, Evelyn F. McKnight Brain Institute
University of Miami

Dear Dr. Rundek,

At the February 16, 2023 meeting of the McKnight Brain Research Foundation (MBRF), the trustees reviewed the 2022 annual report submitted by the Evelyn F. McKnight Brain Institute (EMBI) at the University of Miami (UM). As in previous years, the report was seen as a well-organized and visually engaging synopsis of the productivity of the EMBI.

The report is a testament to Dr. Ralph Sacco's outstanding leadership and reaffirms his extraordinary abilities as a scientist, mentor, community builder, and collaborator. It is remarkable that despite the many challenges presented by the pandemic and his devastating illness, the EMBI team has maintained its steadfast commitment to advancing the mission of the EMBI and the legacy that Dr. Sacco created. The MBRF commends your outstanding leadership during this difficult time and fully endorses your well-deserved appointment as the new Director of the UM EMBI. The trustees also congratulate you on your election to the Academy of Science, Engineering, and Medicine in Florida.

A highlight of the report is the recruitment of Dr. James Galvin as the new chief of the Cognitive Division and the successful opening of the Comprehensive Center for Brain Health. The trustees congratulate him on his well-deserved honor of being named the Alexandria and Bernard Schoninger Endowed Chair in Memory Disorders.

The trustees are pleased with your team's continued development of innovative and diverse collaborations, including the UM EMBI's role as a site within the Precision Aging Network (PAN). Dr. Bonnie Levin and the rest of the PAN team are commended for a successful start-up year. Your leadership within the UM Clinical Translational Science Institute (CTSI) and collaborations with the UM Center for AIDS Research are also remarkable, as is Dr. Xiaoyan Sun's and Dr. Levin's partnership with researchers at the Frost School of Music.

The trustees appreciate the award of two training grants to further the educational activities within the EMBI, which have continued to expand under Dr. Sun's role as Education Director. The trustees commend Dr. Alberto Ramos on his NIH R01 grant, *Sleep in Neurocognitive Aging and Alzheimer's Research (SANAR)*, and his mentee, Dr. Christian Agudelo, for obtaining a NIH Diversity Supplement to this grant. They further commend Dr. Christian Camargo for his appointment as assistant professor in the Cognitive Division.

As a follow-up to this letter, the trustees request some additional information, including an update on Dr. Agudelo's new faculty appointment and clarification on whether his Evelyn F. McKnight Neurocognitive Scholarship funding will be applied to another scholar, given his recent NIH Diversity Supplement award. Additionally, please provide an update on the selection of next year's Evelyn F. McKnight Neurocognitive Post-doctoral Fellow.

The trustees send their appreciation to you for the tremendous efforts in advancing the mission of the MBRF to increase our understanding and alleviation of age-related cognitive decline and memory loss.

Sincerely,

Angelika Schlanger

Angelika Schlanger, PhD
Executive Director

CC: Dean Henri Ford, MD, MHA; Susan Fox-Rosellini, MBA; Stacy Merritt, MA, CCRP; MBRF Trustees

Please address all postal correspondence to:
Melanie Cianciotto ◆ Truist ◆ Post Office Box 620005 ◆ Orlando, Florida 32862 ◆ 407--237-4485

TATJANA RUNDEK, MD, PhD
Professor of Neurology and Public Health Sciences
Evelyn F. McKnight Endowed Chair for Learning and Memory in Aging
Director of the Evelyn F. McKnight Brain Institute
Executive Vice Chair of Research and Faculty Affairs in Neurology
Director, Clinical Translational Research Division

Director, MS in Clinical Translational Investigations
Director, University of Miami CTSI KL2 Program
Miller School of Medicine, University of Miami
1120 NW 12th Street, CRB-1348, Miami, FL 33136
Tel: 305-243-7847; Fax: 305-243-7081
Email: trundek@med.miami.edu

March 5, 2023

Dear Mike, Angelika, and Trustees,

Thank you for kind words about our annual report and difficult times our EMBI was going through.

Here we provide some additional information you requested regarding Dr. Agudelo's new faculty appointment and clarification on whether his Evelyn F. McKnight Neurocognitive Scholarship funding will be applied to another scholar, given his recent NIH Diversity Supplement award.

Dr. Christian Agudelo received his NIH diversity supplement, effective Jan 1, 2023, as reported in the budget section of our Annual Report. Starting June 1, Dr. Agudelo will be appointed as an Assistant Professor of the Neurology in Department of Neurology and Sleep Division and will transition to his role in EMBI as co-Director of our EMBI Education and Community Outreach Core. Given his new funding, we are left with some extra funds to rollover to next year (about $20K Grant and $20K matched funds).

After talking to several outstanding external and internal candidates, we were excited that a young physician-neurologist from Columbia University had agreed to and accepted our offer for the 2023-2024 year. Sadly however, early in March, due to a family issue and a late better offer he decided to stay in New York. Therefore, we have reached out to top internal candidate, who is currently completing a patient oriented clinical-research scholarship in age-related vascular cognitive decline, funded by the UM Clinical Translational Science Institute, Dr. Nicole Sur.

We are recommending to name Dr. Nicole Sur for the Evelyn F. McKnight Neurocognitive Scholar, as an exceptional candidate for this research training program. Dr. Sur is a vascular neurologist, interested in advancing discoveries and treatments of vascular cognitive impairment, specifically for patients with atrial fibrillation and cardiomyopathies. She is currently a site PI of the Discovery study, a large national study funded by NIA to study cognitive trajectories and memory loss after stroke. She has already started participating in our EMBI educational and community outreach program. Currently, she is completing a Master's degree in Clinical Translational Science (MSCTI). I serve as her mentor on her MSCTI capstone project on post stroke dementia in Florida Stroke Registry, a Florida Department of Health registry that capture data on all stroke patients hospitalized in 172 Florida hospitals that treat stroke patient and follow them up though the Florida hospital surveillance system. Please see Dr. Sur research interest's summary and CV in attachments.

As we continue our search for the exceptional candidates for the next Evelyn F. McKnight Neurocognitive Scholarship, we are committed to creating a strong pipeline of clinician-scientists in age-related memory loss and cognitive dysfunction. Our Educational Core is now evaluating residency programs and medical school clerkships for training in cognitive neurology. In most neurology programs, the cognitive neurology rotation is elective, and we plan to develop a mandatory neurocognitive curriculum that will be tested and implemented in our neurology residency program in the next academic year, under the leadership of Dr. Agudelo and Dr. Moreno, both EMBI Scholars who are now neurology attendings. Dr. Sur will also be instrumental in the implementation of this curriculum in her role as an Associate Director of our Neurology Residency Program.

We hope these efforts will create more interest in cognitive neurology, as the candidate pool for cognitive neurology trainees and specialists continues to be low nationwide. There is a huge demand for cognitive neurologists, but a lack of interest in choosing cognitive neurology as a career path. Every institution I talked to have open positions in cognitive neurology. Filling these positions continues to be enormous challenge. Therefore, I think it is also worth discussing this issue and potential strategies for increasing the pool of residents and fellows interested in cognitive neurology at one of our calls or inter-institutional meetings.

Considering this challenge, we are encouraged in that we have several external candidates who have indicated interest in our EMBI Scholarship for the 2024 cycle, and I will talk with them about this opportunity at the AAN meeting at the end of this month.

I and our EMBI team would like to thank you for your continued support for our EMBI and our clinician-scientist educational program in age related memory loss and cognitive decline.

Sincerely yours,

Tatjana Rundek

Tatjana Rundek

Clinical Research Building
1120 NW 14th Street, Suite 1348
Miami, FL 33136

Research of Nicole Sur, MD

Dr. Sur's research is focused on investigating health disparities in age-related vascular cognitive impairment and treatments of cognitive impairment following atrial fibrillation (AF)-related stroke. AF-related stroke is an increasingly prevalent cause of stroke and now the top leading cause of stroke in the aging population. Stroke is the leading cause of disability in the US and worldwide, and a significant proportion of disability post stroke is contributed to cognitive impairment and dementia (PSCID). Although it is known that both AF and stroke are independently associated with cognitive impairment, Dr. Sur's ongoing and future research is focused on elucidating the burden, determinants and disparities of PSCID in the aging population with AF-related stroke. Furthermore, she want to continue research on vascular cognitive impairment in non-stroke populations with AF and a broad range of cardiomyopathies.

CURRICULUM VITAE
Nicole Beaton Sur, MD

Date: January 4, 2023

I. Personal

2. Name: Nicole Beaton Sur

3. Home Phone: 305-338-5886

4. Office Phone: 305-243-6732

5. Address: 1120 NW 14th St, CRB 1358, Miami, Fl 33136

6. Current Academic Rank: Assistant Professor

6A. Current Track of Appointment: Clinical Educator track

7. Primary Department: Neurology

8. Secondary or Joint Appointment: Cerebrovascular Division

9. Citizenship: USA

II. Higher Education

11. Institutional:

Florida International University; BS; 12/2007

Boston University School of Medicine; MD; 05/2013

University of Miami Clinical and Translational Science Institute; MSc; 01/2022 – present

12. Non-Institutional:

Internal Medicine Internship; University of Miami/Jackson Health System; 06/2013-06/2014

Neurology Residency; University of Miami/Jackson Health System; 07/2014-06/2017

Chief Resident in Neurology; University of Miami/Jackson Health System; 07/2016-06/2017

Vascular Neurology Fellowship; University of Miami/Jackson Health System; 07/2017-06/2018

13. Certification and Licensure:

Florida Medical License, ME132266; 04/2017-present

Neurology; American Board of Psychiatry and Neurology; 09/2017

Vascular Neurology; American Board of Psychiatry and Neurology; 10/2018

III. Experience

14. Academic:

University of Miami, Assistant Professor of Clinical Neurology, 07/2018-present

15. Hospital Appointments:

Jackson Memorial Hospital, 06/2013-present

University of Miami Hospital, 06/2013- present

Jackson South Medical Center, 07/2018- present

Miami VA Medical Center, 06/2013-08/2021

16. Non- Academic:

Interim Chief of Neurology/Stroke, Jackson South Medical Center, 08/2019-03/2020

US Medical License Exam (USMLE) Test Materials Development Committee, 01/2019-present
National Board of Medical Examiners, Philadelphia, PA

Associate Program Director, Neurology Residency Program, University of Miami and Jackson Health System, 07/2021-10/2023

IV. Publications

18. Books and Monographs Published:

1. Sishir Mannava M.D., Nastajja Krementz M.D., Andres De Leon M.D., and **Nicole Sur M.D**. (2020). 'Cerebral Venous Thrombosis', in Khaku, AS (ed). *Acute Strokes: Signs, Symptoms and Management.*Nova: in production.

19. Juried or Refereed Journal Articles or Exhibitions:

1. **Sur NB**, Gultekin, S., Malik, A. M., & Koch, S. Progressive cerebral vasculopathy and recurrent strokes due to intracranial fibromuscular dysplasia. Interdisciplinary Neurosurgery: Advanced Techniques and Case Management, 2019; 15, 19-21.
2. **Sur, NB,** Wang K, Di Tuillo MR, Gutierrez CM, Dong C, Koch S, Gardener H, Garcia-Rivera EJ, Zevallos JC, Burgin S, Rose DZ, Goldberger JJ, Romano JG, Sacco RL, Rundek T. Disparities and Temporal Trends in the Use of Anticoagulation in Patients With Ischemic Stroke and Atrial Fibrillation. Stroke 50(6): 1452-1459. 2019.
3. Hua H, **Sur NB**, Choi J, Polineni S, Lee L, Chaturvedi S. The Use of Oral Anticoagulants in Patients with Atrial Fibrillation in the Emergency Department. *Journal of Stroke and Cerebrovascular Diseases* 29 (4). 2020.
4. Carneiro T, Dashkoff J, Leung LY, Nobleza COS, Marulanda-Londono E, Hathidara M, Koch S, **Sur NB**, Boske A, Voetsch B, Nour HA, Miller DJ, Daneshmand A, Shulman J, Curiale G, Greer DM, Romero JR, Anand P, Cervantes-Arslanian AM. Intrvenous tPA for Acute Ischemic Stroke in Patients with COVID-19. Journal of Stroke and Cerebrovascular Diseases 29(11). November 2020.
5. Krementz N, Landman A, Gardener H, Arauz A, Rodriguez AD, Cannon H, Lee HL, **Sur NB**, Marulanda-Londono E, Yavagal DR, Yan B, Nagel S, Demchuk AM, Khatri P, Romano JG, Asdaghi N. Endovascular Therapy in Mild Ischemic Strokes Presenting Under 6 Hours: An International Survey. *Journal of Stroke and Cerebrovascular Diseases* 29 (11). 2020.
6. Hua H, **Sur NB**, Lee L, Chaturvedi S. Emergency Medicine Physician Attitudes toward Anticoagulant Initiation for Patients with Atrial Fibrillation. *Journal of Stroke and Cerebrovascular Diseases* 30 (2). 2020.
7. **Sur NB**, Saini V, Torres LF, Atchaneeyasakul K, Malik AM, Yavagal DR, Chaturvedi S. The Proportion of Thrombectomy Cases That Could Be Avoided With Improved Atrial Fibrillation Stroke Prevention. *Journal of Stroke and Cerebrovascular Diseases* 30 (4). 2021.
8. Gordon Perue G, Fox-Rosellini S, **Sur NB**, Marulanda-Londono E, Margolesky J, Tornes L, Bure A, Kalika PM, Chileuitt AA, Allespach H, Uthman BM, Alkhachroum A, Sacco RL, Montieth TS. Equity, Diversity, Inclusion and Anti-Racism Pledge Sets the Foundation for Accountability and Action in a Neurology Department. Accepted for publication in *Neurology,* June 2021.
9. Otite FO, Saini V, **Sur NB**, Patel S, Sharma R, Akano EO, et al. Ten-year trend in age, sex, and racial disparity in tpa (alteplase) and thrombectomy use following stroke in the united states. *Stroke*. 2021;52:2562-2570
10. **Sur, NB**. Romano J. Stroke and Atrial Fibrillation: An Update. Revista Mexicana Neurociencias. Accepted for publication May 2022.

11. Khan, N, Elarjani T, Jamshidi A, Lu V, Silva M, Richardson A, Harrington T, Vldez T, Campo N, Krementz N, Asdaghi N, **Sur NB**, Marulanda-Londono E, Malik AM, Koch S, Romano J, Morcos J. Direct Bypass Surgery for Moyamoya and Steno-Occlusive Vasculopathy: A Single Surgeon Series of 162 procedures. *World Neurosurg*. 2022;168:e500-e517
12. Asdaghi N, Wang K, Gardener H, Jameson A, Rose D, Alkhachroum A, Gutierrez C, Ying H, Mueller-Kronast N, **Sur NB**, Dong C, Gordon Perue G, LePain M, Koch S, Krementz N, Marulanda-Londoño E, Hanel R, Mehta B, Yavagal D, Rundek T, Sacco R, and Romano JG. Impact of Time to Treatment on Endovascular Thrombectomy Outcomes in the Early versus Late Treatment Time Windows. Accepted for publication in *Stroke* December 2022.

20. Other Works, Publications and Abstracts:

1. Khandelwal P, Ramdas K, Otite O, **Beaton N**, Tipirneni A, Delgado L, Peterson E, Dileep Y. Improving Door to Puncture Times (Need of Hour): Pilot Quality Improvement Project. Poster presentation, Society of Vascular and Interventional Neurology, 2015, Bonita Springs, Fl
2. **Beaton N**, Malik A, Maque-Acosta Y, Koch S. Intracranial Fibromuscular Dys-plasia in a Middle-Aged Woman with Recurrent Ischemic Stroke.Poster presentation at the American Academy of Neurology, 2016, Vancouver, BC, Canada
3. Hua H, **Sur N,** Lee L, Chaturvedi S. The use of oral anticoagulants in patients with atrial fibrillation in the emergency department. Platform presentation, World Stroke Congress, Oct 2018, Montreal, Quebec, Canada
4. Hua H, **Sur N,** Lee L, Chaturvedi S. The use of oral anticoagulants in patients with atrial fibrillation in the emergency department. Platform presentation, AAN Annual Meeting, May 2019, Philadelphia, PA
5. **Sur, N,** Wang K, Di Tuillo MR, Gutierrez CM, Dong C, Koch S, Gardener H, Garcia-Rivera EJ, Zevallos JC, Burgin S, Rose DZ, Goldberger JJ, Romano JG, Sacco RL, Rundek T. Disparities and temporal trends in the use of anticoagulation in patients with atrial fibrillation: the Florida Puerto Rico Atrial Fibrillation (FLiPER-AF) Stroke Study. Poster presentation, International Stroke Conferene, 2019, Honolulu, HI
6. **Sur N**, Saini V, Torres LF, Atchaneeyasakul K, Malik AM, Yavagal DR, Chaturvedi S. The Proportion of Thrombectomy Cases That Could Be Avoided With Improved Atrial Fibrillation Stroke Prevention. Platform presentation at the 2019 AAN Annual Meeting, May 2019, Philadelphia, PA.
7. **Sur N**, Dong C, Wang K, Di Tuillo MR, Gutierrez CM, Koch S, Garcia-Rivera EJ, Zevallos JC, Nobo U, Martin RC, Burgin WS, Rose DZ, Romano JG, Goldberger JJ, Sacco RL, Rundek T. Disparities in the effect of atrial fibrillation on discharge destination and length of stay in patients hospitalized for ischemic stroke: the Florida Puerto Rico Atrial Fibrillation Stroke Study. Moderated poster presentation, AAN Annual Meeting, May 2019, Philadelphia, PA
8. Krementz N, Saini V, Mannava S, Bailey M, Jordan E, Diaz JS, Zamora M, Guada L, Kogan D, Yavagal D, **Sur N**. Elevated HbA1C is Not Associated With Poor Functional Outcome In Stroke Patients Post Endovascular Therapy. Poster presentation at the Society of Vascular and Interventional Neurology annual meeting, 12/2020, Atlanta, GA.
9. Mannava S, Saini V, Krementz N, Bailey M, Diaz JS, Zamora M, Guada L, Kogan D, Jordan E, **Sur N,** Yavagal D. Intensive Care Unit Complications and Outcomes in Mechanical Thrombectomy for Acute Ischemic Stroke. Poster presentation at the Society of Vascular and Interventional Neurology annual meeting, 12/2020, Atlanta, GA.

10. Kogan D, Saini V, Jordan E, Bailey M, Mannava S, Krementz N, Diaz JS, Zamora M, Guada L, Yavagal D, **Sur N**. Lower LDL is Not Associated With Increased Risk of Hemorrhagic Conversion After Mechanical Thrombectomy. Poster presentation at the Society of Vascular and Interventional Neurology annual meeting, 12/2020, Atlanta, GA.
11. Bailey M, Saini V, Diaz JS, Mannava S, Jordan E, Krementz N, Zamora M, Guada L, Kogan D, Yavagal D, **Sur N**. Troponin Elevation after Mechanical Thrombectomy for Acute Stroke is not Associated with Worse Outcomes. Poster presentation at the Society of Vascular and Interventional Neurology annual meeting, 12/2020, Atlanta, GA.
12. Krementz N, Saini V, Mannava S, Bailey M, Jordan E, Diaz JS, Zamora M, Guada L, Kogan D, **Sur N**, Yavagal D. Factors Associated with Prolonged Hospitalization in Patients with Large Vessel Occlusion undergoing Endovascular Treatment. Poster presentation at the Society of Vascular and Interventional Neurology annual meeting, 12/2020, Atlanta, GA.
13. **Sur, N**, Saini V, Torres LF, Krementz N, Mannava S, Atchaneeyasakul K, Malik AM, Yavagal DR, Chaturvedi S. Poor Atrial Fibrillation Management Leads to Avoidable Thrombectomies in Elderly Patients. Poster presentation at the International Stroke Conference 02/2020, LA, CA.
14. **Sur, N**, Koch S, Wang K, Di Tuillo MR, Gutierrez CM, Dong C, Gardener H, Garcia-Rivera EJ, Zevallos JC, Burgin S, Rose DZ, Goldberger JJ, Romano JG, Sacco RL, Rundek T. Factors associated with oral anticoagulant non-use in patients with atrial fibrillation-related stroke. Poster presentation at the International Stroke Conference 02/2020, LA, CA.
15. **Sur, N**, Wang K, Krementz N, Gardener H, Dong C, Yavagal DR, Saini V, Gutierrez CM, Rundek T, Sacco RL, Romano JG, Asdaghi N. The Safety and Outcomes of Endovascular Thrombectomy in Stroke Patients on Oral Anticoagulation: The Florida Stroke Registry. Poster presentation at the International Stroke Conference 02/2020, LA, CA.

21. Other Works Accepted for Publication:

1. Sacco, RL and **Sur, NB**. Rising Incidence of Stroke in Pregnancy. *J Am Coll Cardiol.* 2020 Jan, 75 (2) 191-193.
2. **Sur, NB.** October 2020 Stroke Highlights. *Stroke* 51 (10): 2885. 2020.
3. **Sur, NB**. December 2020 Stroke Highlights. *Stroke* 51 (12) 2020.
4. **Sur, NB**. February 2021 Stroke Highlights. *Stroke* 52 (2): 395. 2021.
5. **Sur, NB**. April 2021 Stroke Highlights. *Stroke* 52 (4): 11632. 2021.
6. **Sur, NB**. June 2021 Stroke Highlights. *Stroke* 52 (6): 1937. 2021.
7. **Sur, NB**. August 2021 Stroke Highlights. *Stroke* 52 (8): 2483. 2021.
8. **Sur, NB.** October 2021 Stroke Highlights. *Stroke* 52 (10): 3081. 2021.
9. **Sur, NB.** December 2021 Stroke Highlights. *Stroke* 52 (12): 3749. 2021.
10. **Sur, NB**. February 2022 Stroke Highlights. *Stroke* 53 (2): 303. 2022.
11. **Sur, NB**. April 2022 Stroke Highlights. *Stroke* 53 (4): 1051. 2022.
12. **Sur, NB**. June 2022 Stroke Highlights. *Stroke* 53 (6):
13. **Sur, NB**. August 2022 Stroke Highlights. *Stroke* 53 (8):
14. **Sur, NB.** October 2022 Stroke Highlights. *Stroke* 53 (10):
15. **Sur, NB.** December 2021 Stroke Highlights. *Stroke* 53 (12):

V. Professional

22. Funded Research Performed:

1. StrokeNet Scholar (PI J. Romano, T. Rundek) Florida Regional Coordinating Center for NINDS Stroke Trials Network. National Institute of Neurological Disorders and Stroke. U24NS107267.
2. Sub-Investigator (PI RL Sacco, T. Rundek, J. Romano). The Florida Stroke Registry. Funded by the Florida Department of Health and Center for Disease Control. COHAN-2.
    a. Chair, Journal Club Committee, Education Core
3. Sub-investigaotr (PI J. Romano) Mechanisms of Early Recurrence in Intracranial Atherosclerotic Disease (MyRIAD). National Institute of Neurological Disorders and Stroke. NIH/NINDS: R01NS084288.
4. Sub-Investigator (Site PI K. O'Phelan). Study of Deferoxamine Mesylate in Intracerebral Hemorrhage (iDEF). NIH/NINDS.
5. Sub-Investigator (Site PI M Ayodele) Stroke Hyperglycemia Insulin Network Effort (SHINE) Trial. NIH/NINDS.
6. Sub-investigator (Site PI E Marulanda-Londono) AtRial Cardiopathy and Antithrombotic Drugs In Prevention After Cryptogenic Stroke (ARCADIA). NIH/NINDS.
7. Site PI (PI Rost N & Greenberg S), DISCOVERY study: Determinants of Incident Stroke Cognitive Outcomes & Vascular Effects on Recovery. NINDS U19NS115388.
8. PI, Miami CTSI NCATS KL2 Award, October 2021 – September 2023. Treatment Disparities in Stroke and Atrial Fibrillation (TDS-AF). KL2TR002737 (mento: Dr. T. Rundek).

23. Editorial Responsibilities:

1. CME and Highlights editor for *Stroke*, 07/2020 to present
2. Consulting Editor, *JACC: Advances*, 12/2021 to present

24. Professional and Honorary Organizations:

American Medical Student Association , member, 2004-2007

American Medical Association, member, 2009-present

Massachusetts Medical Association , member, 2012-present

Committee of Interns and Residents, member, 2013-2018

American Academy of Neurology (AAN), member, 2014-present

American Heart Association/American Stroke Association, member, 2014-present

Neurology Residency Program, Class Representative, University of Miami, 2014-2017

AAN Regional Conference Subcommittee, member, 2019-present

25. Honors and Awards:

Dean's List, Florida International University, Miami, FL, 2004-2007

Outstanding Resident, Committee of Interns and Residents Women in Medicine Award, Miami, FL, 01/2017

Resident Scholarship to the American Academy of Neurology Annual Meeting, Boston, MA, 04/2017

Resident of the Year 2016-2017, Department of Neurology, University of Miami Miller School of Medicine, Miami, FL, 06/2017

26. Post-Doctoral Fellowships:n/a

27. Other Professional Activities:

American Academy of Neurology Diversity Leadership Program, 02/2018-09/2018

Global Alliance of Independent Networks focused on Stroke trials (GAINS) and World Stroke Organization Early Career Investigator Work-shop, World Stroke Congress 2018, Montreal, Quebec, Canada, 10/2018

Invited speaker, Neurology Update and Stroke Intensive, 01/2019, University of Miami, Miami, Fl
Relaxation of the Indications for Thrombolytic Treatment of Acute Ischemic Stroke: Review of the Recent Guidelines, Thrombolysis in Special Populations, Thromolysis in Wake-Up Stroke, Other Thrombolytic Agents

American Academy of Neurology Regional Conference Subcommittee, Member, 2019-present

Invited Speaker, International Stroke Conference 2020, 02/2020, Los Angeles, California
Stroke Prevention in the Elderly: Challenges and Solutions

Invited Speaker, Neurology Update and Stroke Intensive, 01/2020, University of Miami, Miami, FL
Stroke Prevention in Atrial Fibrillation

Co-Chair, Florida Stroke Registry Journal Club Committee, 01/2021-present, University of Miami

Invited Speaker, Neurology Update and Stroke Intensive, 06/2021, University of Miami, Miami, FL
Stroke Prevention in Atrial Fibrillation

Invited Speaker, World Stroke Conference 2021, 10/2021, Virtual Conference
Roundtable of Academia & Industry for Stroke prEvention (RAISE) Satellite Sessions: Advances in Atrial Fibrillation Detection

Invited Speaker, AAN Fall Conference 2021, 11/2021, Virtual Conference

Neurology Update I: Cerebrovascular Disease

Invited Speaker, International Stroke Conference 2022, 02/2022, Virtual Conference
An Update on Sex Differences in Stroke Risk Factors - Management and Outcomes: Moving Towards Personalized Stroke Prevention and Maintenance of Brain Health. Advances in Atrial Fibrillation, 02/2022

Director, AAN Summer Conference: Year in Review, 02/2022-present

Invited Speaker, Neurology Update and Stroke Intensive, 05/2022, University of Miami, Miami, FL
Stroke Prevention in Atrial Fibrillation

Workshop Lead and Consensus Statement Writer, Roundtable of Academia and Industry in Stroke Prevention (RAISE) Conference, 05/2022, Arlington, Virginia
Stroke Risk Factore Management in 2020s: What do we know? What other data do we need?

VI. Teaching

28. Teaching Awards Received: n/a

29. Teaching Specialization:

Internal Medicine Residency Academic Day Lecture Series, 2017-2018
Evaluation and Management of Acute Ischemic Stroke

Stroke Division and Neurology Resident Lecture Series, 2017-present
Cerebral Venous Sinus Thrombosis, 9/2017
Heparin in Acute Ischemic Stroke, 10/2017
DAWN and DEFUSE 3 Trials, 2/2018
New AHA/ASA 2018 Acute Stroke Guidelines, 2/2018
Secondary Stroke Prevention: POINT and NAVIGATE ESUS trials, 6/2018
Cardioembolic stroke, 7/2019, 7/2020, 8/2022
The DISCOVERY Study, 11/2020

Neurology Clinical Clerkship, Case Based Teaching lecture series, 2017-present
Acute demyelinating disorders: Guillan Barre and Mutliple Sclerosis
Traumatic Brain Injury and Increased Intracranial Pressure
University of Miami Miller School of Medicine
Monthly lectures for 3rd and 4th year medical students rotating on Neurology

Neuroscience Module, Case Based Teaching, 2018-present
University of Miami Miller School of Medicine
Yearly lecture for 1st year medical students on the Neuroscience block

Pathway Director, Neuroscience and Behavioral Science Pathway of Emphasis,
NextGenMD curriculum

Unuversity of Miami Miller School of Medicine, 2020-present

30. Thesis and Dissertation Advising/Post-doctoral Student Supervision: n/a

VII. Service

31. University Committee and Administrative Responsibilities:

1. Department of Neurology Committee for Equity, Diversity and Inclusion, 2019-present
2. University of Miami Medical Group Leadership Council, June 2020- present
3. Miller School of Medicine Admissions Committee, October 2020- present

32. Community Activities:

Intern, Miami-Dade Area Health Education Center, Miami, FL, 01/2007

Health Educator, Miami-Dade Area Health Education Center, Miami, FL, 2007-08

Mentor, GearUp Edison Mentoring Program, Miami-Dade Area Health Education Center, Miami, FL, 08/2007-06/2008

Volunteer, Foundation for International Medical Relief of Children, Alajuelita, Costa Rica, 08/2008

Intern, Family Medicine Summer Externship, Boston University School of Medicine, Boston, MA, 06/2010

HIV Counselor, Project TRUST, Boston Medical Center, Boston, MA, 08/2010-2011

Mentor, Miami Model Summer Program, University of Miami Miller School of Medicine, Office of Diversity and Inclusion, Miami, FL, 2017

Lifetime Miami Marathon and Half, Half marathon participant, Miami, FL, 01/2022

Baptist Hospital and Lifetime Miami 305 Half Marathon, Miami, FL, 03/2022

Miles for Migraines, Fundraising Event and 5K Run, University of Miami Miller School of Medicine, Department of Neurology, Miami, FL, 12/2021, 12/2022

Dolphins Challenge Cancer, Fundraising Event and 5K Run, University of Miami Sylvester Comprehensive Cancer Center, Miami, FL, 02/2022, 02/2023

Prevention and Mitigation of Cognitive Decline: From the Bench to Community Engagement

May 3 - 5, 2023
Hilton at UAB, Birmingham, Alabama

Wednesday, May 3, 2023

12:00 – 5:00 PM	MBRF Board Meeting Montgomery Boardroom, Lower Level
1:00 – 6:00 PM	Registration Foyer - outside Hamilton II, Lower Level
5:30 – 7:30 PM	Opening Reception Collum Parlor and Pool Terrace, Lobby Level

6:00 PM **Welcome Remarks**

Ronald M. Lazar, PhD
Director, Evelyn F. McKnight Brain Institute
Evelyn F. McKnight Chair for Learning and Memory in Aging
Professor of Neurology & Neurobiology
University of Alabama at Birmingham

Anupam Argarwal, MD
Dean, Heersink School of Medicine
University of Alabama at Birmingham

Tom Brannan
Vice President for Advancement and Strategic Initiatives
University of Alabama at Birmingham

Michael L. Dockery, MD
Chair, McKnight Brain Research Foundation

Thursday, May 4, 2023

7:30 – 8:40 AM	General Breakfast Hamilton II, Lower Level

7:30 – 8:40 AM	Intervention Core Meeting Montgomery Boardroom, Lower Level
8:45 – 9:10 AM	**Opening Remarks and Welcome** Hamilton I, Lower Level Jason J. Nichols, OD, MPH, PhD Senior Associate Vice President for Research University of Alabama at Birmingham **Overview of Meeting Structure** Ronald M. Lazar, PhD Director, Evelyn F. McKnight Brain Institute University of Alabama at Birmingham Tatjana Rundek, MD, PhD Director, Evelyn F. McKnight Brain Institute University of Miami “Remembering Ralph Sacco”
9:10 – 9:45 AM	**Opening Lecture** Steven Austad, PhD Protective Life Endowed Chair in Health Aging Research Distinguished Professor University of Alabama at Birmingham “Translating the Biology of Aging into the Community”
9:45 – 9:55 AM	Discussion
9:55 – 10:15 AM	Break
10:15 – 11:30 AM	**MBAR Update** Moderator: Tatjana Rundek, MD, PhD
10:15 – 10:35 AM	Ron Cohen, PhD, ABPP University of Florida “Part 1: Where we came from and why?”
10:35 – 10:55 AM	Kristina Visscher, PhD University of Alabama at Birmingham “Part 2: Where we are, accomplishments, and successes”
10:55 – 11:15 AM	Bonnie Levin, PhD University of Miami “Part 3: Where are we going?”
11:15 – 11:30 AM	Discussion

11:30 – 12:20 PM	**Invited Speaker** Philip B. Gorelick, MD Professor of Neurology The Ken and Ruth Davee Department of Neurology Northwestern Feinberg School of Medicine “Optimizing Brain Health”
12:20 – 12:30 PM	Discussion
12:30 – 1:45 PM	Lunch and Networking Hamilton II, Lower Level
1:45 – 3:05 PM	**Implementing Successful Aging into the Community** Moderator: Carol Barnes, PhD
1:45 – 2:05 PM	Asta Håberg, MD, PhD Norwegian University of Science and Technology “Sociocultural Factors in the Longitudinal Study of Aging”
2:05 – 2:25 PM	Matt Huentelman, PhD University of Arizona MindCrowd
2:25 – 2:45 PM	Pamela Bowen, CRNP, PhD University of Alabama at Birmingham “Brain Health Advocacy Mission (BHAM)”
2:45 – 3:05 PM	Discussion
3:05 – 3:25 PM	Break
3:25 – 4:40 PM	**Workshop in Implementation Science** Moderator: Lee Ryan, PhD
3:25 – 3:45 PM	Heidi Hamann, PhD University of Arizona “Fundamentals of Implementation Science”
3:45 – 4:05 PM	George Howard, DrPH University of Alabama at Birmingham “Randomized Controlled Trials: What they are and are not”
4:05 – 4:25 PM	Fern Webb, PhD University of Florida “Conducting studies in diverse and underserved populations”
4:25 – 4:40 PM	Discussion

4:40 – 5:30 PM	Free time before Evening Event
5:30 – 6:00 PM	Transportation to The Florentine Ballroom (dress: business attire; distance is 1.0 mile away from Hilton at UAB)
6:00 – 9:00 PM	**Dinner and Guest Speaker** M. Joycelyn Elders, MD Vice Admiral 15th Surgeon General of the United States
5:45 – 6:45 PM	Reception
6:45 PM	Begin Seated Dinner
7:30 – 8:15 PM	Dr. Elders keynote presentation and Q&A
8:15 – 9:00 PM	Dessert and Social
8:45 – 9:15 PM	Transportation to Hilton at UAB

Friday, May 5, 2023

7:00 – 8:30 AM	Breakfast and Checkout (check-out time is 12pm) Hamilton II, Lower Level
7:30 – 8:30 AM	Board Meeting, Trustees and Leadership Council Skipwith I, Lower Level
8:15 – 8:30 AM	Load buses for departure to campus
8:45 AM	Buses depart for UAB National Alumni House Main Conference Room
9:15 – 10:10 AM	**Pre-Clinical Models for Intervention: Mechanisms and Outcomes** Moderator: Jennifer Bizon, PhD
9:15 – 9:30 AM	Stephen Cowen, PhD University of Arizona “The impact of aging on hippocampal representations of space and motion”
9:30 – 9:45 AM	Barry Setlow, PhD University of Florida “Differential effects of cannabis on cognition across the lifespan”

9:45 – 10:00 AM	Oliver Bracko, PhD University of Miami “Vascular oxidative stress causes neutrophil arrest in brain capillaries, leading to decreased cerebral blood flow and contributing to memory impairment”
10:00 – 10:10 AM	Discussion
10:10 – 11:00 AM	**Optical Coherence Tomographic Angiography: A Novel Biomarker for Aging** Moderator: Sara Burke, PhD
10:10 – 10:30 AM	Edmund Arthur, OD, PhD University of Alabama at Birmingham “Retinal Perivascular Spaces in Aging”
10:30 – 10:50 AM	Jinhua Wang, MD, PhD University of Miami “Current status and future direction of the eye as the window to the aging brain”
10:50 – 11:00 AM	Discussion
11:00 – 11:15 AM	**Closing Remarks** Ronald M. Lazar, PhD Director, Evelyn F. McKnight Brain Institute University of Alabama at Birmingham Molly V. Wagster, PhD Chief, Behavioral & Systems Neuroscience Branch Division of Neuroscience National Institute of Aging Michael L. Dockery, MD Chair, McKnight Brain Research Foundation
11:15 AM	Pick-up Boxed Lunches
11:30 AM	Buses depart for Hilton at UAB (1 or 2 buses will depart for Airport in afternoon, times tba)
1:00 PM – 4:30 PM	**Optional, Post-Meeting Event** (additional information, tba)
1:00 PM	Bus departs Hilton at UAB for Birmingham Civil Rights Institute (BCRI)

1:30 – 2:50 PM	Tour of the BCRI
3:00 – 4:00 PM	Tour of the 16th Street Baptist Church (distance is 0.1 mile away from BCRI, we will walk to)
4:00 PM	Bus departs for Hilton at UAB

McKNIGHT BRAIN RESEARCH FOUNDATION
Preserving memory, enhancing life

PROCLAMATION

HONORING RICHARD S. ISAACSON, MD

Whereas, *the McKnight Brain Research Foundation was established on April 28, 1999, by Evelyn F. McKnight as a legacy to her late husband William L. McKnight to support brain research focused on age- related memory loss intended for clinical application; and*

Whereas, *Dr. Richard S. Isaacson is a neurology specialist, medical educator and research scientist with a distinguished career in academic medicine; and*

Whereas, *Dr. Richard S. Isaacson accepted an appointment as Trustee of the McKnight Brain Research Foundation on May 1, 2016; and*

Whereas, *Dr. Richard S. Isaacson has served successfully as a Trustee to fulfill the wishes of Evelyn F. McKnight in advancing the Mission and Purpose of the McKnight Brain Research Foundation; and*

Whereas*, Dr Richard S. Isaacson has contributed his deep knowledge of communications as chair of the McKnight Brain Research Foundation Communications Committee in successfully working to advance recognition for the Foundation among the scientific and lay communities in national media stories, website development and personal relationships with high profile media personalities.;* and

Whereas, *Dr. Richard S. Isaacson was instrumental in developing the McKnight Clinical Translational Research Scholarship Program through the American Brain Foundation and the American Academy of Neurology.*

Whereas, *Dr. Richard S. Isaacson has contributed to the deliberations of the Education and Research Committees, including his service on the selection committees for the McKnight Clinical Translational Research Scholarships and the McKnight Innovator Research Awards through the American Federation for Aging Research; and*

Whereas, *Dr. Richard S. Isaacson has provided a valuable service to the McKnight Brain Research Foundation by producing a video commemorating the first 20 years of the Foundation; and*

Whereas, *Dr. Richard S. Isaacson has contributed greatly to the social interactions of the McKnight Brain Research Foundation Trustees with his sense of humor and stories of his comical experiences in the clinical setting as well as tutorials on dietary choices; and*

Whereas*, Dr. Richard S. Isaacson completed seven years of service to the Board of Trustees of the McKnight Brain Research Foundation on March 31, 2023, and*

NOW, THEREFORE BE IT PROCLAIMED BY THE BOARD OF TRUSTEES OF THE MCKNIGHT BRAIN RESEARCH FOUNDATION, *the Trustees unanimously commend you and express their highest appreciation in recognition of your dedicated service to the McKnight Brain Research Foundation for the last seven years; and*
BE IT FURTHER PROCLAIMED *that the Board of Trustees extends Dr. Richard S. Isaacson our sincere best wishes for much joy and happiness in all future endeavors.*

Adopted the 3rd day of May 2023.

FOR AND ON BEHALF OF THE
MCKNIGHT BRAIN RESEARCH FOUNDATION

SEAL

_____

Michael L. Dockery, MD, Chair

McKnight Brain Research Foundation

Projected Minimum Investment Return Calculations

(As of 3/31/23 for fiscal year ending 6/30/2023)

Average Fair Market Value		$56,629,577.40
Less:		
	Cash held for charitable purposes (1 1/2 %)	($849,443.66)
Net value of non-charitable use assets		$55,780,133.74
Minimum Investment Return (5%)		$2,789,006.69

Net Minimum Investment Return Calculation:

Minimum investment return		$2,789,006.69
Less:		
sub total	Qualifying Distributions	($2,615,317.00)
		$173,689.69
	Excess distribution carryover (actual for '18, '19, '20, '21)	($128,186.00)
	(estimate for '22)	$173,689.69
		$45,503.69

McKnight Brain Research Foundation

Minimum Distribution Calculation
Fiscal years 2000 - 2022

Market Value Dec 1999 -$69,126,583	*Tax Year*	*Distributable Amount*	*Qualifying Distributions*	*Excess Distributions Carryover*	*Undistributed Income*
$51,867,213	7/1/03 - 6/30/04	$2,352,435	$1,665,404	$5,266,241 (last year we could carryover gift to UF	$0.00
$51,898,266	7/1/04 - 6/30/05	$2,450,345	$3,026,049	$575,704	$0.00
$55,777,369	7/1/05 - 6/30/06	$2,620,008	$2,036,659	$0	$7,645.00
$62,782,831	7/1/06 - 6/30/07	$2,843,725	$3,299,931	$448,561	$0.00
$54,753,484	7/1/07- 6/30/08	$2,817,569	$3,110,508	$292,939	$0.00
$39,447,094	7/1/08-6/30/09	$2,016,762	$2,517,340	$500,578	$0.00
$39,991,364	7/1/09-6/30/10	$1,952,550	$3,789,616	$1,837,066	$0.00
$44,648,921	7/1/10-6/30/11	$2,058,313	$3,983,492	$1,925,179	$0.00
$41,206,393	7/1/11-6/30/12	$1,973,938	$2,615,808	$641,870	$0.00
$43,820,218	7/1/12 -6/30/13	$2,020,034	$2,434,496	$414,462	$0.00
$50,408,385	7/1/13-6/30/14	$2,246,743	$2,298,603	$51,860	$0.00
$50,025,982	7/1/14 - 6/30/15	$2,309,295	$3,190,468	$753,267	$0.00

Market Value Dec 1999 -$69,126,583	***Tax Year***	***Distributable Amount***	***Qualifying Distributions***	***Excess Distributions Carryover***	***Undistributed Income***
$43,374,433	**7/1/15 - 6/30/16**	**$2,156,876**	**$4,896,096**	**$2,739,220**	**$0.00**
$45,020,486	**7/1/16 - 6/30/17**	**$2,197,291**	**$3,463,554**	**$1,266,263**	**$0.00**
$48,399,735	**7/1/17 - 6/30/18**	**$2,290,460**	**$2,662,616**	**$372,156**	**$0.00**
$46,247,121	**7/1/18- 6/30/19**	**$2,308,639**	**$2,028,707**	**$0**	**$0.00**
$49,211,422	**7/1/19 - 6/30/20**	**$2,393,971**	**$2,522,157**	**$128,186**	**$0.00**
$65,427,203	**7/1/2020 - 6/30/21**	**$2,728,732**	**$2,018,715**	**$0**	**$0**
$55,517,277	**7/1/2021 - 6/30/22**	**$3,015,394**	**$2,703,592**	**$0**	**$0**
$56,901,320	**7/1/2022 - 6/30/23**	**$2,789,006 (estimate)**	**$2,615,317 (estimate)**	**-$173,689**	**$0**
			$72,249,467.13	**-$45,503**	**(estimated total excess carryover)**

Part IX Minimum Investment Return (All domestic foundations must complete this part. Foreign foundations, see instructions.)

1	Fair market value of assets not used (or held for use) directly in carrying out charitable, etc., purposes:			
a	Average monthly fair market value of securities		1a	63,345,582.
b	Average of monthly cash balances		1b	1,204,753.
c	Fair market value of all other assets (see instructions)		1c	
d	**Total** (add lines 1a, b, and c)		1d	64,550,335.
e	Reduction claimed for blockage or other factors reported on lines 1a and 1c (attach detailed explanation)	1e 0.		
2	Acquisition indebtedness applicable to line 1 assets		2	0.
3	Subtract line 2 from line 1d		3	64,550,335.
4	Cash deemed held for charitable activities. Enter 1.5% (0.015) of line 3 (for greater amount, see instructions)		4	968,255.
5	**Net value of noncharitable-use assets.** Subtract line 4 from line 3		5	63,582,080.
6	**Minimum investment return.** Enter 5% (0.05) of line 5		6	3,179,104.

Part X Distributable Amount (see instructions) (Section 4942(j)(3) and (j)(5) private operating foundations and certain foreign organizations, check here ▶ ☐ and do not complete this part.)

1	Minimum investment return from Part IX, line 6			1	3,179,104.
2a	Tax on investment income for 2021 from Part V, line 5	2a	77,723.		
b	Income tax for 2021. (This does not include the tax from Part V.)	2b	85,987.		
c	Add lines 2a and 2b			2c	163,710.
3	Distributable amount before adjustments. Subtract line 2c from line 1			3	3,015,394.
4	Recoveries of amounts treated as qualifying distributions			4	0.
5	Add lines 3 and 4			5	3,015,394.
6	Deduction from distributable amount (see instructions)			6	0.
7	**Distributable amount** as adjusted. Subtract line 6 from line 5. Enter here and on Part XII, line 1			7	3,015,394.

Part XI Qualifying Distributions (see instructions)

1	Amounts paid (including administrative expenses) to accomplish charitable, etc., purposes:		
a	Expenses, contributions, gifts, etc. - total from Part I, column (d), line 26	1a	2,703,592.
b	Program-related investments - total from Part VIII-B	1b	0.
2	Amounts paid to acquire assets used (or held for use) directly in carrying out charitable, etc., purposes	2	
3	Amounts set aside for specific charitable projects that satisfy the:		
a	Suitability test (prior IRS approval required)	3a	
b	Cash distribution test (attach the required schedule)	3b	
4	**Qualifying distributions.** Add lines 1a through 3b. Enter here and on Part XII, line 4	4	2,703,592.

Part XII Undistributed Income (see instructions)

	(a) Corpus	(b) Years prior to 2020	(c) 2020	(d) 2021
1 Distributable amount for 2021 from Part X, line 7				3,015,394.
2 Undistributed income, if any, as of the end of 2021:				
a Enter amount for 2020 only			0.	
b Total for prior years: _____, _____, _____		0.		
3 Excess distributions carryover, if any, to 2021:				
a From 2016 1,266,263.				
b From 2017 372,156.				
c From 2018				
d From 2019 128,186.				
e From 2020				
f **Total** of lines 3a through e	1,766,605.			
4 Qualifying distributions for 2021 from Part XI, line 4: ▶ $ 2,703,592.				
a Applied to 2020, but not more than line 2a			0.	
b Applied to undistributed income of prior years (Election required - see instructions)		0.		
c Treated as distributions out of corpus (Election required - see instructions)	0.			
d Applied to 2021 distributable amount				2,703,592.
e Remaining amount distributed out of corpus	0.			
5 Excess distributions carryover applied to 2021 (If an amount appears in column (d), the same amount must be shown in column (a).)	311,802.			311,802.
6 **Enter the net total of each column as indicated below:**				
a Corpus. Add lines 3f, 4c, and 4e. Subtract line 5	1,454,803.			
b Prior years' undistributed income. Subtract line 4b from line 2b		0.		
c Enter the amount of prior years' undistributed income for which a notice of deficiency has been issued, or on which the section 4942(a) tax has been previously assessed		0.		
d Subtract line 6c from line 6b. Taxable amount - see instructions		0.		
e Undistributed income for 2020. Subtract line 4a from line 2a. Taxable amount - see instr.			0.	
f Undistributed income for 2021. Subtract lines 4d and 5 from line 1. This amount must be distributed in 2022				0.
7 Amounts treated as distributions out of corpus to satisfy requirements imposed by section 170(b)(1)(F) or 4942(g)(3) (Election may be required - see instructions)	0.			
8 Excess distributions carryover from 2016 not applied on line 5 or line 7	954,461.			
9 **Excess distributions carryover to 2022.** Subtract lines 7 and 8 from line 6a	500,342.			
10 Analysis of line 9:				
a Excess from 2017 372,156.				
b Excess from 2018				
c Excess from 2019 128,186.				
d Excess from 2020				
e Excess from 2021				

McKnight Brain Research Foundation
Gifts, Grants and Pilot Grants Summary
Fiscal years 2000 - 2029

GIFTS	*University of Alabama*	*University of Arizona*	*University of Florida*	*University of Miami*	*FNIH*	*American Brain Foundation*
	$5,000,000 (5/15/2004) $1,000,000 (10/19/2005) $6,000,000 (8/3/2009)	*$5,000,000 (10/17/2006) $300,000 (7/10/2008) $5,600,000 (5/1/2014)*	*$15,000,000*	*$5,000,000 (7/3/2003) $2,000,000 (date tbd)***	*$5,000,000 (5/6/2008) $5,000,000 (10/2013) $5,000,000 (6/2018)*	*$1,650,000 (6/1/2017) $1,650,000 (3/9/2021)*
7/1/99 -6/30/00			$15,000,000			
7/1/00 -06/30/01						
7/1/01 - 06/30/02						
7/1/02 - 6/30/03						
7/1/03 - 6/30/04				$1,500,000		
7/1/04 - 6/30/05	$2,000,000			$875,000		
7/1/05 - 6/30/06	$1,000,000			$875,000		
7/1/06 - 6/30/07	$1,000,000	$1,000,000		$875,000		
7/1/07 - 6/30/08	$1,000,000	$1,000,000		$875,000		
7/1/08-6/30/09	$1,000,000	$1,300,000				
7/1/09-6/30/10	$1,500,000	$1,000,000			$1,000,000	
7/1/10-6/30/11	$1,500,000	$1,000,000			$1,000,000	
7/1/11-6/30/12	$1,000,000				$1,000,000	
7/1/12-6/30/13	$1,000,000				$1,000,000	
7/1/13-6/30/14	$1,000,000				$1,000,000	
7/1/14-6/30/15		$200,000		$1,000,000	$1,000,000	
7/1/15-6/30/16		$1,200,000		$500,000	$2,000,000 **	
7/1/16-6/30/17		$1,200,000		$500,000	$1,000,000	
7/1/17-6/30/18		$1,000,000			$1,000,000	
7/1/18-6/30/19		$1,000,000				$165,000
7/1/19-6/30/20		$1,000,000				$330,000
7/1/20-6/30/21					$1,000,000	$330,000
7/1/21-6/30/22					$1,000,000	$330,000
7/1/22-6/30/23					$1,000,000	$330,000
7/1/23-6/30/24					$1,000,000	$330,000
7/1/24-6/30/25					$1,000,000	$330,000
7/1/25-6/30/26						$330,000
7/1/26-6/30/27						$330,000
7/1/27-6/30/28						$330,000
7/1/28-6/30/29						$165,000
7/1/29-6/30/30						
Total	**$12,000,000**	**$10,900,000**	**$15,000,000**	**$7,000,000**	**$15,000,000**	**$3,300,000**
Balance	**$0**	**$0**	**$0**	**$0**	**$2,000,000**	**$1,958,000**

Total Gift
$63,200,000

Remaining Balance of Gifts
$3,958,000

as of 3/31/2023

McKnight Brain Research Foundation
Gifts, Grants and Pilot Grants Summary

GRANTS	*Cognitive Test Battery Working Group*	*MRI Standardization Working Group*	*Epigenetic Working Group*	*Inter-Institutional Bioinformatics Core* *$300,000 (9/1/2013)* *$300,000 (9/1/2014)*	*Inter-Institutional Neuroimaging Core* *$339,623 (1/1/2015)* *$415,159 (9/1/2016)* *$176,977 (1/1/2017)*		*Inter-Institutional Cognitive Assessment Core* *$400,000 (9/1/2015)* *$400,000 (9/1/2015)*	IOM Study *$87,713 (7/2012)* *$700,000 (2/1/2013)*	Brain & Cognitive Health Working Group	Precision Aging Network $244,400 (2/5/2020)	Innovator Awards in Cognitive Aging and Memory Loss $500,000 (November 2021) $1,000,000 (November 2022) $1,500,000 (November 2023) $1,000,000 (November 2024) $500,000 (November 2025)	Innovator Awards in Cognitive Aging and Memory Loss Administrative Costs $34,500 (April 2021) $34,500 (April 2022) $34,500 (April 2023) $5,750 (April 2024) $5,750 (April 2025)	Reserve & Resilience Pilot Grant $30,000
7/1/99 - 6/30/00													
7/1/00 - 6/30/01													
7/1/01 - 6/30/02													
7/1/02 - 6/30/03													
7/1/03 - 6/30/04													
7/1/04 - 6/30/05													
7/1/05 - 6/30/06													
7/1/06 - 6/30/07													
7/1/07 - 6/30/08													
7/1/08 - 6/30/09													
7/1/09 - 6/30/10													
7/1/10 - 6/30/11													
7/1/11 - 6/30/12													
7/1/12 - 6/30/13	$22,756.59												
7/1/13 - 6/30/14	$4,273.80	$20,403.05	$18,915.98	$52,000 UA				$87,713					
7/1/14 - 6/30/15		$1,094.20		$121,343.35 UA $94,795.73 UF	$45,000 UM								
7/1/15 - 6/30/16				$102,284.26 UA $153,050.17 UF	$33,409.05 UA $95,000 UM $5,991.48 UF	$7,451.05 UAB	$102,735 UM $5,991.48 UF	$350,000					
7/1/16 - 6/30/17				$250.00 UA	$27,474.23 UA $70,000 UM $2,319.99 UF	$73,715.52 UAB	$47,243.77 UA $89,770 UM $1,655.87 UF	$350,000	$10,454.20				
7/1/17 - 6/30/18					$17,868.28 UA $6,709.31 UF	$80,225.75 UAB	$55,949.87 UF $35,286.88 UA						
7/1/18 - 6/30/19					$50,158.50 UF $28,000.00 UM	$73,743.88 UAB	$47,365.81 UF $45,913.00 UM $41,889.68 UA						
7/1/19 - 6/30/20					$81,216.06 UF $25,869.51 UA	$83,935.15 UAB	$41,571.62 UA $58,188.41 UF			$69,500 Nphase Inc (RedCap) $173,500 UM			
7/1/20 - 6/30/21					$72,828.07 UF $5,271.59 UA	$24,975.69 UAB	$7,129.75 UA $32,259.56 UF					$34,500.00	$30,000
7/1/21 - 6/30/22					$12,534.31 UF	$25,203.19 UAB	$3,819.90 UF				$500,000.00	$34,500.00	
7/1/22 - 6/30/23					$534.80 UF $57,029.04 UA	$53,306.55 UAB	759.86 UF $31,405.53 UA				$1,000,000.00	$34,500.00	
7/1/23 - 6/30/24											$1,500,000.00	$5,750.00	
7/1/24 - 6/30/25											$1,000,000.00	$5,750.00	
7/1//25 - 6/30/26											$500,000.00		
Total	$27,030.39	$21,497.25	$18,915.98	$600,000	$931,759	UAB total spent	$800,000	$787,713	$10,454.20	$244,400	$4,500,000	$115,000	$30,000
Balance	$0	$0	$0	$76,276.49	$294,544.70	$422,556.78	$151,064.01	$0	$0.00	$1,400	$4,000,000	$46,000	0

Remaining Neuro Balance	$294,544.70
Remaining Core Balance	$151,064.01
Less Total spent by UAB	-$422,556.78
Total Neuro & Core Balance	**$23,051.93**

Total Grants
$8,086,049.82

Remaining Balance of Grants
$4,146,728.42

McKnight Brain Research Foundation
Gifts , Grants and Pilot Grants Summary
Fiscal years 2000 - 2029

PILOT GRANTS	A Novel Invention Tool (Levin) $60,000 (5/1/2018) $60,000 (5/1/2019)	Revitalizing Cognition in Older Adults (Bowers) $60,000 (5/1/2018) $60,000 (5/1/2019)	Transcutaneous Vagal Nerve Stimulation (Williamson) $60,000 (10/1/2019) $60,000 (10/1/2020)	Improving Age Related Cognitive Decline with Exercise in Hypertensive Older Adults(Lazar) $56,144 (5/1/2021) $56,144 (5/1/2022)	Reuniting the Brain and Body to Understand Cognitive Aging (Hernandez) $23,600 (5/1/2021) $36,800 (5/1/2022)	Evelyn F. McKnight Neurocognitive Post-Doctoral Fellowship (UM) $100,000 (6/30/2020) $100,000 (6/30/2021)	Evelyn F. McKnight Neurocognitive Clinical Scholar in Brain Health and Aging (UM) payable over 5 years
7/1/99 - 6/30/00							
7/1/00 - 6/30/01							
7/1/01 - 6/30/02							
7/1/02 - 6/30/03							
7/1/03 - 6/30/04							
7/1/04 - 6/30/05							
7/1/05 - 6/30/06							
7/1/06 - 6/30/07							
7/1/07 - 6/30/08							
7/1/08 - 6/30/09							
7/1/09 - 6/30/10							
7/1/10 - 6/30/11							
7/1/11 - 6/30/12							
7/1/12 - 6/30/13							
7/1/13 - 6/30/14							
7/1/14 - 6/30/15							
7/1/15 - 6/30/16							
7/1/16 - 6/30/17							
7/1/17 - 6/30/18							
7/1/18 - 6/30/19	$11,256.57 UF $6,895.45 UA	$6,799.94 UF					
7/1/19 - 6/30/20	$33,845.70 UF $40,000 UM	$14,581.29 UF	$9,881.16 UF			$100,000.00	
7/1/20 - 6/30/21	$830.52 UF $21,604.96 UA	$1,694.96 UF $18,363,11 UA	$12,500.21 UF				
7/1/21 - 6/30/22	$3,583.98 UF	$19,326.94 UF	$1,231.60 UA $19,472.95 UF		$6,801.70 UAB	$100,000.00	$50,000.00
7/1/22 - 6/30/23			$3,133.57 UF $8,276.60 UA		$9,093.50 UAB		
7/1/23 - 6/30/24							
7/1/24 - 6/30/25							
Total	$120,000.00	$120,000.00	$120,000.00	$112,288.00	$60,400.00	$200,000.00	$250,000.00
Balance	$1,982.82	$59,233.76	$65,503.91	$112,288.00	$44,504.80	$0.00	$200,000.00

Total Pilot Grants
$982,688.00

Remaining Balance of Pilot Grants
$483,513.29

Travel Award Program

Date	Name	School	Amount
5/6/2009	Marsha Penner	University of Alabama	$1,305.43
11/4/2010	Clinton Wright	University of Miami	$1,005.26
11/20/2010	Gene Alexander	University of Arizona	$354.39
7/26/2011	Gene Alexander	University of Arizona	$1,006.74
8/3/2011 - 8/4/2011	Cognitive Test Battery Working Group - Retreat #1	University of Alabama, University of Arizona, University of Florida, University of Miami	$7,505.06
12/1/2011 - 12/2/2011	Cognitive Test Battery Working Group - Retreat #2	University of Alabama, University of Arizona, University of Florida, University of Miami	$10,971.11
4/10/2012 - 4/11/2012	Cognitive Test Battery Working Group - Meeting #3	University of Alabama, University of Arizona, University of Florida, University of Miami	$4,280.42
8/1/2012 - 8/3/2012	MRI Standardization Working Group Meeting	University of Alabama, University of Arizona, University of Florida, University of Miami	$10,540.91
8/8/2012 - 8/9/2012	Cognitive Test Battery Working Group - Meeting #4	University of Alabama, University of Arizona, University of Florida, University of Miami	$4,273.80
8/13/2012 - 8/14/2012	Epigenetics Planning Meeting	University of Alabama, University of Arizona, University of Florida, University of Miami	$7,122.85
1/8/2013 - 1/9/2013	Epigenetics Planning Meeting	University of Alabama, University of Arizona, University of Florida, University of Miami	$10,684.25
	MRI Standardization - Scanning Project	University of Alabama, University of Arizona, University of Florida, University of Miami	$1,735.38
4/8/2013 - 4/10/2013	MRI Standardization Working Group Meeting #2	University of Alabama, University of Arizona, University of Florida, University of Miami	$7,851.43
12/6/2013	MRI Standardization	University of Florida & University of Miami	$1,094.90
8/2016	Brain and Cognitive Health Working Group	University of Alabama, University of Arizona, University of Florida, University of Miami	$10,454.20
3/21/2023	Legal Seafood	Dinner deposit for McKnight Clinical Translational Research Scholars Dinner	$3,878.40
		Total Spent	**$84,064.53**

MBRF Operating & Communications Budget
7/1/2022 - 6/30/2023

Operating Expenses

	Budget	Actual
Board of Trustee Fees	$280,000.00	$210,000.00
Legal Fees	$24,000.00	$33,054.85
CPA Fees	$20,000.00	$10,228.94
Consulting Fees*	$218,249.98	$176,254.08
Truist Bank Fees	$196,850.00	$126,978.73
Taxes	$136,000.00	$99,000.00
Meetings	$20,000.00	$23,132.28
Website Fees	$1,500.00	
Memberships	$780.00	$815.00
Insurance	$1,625.00	$1,667.51
Total Operating Expenses	$899,004.98	$681,131.39

Budget approved at the March 23, 2022 Board of Trustees' Meeting

Communications Expenses

	Budget	Actual	
LookThink	$160,000.00	$130,484.00	
Paid Social Media Engagement	$25,000.00	$2,269.61	Facebook and Google
Website Support and Travel	$5,000.00	$123.50	MailChimp
		$776.00	Paperturn
		$850.00	Pantheon
		$1,577.81	Travel
		$150.00	Zoom
		$34.00	FilePro Upload Service
Consulting Fees* **	$80,000.00	$59,700.00	
Total Communications Expenses	$270,000.00	$195,964.92	

*** represent payment to Senior Communications Advisor*

Education Expenses

	Budget	Actual
Environmental Scan	$40,000.00 ****	$34,837.50

** represents payment to Executive Director*
*** was amended at August 29, 2022 Trustees' Meeting to reflect new Executive Director Salary*
**** represents payment to Senior Communications Advisor*
***** increase in the Environment Scan Budget from $10,000 to $40,000 was approved at the September 20, 2022 Trustees' Meeting*

through 3.31.2023

MBRF Operating & Communications Budget
7/1/2023 - 6/30/2024

Operating Expenses

	Budget	Actual
Board of Trustee Fees	$320,000.00	
Legal Fees	$24,000.00	
CPA Fees	$20,000.00	
Consulting Fees*	$228,000.00	
Truist Bank Fees	$170,000.00	
Taxes	$107,000.00	
Meetings	$30,000.00	
Website Fees		
Memberships	$4,815.00	
Conferences/Travel - Executive Director	$3,000.00	
Insurance	$1,667.00	
Total Operating Expenses	$908,482.00	

Communications Expenses

	Budget	Actual
Communications Partner		
Agency Staff Time		
Out of Pocket Expenses		
Paid Social Media & Outreach		
Website support		
Travel		
Consulting Fees**		
Total Communications Expenses		

** represents payment to Executive Director*
*** represents payment to Senior Communications Advisor*

Membership & Governance Committee Activity Timeline
For the Period June 1, 2021, to June 30, 2023

Updated April 14, 2023

Duty (from Committee Charter)	Activity/Action	Outcome	Date	Comments
"identify, recruit and recommend candidates for appointment or re-election of current Trustees, consistent with applicable qualifications…"	Determine ideal size of Board	Size of 7 Trustees, plus 1 Corporate Trustee and 1 Chair Emeritus was established as goal (Maximum 11 Trustees)	June 27, 2019	DONE
	Update/Revise Orientation Packet for New Trustees	The orientation packet required the addition of new material and updated information	October 5, 2020	Completed and presented to new Trustees and posted on the secure site
	Provide Ongoing Updates to the Orientation Packet as needed	Appointments of New Trustees and the new Executive Director necessitated updating the orientation material	January 2022 August 2022	DONE DONE
	Review appointment and retirement dates	Target for Identifying New Trustees to Maintain Board Size of 7: 1 or 2 in 2020 1 or 2 in 2021 2 in 2023 Any in 2024/2025?	DONE (2) DONE (1)	New Appointments to the Board of Trustees: Dr. Patricia Boyle September 2020 Dr. Allison Brashear September 2020 Dr. John Brady December 2021

			DONE (2)	Dr. Sharon Brangman July 2023 Dr. Roy Hamilton July 2023
	Review, discuss and determine expertise needed on Board	Behavioral Neurologists; Women; Expertise Needed in 2021 – Geriatric Psychiatrist; Primary Care Physician (Internal Medicine; Geriatrics; Family Practice) Discussed Expertise Needed to round out the Board Trustees approved the appointment of two new candidates in 2023: one with expertise in Behavioral Neurology and one in Internal Medicine with a specialty in Geriatrics. Trustees approved outreach to top candidates in each specialty Trustees conducted interviews for Dr. Hamilton and Dr. Brangman and voted to approve their appointment to the Board	Fall 2020 Summer 2021 Ongoing Oct 11,2022 October 27, 2022 January/February 2023 February 16, 2023 April 17, 2023	DONE DONE
"identify, recruit, and recommend…" Continued	Develop Process for Recruiting, Vetting, and Recommending Candidates	Committee reviewed and edited	September 30, 2019 June 1, 2021	Document was shared October 2019 Meeting; Document revised;

	(The following is a summary of the process document and a reminder of steps in the process)		July 28, 2021	Document was shared July 2021 Trustees Meeting as revised. Document Approved
	Names Submitted to and Reviewed by Committee			
	Selected Names Forwarded to Board with vetting information and Committee recommendation			
	Board selects Candidates to contact			
	Nominator and/or MBRF Chair (or Executive Director, if assigned) contact candidate(s) to assess interest and request CV			
	Committee conducts further vetting, reviews CVs, ranks candidate(s), and makes final recommendation to Board			
	Board selects finalist(s), invites to interview, can invite to attend events or trustees meeting. Trustees vote on appointment. Vote must be unanimous			
	New Trustee(s) notified. Executive Director requests time for orientation call. Orientation provided by Executive Director and current Trustee as approved by MBRF Chair.			
"oversee annual Board self-evaluations"	Review of the Committee's charge to conduct and monitor the Trustee Self-Assessment Process	Current Self-Assessment form and Commitment Form reviewed. New form was distributed for January 2021	September 2019 October 2019 January 2020 Self-Assessment January 2021	The Committee developed new self-assessment form and process.

		Review of Input on Forms and conversations with the Chair	Conversations took place with Chair Feb. 2021	No new changes to form were suggested
	Identify needed questions and revisions to the current Trustee Self-Assessment Form			DONE ONGOING
	Decide to send either current form or revised form in January with responses due to corporate trustee in one – two weeks		December 2019 January 2020 January 2021	MBRF proceeded as has been done in the past in 2019/2020 New Form used in 2021 and 2022
	Discuss whether to develop Board Self-Assessment to review progress toward Board goals (this would be an assessment of the impact of the full Board of Trustees)		March 2020 Considered in 2021	Request for Suggestions to improve Board were added to individual Self-Assessment as a way to assess the full Board's impact DONE
		Self-Assessment form distributed to Trustees and Returned to Corporate Trustee	Dec. 2021 January 2022 Dec. 2022	There were no changes to the form from 2021
"…make recommendations on structure, charters, policies, process and practices…"	Align policy with practice for length of service	Board approved change in policy to allow a "maximum of 9 years" service		DONE
"…structure, charters, policies, process…" Continued	Approve role of first Chair Emeritus	Board developed and approved by unanimous consent in email	July 2019	DONE
	Approve role of Trustee Emeritus/ae	Board approved; Recognition provided	July 31, 2019	DONE

	Review/revise "Qualifications for Trustees"	Expanded to non-MD, non-PhD candidates	July 31, 2019	DONE
	Developed 'Qualifications for Advisory Committee Members'	Trustees approved	2019	DONE
	Develop criteria and process for review of performance of Trustees for Trustee Reappointment. Base criteria on Board Duties and Responsibilities	Summary of Recruitment, Election and Re-Election document developed in July 2020	DONE June 2021	Trustees reviewed Summary of Recruitment, Election and Re-election. Process for Review of Performance for re-election approved
	Develop and implement a formal Trustee Recognition of Appreciation for Service	Discuss notification of Trustees completing their service after one, two or three terms. Retiring Trustees will be recognized with a crystal bowl (or other gift) and proclamation	Jan. 21, 2021 April 30, 2021 July 28, 2021	Dr. Gene Ryerson was recognized with gift and proclamation Dr. Robert Wah was recognized with gift and proclamation
	Review concept of developing an Education Working Group vs. establishing an Education Committee Subcommittee Consider hiring a Sr. Advisor, Education	Recommendation to hire a Sr. Advisor, Education, and to follow the Communications model with a working group, was shared with the Board of Trustees. Further Discussion	Feb. 22, 2022 March 13, 2022 March 23, 2022 Upon receiving report from Education Consultant	Winter/Spring 2023

MINUTES
MCKNIGHT BRAIN RESEARCH FOUNDATION
Membership and Governance Committee
WebEx Conference Call
March 31, 2023

The Membership and Governance Committee of the MBRF WebEx conference call was called to order at 12:00 p.m. EST on March 31, 2023.

The following members were present:

Dr. Susan L. Pekarske, Chair of the Membership & Governance Committee
Dr. J. Lee Dockery, Chair Emeritus, MBRF
Dr. Madhav Thambisetty, MBRF Vice Chair
Ms. Melanie Cianciotto, Corporate Trustee,
Truist Bank Foundations and Endowments Specialty Practice

The following members were absent:
Dr. Michael Dockery, MBRF Chair

Others attending:
Dr. Angelika Schlanger, Executive Director

1. Call to Order/Welcome/Roll Call

Dr. Sue Pekarske, Chair, welcomed the committee members and thanked them for their review of the materials in preparation for the meeting.

2. Approval of Minutes from January 30, 2023 Meeting

The minutes from the January 30, 2023, meeting (Attachment 1) were reviewed and approved as amended. The changes are:

Item 5 b: add "area of" before expertise
Item 5 c: add "area of" before expertise
Action Item 3: add "area of" before expertise

Action Item 1: The minutes from the January 30, 2023, meeting (Attachment 1) were approved as amended.

3. Review of Updated Committee Activity Timeline

The updated Committee Activity Timeline was shared with the committee for information (Attachment 2).

Action Item 2: The committee received the updated Committee Activity Timeline for information (Attachment 2).

4. Membership of the Board of Trustees

a. Review of Process for Trustee Recruitment, Election and Re-Election

Dr. Pekarske noted that the Process Document (Attachment 3) was included in the materials for information.

b. Review of Nominees/Candidates

Following the February 16, 2023, Board of Trustees' meeting, Dr. Lee Dockery reached out to the top candidates to gauge their interest in being considered as a trustee candidate. Dr. Dena Dubal despite her passion for the mission of the MBRF, decided that she would not be able to serve in this role at this time due to her many professional commitments. She did add that she hoped we would consider her for a trustee position at a future time. Dr. Lee Dockery also reached out to Dr. Sharon Brangman and Dr. Roy Hamilton, who both expressed their enthusiasm and interest in being considered for a trustee position. Both have submitted a personal statement and CV (Attachment4)

c. Recommendation of Candidates(s)

A motion was made to move forward with scheduling interviews with Dr. Sharon Brangman and Dr. Roy Hamilton.

Action Item 3: A motion was made to move forward with scheduling interviews with Dr. Sharon Brangman and Dr. Roy Hamilton.

d. Timeline for Virtual Interviews

A decision was made to conduct virtual interviews with the candidates. Dr. Lee Dockery will reach out to Dr. Sharon Brangman and Dr. Roy Hamilton to obtain their availabilities for a one-hour interview during the week of April 17, 2023, between 5:00 and 8:00 pm EST. Dr. Schlanger will reach out to the trustees and ask them to hold these dates and times on their calendars. Dr. Pekarske suggested that the trustees be provided with the list of questions used during the most recent trustee candidate interview (in 2021), with a suggestion that some questions may need to be adjusted, or updated, for the current candidates.

e. Timeline for Recruitment of an Additional (Third) Trustee

The committee discussed a potential timeline for recruitment of an additional (third) trustee due to the resignation of Dr. Richard Isaacson. The priority at this time, however, is to complete the recruitment of the two trustees currently under consideration. The committee decided to table this discussion and to revisit it later in the 2023.

5. Recognition for Completion of Service for Dr. Richard Isaacson

The committee feels that it is important to recognize Dr. Isaacson for his 7 years of dedicated service. After a lengthy discussion, it was decided that a proclamation would be drafted and read during the Trustees' meeting on May 3, 2023. Dr. Isaacson will be invited to attend virtually to hear the reading of the proclamation. The proclamation will be framed and sent to Dr. Isaacson after the meeting.

There being no further business, the meeting was adjourned at 12:45 p.m. EST.

Summary of Action Items:

Respectfully Submitted,

Melanie A. Cianciotto
Truist Bank, Corporate Trustee

Duties of Chair
Board of Trustees
McKnight Brain Research Foundation (MBRF)

1. **Represent the Foundation in all communications with individuals, organizations and Institutions.**

2. **Serve as spokesperson**

3. **Foster relationships with organizations and grant award recipients.**

4. **Lead the Foundation in monitoring performance and progress of all grant recipients.**

5. **Manage all communications with the Foundation--both print and electronic.**

6. **Supervise the execution of work by all outside contract services.**

7. **Organize meeting agendas and preside at meetings.**

8. **Perform first review of the minutes of meetings before release for review an approval by the trustees.**

9. **Serve as first point of contact for all questions from corporate trustee/secretary**

10. **Act as liaison between the trustees and legal counsel in negotiation of contracts, gift agreements or other legal documents involving the Foundation.**

11. **Act as liaison between the trustees and the investment manager directly or through the corporate trustee as required.**

12. **Manage or monitor, in collaboration with the corporate trustee, other business tasks as required, e.g. tax reports, MBRF website, archives, copyright registrations.**

13. **Monitor compliance with all Gift Agreements, travel awards and grant awards.**

14. **Implement all actions approved by the Board and perform additional duties assigned by the Board.**

15. **Lead board member development and succession planning.**

Approved: April 6, 2015

Duties of Vice Chair
Board of Trustees
McKnight Brain Research Foundation (MBRF)

1. **Substitute for Chair**

2. **Other tasks as assigned by the Chair or designated by the Board**

Approved: April 6, 2015

Officers of the Board of Trustees

As stated in the minutes of the October 14, 2014, Board of Trustees meeting, and as relevant to components of discussion during the strategic planning at that time, the Trustees took the following actions regarding the establishment of the Officers of the Board of Trustees:

The Trustees voted to abolish the consensus form of board governance and to establish a Board Chair, Vice Chair and Secretary position (to be held by the Corporate Trustee).

The Trustees agreed upon the following criteria to become an officer of the MBRF:

1) Two years of active service as a trustee member are required before becoming an officer

2) An individual eligible to serve as an officer may be nominated by another trustee or self-nominate

3) The term of office coincides with the fiscal year

4) The term of the office of the chair and vice chair is two years. The number of terms is not limited for chair or vice chair.

5) The election of the chair and vice chair occur at the spring meeting of the Board of Trustees every odd numbered year (2021, 2023, 2025, etc.) with the term beginning, as stated above, on July 1 and ending on June 30 to coincide with the MBRF's fiscal year.

Approved October 14, 2014
Reviewed and Amended July 21, 2021

Finance Committee Activity Timeline
For the One-Year Period July 1, 2022, to June 30, 2023

Updated April 11, 2023

Duty (from Committee Charter)	Activity/Action	Outcome	Date	Comments
"…shall coordinate the Board of Trustee's Financial Oversight Responsibilities (through monitoring of) …financial management, assets, and risks …"	Review Investments and Investment Policy	Asset Allocation Review (Mike Hill) Efficient Frontier Analysis (Shelly Simpson) Monte Carlo Simulation Investment Performance Review	August 29, 2022 August 29, 2022 August 29, 2022	***completed*** ***completed*** upon recommendation by Truist or request of the MBRF ***completed***
		Investment Performance & Asset Allocation Review (Mike Hill)	October 27, 2022	***completed***
		Investment Performance & Asset Allocation Review (Mike Hill)	February 16, 2023	***completed***
		Investment Performance & Asset Allocation Review (Mike Hill)	May 3, 2023	

Duty (from Committee Charter)	Activity/Action	Outcome	Date	Comments
Financial Oversight… "…Ensure Compliance with Federal, State and other Financial Reporting Requirements…"	Assess and Maintain IRS Required Distribution Amount	Minimum Distribution Calculation Report	August 29, 2022 October 27, 2022 February 16, 2023 May 3, 2023	***completed*** ***completed*** ***completed***
	Compensation Review	Examples Presented for Comparison	August 29, 2022	***completed***
	Tax Filing	Legal Counsel for the MBRF reviews the completed tax form before filing		**Will be filed by 5.15.2023**
	Insurance	MBRF carries D & O Insurance	Renewed annually	Premium paid by Corporate Trustee
Financial Oversight " planning, monitoring and evaluation of …funding for the McKnight Brain Institutes… and the MBRF Operations"	Monitor Current and Outstanding Gifts and Grants	Gifts and Grants Report	August 29, 2022 October 27, 2022 February 16, 2023 May 3, 2023	***completed*** ***completed*** ***completed***
		Travel Award Program Report	August 29, 2022 October 27, 2022 February 16, 2023 May 3, 2023	***completed*** ***completed*** ***completed***
	Review MBRF Operating Expenses	Year to Date Operating Expenses Report	August 29, 2022 October 27, 2022 February 16, 2023 May 3, 2023	***completed*** ***completed*** ***completed***
		Review & Approve Annual Operating Budget	May 3, 2023	

Duty (from Committee Charter)	Activity/Action	Outcome	Date	Comments
Financial Review…of reports and requests submitted to the MBRF by the MBIs and Other Partners	Review Financial Reports Submitted with the MBI's Annual Reports		January 24, 2023	***completed***
	Review Financial Information included in Interim and Final Reports for Research Grants		Per terms of the award letter	
	Review Budgets Submitted with Requests for Funding		As submitted	
"…ensure adequacy of MBRF internal controls and compliance with conflict of interest policy…	Review Signing Authority	MBRF policy is minimum of 2 individuals with signing authority	September 22, 2022	***completed***
	Conflict of Interest	Conflict of Interest Policy signed by all new and re-elected Trustees and by all Advisory Members of MBRF Committees	ONGOING	

Cognitive Aging Summit III (2017)

Final Budget, June 12, 2017

Venue: Bethesda North Marriott Meeting Dates: April 5-7, 2017	**Estimated Budget**	**Actual Expense***	**Variance**	**Paid by NIA**
Sponsored Travel				
Travel Subtotal:	$ 59,000	$ 41,319	$ 17,681	$ -
Food & Beverage				
F&B Subtotal:	$ 78,110	$ 68,197	$ 9,913	$ -
Audio Visual Equipment Rental				
AV Equipment Rental Subtotal:	$ 22,530	$ 18,983	$ 3,547	$ -
Video Recording and Web Posting (PAID BY NIA)				
Video Recording/Web Posting Subtotal:	$ 13,470	$ -	$ 13,470	$ 16,770
Printing Program/Signage (PAID BY NIA)				
Printing Subtotal:	$ 8,500	$ -	$ 8,500	$ 8,840
Registration Materials and Website				
Registation Materials & Website Subtotal:	$ 4,064	$ 3,605	$ 459	$ -
Event Subtotal:	**$ 185,674**	**$ 132,104**	**$ 53,570**	**$ 25,610**

FNIH Staff/Administration				
FNIH Staff Time	$ 50,000	$ 23,713	$ 26,287	
FNIH indirect costs @ 10% of direct costs	$ 23,567	$ 15,582	$ 7,986	
Staff/Administration Subtotal:	$ 73,567	$ 39,295	$ 34,273	
Contingency	$ 10,000	$ -	$ 10,000	
TOTAL:	**$ 269,241**	**$ 171,399**	**$ 97,843**	**$ 25,610**

GRAND TOTAL INCLUDING NIA COSTS: $ 197,008

Revenue Received from MBRF	$	186,364
Expenses	$	(155,817)
Indirect costs @ 10% of Directs	$	(15,582)
Total Direct and Indirect costs	$	(171,399)
Balance Remaining	**$**	**14,965**

Projected Budget Ranges for Cognitive Aging Summit IV

As we do not currently have a budget or projected total for the Summit from the FNIH, based on the actuals from 2017 and projections for inflation, the following budget estimates have been presented.

	Total	**MBRF**	**NIA**
2017 Actual	$197,000	$171,000 (87%)	$26,000 (13%)
2024 - 10% increase	$216,700	$188,529	$28,171
2024- 20% increase	$236,400	$205,668	$30,732
2024 - 30% increase	$256,100	$222,807	$33,293

Education Committee Activity Timeline
For the Years 2019 – 2023

Updated April 2023

Duty (from Committee Charter)	Activity/Action	Outcome	Date	Comments
"…shall develop information and resources (for the public and scientific community) on prevalence and impact of age-related cognitive decline and memory loss….	Work toward alignment of messages across the MBIs and MBRF Make substantive judgments on content and quality of educational content/statements developed for or posted on the website	Key Messages Were Approved and Distributed in Spring 2019	July 1 – ONGOING ONGOING Review of Topics and Content for Primary Care Physician (PCP) pages on website February 2021	The Education Committee reviews content before it is posted on website, published, or included in print materials or slide presentations, ensuring consistency with key messages. The committee reviews for accuracy, soundness, and alignment with the MBRF mission and current scientific understanding and clinical practice. (The Research Committee also reviews content before making public.)
	A top priority for the committee and MBRF, as approved by the Trustees, is to identify and/or develop educational content for primary care physicians and to oversee the ongoing posting of additional information	The committee approved an outline of resources for the PCP Area on McKnightBrain.org The committee approved drafting content for the PCP area of the website based on the approved outline navigation of the section	DONE June 30, 2020 DONE September/ October/November	

Duty (from Committee Charter)	Activity/Action	Outcome	Date	Comments
		The committee reviewed proposed navigation and drafted content for the Primary Care Physician (PCP) pages of the website Content will be revised and edited to include feedback from the committee and used to build out a mock-up of the PCP section An Update to the Trustees will be provided The PCP section will be shared with suggested primary care physicians for feedback and suggestions. Dr. John Brady, Chair of the Education Committee will be instrumental in helping to develop strategy and content	DONE February 2021 DONE February – March 2021 DONE April 30, 2021 Winter/Spring 2022 ONGOING	
And…" assist those living with age-related cognitive decline and memory loss"	Website content developed for individuals, families and caregivers of those with age-related cognitive decline and memory loss	Add links to approved articles as appropriate but development of content is on hold until PCP content is identified and developed.	Winter/Spring 2022	
Inform "…how to better maintain brain health…"	Website content developed for individuals on how to protect, maintain brain health	Add links to approved publications and articles	July 1 – ONGOING	Committee Reviews before Posting

"shall review all educational materials…:	Brochure copy in development to raise awareness and promote the MBIs and MBRF to individuals, partners, donors	Review of Brochure was conducted and committee concurs with suggestions by Communications Committee	DONE Posted on website January 2021	
"Identify educational opportunities and implement activities…to encourage MBIs…inspire commitment and shared vision"	12th Annual Inter-institutional Meeting 13th Annual Inter-institutional at UA 14th Annual Inter-Institutional Meeting, UAB McKnight Scholars Will be invited to next Inter-institutional Meeting	2020 Meeting was canceled 2021 Meeting will be virtual Meeting was in-person Draft agenda has been developed and is being updated Develop Feature on McKnight Scholars on McKnightBrain.org	April 28 & 29 2021 Mar 23-25, 2022 May 3-5, 2023	DONE Will help promote scholarship and engage scholars
	McKnight Scholars Dinner at AAN	2020 Toronto, AAN Meeting was canceled 2021 Virtual AAN Meeting Planned for April 2023 AAN Meeting	April 17 – 22, 2021	Held over - MBRF approved funding of $4,000 to cover travel, hotel for the night, dinner, UM staff travel Approved by full board at February 2023 meeting
	William G. Luttge Annual Lectureship in Neuroscience at the University of Florida	Annual Lectureship by research scientist of National or International prestige in the field of neurosciences	Held in March/April each year in conjunction with Brain Awareness week. 7th lectureship was by Dr. George Koop March 11, 2019 2020 Lecture was canceled.	Annual Lectureship established honoring the Founding Director of the Evelyn F. and William L. McKnight Brain Institute at the University of Florida Events as part of the William G. Luttge Lecture Series were expanded in

			2021 Lecture to be held in Fall 2021 2022 Virtual Lectures January 13 - Dr. Alexis Stranahan, PhD, UF Feb 24 – Dr. Perla Moreno Castilla, PhD, "Rising Star" Luttge Lecturer, NIA March 3 – Dr. Dan Nicholson, PhD, Rush March 31 – Dr. Kirk Erickson, PhD, University of Pittsburgh 2023 Lecture: February 23rd – Dr. Joshua A. Gordon, MD, PhD, Director, National Institute of Mental Health (NIMH)	2021 to become a Lecture Series. DONE DONE
"work to elevate the importance of age-related cognitive decline and memory loss on the national agenda…(work toward) greater investment in research and education by federal health agencies…."	IOM Study	"Public Health Dimensions of Cognitive Health" was released by the IOM (see attached document) Working Group formed under the lead of Dr. Molly Wagster	DONE April 14, 2015 CURRENTLY NOT MEETING	Study funded by MBRF and federal agencies (NIA, CDC, NINDS, HHS), AARP, Retirement Research Foundation

		MBRF has initiated and implemented several of the IOM recommendations.	ONGOING	
		Dr. Lee Dockery was in contact with IOM (now Academy of Medicine) about issuing a report on progress	October 23, 2019 NOT TO BE PURSUED	This would be unusual for the Academy of Medicine to do per Dr. Molly Wagster.
"work to elevate the importance of age-related cognitive decline and memory loss on the national agenda…" continued		Dr. Ralph Sacco, former President of AAN, recommended to AAN that they support adding age-related cognitive decline and memory loss to curricula for requirements	July 11, 2019	Letters were sent from AAN to MBRF, American Board of Psychiatry and Neurology, and ACGME
		Dr. Robert Wah and Dr. Lee Dockery spoke by phone with Dr. Gordon Smith, Chair, AAN Education Committee, and Dr. Jaffar Khan, Chair, AAN Graduate Education Subcommittee, to discuss collaborative steps	August 8, 2019	
		Follow-up communication with Drs. Smith and Kahn and Kathy Malloy re: schedule for review of special requirements by ACGME	DONE September 16, 2019 June 2020 NOT TO BE PURSUED	On distribution list for ACGME e-Communication with schedule for review of special requirements Committee feels they've done all they can do at this time.

	Discuss strategy to achieve MBRF Education goals to reach Primary Care Physicians and the Public. Discuss benefits of additional staffing and advisory groups working with the MBRF		Done March 13, 2022	
	Identify and hire consultant for feasibility assessment and scoping document assessing the educational needs and opportunities with PCPs regarding cognitive decline.	Consultant (SCP) was selected by the Trustees on September 20, 2022 after a thorough vetting process, and the project kicked off on Oct 10, 2022 with a meeting with a group of Trustees. The study and final report will be completed February, 2023.	October 10, 2022	
		SCP gave a progress update to Trustees at their Board Meeting.	October 27, 2022	
		Another update to Trustees took place on Dec 21, 2022.	Dec 21, 2022.	
		SCP presented the draft scoping document to the Education Committee. The committee provided feedback to SCP. SCP is working to revise the document with a final version presented before the Feb 16, 2023 BoT meeting.	Jan 25th, 2023	
		SCP presented the final report at the February 16, 2023 Board of Trustees meeting.	February 16, 2023	
		A consultant may be needed to implement the Education	TBD	

		Initiative. If so, the Education Committee will make a recommendation to the Trustees on seeking and engaging a firm to implement the initiative		
	Education Outreach Initiative to Primary Care Providers and Consumers	Key Messages document was completed for both PCPs and consumers, with input from Trustees Outreach to national organizations has taken place to recommended and aligned organizations to explore potential synergies and partnerships; outreach began in March 2023	March 2023 Ongoing	

KEY MESSAGES FOR PRIMARY CARE PROVIDERS (PCPs)
MARCH 2023

Below are a set of recommended action steps primary care providers can proactively take during annual wellness visits or otherwise with adult patients of all ages to protect their patients' brain health.

Cognitive aging happens over a lifetime, and therefore patients should be encouraged at all ages, even as early as their 20s, 30s, and 40s, to pay attention to and mitigate risk factors to help them maintain brain health. The main source for the recommendations below is *Cognitive Aging – Progress in Understand and Opportunities for Action* (2015), a publication of the Institute of Medicine of the National Academies (found here).

1. Steps that Primary Care Providers can take to Promote Brain Health

- Use the Annual Wellness Visit as an opportunity to conduct preventive screenings including cognitive assessments. An overview of some of the more widely-used cognitive assessments can be found on the MBRF website. For additional information on how to code and bill for these assessments, visit Gerontological Society of America's KAER Toolkit, pgs. 3-8
- Educate patients about **health-promoting behaviors** which may reduce the risks of cognitive decline. Research-based recommendations include:
    - Staying physically active;
    - Reducing and managing cardiovascular disease risk factors including tight blood pressure control, weight reduction, cessation of smoking, and lowering cholesterol levels;
    - Encouraging family members to report any noticeable changes in the patient's cognitive abilities or memory;
    - Regularly reviewing any pertinent health conditions, medications, or supplements which may impact the patient's cognitive health;
    - Encouraging the patient to stay socially and intellectually engaged;
    - Discussing stress management and encouraging the patient to seek medical attention for any symptoms of depression, anxiety or any other mental health concerns;
    - Encourage eating a healthy and balanced diet that's low in fat and high in vegetables and fruit; and
    - Encourage getting the recommended amount of sleep while ruling out possible sleep disorders.

- Educate patients about **risk factors** which may increase the risk of cognitive decline. Research-based recommendations include:

    - Talk with patients about unhealthy behaviors that increase the risk of cognitive decline, such as cigarette smoking, excessive alcohol consumption, and a sedentary lifestyle;
    - Share evidence-based information regarding products that may be harmful or without benefit, including nutraceuticals and other interventions (PCPs may consult this evidenced-based web site on "Complementary Remedies" for older adults and Table 1 of this American Family Physician Article).

- Talk with your patients about the medicines they take and discuss possible side effects they may have on their memory, sleep and brain function (a helpful resource for this conversation is the Administration for Community Living's publication, "Brain Health: Medicine, Age, and Your Brain");

- Address perceptions, fears and common misunderstandings about aging and cognitive decline (for helpful tips on having this conversation, see Gerontological Society of America's KAER Toolkit, pages 11-12 and the National Institute on Aging's "Talking with your Older Patients");
- Intervene to minimize cognitive decline associated with medical conditions such as stroke, diabetes, head trauma, renal insufficiency, vision and hearing losses and cardiac disease;
- Upon admission to the hospital, screen for delirium risk factors and implement delirium-prevention strategies.

2. PCP Resources and Patient Handouts

Below are helpful handouts and resources that can be shared digitally, or in print, with patients:

- The MBRF's brochures explain the concepts of brain health and cognitive aging and include healthy lifestyle recommendations that benefit brain health.
  - "Keeping Your Brain Healthy" (digital and print, brochure)
  - "Cognitive Aging Explained" (digital and print, brochure, *in development*)
  - "Top 10 Tips for Healthy Aging" (digital and print, tips sheet)
- National Institute on Aging (NIA)
  - Cognitive Health and Older Adults (article)
  - What Do We Know about Healthy Aging? (article)
  - A variety of "Free Publications" produced by the NIA can be found here
- U.S. Department of Health and Human Services, Administration for Community Living (ACL)'s handouts review the basics of brain health:
  - "Talking About Brain Health And Aging - The Basics" (handout)
  - "Talking About Brain Health And Aging - The Basics" (PowerPoint Presentation for Providers and Educators)
  - "Brain Health: Medicine, Age, and Your Brain" (handout)
- American Heart Association's "Life's Essential 8™ Fact Sheet" (handout)

3. The Case for educating patients about their Brain Health

Overwhelmingly, Americans report wanting to learn how to "stay sharp," yet also report having little awareness about brain health research. PCPs can be the accessible, trusted, and familiar conduit of information and guidance on lifestyle habits and changes that patients can make to maintain and preserve their brain health.

Two-thirds of individuals report having little or no knowledge about brain health research (August 2022)

Commissioned by Research!America in partnership with the Dana Foundation, an August 2022 national survey captured Americans views on brain health and brain health research. Despite the widespread personal impact of brain health issues, 66% of respondents reported having little or no knowledge about brain health research. Of interest is that the same percentage of respondents, 66%, indicated strong curiosity to learn more. (Source)

"The 87%", The Journals of Gerontology, Series A, Vol 67, Issue 7, July 2012 - Molly V. Wagster, PhD, et al

- One in eight people 65 and older (13 percent) develops Alzheimer's disease.
- The remaining 87 percent are experiencing cognitive changes attributable to the normal aging process to varying degrees.

AARP 2016 Member Opinion Survey Results

- 84 percent of members surveyed (age 50 and older) were very concerned with staying mentally sharp.
- Staying mentally sharp (90 percent) and physically fit (87 percent) were the top two health/self-related interests among those surveyed.

KEY MESSAGES FOR CONSUMERS
MARCH 2023

The information below can be shared with individuals, family members, and caregivers to help advance their knowledge around cognitive aging and the steps they can take to preserve their brain health. Even small lifestyle changes can have significant benefits and may help older adults maintain their cognitive health. Research shows that a combination of these healthy behaviors may also reduce the risk of developing dementia. (Source)

Cognitive Aging Scientific Summary Statements

- Cognitive aging refers to the effect age has on cognition – including memory, thinking, learning, and problem solving – and is a normal part of getting older
- Cognitive aging affects individuals differently. Whereas some individuals experience cognitive changes in memory, for example, other may experience changes in other domains (e.g., proc speed, attention)
- The effects of cognitive aging may impact a person in subtle ways, such as not instantly finding the right word, or forgetting where you put your glasses.
- Cognitive training and physical activity interventions show promise for delaying or slowing age-related cognitive decline. (*Cognitive training is defined as a broad set of interventions, such as those aimed at enhancing reasoning, memory, and speed of processing.*)[1]
- The science of cognitive aging is still developing.

Key Messages for Consumers

1. What is Cognitive Aging?
As we age, our brains age too. Cognitive aging, like aging in general, is a natural process.

- Our brains age at different rates and in different ways.
  - Wisdom, expertise and vocabulary typically increase with age, while other abilities like processing speed, decision-making and some types of memory may decline.
  - The brain changes associated with aging are part of a natural process that takes place throughout our lives.
- Cognitive health is the ability to clearly think, solve problems, learn and remember. It's just one aspect of overall brain health and is an important part of protecting your ability to perform everyday tasks.

2. What is Brain Health?
Brain health is how well your brain functions across several areas, including:

- How well you think, learn and remember;
- How well you control your body movement, including balance;
- How well you interpret and respond to emotions; and

[1] National Academies of Sciences, E., et al., in *Preventing Cognitive Decline and Dementia: A Way Forward*, A. Downey, et al., Editors. 2017, National Academies Press (US)

- How well you make effective decisions.

3. What Can You Do to Maintain Brain Health?

- It's never too soon or too late to protect your brain health. Taking steps now, like staying physically active, getting enough sleep, and reducing and managing your risk for cardiovascular disease can help maintain your brain health as you age.

- Growing evidence shows there are various lifestyle behaviors that may help protect your brain health now and in the future. (Sources include National Institute on Aging and American Heart Association):
    1. **Exercise --** Break a sweat and engage in regular cardiovascular exercise that elevates the heart rate and increases blood flow to the brain and body.
    2. **Quitting Smoking –** Reduce your risk of cognitive decline to levels comparable with those who never smoked.
    3. **Keeping a Healthy Heart --** The risk factors for cardiovascular disease and stroke — obesity, high blood pressure, and diabetes — also have been shown to negatively impact cognitive health. Preventing and managing high blood pressure and cholesterol will help protect the heart and take care of the brain.
    4. **Eating a Healthy and Balanced Diet –** Following a diet that's low in fat and high in vegetables and fruit has also been linked to reducing the risk of cognitive decline. Although research on diet and cognitive function is limited, certain diets, like the Mediterranean and Mediterranean-DASH (Dietary Approaches to Stop Hypertension), may help maintain brain health.
    5. **Getting Enough Sleep –** Not getting enough sleep may result in problems with memory and thinking, yet a third of American adults report regularly getting less than the recommended 7-8 hours of sleep. Help protect your brain by getting better sleep.
    6. **Staying Socially Engaged –** Social and intellectual engagement is important for brain health. Pursuing interesting and meaningful social activities will help you keep connections with others. Try volunteering at a local church or animal shelter or just share the activities you enjoy with friends and family.
    7. **Learning and Welcoming Challenges –** Challenging and activating the mind by reading, doing puzzles, building furniture, or playing games are good ways to encourage strategic thinking. Taking an online class or learning a new language will also help keep your mind sharp.
    8. **Don't Forget Mental Health** -- Some studies also link depression with increased risk of cognitive decline. Managing stress and seeking medical attention for any symptoms of depression, anxiety or any other mental health concerns will help optimize your brain health.

3. Consumers' Concern with Cognitive Aging and Memory Loss/Prevalence and Desire to Learn More

Given the lack of data quantifying the number of people affected by cognitive aging and the associated cost, the statistics below can be used to help frame the issue in terms of prevalence and concern.

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Research!America Public Survey results (August 2022)

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Education Outreach Update

May 3, 2023 Board of Trustees Meeting

Submitted by Angelika Schlanger, Executive Director

Introduction

During the February 16th, 2023 meeting, the Trustees endorsed the Executive Director to proceed with outreach to aligned organizations with existing education efforts – those directed to consumers/patients, and those directed to Primary Care Provides (PCPs). The summary below describes the outreach that has taken place and opportunities for consideration.

Consumers

Self-Management Resource Center (SMRC) | https://selfmanagementresource.com

About: The Self-Management Resource Center is the culmination of 40 years of research and program development, all focused on the goal of helping people better manage their chronic health conditions. The portfolio currently consists of six evidence-based programs supported by over 40 peer-reviewed articles. The most well-known program is the Chronic Disease Self-Management Program (CDSMP). The programs have the endorsement of the Administration for Community Living (ACL) and National Council on Aging (NCOA). The CDSMP consists of six sessions and is administered by trained facilitators who are affiliated with an organization or healthcare system that licenses the program. The table of contents for this program can be found here. Currently, 700-800 organizations license the programs per year and 75,000 people a year complete across all programs. Ownership of the programs transferred from Stanford University to SMRC six years ago. More information on the format and impact of the program on health/wellness and quality of life can be found here.

Alignment and Next Steps: The founder, Kate Lorig, and her team is enthusiastic about partnering with the MBRF, which would entail the SMRC leveraging our Key Messages document to develop a stand-along brain health module OR incorporate the module into existing curricula. The module would be available to all licensees, without paying additional fees. Conservative estimates of usage would be 10,000-20,000 participants by the end of the first year. Approximately $40,000 would be needed to develop the program in English, with additional funding for Spanish and for an evaluation by an academic partner. The curricula should be self-sustaining after this development and evaluation period. Given the relatively low cost, buy-in from SMRC, and immediate access to a broad international audience by way of one of the most trusted chronic disease management programs, **it is recommended that the organization be invited to submit a concept paper/proposal and budget for this partnership.**

Questions/Concerns:

- Clarify intellectual property limitations. The MBRF logo will not be able to be featured due to intellectual property concerns, but the MBRF will be acknowledged – clarify how
- Clarify any exclusivity requirements
- Since SMRC is not a non-profit, if MBRF chooses to fund, this would be as an expense
- Clarify funding and timeline for sustainability

Penn IMPaCT Center | https://chw.upenn.edu/about/

About: IMPaCT Community Health Worker (CHW) is national center of excellence that provides training, technological applications, and technical assistance to healthcare organizations seeking to employ CHWs. Multiple peer-reviewed studies have shown a positive impact of this model on decreasing hospital stays, increasing access to primary care, and health cost savings. The healthcare systems pay to use the model and to receive training. Currently, over 50 organizations across 20 states use IMPaCT.

Alignment and Next Steps: In speaking with leadership, it was clear that the focus of this particular CHW program is less about prevention and health education, and more about identifying the basic needs and address social determinants of health for two main populations: those transitioning out of the hospital, and those who are enrolled in outpatient chronic disease programs. The CHWs tend to focus on making sure patients have a medical home, have transportation to their PCP, safe housing, and follow up appointments scheduled. The CHWs work with the patients for a limited amount of time. The MBRF's key messages and brochures were shared with the partner, however, since this particular program does not focus on general wellness education, **there does not appear to be direct alignment with our brain health consumer education at this time.**

Questions/Concerns: Noted above.

Primary Care Providers

Gerontological Society – KAER | https://www.geron.org/publications/kaer-toolkit| Presentation here

About: The GSA KAER Toolkit is intended to support primary care teams in implementing a comprehensive approach to initiating conversations about brain health, detecting and diagnosing dementia, and providing individuals with community-based supports. It includes practical approaches, educational resources, and validated clinical tools that teams can integrate into their workflow. The kit is freely available for download. GSA does not know how many practices or healthcare organizations are using it. They have piloted the KAER toolkit in one health system and the pilot is being completed and evaluated, and they are developing partnerships in Ohio and the VA. The greatest overlap with MBRF's messaging is in the "K" ("Kickstart the conversation"), which seeks to normalize conversations around brain health and integrate discussions about brain health in every PCP visit. Page 12 of the toolkit includes a chart with links to various brain health resources.

Alignment and Next Steps: **There are several opportunities that could be explored:**

- Jointly produce brain health materials (MBRF/GSA)
- Include links to brain health materials made by MBRF in the toolkit
- Provide funding to tweak the toolkit to make it more usable in various contexts like small practice with only one or two practitioners and to do an evaluation
- Funding to support staff who can provide support, technical assistance, and training of champions at clinical practices/healthcare organizations implementing the toolkit
- Partner or provide funding to develop a direct-to-consumer version that will also be targeted to different minority populations, like Native American, African American, Hispanic, etc.

Questions/Concerns:

- They are currently not able to track usage/impact outside of one or two formalized partnerships
- What are the strategies for further dissemination?

- How will the consumer version work and does these need to be distributed through the PCPs office - could MBRF help to develop the consumer version?

Cognition in Primary Care | https://familymedicine.uw.edu/cpc/ | Presentation here

About: Barak Gaster, MD (University of Washington) is a dementia expert and primary care physician with more than 20 years of experience as a clinician, teacher, and leader in clinic process improvement. Dr. Gaster received an initial two-year grant from CDC in 2020 to create a workable version of the KAER toolkit that could be used in a large health center. Funding was to implement the program out of UW Medicine and 14 community-based clinics. They have trained more than 125 PCPs so far, and received a two-year renewal, which will end by the end of next year. Evaluation has shown improved outcomes in number of cognitive assessments (MOCA) completed; use of tools; and number of early-stage diagnoses.

Alignment and Next Steps: After completing this initial study, they are looking to produce high-quality learning modules and training videos for PCPs which can be viewed on demand and combined with some support from a trainer. They will then seek to create this package for national implementation and dissemination. They are seeking funding for this, as current CDC funding is for the local pilot. **The MBRF could explore expanding the brain health education portion of this program.**

Questions/Concerns:

- Ensure other funding sources are committed to the national expansion
- Will this compete with KAER? Better understand the relationships to KAER, particularly as this expands nationally
- There may be a difference of opinion. Currently, the program initiates when someone shares a complaint about memory and is focused on early detection of cognitive impairment and to improve care for people with dementia. The program is not necessarily promoting wellness/prevention education to maintain cognitive health.

Future Outreach (is anyone missing?)

- National organizations, such as: national CHW organization; USAGing; YMCA
- Dr. Ron Lazar's Brain Health Advocacy Mission (BHAM) (meeting being scheduled)
- AARP Brain Health Collaborative (summer launch)
- AAN CEO and leadership of Brain Health Initiative (meeting is being scheduled for May; next Brain Health Summit in September in DC)
- John A. Hartford Foundation (meeting scheduled for May)

Conclusion

Based on these conversations, the following is recommended for discussion:

- Consumers: **Move forward** with the SMRC - given the great alignment and potential – continue the conversation and invite to submit proposal if everything lines up. **Pause** with Penn IMPaCT
- PCPs: **Continue exploring opportunities** with KAER based on the specific strategy or set of strategies that will add the most value. **Potentially pause and better understand** Cognition in Primary Care, since the model is very similar to KAER and may compete, unless they work together/partner.

Research Committee Activity Timeline

2022-2023

Updated March 13, 2023

Duty (from Committee Charter)	Activity/Action	Outcome	Date	Comments
"Encourage and assess research at the McKnight Brain Institutes (MBIs)"	Review of the Annual Reports of the MBIs	Information for scientific review includes: scientific achievements, publications, presentations, collaborations	DONE February 5, 2020 DONE June 15, 2020 DONE Feb. 26, 2021 Annual Reports were reviewed by the Trustees on Feb. 9, 2022	Reviewers presented at Feb. 2021 Trustees Meeting. Follow up letters were written and sent to each of the MBIs. All Requests of MBIs have been addressed by MBIs. MBRF/MBI Task Force was established April 2021 to streamline Annual Report Recommendations. Recommendations were reviewed Oct 28, 2021 by Trustees. New Template was used for 2021 Annual Reports
	Review of all New Funding Requests from MBIs. Most Funding Requests should be reviewed by the Interventional Core Committee of the MBIs first.	UM submitted a request for $200,000 for Neurocognitive Post-Doctoral Fellowship over the next two years Christian Agudelo, MD, was selected	October 23, 2019 Trustees voted to fund -- payable over two years. Position Start Date – July 2020	The notification letter mentioned that future funding should come from other sources (See "The Evelyn F. McKnight Neurocognitive Clinical Scholar in Brain Health and Aging" on page two)

		UA submitted a request for $244,400 for UM's participation in the Precision Aging Demonstration Pilot	The proposal was reviewed and approved by the Trustees on Feb 5, 2020. The budget was revised and approved June 2020	Dr. Mike Dockery notified UA of the Trustees' approval Trustees were notified of the revised budget and approved no-cost revisions
		A Funding Request "Centralized, telephone-based, computer-assisted…Spanish" for $129,000 was submitted in April 2021 by Dr. Ron Lazar	Reviewed by Cmte in July and not recommended	This request was reviewed by the Trustees in July 2021 and was denied. Suggestion was provided to Dr. Lazar to work though MBI Core Committee if he chooses to resubmit.
		UM submitted a request for $ 3 million to endow a Neurocognitive Training Fund in Brain Health and Aging. UM submitted a request for $250,000 to co-fund a fellowship over 5 years – The Evelyn F. McKnight Neurocognitive Clinical Scholar in Brain Health and Aging"	July 1, 2021 October 2021 Research Cmte reviewed on October 21, 2021; Recommended funding; Trustees reviewed and approved funding October 28, 2021 Grant Notification Memorandum was dated Nov. 10, 2021	This request was denied by Trustees on July 28, 2021, but Dr. Lee Dockery was asked to pursue conversations with UM about how they might proceed. Dr. Dockery had several conversations and exchanges with UM with ideas for strengthening the program infrastructure. A memorandum notifying UM of the approval for funding the Evelyn F. McKnight Neurocognitive Clinical Scholar in Brain Health and Aging for a total of $250,000 ($50,000 over 5 years) to be matched by UM was sent by Dr. Mike Dockery to UM and agreed to and signed by Drs. Sacco and Rundek.

"Encourage and assess research at the McKnight Brain Institutes (MBIs)" continued	Review of Travel Award Fund: Originally established to fund research scholars and faculty to visit other McKnight institutions.	Few applications for travel. The funds allocated for travel have been used to fund the activities of focus groups: Epigenetics, MRI standardization and cognitive test battery working group	Reviewed at each Trustees' Meeting ON HOLD DUE TO UNIVERSITY TRAVEL RESTRICTIONS	Approved in 2009 In the amount of $100,000 Approximately $30,000 remains in the fund
	Inter-institutional Block Grants	Cognitive Aging Core Working Groups	N/A	5 Areas: Brain and Cognitive Health Cognitive Aging & Memory Cognitive Testing Battery Epigenetics MRI standardization
	Inter-institutional Block Grants	Bio-Informatics Core (Epigenetics)	Funding period: 9/1/2013-8/31/2015	Tom Foster, UF still lead scientist.
	Inter-institutional Block Grants	Neuroimaging Core	Funding period: 1/1/2015 to 12/31/2017 $931,759.00	
	Inter-institutional Block Grants	Cognitive Assessment and Brain Registry Core	Funding period: 9/1/2015-8/31/2017 Request for another extension was approved at the Feb 5, 2020, Trustees' meeting.	No-cost Extension Request submitted for April 30, 2021. Trustees approved the extension.
	Review of Pilot Grants (Funding Requests and Progress Reports)	1)A Novel Invention Tool – Levin 2)Revitalizing Cognition in Older Adults – Bowers	1)Funding Period: 5/1/2018-4/30/2020 2)Funding period: 5/1/2018-4/30/2020	1)Funding for 2-years for total of $120,000 2)Funding for 2-years for total of $120,000

				No-cost Extension Request submitted and approved for April 30, 2021.
		3)Transcutaneous Vagal Nerve Stimulation and Cognition Training – Williamson/Alexander	3)Approved July 2019 Funding period: 10/1/2019-9/30/2021 Deadline was extended	3)Funding for 2-years for total of $120,000
			Request for no-cost Extension	Trustees approved at their August 29, 2022 meeting
	Applications for 2021 Pilot Grants	5 Letters of Intent were Submitted	Research Cmte Reviewed LOIs for 2020 Jan. 29, 2021.	Trustees approved 3 grants
		3 Grants were approved	Feb. 26, 2021	
		With Dr. Gomes-Osman's subsequent departure from UM, the Core Committee recommended the next application in line to replace Dr. Gomes-Osman's. This was submitted by Dr. Sonya Kaur "Sleep Intervention…"	The Research Cmte did not recommend funding the next-in-line proposal in its July 2021 meeting "Reuniting the Brain and Body to Understand Cognitive Aging: The Nexus of Geroscience and Neuroscience" pilot grant August 2022	The Trustees denied funding and setting this precedent in its July 2021 meeting. Dr. Rundek was notified. Interim Report submitted. Trustees reviewed and approved on August 29, 2022
	Checked RFA for 2022 before it was posted to be sure it stresses Junior Faculty. It does.	Drs. Lazar and Levin shared that only 1 LOI was received for 2022 funding cycle.	January 31, 2022 Leadership Council Meeting attended by Drs. Thambisetty and Mike Dockery and A. Porter	Several reasons for only 1 LOI were cited. The Leadership Council drafted a new RFA to address these reasons and broaden the scope of the research for Trustee review at their February meeting

			February 23, 2022 September 12, 2022	Dr. Mike Dockery, on behalf of the Trustees, responded to the LC and the members of the Core Committee that they did not wish to change the focus of the pilot grant program by changing the RFA Dr. Mike Dockery, on behalf of the Trustees, and Angelika Schlanger attended the Leadership Council meeting and asked the Council to follow up with the MBRF on the status of the Cognitive Aging and Memory Intervention Core Workgroup, in terms of its membership and plans to respond to the Memo from February 23, 2022.
	2023 Pilot Grants	5 Applications Submitted on February 7, 2023 via Ron Lazar and Bonnie Levin. The research Committee approved three of the pilot grant applications.	March 28, 2023	Dr. Sonya Kaur (PI): "Feasibility of a Timed Bright Light Exposure Therapy to Improve Circadian Function" Dr. Farah Lubin (PI): "Ketogenic Diet Improvement of Age-Related Memory Impairments, Nominates Cell-type Specific O-GicNAc Deficiencies in the Aged Hippocampus" Dr. Joseph Signorile (PI): "Cued High-Speed Multidirectional Yoga: Impact on Retinal Microvascular

				and Cognitive Measures"
"Identify opportunities…to foster greater interest in cognitive aging and age-related memory loss (in the scientific community)"	Research Partnership with the Foundation for NIH and the NIA. 1st cycle-2009, 2nd cycle-2014 3rd cycle approved 2019 to begin Spring of 2020	Fund balance of $1 million from 2nd five-year partnership returned to MBRF Report received on all FNIH/MBRF activities RFA posted: "Network for Identification, Evaluation, and Tracking of Older Persons with Superior Cognitive Performance for Age" FNIH Report submitted For information only	DONE August 2019 FNIH Report in October 2019 had an error. A corrected report resubmitted on Feb. 5, 2020. Posted Feb 2020; Deadline LOI Sept. 1; Application October 1, 2020 First payment was made to FNIH by March 31, 2021. Will continue until 2025 Dr. Molly Wagster will be attending the March 23-25 Inter-institutional Meeting at UA. The Trustees have invited her to present at their	History: Established 2009 $5 M over 5 years from MBRF; match from NIA and partners was $23 M for total of $28 M (17 five-year grants funded) 2014 Partnership renewal funded one 5-year project for $15 million with $5 M from MBRF and $10 M from NIA Valerie connected with Julie Wolf-Rodda and Molly Wagster on promoting STARRS study. NIA will provide $14M to be pooled with MBRF $5 M. A 2.8 Match. RFA was shared with Communications Working Group for posting and with Leadership Council. Two grants were provided from the Research Partnership ""Network for Identification, Evaluation and Tracking of Older Persons with Superior Cognitive Performance for their Chronological Age" to Dr. Thomas

			meeting on March 23, and to the idea of inviting the grantees for a video presentation. Dr. Julie Gerberding, Julie Wolf-Rodda, FNIH, and Dr. Molly Wagster, NIA, attended MBRF Trustees Meeting on October 27, 2022, in DC	Perls, Boston University, and Dr. Emily Rogalski. Julie Wolf-Rodda, FNIH, Dr. Molly Wagster, NIA, and other members of the FNIH and NIA teams met by Zoom with Drs. Mike Dockery, Lee Dockery, Madhav Thamibisetty and Angelika Schlanger on January 31 and March 20, 2023 to being planning the next Cognitive Aging Summit.
"Identify opportunities…to foster greater interest in cognitive aging and age-related memory loss (in the scientific community)"	MBRF Innovators Awards in Cognitive Aging and Memory Loss The McKnight Brain Research Foundation committed $4.5 million over the next five years to support outstanding mid-career scientists committed to researching the basic biological mechanisms underlying cognitive aging and memory loss.	Program was Approved by the Trustees Potential administrative and/or funding partners were approached American Federation of Aging Research (AFAR) was identified as an excellent partner organization. AFAR presented a proposal and draft contract for review Revised Agreement signed between AFAR and the MBRF	October 14, 2020 December 2020 January 2021 February 2021 July 15, 2021 August 2021 Mid Oct. 2021 Dec. 15, 2021 March 2022	AFAR Review Committee: Chair: Dr. Anna Maria Cuervo Members: Dr. Rafa de Cabo Dr. Thambisetty Dr. Boyle and Dr. Roz Anderson 2021 LOI Deadline – 9 LOIs Received LOI Review – 7 applicants asked to submit full application Application Deadline Award Announcement 2022 *LOI Submission and review was eliminated due to the small number of applicants in 2021*

			August 2, 2022 September 19, 2022 December 7, 2022	Application Deadline Application Review – 4 applied. Award Announcement
	Reserve & Resilience Workshop 2019 Reserve & Resilience Workshop Pilot Grants 2020 Final Reserve & Resilience Workshop 2021	Over 300 Attendees (8 MBI researchers) Organizers requested $30,000 to support (1 – 3) pilot grants	September 9 and 10th, 2019 Bethesda In-Person Meeting CHANGED TO VIRTUAL MTG September 14 and 15, 2020; Report Submitted Jan. 2021 Oct 31/Nov 1 Bethesda Meeting will be a hybrid – part virtual and part person. The program is posted on reserveandresilience.com. Of note, Jen Bizon and Tom Foster are panelists.	This is an outcome from Cog. Aging Summit III held in 2017. Research Committee approved support in first and second years. Dr. Stern requested support for the Final R & R Workshop to take place Oct. 31/Nov. 1 in Bethesda. He did not request a specific amount but support MBRF provided last year was $30,000. Committee supports recommendation to fund at no more than $30,000.
"Encourage young investigators in this area of research"	McKnight Brain Research Foundation Clinical Translational Research Scholarship with American Academy of Neurology (AAN) and American Brain Foundation (ABF)	2021-2022 MBRF Reviewers are Dr. Boyle, Dr. Thambisetty, and Dr. Isaacson	Reviewers meet in Dec. Two Scholars are selected and alternates were identified. Awardees are notified in January. Funding starts July 1 of each cycle	First Scholarships Awarded January 2018 (McConnell, Albert) Second Scholarships Awarded January 2019 (Camargo, Sedaghat) Third Scholarships Awarded January 2020 (Baxter, Getz)
	McKnight Brain Research Foundation Clinical Translational Research Scholarship with American Academy of Neurology (AAN)		Edits to 2021 RFA were made and approved by Research Cmte. RFA was posted as of July 4, 2020, on AAN site.	Fourth Scholarships were Awarded in January 2021 to Dr. Wendy Yau Wai-Ying (Brigham and Women's) and ~~Dr. Matthew Burns (UF)~~

	and American Brain Foundation (ABF) (continued)		Advertising followed 2019 Plan for 2020 Award and begin in August, 2020. 8 applications for 2021 were received. October 14, 2020, Renewal for next five years was approved by the Trustees	Dr. Reem Waziry (Publicly announced in April 2021 (Dr. Matthew Burns [UF] received a K-Award from NIA and had to decline the McKnight Scholarship.) <u>Fifth Scholarships</u> Advertising was conducted in August and September 5 Applications received Oct. 1. Review was in Dec. 2021
		Members of the 2022-23 Review Committee include Dr. Madhav Thambisetty and Dr. Patricia Boyle	2022-23 Deadlines September 1, 2022 Application Deadline November 3, 2022 Review Committee Meets January 9, 2023 Notification of Recipients Spring 2023 Announcement of Recipients	<u>Sixth Scholarships</u> New 2022-23 RFA Draft was reviewed and has been posted and advertised - 9 applications were reviewed 2023 Scholars Announced (Drs. Eva Klinman, MD, PhD and Sheena Baratano, MD, PhD)
"Encourage young investigators…" Continued	Poster Reception at 2019 Society for Neuroscience annual meeting (Chicago) MBRF/MBI Poster Reception 2020 Society for Neuroscience (SfN) annual meeting in DC October 24 – 28, 2020		October 20, 2019 August 29, 2022	First Poster Reception held in 2008. (50 submissions received) Sponsored by MBRF. Hosted by Directors of MBIs. Submissions open to researchers at MBIs and invited guests only MBRF Trustees Decided not to host the MBRF/MBI Poster session at the 2022 meeting. Dr. Mike Dockery updated the

	canceled due to DC pandemic closing guidelines Society for Neuroscience will meet in San Diego Nov 12 - 16		September 5, 2022 September 1, 2022	Leadership Council on Sept. 12, 2022 by Zoom. Dr. Mike Dockery wrote to the Leadership Council to ensure it will take place in 2023. Ms. Porter wrote to Dr. Molly Wagster to alert her that the poster reception will not take place this year.

MINUTES
MCKNIGHT BRAIN RESEARCH FOUNDATION (MBRF)
RESEARCH COMMITTEE
CONFERENCE CALL
March 28, 2023

The Research Committee of the MBRF was called to order at 5:00 pm EST on March 28, 2023, by Dr. Madhav Thambisetty.

The following members were present:

Dr. Madhav Thambisetty, Chair of the Research Committee, Trustee
Dr. Mike Dockery, MBRF Chair
Dr. Sue Pekarske, Trustee

The following members were absent:
Dr. Patricia Boyle, Trustee
Dr. Richard Isaacson, Trustee

Others attending:

Dr. Lee Dockery, Chair Emeritus
Ms. Melanie Cianciotto, Corporate Trustee
Dr. Angelika Schlanger, Executive Director

1. Call to Order

Dr. Thambisetty welcomed the members of the committee to the call.

2. Minutes of the January 20, 2023 Meeting

The minutes of the January 20, 2023, Research Committee Meeting (Attachment 1) were reviewed and approved as amended. The changes are:

Item 4 a, the second sentence of the second paragraph should read "They feel making the match less restrictive for applicants from smaller institutions would allow for a broader, more diverse pool of candidates, including investigators from smaller institutions."

Item 5, the last sentence of the paragraph should read "He also shared the MBRF would not be in favor of having fellow or junior faculty members driving this process."

Action Item 1: The minutes of the January 20, 2023, Research Committee Meeting were approved as amended (Attachment 1).

3. Updated Activity Timeline

The committee reviewed the updated Activity Timeline (Attachment 2) for information.

4. Pilot Grant Applications

Dr. Thambisetty provided a summary of the Pilot Grant applications and review process. Five proposals were received during this cycle. The applications were reviewed by the Cognitive Aging and Memory Intervention Core – notably Dr. Ron Lazar and Dr. Bonnie Levin as well as at least two outside reviewers assigned to each proposal. The recommendation of the Cognitive Aging and Memory Intervention Core is to fund the requests of Dr. Joseph Signorile and Dr. Sonya Kaur. Dr. Signorile's study is titled "Cued High-Speed Multidirectional Yoga: Impact on Retinal Microvascular and Cognitive Measures" and has a total budget of $119,739. Dr. Kaur's study is titled "Feasibility of a Timed Bright Light Exposure Therapy to Improve Circadian Function" and has a total budget of $120,000.

The committee discussed the merits of the two recommended proposals. Dr. Signorile, who is a senior investigator, received the highest mean score of 3 (on a scale of 1 to 9, where 1 is the highest) for his project, and the committee noted its clinical relevance. Dr. Kaur, who is a junior investigator, received a mean score of "5" for her project. Despite this relatively lower score, the Trustees felt that pilot grant funding could have a positive impact on Dr. Kaur's career and could open the door to future funding from the National Institute of Health (NIH). The Trustees also discussed the weaknesses with the proposal that were identified by the reviewers. The committee discussed and reaffirmed the pilot program's stated goal to fund both a senior and junior investigator in each cycle, where possible.

The committee passed a motion to approve funding for the proposals endorsed by the Cognitive Aging and Memory Intervention Core. The motion also requests that Dr. Kaur's research project, in consultation with her mentors, be modified to overcome the weaknesses noted by the reviewers.

Due to time constraints, Dr. Schlanger will share the recommendation of the Research Committee with the full board to review and vote by email.

The committee also discussed the study submitted by Dr. Giovanna Pilonieta titled "A Single Arm Intervention Study to Evaluate Effects of Personality Traits on Efficacy of Processing Speed Training in Individuals with Subjective Cognitive Decline." The committee felt that the proposal had considerable potential, particularly with strong mentorship from the senior investigators on the research team. The committee would like to encourage Dr. Pilonieta to revise and resubmit her proposal during next year's Pilot Grant cycle.

Action Item 2: The committee passed a motion to approve funding for the two proposals endorsed by the Cognitive Aging and Memory Intervention Core (submitted by Dr. Kaur and Dr. Signorile). The motion also requests that Dr. Kaur's

research project, in consultation with her mentors, be modified to overcome the weaknesses noted by the reviewers.

Action Item 3: Dr. Schlanger will share the recommendation of the Research Committee with the full board to review and vote by email

Dr. Thambisetty provided a summary of his recent phone conversation with Dr. Ron Lazar. Dr. Lazar expressed that there is an increasing disconnect between the mission of the MBRF and the 4 MBIs. This centers around three issues:

- The MBRF does not provide a mechanism for direct salary support for Primary Investigators (PIs) for these initiatives.
- The MBRF's definition of translational research may be too restrictive, possibly excluding valuable projects from receiving pilot grant funds.
- Lack of awareness of the MBRF funding opportunities amongst the MBI researchers (e.g. MBRF Innovator Awards) and how to improve this awareness.

The committee feels the disconnect is bothersome and discussed next steps. The committee recommends having offline conversations with the Director of each MBI in advance of the MBRF Inter-Institutional Meeting Leadership Council Meeting. Dr. Schlanger will share the Innovator Awards funding opportunity by email with the Leadership Council, and the opportunity has already been advertised on the MBRF's social media platforms and in its recent newsletter.

5. Current Grants/Programs

a. MBRF Innovators Awards in Cognitive Aging and Memory Loss

Dr. Thambisetty shared that AFAR has agreed to streamline the process for the next grant cycle, including dividing the rankings into two groups (basic science and clinical-translational science), thereby ensuring that at least one clinical-translational project receives support in each cycle.

b. MBRF Clinical Translational Research Scholarship in Cognitive Aging and Age-Related Memory Loss

The committee reviewed the current draft of the RFA for the 2023 Clinical Translational Research Scholarship in Cognitive Aging and Age-Related Memory Loss (Attachment 3). The committee approved the following revisions to the RFA:

- Remove "solely" from the please note at the top of the document
- Under How to Apply #2, change "2022" to "2023"
- # 1 under Eligibility, second sentence add "may include" after "These"
- # 2 under Eligibility, remove "must" from the beginning of the first sentence and replace with "is"

Action Item 4: The committee approved the revisions to the current draft of the 2023 RFA for the Clinical Translational Research Scholarship in Cognitive Aging and Age Related Memory Loss (Attachment 3) as discussed.

6. Cognitive Aging Summit IV Planning Update

Dr. Thambisetty provided the committee with an update on the Cognitive Aging Summit IV Planning. The potential dates for the summit are March 19 – March 21, 2024.

7. Adjourn

Dr. Thambisetty asked if there was any further discussion. Hearing none, he called for adjournment of the meeting 6:15 p.m. EST.

Summary of Action Items:

Respectfully Submitted,

Melanie A. Cianciotto
Corporate Trustee

Addendum
McKnight Brain Research Foundation
Research Committee Meeting
March 28, 2023

Following the in-person meeting, the committee discussed, by email, funding a third pilot grant project, which was submitted by Dr. Farah Lubin "Ketogenic Diet Improvement of Age-Related Memory Impairments, Nominates Cell-type Specific O-GicNAc Deficiencies in the Aged Hippocampus." The committee reasoned that Dr. Lubin has been an active research investigator within the MBI at the UAB for many years and has distinguished herself in receiving the President's Diversity Champion Award at UAB. Dr. Lubin's proposal also received the highest mean score of "3," tied for the highest score with Dr. Signorile's project. Given that no pilot grants were awarded in 2022, it was felt that the MBRF could approve a third pilot grant in 2023. **Therefore, a motion was made and approved by the committee via email to also fund Dr. Lubin's proposal, for a total of three funded pilot grants in 2023.**

UF | UNIVERSITY of FLORIDA

Department of Clinical & Health Psychology
College of Public Health and Health Professions

PO Box 100165
Gainesville, FL 32610-0165
(352) 273-6152

April 22, 2023

Dear McKnight Trustees:

We would like to provide the McKnight Brain Research Foundation Trustees with an update on our McKnight Inter-Institutional Pilot Grant entitled, "A Pilot Intervention with Near Infrared Stimulation: Revitalizing Cognition in Older Adults" and to kindly request an additional no-cost extension for the project through April 30, 2024. This pilot project has been instrumental in establishing a strong cross-institutional collaboration between our investigative teams at the University of Florida (UF; MPIs: Dawn Bowers; Adam Woods) and the University of Arizona (UA; MPI: Gene Alexander). The funding for this pilot grant began in July 2018 and we received a no-cost extension last year through April 30, 2023. Early in the project, we were able to make great progress in further developing and refining our methods, as well as in initiating our efforts in collecting pilot intervention data. This initial pilot work was critically important in supporting our collaborative, multi-site grant submission for this novel near-infrared photobiomodulation stimulation intervention trial, which was funded by NIH (NIA R01AG064587; $3.8M total costs; MPIs: Bowers, Woods, Alexander) and is ongoing. Additionally, two trainees have attained funding related to this R01 including a post-doctoral diversity supplement (Dr. Stacey Alvarez-Alvarado) and a diversity predoctoral NRSA (F31-AG071264) awarded spring 2021 (Francesca Lopez). Both are designed to test independent hypotheses related to the baseline imaging and cognitive data and will also be able to utilize data from the McKnight project as part of their studies. Dr. Alvarez-Alvarado has just joined the faculty at UF-Jacksonville as an Assistant Professor and Ms. Lopez will be starting a post-doctoral fellowship at University California-San Diego in July 2023.

To date, our total expenditure on the project is $66,960 (UF: $43,854; UA: $23,956). We would be most grateful for an additional no-cost extension for this pilot project through April 30, 2024, which will provide the opportunity for both sites to complete our planned study enrollment efforts, as well as our processing and analyses of project data. This no-cost extension will also allow us to further leverage this pilot study to support new additional grant submissions, while advancing our understanding of how this novel intervention can help to diminish the effects of age-related memory decline.

As always, we wish to express our profound appreciation for your ongoing support and the funding provided by this McKnight Inter-Institutional Pilot Grant. As we noted previously, this pilot grant award has been instrumental in providing the critically essential methodological developments and initial pilot data to support our successful collaborative NIA R01 grant award. We very much look forward to further advancing the return on this investment provided by the McKnight Brain Research Foundation, as our cross-institutional collaborative work progress and our findings continue to emerge from this novel aging intervention effort. Of course, please let us know if any additional information or clarification would be helpful in your consideration of this no-cost extension request.

Cordially,

Dawn Bowers, Ph.D., ABPP-CN
Professor,
Departments of Clinical & Health Psychology and Neurology
Director, Neuropsychology Post-doctoral Program
University of Florida

Adam J. Woods, Ph.D.
Associate Dean for Research
College of Public Health and Health Professions
Associate Professor
Associate Director, Center for Cognitive Aging and Memory, McKnight Brain Institute
Department of Clinical and Health Psychology
University of Florida

Gene E. Alexander, Ph.D.
Professor and Director,
Brain Imaging, Behavior & Aging Lab
Departments of Psychology and Psychiatry Neuroscience and Physiological Sciences
Graduate Inter-disciplinary Programs
Bio5 Institute, and Evelyn F. McKnight Brain Institute
University of Arizona

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April 11, 2023

Ronald M. Lazar, PhD, FAHA, FAAN |University of Alabama EMBI

Bonnie E. Levin, PhD | University of Miami EMBI

Inter-Institutional Cognitive Aging and Memory Interventional Core

Dear Dr. Lazar and Dr. Levin,

The Trustees of the McKnight Brain Research Foundation (MBRF) have reviewed the 2023 pilot grant applications submitted through the Inter-Institutional Cognitive Aging and Memory Interventional (CAMI) Core in February 2023. They appreciate the effort you made to develop a thoughtful and rigorous review process and were impressed by the quality and the number of applications from both junior and senior investigators.

It is recognized that no pilot grants were awarded last year, and, therefore, the Trustees have chosen to make three awards this cycle. Furthermore, the Trustees are keen to re-energize this important initiative under the Inter-Institutional CAMI Core. I am therefore pleased to share that, in recognition of the importance of inter-institutional collaboration and based on the strengths of the proposals and their potential for advancing the field of cognitive aging, the Trustees have approved a block grant in support of the three projects listed below:

> Dr. Sonya Kaur (PI): "Feasibility of a Timed Bright Light Exposure Therapy to Improve Circadian Function"
>
> Dr. Farah Lubin (PI): "Ketogenic Diet Improvement of Age-Related Memory Impairments, Nominates Cell-type Specific O-GicNAc Deficiencies in the Aged Hippocampus"
>
> Dr. Joseph Signorile (PI): "Cued High-Speed Multidirectional Yoga: Impact on Retinal Microvascular and Cognitive Measures"

The submitted budgets have been approved for each of the three awards. Payment from the MBRF will not exceed the submitted and approved amounts. Payment will be over a two-year period. The grant is not intended to provide sustaining support following the conclusion of the grant awards. The funding will be available beginning May 1, 2023, with the requirement of submission of an annual report at the end of each grant year.

For the funds to be disbursed by the MBRF, it will be necessary for the collaborating Principal Investigators at each institution to notify the corporate trustee of the MBRF regarding who has the authority to submit invoices. Invoices should be submitted quarterly to the corporate trustee, noting the title of the pilot grant.

Congratulations to the recipients of this year's Pilot Grant Awards! We look forward to seeing the result of their research and the impact it will have on the field of cognitive aging. We express appreciation to you for your efforts in advancing the collaborative research in age-related cognitive decline and memory loss through the CAMI Core's Pilot Grants program.

Sincerely,

Angelika Schlanger

Angelika Schlanger| Executive Director, MBRF

CC: MBRF Trustees; Dr. Sonya Kaur; Dr. Farah Lubin; Dr. Joseph Signorile

McKNIGHT BRAIN RESEARCH FOUNDATION
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Established by Evelyn F. McKnight to Alleviate Memory Loss in the Aging

April 11, 2023

Ronald M. Lazar, PhD, FAHA, FAAN |University of Alabama EMBI

Bonnie E. Levin, PhD | University of Miami EMBI

Sonya S. Kaur, PhD | University of Miami EMBI

Dear Dr. Lazar, Dr. Levin, and Dr. Kaur,

Congratulations, again, to Dr. Kaur and the other recipients of this year's Pilot Grant Awards!

The Trustees are pleased to fund the proposal of Dr. Kaur, a junior investigator, through the pilot grant program and hope that this funding will support her advancement as a researcher in the field of Cognitive Aging.

As a follow-up to our award letter, the Trustees would like to request that Dr. Kaur, in consultation with her mentors, modify the project to overcome the weaknesses noted by the reviewers. We hope that this will strengthen the project and its outcomes. Information on the modifications that are made can be shared directly with the MBRF, by email to its Executive Director, and as part of the required annual report submitted at the end of each grant year.

On behalf of the Board of Trustees, I express appreciation to you for your efforts in advancing collaborative research in age-related cognitive decline and memory loss. We look forward to seeing the results of Dr. Kaur's research.

Sincerely,

Angelika Schlanger

Angelika Schlanger

Executive Director

CC: MBRF Trustees

April 11, 2023

Ronald M. Lazar, PhD, FAHA, FAAN |University of Alabama EMBI

Bonnie E. Levin, PhD | University of Miami EMBI

Giovanna Pilonieta, DMD, MPH | University of Alabama EMBI

Dear Dr. Lazar, Dr. Levin, and Dr. Pilonieta,

As a follow up to the Pilot Grant Award letter, we wanted to share our appreciation to Dr. Pilonieta for her submission of a pilot grant application. Although not approved for an award this year, the Trustees were impressed by her study, titled "A Single Arm Intervention Study to Evaluate Effects of Personality Traits on Efficacy of Processing Speed Training in Individuals with Subjective Cognitive Decline." They believe that the proposal has considerable potential, particularly with strong mentorship from the senior investigators on the research team to address the weaknesses noted by the reviewers. The Trustees would like to encourage Dr. Pilonieta to revise and resubmit her proposal during next year's Pilot Grants cycle.

On behalf of the Board of Trustees, I express appreciation to you for your efforts in advancing collaborative research in age-related cognitive decline and memory loss. We look forward to seeing a resubmission from Dr. Pilonieta next year.

Sincerely,

Angelika Schlanger

Executive Director

CC: MBRF Trustees

McKnight Clinical Translational Research Scholarship in Cognitive Aging and Age-Related Memory Loss

Funded by the McKnight Brain Research Foundation through the American Brain Foundation and the American Academy of Neurology

Application Deadline: September 14, 2023

This award aims to support young investigators in clinical studies relevant to age-related cognitive decline and memory loss. The award also recognizes the importance of rigorous training in clinical research and encourages young investigators to seek opportunities to establish future careers in the area of human cognitive aging. **Please note: the focus should NOT be on a neurodegenerative dementia (e.g. Alzheimer's disease); however, proposals that focus on combined study of cognitive aging and neurodegenerative cognitive changes may be considered.**

The award will consist of a commitment of $65,000 per year for two years, plus a $10,000 per year stipend to support education and research-related costs for a total of $150,000. Supplementation of the award with other grants is permissible, but to be eligible to apply for this award, the other grant source(s) cannot exceed $75,000 annually.

The American Academy of Neurology is firmly committed to embracing the diversity among our members, applicants, and reviewers and affirms the importance of equity and inclusiveness within the AAN research program.

HOW TO APPLY

1. Visit AAN.com/view/ResearchProgram
2. Go to "2023 McKnight Clinical Translational Research Scholarship in Cognitive Aging and Age-Related Memory Loss"
3. Select "Apply now"

Please only submit one application - applicants are not allowed to submit applications for more than one award. Your application will also be considered for all relevant clinical research scholarship awards.

Visit the Frequently Asked Questions portion of the website for more information.

IMPORTANT DATES

September 14, 2023: Application deadline – Note that this is the deadline for all documents, including those from the mentor and chair. Applications will be declined if this information is not submitted by September 14.
January 2024: Notification of recipients
July 1, 2024: Funding begins

ELIGIBILITY

1. For the purpose of this scholarship, research is defined as patient-oriented research conducted with human participants, or translational research specifically designed to develop treatments or enhance identification of age-related cognitive decline and memory changes. These may include epidemiologic or behavioral studies, clinical trials, studies of disease mechanisms, the development of new technologies, and health outcomes research. Disease-related studies not directly involving humans are also encouraged if the primary goal is the development of therapies, diagnostic tests, or other tools to prevent or mitigate neurological diseases.
2. Recipient is interested in an academic career in neurological research who has completed residency or a PhD no more than 5 years prior to the beginning of this award (July 1, 2024). If you have completed both residency and a PhD, your eligibility is based on when you completed residency. If you completed a fellowship of any kind after residency, your eligibility is still based on the date you finished residency.
3. The proposed program of training and research must be performed entirely within an institution in the United States accredited by the relevant accrediting authority.
4. Research studies at the intersection of age-associated cognitive changes and disease-related cognitive impairment may be considered if a strong case can be made for their relevance to cognitive aging and age-related memory loss. However, research that is primarily focused on neurodegenerative diseases (e.g., Alzheimer's disease) will not be supported.

A successful application should include the following:

- Well-developed hypothesis: The hypothesis is testable and presented in clear language.
- Detailed statistical plan: Statistical methods are well-designed and detailed.
- Strong mentorship: There is clear demonstration of strong mentorship to support the project.
- Feasible primary outcomes: Each aim is feasible, focused, and logical.
- Innovation: Project concept is original, novel, and will advance the applicant's long-term career goals.
- Well-defined training plan: There is a clear and gap-based career development plan.

EVALUATION AND SELECTION

Applications are evaluated by reviewers based on the following criteria:

- Quality and originality of the research plan
- Applicant's ability and promise as a clinician-scientist based on prior record of achievement and career plan, and NIH Biosketch
- Quality and nature of the training to be provided and the mentor-specific, departmental, and institutional training environment
- Innovation of the research plan approach
- Project significance: the ability to progress the field or solve an important problem

REQUIRED ATTACHMENTS FOR APPLICATION

1. PDF of Three-page Research Plan, including brief statements of aims, background, contemplated approaches to methodology and any supporting preliminary data/figures. References do not count toward the page limit. The research plan should be written by the applicant and should represent their original work. However, the applicant is expected and encouraged to develop this plan based on discussion with the proposed mentor.
2. PDF of Applicant's NIH Biosketch. See this link for the most recent NIH Biosketch template

Once the above information is fully completed and **submitted** by the applicant:

3. The **chair** will receive an email with a link asking them to check a box confirming that the applicant's clinical service responsibilities will be restricted to no more than 30 percent of the applicant's time and include a list of applicant's non-research related service. The chair will NOT be asked to submit a letter.
4. The **mentor** will receive an email with a link to submit a letter of reference detailing their support of and commitment to the applicant's proposed research and training plan. The letter should be 1,000 words or less and specifically indicate the mentor's role in the development and preparation of the applicant's research plan including:
    - How the proposed research fits into the mentor's research program
    - Expertise and experience in the area of research proposed and the nature of the mentor's proposed time commitment to the applicant's supervision and training
    - Mentor's prior experience in the supervision, training, and successful mentoring of clinician scientists
    - Potential for applicant's future research career and comparison of applicant to other trainees
    - Institution's commitment to 70 percent protected research time
5. The **mentor** will also be required to upload a NIH Biosketch.

ANNUAL AND FINAL PROGRESS REPORTS

An annual progress report is due in May of the first year. Renewal of the award in year two is contingent upon presentation of a satisfactory progress report. Additionally, a final research report and a final expenditure report are due within 60 days following the close of the grant term. The final expenditure report must be prepared by the institution's financial office.

CONTACT INFORMATION:

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Communications Activity Timeline

As Outlined in the 2022-2023 Communications Plan

Updated April 12, 2023

Activity	Date/Status	Action	Responsible Party	Comments
Patient Education Brochure	**January-September 2022**	Draft content and design a new patient education brochure	V. Patmintra	Worked from patient education content posted on the McKnight website to draft content for the new patient education brochure. Worked with designers to come up with different cover designs and titles for the patient education brochure. Based on feedback shared by the Communications Committee during their March meeting, the brochure was separated into two versions – "Keeping Your Brain Healthy" and "Cognitive Aging Explained." "Keeping Your Brain Healthy" was approved by the Communications Committee in August, posted to the website in September and promoted as part of Healthy Aging Month. "Cognitive Aging Explained" was approved by the Communications Committee in August pending an update to the chart showing data from Richard's 2019 research study. Working with Richard to see if the chart is approved for inclusion in the brochure. Pending Richard's feedback, the new brochure will be posted to the website and promoted in May as part of the Mental Health Awareness Month social campaign.
McKnight Brain Website	**September 2022 ONGOING**	Home Page Refresh and Ongoing Content Development	V. Patmintra	Working from images approved by the Communications Committee in August, the home page of the website was updated to include a carousel of images that change each time a user visits the home page. A new version of the website navigation was also

				developed to more clearly draw in and guide consumer/patient audiences to the site content most relevant to them. The Communications Committee approved the new navigation in January and a user testing plan is being developed to test the new navigation before it's implemented on the website. Developed content ideas and a calendar outlining timing to add a consumer-focused blog to the website as a way to share timely tips and information with site visitors and ensure new content is added to the site on a regular basis. Consumer-focused blog will be added to the site this May.
	May 2021 – COMPLETE **March 2022 – ON HOLD**	Develop content to build a dedicated area of the website for PCP education	V. Patmintra	Created web content to educate PCPs on the differences between Alzheimer's disease and cognitive decline/age-related memory loss. Content emphasizes the need for appropriate patient screening and offers vetted screening tools/resources PCPs can use with patients. PCP section of the website was added in early May 2021. Efforts to further build out the PCP web content and promote it to relevant audiences are on hold pending outcomes from the education landscape analysis and communications agency RFP process.
	Spring 2021 ONGOING	Expert Interview Blog Series	V. Patmintra	Interviewing McKnight Trustees and experts from the MBIs to post the bi-monthly "Three Questions with…" Expert Interview blog series. Coordinating with CWG members to interview an expert from one of the MBIs each month as outlined in the calendar presented to the CWG during their October meeting.
Social Media	**ONGOING**	Develop monthly content themes and make regular posts to the MBRF	V. Patmintra	Developing themes and drafting content on a monthly basis to make 2-3 posts per week. Leveraging boosted Facebook posts and Google ads to drive additional traffic

		Twitter, Facebook and LinkedIn pages		to the McKnightBrain.org website. Working to implement a Social Media Campaign in May leveraging Mental Health Awareness Month. Campaign ideas and creative assets will be shared with the Communications Committee during the April 19 meeting.

Tracking and Quarterly Reports	**Began in 2019** **ONGOING**	Conduct media tracking and provide quarterly updates.	V. Patmintra	Tracking media and social media metrics and reach throughout the year and providing quarterly updates to the Trustees. Tracking topics include: brain health, age-related memory loss, cognitive aging, cognitive decline, age-related cognitive decline, McKnight Brain Research Foundation, McKnight Brain Institutes. Q1 2023 Media Tracking report will be included for review with materials for the May 3 Trustees meeting package.
Communications Working Group	**Began in 2019** **ONGOING**	Zoom meetings with members of the Communications Working Group	A. Schlanger/V. Patmintra Upcoming Meetings: April 19, 2023 June 2023 August 2023 October 2023 December 2023	Meet with members of the Communications Working Group every other month to engage in ongoing activities, including: • Identifying core competencies needed for each MBI to move forward with communications outreach • Reviewing, vetting and approving materials • Providing input on upcoming studies with relevant consumer/medical media angles • Identifying young researchers and studies of note to highlight on the MBRF website
FY2023-2024 Communications Planning	**ONGOING**		A. Schlanger/V. Patmintra	An outline of three different budget options and related activities to continue communications efforts through FY 2023 -2024 was prepared for review by the Communications Committee. The Communications Committee met on January 23rd and reviewed the proposed budget levels and possibility of issuing an RFP to work with a new agency partner starting

				July 2023. The discussion will continue at the Trustees meeting taking place on February 16, 2023. After approval during the February Trustees' meeting, an RFP was drafted requesting proposals for a three-year visibility campaign at three different budget levels. RFPs were sent to 5 agencies and responses were received in early April. Proposals were reviewed and presented to the Communications Committee for discussion during the April 19 meeting.

MINUTES
MCKNIGHT BRAIN RESEARCH FOUNDATION
COMMUNICATIONS COMMITTEE OF THE BOARD OF TRUSTEES CONFERENCE CALL
April 19, 2023
Draft for Committee Approval

The McKnight Brain Research Foundation's Communications Committee conference call began at 6:00p.m. Eastern on Wednesday, April 19, 2023.

The following MBRF Trustees participated in the call:

Dr. Patricia Boyle, Chair
Dr. Mike Dockery, MBRF Chair
Dr. John Brady
Dr. Sue Pekarske

Dr. Angelika Schlanger and Ms. Valerie Patmintra also participated.

1. Call to Order and Roll Call

Dr. Boyle welcomed the group to the call and noted she was pleased to be serving as the new Chair of the Communications Committee. Dr. Boyle took a roll call of who was participating.

2. **Activity Timeline**

Dr. Boyle then reviewed the current and updated items included in the Communication Activity Timeline, noting that the items in yellow are the activities currently in progress and that most of those items will be covered during the meeting. She noted that since the February Trustees meeting, Dr. Schlanger and Ms. Patmintra have been primarily focused on the RFP process, which will be discussed at the end of the meeting, as well as moving forward with plans to update the website navigation and to implement a social media campaign in May tied to Mental Health Awareness Month.

Dr. Boyle also noted that with the RFP process wrapping up, the plan to create new monthly content for the "Ask the Experts" blog series and leverage content from the PCP landscape analysis to create original articles for the PCP and consumer sections of the website will be moving forward over the next couple months.

3. **Website and Media Tracking Report**

Dr. Boyle then asked Ms. Patmintra to provide an update on the Website and Media Tracking Report that was included with the meeting materials. Ms. Patmintra shared that each month of the first quarter, web traffic has been close to 2,000 monthly visitors, compared to around 1,000 visitors per month for the first quarter of last year. She noted that it's encouraging to see continued slow and steady growth in traffic resulting from ongoing organic outreach efforts and mentioned that if the three-year

communications plan being considered moves forward, traffic to the website will increase at a more rapid pace. Ms. Patminra also mentioned the *Inside Philanthropy* Whitepaper that was published in March featuring several quotes from Dr. Dockery and Dr. Thambisetty and did a good job highlighting the work of the MBRF. She said she was very encouraged the Foundation was featured so prominently in the Whitepaper after also being featured in a standalone article in the Fall. Ms. Patmintra also mentioned the webinar with AFAR and *Prevention Magazine* taking place on April 26 from 3-4pm, which will feature a conversation among the two Innovator Award recipients and the editor-in-chief of *Prevention*. She also noted that *Prevention Magazine* has an impressive online reach with several hundred people typically participating in the webinar series, so it should be great visibility for the Foundation and the Innovator Award recipients.

4. Website Navigation Updates

Ms. Patmintra then spoke about the updates to refresh the website, noting that in August, the committee approved new Hero images for the homepage, which have now been implemented on the home page. She mentioned that each time you visit the home page, one of the five different approved images will appear and aim to depict the different audience types coming to the site. She also noted the three new buckets of content below the hero image which target consumers, primary care providers and researcher and aim to direct each audience group to the content most relevant to them.

Dr. Boyle also noted that during the January meeting, an updated website navigation was approved by the committee to help better guide users to the content that is most relevant to them. She shared that in working with Whereoware to implement the new navigation, they recommended user testing before making such a significant change to the site to ensure the new navigation would truly improve the user experience and help lower the site's bounce rate.

Ms. Patmintra provided details on the process and timing, noting that the goal is to recruit 25 people to review a mockup of the new navigation and respond to a series of questions. Recruiting volunteers will begin in May, with the goal of having the user testing and analysis complete by the end of May and implemented by the end of June. Dr. Boyle asked how the volunteers would be recruited to test the navigation and Ms. Patmintra responded they would be recruited by email sent to the organizational contacts and newsletter distribution list. Ms. Patmintra noted that the CWG members are also being asked to participate and that feedback from the Trustees is welcome as well. Dr. Dockery and Dr. Boyle offered to help recruit participants and Ms. Patmintra said she would send the recruitment email to the Trustees to share with their networks.

5. May's Mental Health Awareness Social Campaign

Dr. Boyle then introduced the topic of social media campaigns, noting the first was in September tied to Healthy Aging Month and the upcoming campaign in May is tied to Mental Health Awareness Month. Dr. Schlanger shared her screen to show the visual concepts proposed to serve as the creative backdrop for the campaign, mentioning that after Dr. Boyle's review it was decided to focus on the second creative option featuring real people. Dr. Boyle noted that she found the cartoon concept too simplistic and the group agreed. Ms. Patmintra noted that since the visuals were first shared with the committee, the

second concept has been built out to depict a variety of individuals across different ages, demographics and gender to illustrate the connection between mental health and brain health. Dr. Boyle asked if everyone was onboard with the visuals shown in the second option and everyone concurred. Dr. Pekarske and Dr. Brady said they really liked all of the people in the visuals shown. Ms. Patmintra asked if the committee approved using all of the visuals presented across different campaign elements or if there were any images the committee would prefer not be used and the committee approved using all of the images.

Dr. Brady asked what the campaign would entail. Ms. Patmintra shared it will include a landing page on the website and targeted ads across Google and Facebook driving back to the landing page, in addition to short video ads on YouTube, which will also drive back to the landing page. She noted that all social posts in May will tie in to the Mental Health theme instead of offering tips and information across various aspects of brain health like in a typical month. Dr. Boyle also noted that the different visuals in the presentation will tie in to weekly blog posts that will be shared throughout the month.

Before moving on to discuss the communications RFP, Dr. Schlanger asked if the group could go back to review the minutes from the January 23 meeting. Dr. Boyle asked if there were any changes to the minutes and Dr. Pekarske asked for an edit to the third paragraph of the minutes where the word "is" was included twice in the sentence about website navigation. Dr. Schlanger agreed to revise the minutes to reflect Dr. Pekarske's edit. **Dr. Brady moved for approval of the minutes as amended, Dr. Pekarske seconded and the minutes from the January 23 meeting were approved.**

6. <u>Review of Proposals and Budget Levels Submitted</u>

Dr. Boyle gave an overview of the RFP process, noting that following the Trustees meeting in February, Dr. Schlanger and Ms. Patmintra drafted an RFP, which was fielded to five agencies and all five responded with proposals outlining ideas for a three-year communications initiative at three different budget levels ranging from $1-$2 million. Dr. Boyle mentioned the rigorous review process Dr. Schlanger and Ms. Patmintra have undergone to arrive at their top three agency selections and noted that the summary document included with the meeting materials outlines their rationale for selecting the top three agencies and also includes a chart ranking the agencies across several categories, including agency capabilities, responses to specific aspects of the proposal and anticipated outcomes.

Dr. Schlanger provided additional detail on the agency RFP process mentioning that she and Ms. Patmintra met with the three top agencies to hear additional insights about their proposals, goals and strategies and approaches to the different budget levels. She noted it was helpful that all three agencies came back with the same approach to the three budget levels, separating them by $1 million, $1.5 million and $2 million over the three years.

Based on the meetings and insights gained about each proposal, the agencies are currently ranked with BRG in the lead, followed closely by JPA, and then SCP. Dr. Schlanger noted that the memo outlines additional details behind the scoring and that she and Ms. Patmintra agree both BRG and JPA would be outstanding partners to work with on the communications initiative.

Dr. Schlanger mentioned that while SCP didn't rank as high as BRG and JPA, they are a leading organization in the brain health and aging space and their ability to target strategic partnerships rises to the top. She noted that after speaking to them about their approach and experience, overarching visibility and public facing campaigns aren't their strongest suit. She mentioned that their strength with strategic partnerships could benefit MBRF.

Asked what sets BRG apart, Ms. Patmintra responded that their planning process, which would bring all MBRF stakeholders to the table, and effective use of budget, gave BRG has a slight advantage over JPA.

Dr. Pekarske asked if she could bring up two questions, first about the Gretel tool and what it does. She also noted the major distinctions in the projected metrics table and asked if it is realistic that BRG is able to provide such higher outcomes at the same budget level as the other agencies.

Ms. Patmintra responded that Gretel is a proprietary tool JPA developed to monitor mentions of specific topics and identify where conversations on those topics are happening. She also noted that JPA is a very creative agency and their branded research products, like Gretel, help clients monitor and track their share of voice on specific topics.

Ms. Patmintra also said she can understand how in looking at the metrics, BRG does look too good to be true, but she knows from experience that the numbers are accurate and those are the kind of results you can expect working with BRG. She also noted that BRG and JPA were tied in their rankings until the agencies provided their anticipated outcomes and they were compared by budget level.

Dr. Brady asked if the outcomes in the chart are for one year or three years. Ms. Patmintra clarified that the media metrics are for three years and said she would need to go back and confirm if the web traffic numbers represent anticipated monthly visitors after the three years. She mentioned that the metrics provided are estimates based on past projects and meant to help us compare what the different agencies could achieve, but more detailed metrics would be determined to gauge success of the MBRF initiative specifically.

Dr. Brady asked Ms. Patmintra to comment on what the different budget levels include. Ms. Patmintra explained that level one is primarily organic outreach, where level two will include more paid strategies, like media partnerships, PSAs and influencer engagement. Level three further increases the amount of budget that could be put toward those paid initiatives.

Dr. Boyle suggested the mid-tier as a good starting point to see a significant increase in outreach without committing to the highest level. Dr. Boyle also asked if after the three-year initiative the Foundation is happy with their level of awareness would the budget need to be sustained at the same level. Ms. Patmintra mentioned there are several ways to measure success and reallocate budget after reaching your initial visibility goals. It could be focusing outreach around a moment in time or key awareness month or deciding one key paid outreach tactic to implement each year. She said at the end of three years there will be a lot of opportunity to evaluate where we are and determine how we want

to move forward. Dr. Dockery asked if web site maintenance would be part of the overall budget and Ms. Patmintra confirmed it would.

Dr. Pekarske asked if JPA and BRG demonstrated strengths in developing strategic partnerships or if only SCP was strong in this area and Ms. Patmintra and Dr. Schlanger agreed JPA and BRG also confirmed they have background and experience with developing strategic partnerships.

Dr. Pekarske, Dr. Boyle and Dr. Brady all agreed moving forward with the mid-tier budget sounded like the best approach. Ms. Patmintra concurred that starting with the mid-tier budget will generate a significant amount of visibility and allow the Foundation to determine if it's worth investing more going forward or if the initial results achieve the organization's goals.

Dr. Brady asked if metrics have been defined and how they would be measured over time. Ms. Patmintra explained the Foundation's specific metrics would be determined in the planning sessions, but the sample reports BRG shared show a really nice breakdown of results across multiple activities, including more than media and web metrics. Dr. Schlanger also mentioned the importance of share of voice to measure the percentage of articles on brain health/cognitive aging the MBRF will be included in after outreach begins. Dr. Schlanger noted she was impressed with BRG's ability to increase share of voice for the American College of Preventative Medicine by activating a network of spokespeople across the country and empowering them to act as media ambassadors. She noted that by implementing a communications campaign, the Foundation would want to see its share of voice increase relative to others organizations in the brain health and cognitive aging space.

Dr. Dockery asked why we shouldn't consider the highest budget level since it's only $500,000 more over three years and could achieve higher results. Dr. Schlanger mentioned the opportunity to potentially increase the budget from the middle level over time and noted that it would be harder to scale back if the highest budget level was approved upfront. Ms. Patmintra agreed a better strategy would be to increase the budget throughout the three-year initiative opposed to starting at the highest level and scaling down.

After further discussion, the Communications Committee members agreed they thought BRG was the best agency partner and that starting with the mid-tier budget was the best approach.

Dr. Brady and Dr. Pekarske motioned to move forward with BRG. They also motioned to approve a total three-year communications budget of $1.755 (to include consulting fees). Both motions were approved unanimously.

Dr. Dockery requested that the memo be updated to specify if the metrics are over the three years or annual and to include an executive summary of how the decision to select BRG was reached. Dr. Schlanger agreed those items would be added to the Trustees materials and the meeting was adjourned at 7:26.

MINUTES
MCKNIGHT BRAIN RESEARCH FOUNDATION
COMMUNICATIONS WORKING GROUP CONFERENCE CALL
April 19, 2023
DRAFT FOR COMMITTEE REVIEW

The McKnight Brain Research Foundation's Communications Working Group conference call began at 2:00 p.m. Eastern on Wednesday, April 19, 2023.

The following working group members participated in the call:
Patricia Boyle, PhD, Chair, MBRF Communications Committee
Christian Camargo, MD, University of Miami
J. Lee Dockery, MD, Chair Emeritus, MBRF Trustee
Susan Fox-Rosellini, MBA, University of Miami
Kathleen McIntyre, University of Florida
Peggy Ann Nolty, University of Arizona
Vanessa Noonkester, University of Arizona
Valerie Patmintra, MBRF Senior Communications Advisor
Angelika Schlanger, PhD, MBRF Executive Director
Tasha Smith, University of Alabama Birmingham
Todd Taylor, University of Florida

1. Roll Call and Welcome

Ms. Patmintra welcomed the group, took roll of those in attendance. Dr. Schlanger also welcomed the group and introduced Dr. Boyle, noting that she has been a member of the communications committee for several years and always provides great insights and feedback on the Foundation's messaging and materials. She has more than 200 peer-reviewed publications and has great experience translating her research findings to the public through public talks and in media interviews. Dr. Schlanger then invited Dr. Lee Dockery, MBRF Chair Emeritus, to share an introduction and welcome Dr. Boyle. Dr. Dockery shared Dr. Boyle was one of the first recipients of the research grants funded by the Research Partnership in Cognitive Aging, a public-private effort jointly funded by the National Institute on Aging and the MBRF through the Foundation for the National Institutes of Health. Dr. Dockery also noted that Dr. Boyle leads Research Education at the Rush Alzheimer's Disease Center. He commended her for her many professional and academic achievements and thanked her for stepping into the role as the MBRF's Communications Committee Chair.

After welcoming Dr. Boyle, Ms. Patmintra mentioned the February 22 meeting minutes which were sent out for review earlier in the afternoon. Acknowledging there wasn't much time to review the minutes before the meeting, the group agreed to review the minutes and send any edit to Ms. Patmintra via email. The updated minutes would be included with the June meeting materials and on the agenda for approval during that meeting.

2. MBRF Updates

Ms. Patmintra them moved to the MBRF Updates, sharing that the Foundation is moving forward with plans to launch a social media campaign in May tied to Mental Health Awareness Month. She noted that creative assets have been developed to serve as the imaging for the campaign, which will focus on sharing the various ways overall mental health can benefit brain health. She mentioned the campaign will include advertising on Facebook and Google as well as short videos shared on YouTube and social posts throughout the month tying into the theme of

mental health. Ms. Patmintra encouraged the MBIs to please share the MBRF's social posts throughout the month and asked the group to let her know of any activities they would be doing in May tied to mental health that the Foundation could share via its social media channels.

Ms. Patmintra also noted that the Trustees recently approved a new navigation menu for the McKnight Brain website to help drive visitors to the information that is most relevant to them. She noted the changes include collapsing the Cognitive Aging and Brain Health sections into one "Tips for You" section for consumers and more prominently featuring the "For Primary Care" and "For Researchers" tabs. Ms. Patmintra shared that before implementing the navigation changes on the website, the web agency suggested user testing to make sure the changes will resonate with the target audiences. She said an email recruiting volunteers to participate in the user testing would be coming in early May and encouraged the CWG members to participate in the testing if they could. Ms. Patmintra said the email invite would be send to the newsletter distribution list and the testing would be about a 10-minute online process.

Finally, Ms. Patmintra shared that the MBRF issued a request for proposals for a three-year communications initiative to build awareness for the MBRF and the importance of brain health. She noted five proposals were submitted in response to the RFP and that they are being reviewed and presented to the communications committee as well as the full Board of Trustees. She noted that through the process, several of the agencies have noted a void in messaging around brain health and prevention, which presents a great opportunity for the MBRF and the MBIs to reach audiences with more preventative messages. She noted that while there are a lot of organizations that aim to help people once they've been diagnosed with a neurodegenerative disease, not many organizations focus on how to prevent cognitive aging and keep your brain healthy. Ms. Fox-Rosellini agreed that a lot of organizations do focus on what to do after the onset of disease. She noted that the University of Miami researchers are focusing on the majority of people who don't have Alzheimer's disease and how to keep more people from getting neurodegenerative diseases and there is a real opportunity to better communicate with the public about that. Dr. Schlanger also agreed and added that the communications initiative will be a way to engage more with the MBI researchers and shine a light on the work they are doing.

Dr. Dockery then asked Mr. Taylor about the recent announcement of Dr. Michal Okun's UF College of Medicine Lifetime Achievement Award and how it was being promoted as he only saw it posted on Twitter. Mr. Taylor responded that the UF MBI only amplified the Twitter announcement made by the Fixel Institute where Dr. Okun is Director and said when a full article is written for the website, it will be shared across all of the MBI's social channels – Twitter, Facebook and LinkedIn.

Ms. Fox-Rosellini mentioned her strategy is to typically lead with Twitter for news announcements of most interest to medical peers as she finds Twitter is the main channel for research communication and Facebook is more community-focused. She also shared that she thinks LinkedIn is starting to take precedence over Twitter for reaching peers in the medical space and it offers greater flexibility of not having restrictions in text length. Dr. Dockery asked about the news of several organizations leaving Twitter and if that means people are favoring Facebook and Instagram. Ms. Fix-Rosellini responded that she still prefers Twitter for quick peer-to-peer updates.

Mr. Taylor shared that Twitter is where the UF MBI gets the most engagement because they post a lot scientific information and research papers there. He noted that despite the recent controversy with Twitter, the UF MBI has

gained 200 Twitter followers since October, and is now at 2,400, which represents steady growth. He also noted that for UF, they stopped focusing as much on Facebook as their growth there stagnated and he sees LinkedIn as a blend of the two channels.

Ms. Patmintra shared that the MBRF receives the most organic engagement on Twitter, but thanks to boosted posts, the engagement on Facebook is much higher. She said the Foundation will continue to engage across Twitter, LinkedIn and Facebook, but hasn't started Instagram yet.

Noting that there were a few new faces on the call, Ms. Patmintra asked the group to do introduce themselves. Dr. Boyle and Ms. Smith appreciated everyone's warm welcome. Ms. Smith thanked Ms. Nolty for all of her help with the Inter-Institutional Meeting website and shared that she would be launching the site for the 2023 Inter-Institutional Meeting soon.

Dr. Dockery asked how Ms. Noonkester relates to the University of Arizona MBI. She shared that MBI is under the Department of Psychology and that she reports into Dr. Lee Ryan, Associate Director of the MBI. Dr. Dockery then asked how to best coordinate with the Precision Aging Network website, and Ms. Nolty shared that they run the websites are run separately. Dr. Dockery asked for recognition for each institute in each domain so that the issue areas could be advanced together. Ms. Patmintra mentioned that she and Dr. Schlanger met with the PAN communications team to collaborate on sharing news and announcements across the organizations.

Ms. Smith then asked Dr. Schlanger and Ms. Patmintra if they would like to set up a meeting to discuss a document or article to share about and after the Inter-Institutional Meeting and said she would be in touch to set up time to discuss. Ms. McIntyre asked if there is a hashtag for the meeting. After discussion, the group agreed on #MBIIM23 as the meeting hashtag.

Dr. Dockery asked if the meeting program could be shared and posted on the MBI and MBRF websites. Ms. Nolty noted that after having trouble getting information from the researchers in time, there is no longer a printed program, but the speaker names and links to their home institutes will be posted to the meeting website. Dr. Dockery acknowledged that this still helps to link the respective faculty to their own institute so they can identify with each other.

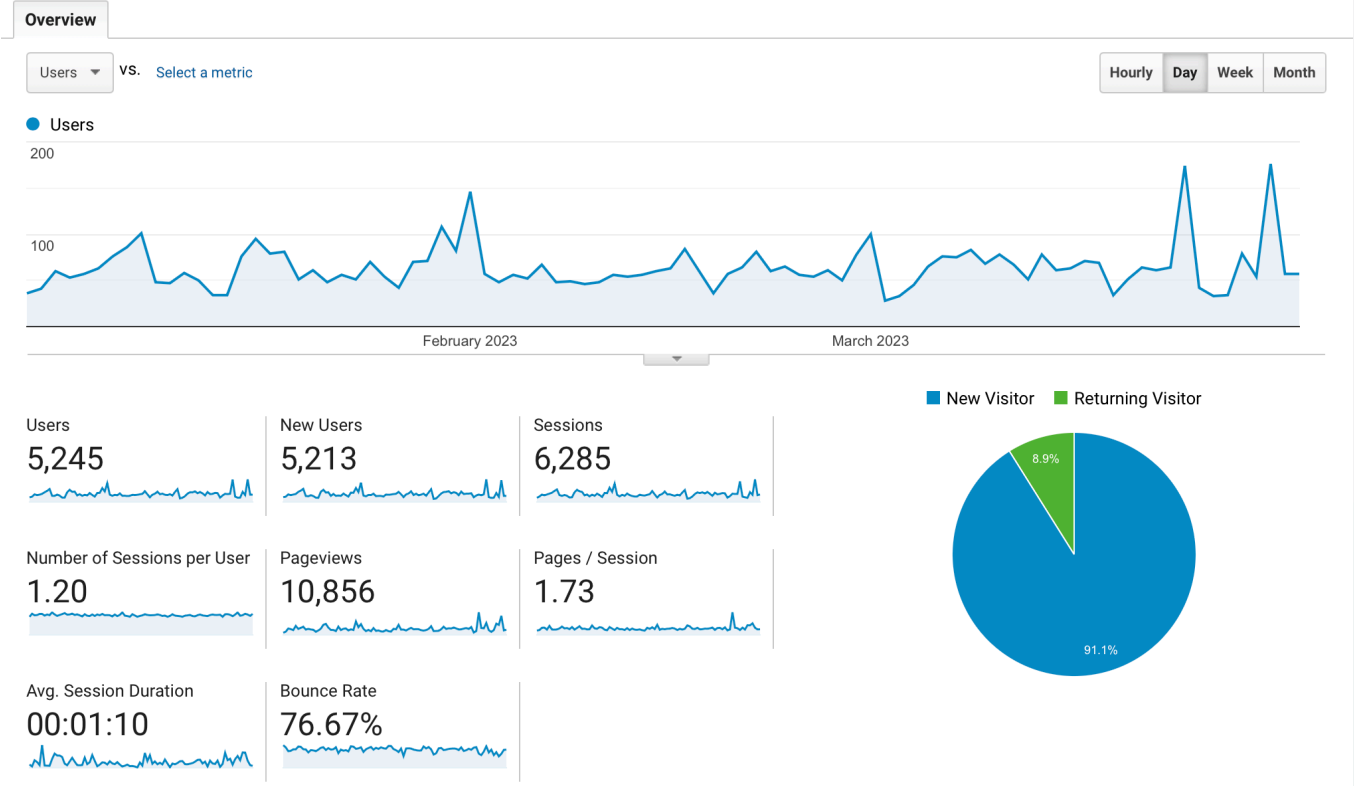
Ms. Patmintra closed the meeting with a reminder for everyone to please continue sending updates and ideas for Experts at their MBIs for blog articles and the meeting was adjourned at 3:05pm ET.

McKNIGHT BRAIN RESEARCH FOUNDATION
Preserving memory, enhancing life

2023 McKnightBrain.org Traffic Report

	January	February	March	Q1 Totals
Users	1,792	1,613	1,906	5,245
Sessions	2,156	1,856	2,273	6,285
Page Views	3,700	2,882	4,274	10,856
Session Duration	1:16	:54	1:17	1:10

Q1 2023 McKnightBrain.org Traffic Totals



Definition of Key Terms

User: Any person who has visited the website. The moment a person lands on any page of the site, they are identified as a User.

Page Views: Total number of pages loaded by Users on the website, including when Users load the same page of the website.

Sessions: A group of user interactions within the website that take place within a given time frame. A single session may include multiple page views, events and social interactions. Sessions track the number of times a user interacts with the website.

Session Duration: How long a visitor remains on the website. Average session duration for direct traffic is 44 seconds.

Social Media Stats as of April 2023

Facebook: 123 followers
LinkedIn: 152 followers
Twitter: 290 followers

2023 Media Highlights

Lindsay De Biase honored by McKnight Brain Research Foundation, UCLA Newsroom, April 4, 2023: https://newsroom.ucla.edu/dept/faculty/de-biase-2021-mcknight-brain-research-foundation-award

Giving for Neuroscience Research, Inside Philanthropy, March 15: https://www.insidephilanthropy.com/state-of-american-philanthropy-pdfs/giving-for-neuroscience-research

What We Learned from a Deep Dive Into Neuroscience Research, Inside Philanthropy, March 7: https://www.insidephilanthropy.com/state-of-american-philanthropy-pdfs/giving-for-neuroscience-research

McKNIGHT BRAIN RESEARCH FOUNDATION

Preserving memory, enhancing life

Mental Health Month Campaign

APRIL 18, 2023

Mental Health Matters

This theme is an extension/companion to our main MBRF theme (“Your Mind Matters”), bringing home the importance of both distinct messages.

The campaign seeks to educate and remind our target audience that mental health is an important, wide-ranging condition, including emotional, psychological, and social well-being.

What’s more, mental health also plays a key role in overall brain health, making it crucial to practice self-care, manage stress, and seek medical attention if necessary.

McKNIGHT BRAIN
RESEARCH FOUNDATION
Preserving memory, enhancing life

mental health matters

Boost your brain health with more self-care & less stress.

Display Ad

*clicking these ads will link to the blog.

Social Ad

Post Copy

Your emotional well-being plays an important role in your overall brain health too.

Learn More / Explore the Connection

Disclaimer - if this direction is chosen we will leverage a few different people.

Additional Image Options

:15s Video Story Board - Model 1

Scene 1

Did you know your emotional well-being plays a significant role in your brain's overall health?

Scene 2

It's true.

Scene 3

This Mental Health Awareness Month, take some time for self-care…

Scene 4

…and less stress.

Scene 5

Because your mental health matters.

Scene 6

Closing…

:15s Video Story Board - Model 2

Scene 1

Did you know your emotional well-being plays a significant role in your brain's overall health?

Scene 2

It's true.

Scene 3

This Mental Health Awareness Month, take some time for self-care…

Scene 4

…and less stress.

Scene 5

Because your mental health matters.

Scene 6

Closing…

:15s Video Story Board - Model 3

Scene 1

Did you know your emotional well-being plays a significant role in your brain's overall health?

Scene 2

It's true.

Scene 3

This Mental Health Awareness Month, take some time for self-care…

Scene 4

…and less stress.

Scene 5

Because your mental health matters.

Scene 6

Closing…

McKNIGHT BRAIN RESEARCH FOUNDATION
Preserving memory, enhancing life

Three Year Communications Plan Proposal Comparison

Executive Summary

With approval from the Communications Committee, a Request for Proposal for a Three-Year Communications Initiative was fielded to five communications agencies – BRG Communications, JPA Health, Qorvis, SCP and Whereoware. All five agencies expressed interest and excitement around the project and submitted proposals in time to meet the RFP deadline.

After reviewing the five proposals, two of the proposals submitted did not demonstrate the same level of creative thinking and background understanding of the MBRF and the field of cognitive aging. The proposals from Qorvis and Whereoware addressed the tactical components requested in the RFP, but didn't demonstrate how the agencies would work in partnership with the MBRF to better understand the issue area, craft unique messages, and successfully implement a measurable three-year campaign. For those reasons, the proposals from Qorvis and Whereoware were not presented to the Communications Committee for review.

Based on the submitted proposals and introductory conversations, BRG, JPA and SCP all appeared to be strong potential partners for the MBRF communications initiative. They all presented very structured, detailed and well-thought-out proposals that demonstrated a strong understanding of the goals of the initiative, clearly outlined strategies and tactics to achieve our goals, innovative ideas, and strong background experience conducting large-scale communications initiatives. They all have decades of experience with high-profile national clients and focus on the health, wellness and aging space. Pages 2-5, below, offer a brief summary of the three proposals, and the chart that follows compares the responses using a numeric grade to show the relative strengths of each agency across specific categories. The charts on pages 6-8 outline the projected measurable outcomes each agency anticipates being able to achieve across the three different budget levels.

The Communications Committee reviewed this memo and the proposal materials as reference. At its meeting on April 19, 2023, the Committee discussed the process that was followed to review and evaluate the proposals – including the rankings and comparisons below, in addition to interviews with each of the three agencies conducted by Angelika Schlanger and Valerie Patmintra.

Based on the information presented by Angelika Schlanger and Valerie Patminta, the Communications Committee agreed that while SCP has a very impressive list of clients in the aging and brain health space and clearly demonstrated an ability to secure and implement strategic partnerships that would advance the MBRF's goals of brand and issue awareness, they didn't demonstrate the same level of strength and expertise in conducting multi-year brand awareness campaigns as BRG and JPA. BRG and JPA both demonstrated creative approaches and were excited by the potential of helping the MBRF build its brand reputation and awareness for the importance of brain health, but it was decided that BRG's thorough approach to planning, effective use of budget and confidence in securing high level results gave them a slight advantage over JPA.

The Committee members also discussed the three different budget levels and agreed the mid-tier budget of $1.755 million over three years would be the best starting point to generate a significant increase in outreach and visibility without committing to the highest budget level.

Following this discussion, the committee approved a recommendation to the board to move forward with BRG as MBRF's agency partner at the $1.755M level over three years. This recommendation is respectfully submitted to the full Board of Trustees to discuss at the Board meeting on May 3, 2023.

BRG Communications Proposal Review
BRG's proposal addressed all requirements of the RFP and highlighted the MBRF's unique positioning to continue advancing research on brain health and cognitive aging, while also raising awareness for the importance of the topic among consumers and primary care providers. BRG conducted a media audit to inform its proposal and found that brain health isn't a clear priority for most competing organizations in the space. By working to differentiate the MBRF messaging from what's currently offered by other organizations, BRG identified the unique opportunity for MBRF to drive behavior change while also building brand visibility.

With clients ranging from Fortune 500 companies to nonprofits, medical societies and industry associations, BRG focuses on communications initiatives to improve how people live through health and wellness. BRG expressed confidence that their team of experts as well as their background and expertise in health behavior change initiatives, make them a strong partner to advance the MBRF's communications efforts.

BRG is an integrated communications agency with in-house experts providing client services, including strategic planning, research and testing, brand strategy, influencer engagement, media relations, social media, digital marketing, content creation, and graphic design. BRG's unique approach to media storytelling consistently results in media impressions and placements that exceed client expectations.

Beyond the objectives we outlined in the RFP, BRG sees the potential to also build strategic partnerships, deepen our engagement with the research community, create a strong network of spokespeople and build relationships with media.

BRG recommends a strong foundation building process including an organizational assessment, marketplace review, program and message architecture development and consensus building to ensure the resulting integrated education and communications program is successful. The assessment findings would be delivered as two facilitated working group sessions to work through program goals and opportunities and used to develop an action plan to drive the communications initiative moving forward.

BRG did not share a suggested theme for the campaign, but said they will develop and share 2-3 creative themes for consideration after the foundation building process is complete. The proposal maps out how BRG would build visibility for MBRF through a range of activities including media relations, thought leadership, healthcare provider and researcher engagement, social media and influencer relationships and strategic partnerships. The proposal clearly describes the opportunity MBRF has to become a leading expert in the brain health field and demonstrates BRG's confidence that they can be a good partner to help us develop and build a successful outreach platform over the long term.

JPA Health Proposal Review
JPA submitted a proposal that addressed all elements of the RFP with an engaging visual and creative approach. The proposal expressed JPA's shared passion for the work the MBRF is doing and confidence in their ability to work with the MBRF to create an integrated communications plan that both raises awareness of brain health and elevates our organizational profile. JPA focuses exclusively on health and has an impressive list of national clients, including foundations, nonprofits, government agencies and biopharma companies. JPA is an integrated communications agency with in-house research, creative and digital teams.

One of JPA's distinguishing factors is their proprietary communications monitoring tool – GRETEL – that they leverage to understand the dynamics of a healthcare issue and how and where key audiences talk about the issue. This unique tool, which has a real-time dashboard, helps JPA identify opportunities to leverage connections and build engaging and targeted communications strategies. With initial exploration in GRETEL, JPA found there currently is no go-to organization offering evidence-based brain health for younger consumers and

identified an opportunity for MBRF to fill the gap between the brain health community and consumers younger than age 60.

The proposal outlines a detailed planning process to include a traditional and social media audit; assessment of peer organizations; discovery sessions with MBRF Trustees, staff and stakeholders; online surveys to gauge awareness among consumers and primary care providers; in-depth interviews with researchers and online discussion boards to test messages and campaign concepts. The research findings will be used to form a strategic communications plan that includes strategies, tactics and a timeline to reach key audiences and a detailed measurement plan to track campaign success over time.

To bring their proposal to life, JPA suggested a campaign theme of "I Mind my Mind" and shared exciting ideas and innovative thinking, including out of the box partnership ideas like partnering with major consumer brands like Lululemon. JPA also expressed confidence in reaching all three of the MBRF's target audiences, including researchers, and has a proven track record of reaching and educating primary care providers.

SCP Proposal Review

The SCP proposal addressed all requirements of the RFP and outlined a detailed discovery and planning process to help inform the resulting communications campaign. SCP recommends conducting interviews with key MBRF Trustees and staff, as well as a landscape analysis of the consumer aspects of the brain health field, coupled with qualitative interviews and focus group research to inform a findings presentation that will outline SCP's key thoughts and ideas for the communications initiative.

With more than 30 years of experience in mission-driven communications, SCP focuses specifically on health and social change and has created a strong network of media, nonprofit, government, and academic connections. SCP works with clients spanning not-for-profit organizations, foundations, associations, and government agencies, helping them develop and implement communications initiatives designed to amplify their messages, engage their key stakeholders, and help them effect change.

SCP's core capacities include messaging and branding; thought leadership positioning; campaign development and implementation; traditional media outreach; social media planning, execution, and analysis; public opinion polls and surveys; writing and graphic design; website design; and video development.

With multiple high-profile national clients in this space, including AARP's Global Council on Brain Health initiative, Grantmakers in Aging, and Gerontological Society of America, SCP recommends establishing high profile national partnerships that could be activated quickly and suggests forming a unique partnership with the Hollywood Health & Society program of the University of Southern California Annenberg Norman Lear Center that provides the entertainment industry (notably TV and movies) with accurate and up-to-date information for storylines on health, safety and security. At the highest budget level outlined, SCP suggests MBRF could collaborate with HH&S to develop and distribute materials to help screenwriters write about brain health and dementia issues with greater accuracy and credibility.

As the core audience for the consumer campaign, SCP recommended focusing on people 40-60 years of age, as they are both thinking about their health and well-being and concerned about the health and well-being of their parents and older relatives, whereas people over 65 are already well served by AARP, Alzheimer's Association, and others. SCP also suggested some innovative interactive social media ideas, such as a "This Is My Brain On" contest, which would challenge people to submit photos or videos, accompanied by short text describing an activity (e.g., power walk with a friend, dance, music, meditation, community gathering, et al) that represents how they are building their brain health.

Comparative Rankings

The table below is an attempt to score the abilities of the agencies to deliver on various goals and expectations related to the proposal. While some of the scores were comparable, we found key distinctions in several categories. **BRG and JPA appear to be very strong in developing outreach/visibility campaigns rooted in Media Relations and Social and Digital Media. While SCP doesn't appear to be as strong in developing and implementing integrated communications campaigns, their distinct strength is the strong partnerships built over time with a variety of nonprofits/agencies engaging in various brain health initiatives that they could leverage for collaborative synergies.**

The current agency ranking order based on the submitted proposals from highest to lowest overall mean score is: BRG (mean score of 2.75); JPA (mean score of 2.71); and SCP (mean score of 2.23).

Communications Agency Proposal Comparison

The table below reflects rankings by Valerie Patmintra (VP) and Angelika Schlanger (AS)

****RANKINGS MAY BE ADJUSTED BASED ON FOLLOW UP MEETINGS AND Q&A****

Attribute	BRG (VP)	BRG (AS)	JPA (VP)	JPA (AS)	SCP (VP)	SCP (AS)
Agency Background/Relevant Experience	3	3	3	3	3	3
Agency Reputation – Awards and Perception	3	3	3	3	2	2
Creativity of Proposal	2	2	3	3	1	2
Understanding of Opportunity	3	3	3	3	2	3
Excitement to Partner with MBRF	3	3	2	3	2	3
Strength of Proposal Components						
Planning	3	3	3	3	2	3
Media Relations	3	3	3	3	1	2
Social and Digital Media	3	3	3	3	2	2
Healthcare Provider Engagement	3	3	3	3	3	2
Researcher Engagement	2	2	2	2	2	2
Partnership Activation	2	2	2	2	3	3
Proposed Quantifiable Outcomes	3	3	2	2	1.5	2
MEAN	2.75	2.75	2.67	2.75	2.04	2.42
OVERALL MEAN SCORE	2.75		2.71		2.23	

**Scale ranked from 0-3

0 = not included in proposal

3 = clearly articulated in proposal

Communications Agency Anticipated Outcomes Comparison by Budget Level

The metrics in the chart below were shared by each of the three ranked agencies to quantify estimated outcomes resulting from their outreach efforts over the three-year communications initiative. Each chart represents a budget level - $1M, $1.5M, and $2M – as the three agencies submitted budgets at the same three amounts, allowing for a direct comparison. Please note, the metrics should be interpreted as rough projections based on the agencies' past client initiatives and may shift as our communications priorities are solidified.

Anticipated Annual Metrics for Budget Level A: $1 Million over 3 Years			
	BRG	**JPA**	**SCP**
Media	35-45 Media Placements 500+ Million Media Impressions 40-50 Media Interviews annually	30-40 Media Placements 400+ Million Media Impressions 15-20 Media Interviews annually	12-15 Media Placements 300 Million Media Impressions (based on achievements from a recent campaign) annually
Website	60,000 – 75,000 Annual Web Users after Three-Year Initiative	40,000-60,000 Annual Web Users after Three-Year Initiative	25,000-50,000 Annual Web Users after Three-Year Initiative
Social	50% increase in followers each year	50% increase in followers each year	10-15% increase in followers each year
****Total Budget = $1.255 Million**** *including $85,000 annual fee for the Senior Communications Consultant to manage MBRF's ongoing communications efforts and oversee the communications agency*			

Anticipated Annual Metrics for Budget Level B: $1.5 Million over 3 Years			
	BRG	**JPA**	**SCP**
Media	45-60 Media Placements 750+ Million Media Impressions 50+ Media Interviews annually	40-55 Media Placements 500+ Million Media Impressions 20-25 Media Interviews annually	15-18 Media Placements 300 Million Media Impressions (based on achievements from a recent campaign) annually
Website	60,000-90,000 Annual Web Users after Three-Year Initiative	50,000-75,000 Annual Web Users after Three-Year Initiative	30,000-75,000 Annual Web Users after Three-Year Initiative
Social	75% increase in followers each year	75% increase in followers each year	20-25% increase in followers each year
****Total Budget = $1.755 Million**** *including $85,000 annual fee for the Senior Communications Consultant to manage MBRF's ongoing communications efforts and oversee the communications agency*			

Anticipated Annual Metrics for Budget Level C: $2 Million over 3 Years			
	BRG	**JPA**	**SCP**
Media	900+ Million Media Impressions 75+ Media Placements 75-100+ Media Interviews annually	600+ Million Media Impressions 55-75 Media Placements 25-35 Media Interviews annually	300 Million Media Impressions (based on achievements from a recent campaign) 20-30 Media Placements annually
Website	100,000-150,000 Annual Web Users after Three-Year Initiative	60,000-90,000 Annual Web Users after Three-Year Initiative	40,000-100,000 Annual Web Users after Three-Year Initiative
Social	100% increase in followers each year	100% increase in followers each year 5,000–7,500 social engagements each year	25-35% increase in followers 25-35% increase in social engagements each year
****Total Budget = $2.255 Million**** *including $85,000 annual fee for the Senior Communications Consultant to manage MBRF's ongoing communications efforts and oversee the communications agency*			

Communications Agency Budget Approach

The narrative summaries below describe each agency's approach to leveraging the three different budget levels and how they prioritize using the budget across different areas of activity to grow the initiative and deliver results over three years. Please note, the budget allocations may shift based on the input we provide during the strategy and planning session with our selected agency partner. At the lower budget levels, all three agencies make trade-offs related to how they will spend the dollars. BRG proposes to introduce all strategies and target all three audience – consumers, PCPs, and researchers – by the end of three years at the $1M level (adding in additional strategies as time progresses), while the other agencies make significant trade-offs that eliminate certain strategies or outreach to particular audiences at the lower budget levels.

BRG

The budget provided by BRG maps out an approach to include all requested strategies to reach consumers, primary care providers (PCPs), and researchers at all three budget levels, with the effort starting slower at the lower budget levels. For example, outreach to PCPs, and the development of strategic partnerships and thought leadership would begin in year two at the $1 million budget level, but all activities would begin in year one at the $2 million budget level.

BRG also puts a high investment of staff time behind media relations at all three of the budget levels, which will result in the higher number of media placements and media impressions than the other agencies estimated in the metrics charts. The majority of results achieved in terms of social media followers and web traffic would be generated by organic (unpaid content shared on our social media channels) efforts at the $1 and $1.5 million budget levels. Paid distribution and advertising would be implemented at the $2 million budget level to increase the campaign's reach.

JPA
Like BRG, JPA maps out a budget strategy where the $1 million budget level would include primarily organic outreach and distribution strategies to reach consumer audiences through media outreach and nonpaid search engine optimization digital strategies. Unlike BRG, JPA only integrates PCP outreach activities at the $1.5 and $2 million budget levels. JPA maps out a plan to conduct more in-depth research to inform the communications planning process at the higher budget levels – with online bulletin boards to test the campaign's messaging and creative strategy and custom GRETEL map creation added at the $1.5 million budget level.

As opposed to BRG, who recommends implementing influencer engagement and PSA distribution across all of the budget levels while scaling the distribution to accommodate budget, JPA only recommends implementing an influencer engagement strategy and PSA distribution at the $2 million budget level. JPA also only includes conducting a follow-up consumer survey to measure the campaign's success at the $2 million budget level, while BRG includes the survey as an annual initiative to build brand reputation for MBRF and gauge campaign success at all three of the budget levels.

SCP
Unlike the BRG and JPA budgets which focus heavily on media outreach and nonpaid search engine optimization and digital strategies to reach consumer audiences, the SCP budget focuses more resources on building a new consumer-focused website, creating multimedia content and promoting the site via digital advertising as the primary drivers to reach consumer audiences. Instead of a PSA distribution, at the $2 million budget level, SCP introduces a partnership opportunity with the Hollywood Health & Society program of the University of Southern California to help get storylines on brain health and dementia included in mainstream TV shows. The SCP budget also places more priority on PCP engagement across all three levels and reserves between $25,000 (at the $1 and $1.5 million budget levels) to $50,000 (at the $2 million budget level) to support the education initiative.