



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

*Established by
Evelyn F. McKnight
to Alleviate Memory Loss
in the Aging*

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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

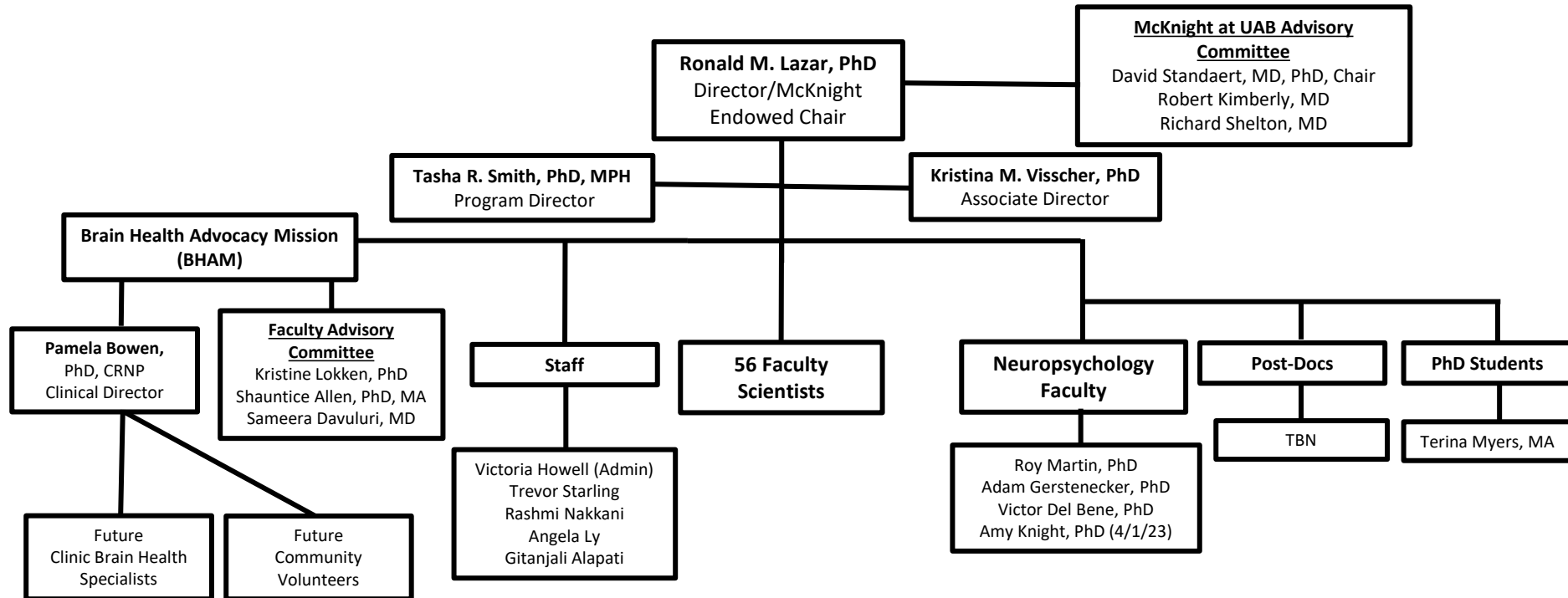
Please address all postal correspondence to:

Melanie Cianciotto ♦ Trust ♦ Post Office Box 620005 ♦ Orlando, Florida 32862 ♦ 407--237-4485

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 Heersink 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 urges 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 8 th 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, 41 st 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, 6 th 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	Master of Science Thesis committee Department of Molecular Genetics and Microbiology, University of Florida
2004-2007	Thomas Hock	PhD student Department of Biochemistry and Molecular Genetics, UAB
2004-2006	April White	Masters of Science student Department of Biology, UAB
2004-2008	Joo Yeun Oh	PhD student Department of Pathology, Integrated Biomedical Sciences Program, UAB
2005-2007	Jessy Deshane	PhD student Department of Biochemistry and Molecular Genetics, UAB
2005-2009	Marcienne Wright	PhD student Department of Biochemistry and Molecular Genetics, UAB
2006-2010	Subhashini Bolisetty	PhD student (CMB graduate program) Department of Cell Biology, UAB
2006-2010	Brian Danka	PhD student Department of Pathology, Integrated Biomedical Sciences Program, UAB
2006-2011	Sean McConnell	PhD student Department of Biochemistry and Molecular Genetics, UAB
2006-2009	Yongliang Huo	PhD student Department of Biochemistry and Molecular Genetics, UAB
2006-2011	Shanrun Liu	PhD student Department of Biochemistry and Molecular Genetics, UAB
2008-2012	Colin Reilly	PhD student Department of Pathology, Integrated Biomedical Sciences Program, UAB
2007-2010	Jungyun Kim	PhD student Department of Pathology, Integrated Biomedical Sciences Program, UAB
2009-2010	Sarah Baxley	MD PhD student UAB MSTP and Department of Cell Biology
2009-2012	Carl A. Frizell	Masters Student

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

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, <i>Journal of the American Society of Nephrology</i>
July 2003-Present	Member, Editorial Board, <i>American Journal of Physiology, Renal</i>
2000-2006 2007-2013	Member, Editorial Board, <i>Journal of the American Society of Nephrology</i> .
2008-2022	Member, Editorial Board, <i>Kidney International</i> .
2009-Present	Member, Editorial Board, <i>Laboratory Investigation</i>
2010-2018	Member, Editorial Board, <i>Clinical and Translational Science</i> .
2001	Guest Editor, <i>Antioxidants and Redox Signaling</i> , 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

2003	-Diabetic Nephropathy 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 2 nd 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 protection. 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 (1P1BX001595-01)

(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- β 1
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 angiotensin 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- β
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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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 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:			
	<i>Trainee name</i>	<i>Period/Source of support</i>	<i>Subsequent position</i>
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 1 st 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	3 rd 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:

	<i>Trainee name</i>	<i>Period/Source of support</i>	<i>Subsequent position</i>
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. Kaptureczak, 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 [Mentored Experiences in Research, Instruction, and

	UAB		Teaching (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:

	<i>Trainee name</i>	<i>Period/Source of support</i>	<i>Current position</i>
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.

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.



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

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.