Somanath P. R. Shenoy, M.Sc., Ph.D., FAHA.
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914 New Bailie Street, Augusta, GA - 30912-2450.
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RANK AND CURRENT PRIMARY ACADEMIC APPOINTMENTS

2023: Kenneth L. Waters Professor of Pharmacy, University of Georgia.
2018: Professor with Tenure
2009: Research Scientist, Augusta VA Health Care System, Augusta, GA

Other roles

Assistant Department Head for Research and Graduate Education
Director of Graduate Studies, Clinical & Administrative Pharmacy
Director, MCG Center for Pharmacy and Experimental Therapeutics
Co-Director, KL2 Training Programs, Georgia CTSA

Graduate faculty status: Current

Citizenship: Naturalized US Citizen and Overseas Citizen of India

ORCiD: https://orcid.org/0000-0003-3017-0230

Education

1991-1994 BSc. Zoology, Botany & Chemistry, Cochin, Sacred Heart College (MG University), India.
1994-1996 MSc. Biochemistry, Annamalai University, Chidambaram, Tamil Nadu, India
1996-2000 Ph.D. Biochemistry (Animal Science), National Dairy Research Institute (Government of India), Indian Council of Agricultural Research, Karnal, India

Postdoctoral fellowships

2000-2001 Project Associate, Center for Cellular & Molecular Biology, Hyderabad, India
2002-2003 Postdoctoral Research Associate, Kent State University, Kent, OH
2003-2006 Postdoctoral Research Fellow, Lerner Research Institute, Cleveland Clinic, OH

Websites: Links to the Principal Investigator and the Clinical and Experimental Therapeutics

Laboratory address

5B-125 Augusta VA Health, GA, Tele: (706) 733-0188; Ext.: 2493 Email: Somanath.Shenoy@va.gov
UGA Lab – HM170-176. 914 New Bailie Street, Augusta, GA - 30912-2450.

Residential address: 406 Pottery Drive, Martinez, GA 30907. Email: somanathshenoy@gmail.com

Past academic appointments

2013-2018: Associate Professor, College of Pharmacy, University of Georgia, Augusta, GA
2009-2013: Assistant Professor, UGA Pharmacy and Medical College of Georgia.
2008-2009: Project Scientist, Molecular Cardiology, Cleveland Clinic, OH
2007-2008: Instructor, Molecular Cardiology, Cleveland Clinic, OH
2002-2007: Postdoctoral Fellow, Kent State University and the Cleveland Clinic
2001-2002: Lecturer (Instructor) of Biochemistry, Kurukshetra University, India
2000-2001: Project Associate, Center for Cellular and Molecular Biology (CCMB), India

Scholarly impact

- **140+ peer-reviewed publications | h-index 48 |i10-index 96 | 7,200+ citations**
- **PubMed name:** "Somanath P.R." OR "Payaningal R. Somanath"

ADMINISTRATIVE ROLES

2021 – Present: Assistant Department Head (Research & Graduate Education), Clin. & Admin. Pharm., UGA-College of Pharmacy. In this capacity, I collaborate with faculty to ensure the smooth implementation of policies, procedures, and graduate curriculum, while overseeing key academic milestones like oral exams and dissertation defenses. I lead efforts to improve course quality and delivery models, and manage performance metrics, tracking publications, innovations, awards, graduation rates, and alumni engagement. Additionally, I contribute to the strategic development of undergraduate and graduate programs as a member of the College Education Committee.

2023 – Present: Director of Graduate Studies. Serving as the Supervisor of Record for CAP Graduate Students, a liaison between the department and the Graduate School, and implementing all policies and procedures of the Graduate Council about graduate education at UGA. Overseeing graduate student matriculation (guidance) and progress review process, leading student appeals process, supporting post-graduation placement, and managing graduate student alumni database for ongoing engagement with UGA.

2016 – Present: Co-Director, NIH-funded KL2 Training Programs, Georgia CTSA. As UGA co-director for the NRSA KL2 program and a member of the Georgia CTSA Research Education Executive Committee, I have played a key role in supporting 8 KL2 scholars at UGA. I am committed to providing leadership and mentorship for the continued success of the KL2 program across Georgia CTSA institutions. Key achievements include assisting with the successful 2017 grant award, supporting several KL2 grant applications with all trainees securing extramural funding, co-mentoring KL2 fellow. I also served as UGA site lead, securing NCATS funding to develop MOOCs for the partner institutions.

2020 – Present: Director, Center for Pharmacy & Experimental Therapeutics, Medical College of Georgia, Augusta University. In my capacity as the MCG's center director, representing the UGA Department of Clinical and Administrative Pharmacy, I facilitate experimental therapeutics research on the AU campus through the Clinical and Experimental Therapeutics (CET) laboratories and in collaborations with the Medical College of Georgia (MCG) faculty. E.g., attend the AU Research Administration Meeting, and administer the CET program research activities at the Augusta VA Health System. In addition, I report quarterly to the Sr. VP for Research at Augusta University on UGA College of Pharmacy's research activities on the Augusta campus and our ongoing/future collaborations with the Augusta University faculty, use of core facilities, etc.

PAST LEADERSHIP ROLES

2016 – 2024: Director, Clinical and Experimental Therapeutics Graduate Program. As the leader of a graduate faculty unit, I have supported MS and Ph.D. students from recruitment through graduation and post-graduate training. Key achievements include developing a new MS program (2016) with the first class in 2017, overhauling the Ph.D. curriculum taught exclusively by CET faculty, and achieving a 100% on-time graduation and job placement rate. I contributed to the 2021 SACS re-accreditation, pioneered a PharmD/MSCR dual degree program with Emory, and established Residency/MS and Residency/Ph.D. programs. I also played a key role in designing a UGA research lab and collaborated with international missions to attract state-funded scholars to CET.

2016 – 2023: Co-Director, NIH-funded TL1 Training Programs, Georgia CTSA. As UGA co-director for the NRSA TL1 program, I have played a key role in supporting 8 TL1 scholars at UGA during this period.

2020 – 2021: Interim Assistant Department Head for Research, Clinical & Administrative Pharmacy, UGA-College of Pharmacy. In the role of interim Assistant Head for Research, my duties included (1) Managing UGA-COP's research facilities, overseeing the CET research (IRB, IACUC, Biosafety, and Chemical Safety, etc.), and serving as a liaison with AU and Augusta VA Health on annual

research and facilities contracts, and overall conduct of departmental research across all four campuses. (2) Assisting faculty members with their research needs and grantsmanship, junior faculty training on research conduct and other requirements, and integrating pharmacy students and residents in translational research. (3) Assisting with identifying and monitoring budgetary concerns regarding implementing research in the department (e.g., fixed annual laboratory maintenance, computer server for large data).

CHAIR DUTIES ON VARIOUS COMMITTEES

2011: **Chair, Graduate Education & Curriculum Committee**, UGA-COP

2016-2018: **Chair, Graduate Education and Curriculum Committee**, UGA-College of Pharmacy - Duties include, but are not limited to, reviewing and approving new courses and course amendments in the graduate programs by working with the course coordinators.

2011-2015: **Co-chair, Prostate Cancer Session, World Congress on Oncology**, Greece. Moderated scientific sessions at the international conference

2012: **Chair, Planning Committee, STaR Conference-2012**' *Cancer therapy - Making it personal.'* - Overseen planning committee on organizing a Southeast US regional conference.

2019-2020: **Chair, Faculty Search Committee, Clinical and Experimental Therapeutics**, UGA - Successfully chaired a committee to recruit faculty for the CET program.

2020, 2022: **Chair, Promotion & Tenure Committee, UGA-Clinical & Administrative Pharmacy -** Review and provide promotion and tenure recommendations to department faculty and conduct post-tenure reviews.

2019-2020: **Co-Chair, The Basic Cell Sciences 2 committee, American Heart Association.** Chaired a study section to assign reviewers, conduct the meetings, review the grant proposals, and score applications to support recommendations for funding.

2021-2022: **Chair, Faculty Council**, **College of Pharmacy, University of Georgia.** Overseeing the activities of the UGA-College of Pharmacy Faculty Council serves as a deliberative and advisory body for all matters of the policy of the University of Georgia and is our primary forum for faculty-administrative interaction in determining that policy.

2024-2025: **Chair, Faculty Search Committee, Clinical and Experimental Therapeutics**, UGA - Chairing a committee to recruit faculty for the CET program (In Progress).

2022-2026: **Chair, Promotion & Tenure Committee**, **College of Pharmacy, University of Georgia.** Moderate the discussions on the faculty P&T and changes in the rules governing the process in the college based on the unit criteria, college rules, and the UGA guidelines.

2018-2028: **Chair, Institutional Biosafety Sub-Committee (IBSC), Augusta VA Health System, Augusta, GA.** Chair meetings, review proposals, and oversee biosafety for research conducted at the Augusta VA Health. Additional responsibilities include training the committee members, advising the faculty, overseeing compliance matters, and reporting to ORO and ORD, the VA department, in Washington, DC.

OTHER CURRENT PROFESSIONAL APPOINTMENTS

2020: Scientific Advisory Board Member, Ayma Therapeutics Inc.

2020: Co-founder & Chief Scientific Officer (CSO): MetasTx, LLC.

2019: Board Member, Augusta Biomedical Research Corporation, Augusta, GA

2016: Board Member, Research Education Executive Committee, Georgia CTSA

2015: Member, Center for Pharmacy and Experimental Therapeutics, Augusta Univ.

2014: Member, Biomedical and Translational Sciences Institute, University of Georgia

2014: Adjunct Member, Cancer Center, Augusta University
2013: Associate Member: Vascular Biology Center, Augusta University
2011: Adjunct Faculty, Department of Medicine, Augusta University, Augusta
2009: Member, Center for Drug Discovery, University of Georgia
2009: Member, Cancer Center, University of Georgia

COMMITTEE SERVICES

University (UGA) Committees

2020-2023: UGA-Health & Clinical Sciences University P&T Review Committee
2023-Current: University Post-Tenure Review/Academic Appeals Committee, University of Georgia.
2024-Current: Member, University Council, University of Georgia.
2025: UGA Graduate School, Summer Graduate Research Award Review Committee.
2026-Current: Member, University Educational Affairs Committee, University of Georgia.

UGA College of Pharmacy Committees

2009-2010: Member, Self-study committee - Resources, UGA-College of Pharmacy
2010-2011: Member, Graduate Education & Curriculum Committee, UGA-COP
2013-2016: Member, Academic and Professionalism Committee, UGA-College of Pharmacy
2013: Member, College of Pharmacy Research Retreat Planning Committee
2010-Current: Preceptor, Provide laboratory research training to PharmD students (electives and APPEs), Pharmacy PGY2 residents, summer students, and resident physicians
2015: Member, College of Pharmacy Graduate program strategic planning task force
2018-2019: Graduate Education and Curriculum Committee, UGA-College of Pharmacy
2018: CAP Department Student Appeals Adhoc Committee-College of Pharmacy
2019: PBS Department Student Appeals Adhoc Committee-College of Pharmacy
2021: Member, COP Strategic Plan 2025 Executive Committee- Strengthening Partnerships with Communities across Georgia & around the World
2021: UGA-COP CAP Department Executive Leadership Committee (current)
2021-2022: UGA-College of Pharmacy Executive Committee
2018-Current: Promotion & Tenure Committee, UGA-College of Pharmacy
2020-2021: Member, Department Head Search Committee, UGA-Clinical & Administrative Pharmacy
2021-2022: UGA-COP Executive Committee
2016-Current: Member, Graduate Education & Curriculum Committee, UGA-COP
2023-2024: Self-Study Committee, College of Pharmacy, University of Georgia.
2024: UGA-COP Graduate, undergraduate Teacher of the Year Award Selection Committee.
2021-Current: PharmD admission interview panel.

UGA Clinical and Administrative Pharmacy department

2011: Member, Faculty Search Committee, UGA-CET Program
2016: Moderator, CET retreat on developing a new MS program to start in the Fall of 2017
2020-Current: Executive Committee member, Clinical & Administrative Pharmacy Department.
2014-Current: Promotion & Tenure Committee, UGA-Clinical & Administrative Pharmacy
2021-Current: Junior Faculty Mentoring Committee.
2024-2025: Faculty Search Committee, UGA-Clinical & Administrative Pharmacy (Athens).

VA Health care System Augusta, GA

2010-2028: Member, Institutional Animal Care and Use Committee (IACUC) at the *Augusta VA Health,*. (Currently on a 4th 3-year term, year 14)
2014-2028: Member, Institutional Biosafety Committee at the *Augusta VA Health*

2014-2018: Member, Institutional pre-proposal review committee at the *VAMC, Augusta*.
2014: Member: *Augusta VA Health Augusta* Research Week Planning Committee
2010-2017: Coordinator, CET-VAMC Journal Club
2019-2022: Member, Faculty Council, College of Pharmacy, University of Georgia
2025: Augusta Veterans Health Care System, VA Research Day Organizing Committee.

Medical College of Georgia, Augusta University

2013: Member, Clinical and Translational Research Task Force, Augusta University
2014: Member, Department Head Search Committee, AU-Department of Biochemistry
2026-Current: Advisory Board Member, James and Jean Culver Vision Discovery Institute

Other Institutions

2016: AHA Scientific Sessions (Annual Meeting) - 2016 Abstract Reviewer
2019-Current: Board Member, Augusta Biomedical Research Corporation, Augusta, GA
2016-2020: Proposal Reviewer, American Legion Grant Award
2019-2022: Content Expert, Translational Education & Mentoring in Science (TEAMS), GACTSA.
2025: International Travel Award Selection Committee, MDPI-Life Journal (Basel, Switzerland).

PROFESSIONAL SOCIETY AFFILIATIONS AND VOLUNTARY SERVICE

2004-Present: Member, American Heart Association (ATVB and BCVS Councils)
2008-Present: Council Member, North American Vascular Biology Organization (NAVBO)
2010-2018: Study Section Member, American Heart Association. Grant Review Panel (Vascular)
2012-Present: Premium Professional Member, American Heart Association, ATVB & BCVS Councils
2013-Present: Fellow of the American Heart Association (FAHA)
2013-2018: Professional Member of the American Society for Biochemistry and Mol Bio. (ASBMB)
2018-Present: Communications Committee Member, NAVBO
2023-Present: Member, Association for Research in Vision and Ophthalmology (ARVO)
2025-Present: Member, American Association of Colleges of Pharmacy (AACP)

ENTREPRENEURIAL ACTIVITIES

2021-Present: Co-Founder, MetasTx, Inc. Served as the Chief Scientific Officer from 2021 to 2025 and is continuing to serve as the Senior Scientific Advisor. We have identified novel drugs to suppress prostate tumor growth and metastasis to bone. By working with the University of Georgia Office of Innovation, we co-founded MetasTx LLC in August 2021 (a start-up company) to develop and market the product (MTX-101) for cancer metastasis clinical trials. The company is in the developmental stage, and investments are sought from accredited investors and funding through the Georgia Research Alliance and NIH-SBIR grants. MetasTx recently received SBIR funding from the National cancer Institute of NIH to investigate "Epithelial-Mesenchymal Transition Signature Markers (EMTsm) with Machine Learning-Based Analysis as a Predictor of Metastatic Prostate Cancer". The company has been incorporated as MetasTx Inc in 2005.
2022: Best start-up pitch presentation **award** at the **BioNJ's 12th Annual BioPartnering Conference**
2022: MetasTx LLC Raises Funds, Engages Manufacturing Partner, And Advances Phase One Development - **BioSpace**, **Globe Newswire**, **Yahoo**, and **J*Star**
2022: Accelerator Venture Partners suggested companies to be Fast-Tracked in 2022, **Globe Newswire.** **2023:** Awarded Best Pitch Presentation by the California-based 'PitchForce Connect'.
2023: MetasTx Receives **Georgia Research Alliance** (GRA) funding
2023: AlphaLab Health **Launches Fourth Cohort of Startups** to Transform Patient Care with MetasTx
2025: MetasTx **received** NIH's **SBIR funding**.
2025: MetasTx LLC is now MetasTx Inc.

2020-Present: Scientific Advisor, AYMA Therapeutics Inc. The study in our laboratory over the last two decades has identified the integral role of the Akt pathway in several physiological processes and pathologies that include cancer and lung diseases such as acute respiratory distress syndrome (ARDS), idiopathic pulmonary fibrosis (IPF), and COVID-19-associated lung injury and ARDS. We identified a reliable treatment option in "Triciribine" (AYX-101), a widely considered Akt pathway inhibitor for IPF, ARDS, retinal degenerative diseases (e.g., Diabetic retinopathy), and COVID-19. We also discovered that Triciribine has benefited from the activation of the adenosine receptor (acting as an adenosine receptor agonist). Since it is the most active in a mono-phosphate form, it potentially activates AMP Kinase (an effect similar to the beneficial effects of Metformin in diabetic patients), which will help to normalize the pathologically deregulated pathways. This augments injury resolution, suppresses uncontrolled inflammation/cytokine storm, and inhibits tissue fibrosis. Our publications in these areas have become the basis of clinical trials being planned by AYMA Therapeutics Inc. and grant applications being submitted to NIH and other funding agencies.

HONORS, AWARDS, PATENTS, AND INVENTION DISCLOSURES

2025: Our publication on "Pro-Inflammatory Characteristics of Extracellular Vesicles in the Vitreous of Type 2 Diabetic Patients" published in BIOMEDICINES was selected as the "Editor's Choice Article of the year" for demonstrating exceptional scientific rigor, innovation and impact.

2025: UGA Student Career Success Influencer Award 2024 - Recognition by the University of Georgia Career Center for greatly contributing to the career development of UGA graduates.

2025: Meritorious Service Award for 15 years of Outstanding and Dedicated Service, UGA College of Pharmacy.

2021-2025: Listed in the World's Top 2% of Scientists by Elsevier and Stanford University.

2023: Teacher of the Year Award (Graduate/Undergraduate)- UGA College of Pharmacy.

2023: Kenneth L. Waters Endowed Pharmacy Professorship (Inaugural), University of Georgia.

2023: Wiley Publishers recognition for "Top Downloaded Article of the Year" for the study "Akt-independent effects of triciribine on ACE2 expression in human lung epithelial cells: Potential benefits in restricting SARS-CoV2 infection" in the Journal of Cellular Physiology.

2023: UGA Student Career Success Influencer Award 2022 - Recognition by the University of Georgia Career Center for greatly contributing to the career development of UGA graduates.

2022: *U.S. PATENT* (63/304,058) "*Pharmaceutical Compositions and Methods of Administration*" (Provisional) – submitted in January 2022 and full application submitted on January 27, 2023.

2022: Invited panelist at the Health Connect South Conference, Georgia Aquarium, Atlanta, GA 2022: *U.S. PATENT* (16/077,980) Application No. 62/295,331 filed on 2/15/2016. US Utility Patent Number **11,517,539**, titled "*IPA-3-LOADED LIPOSOMES AND METHODS OF USE THEREOF,*" issued on 12/06/2022. Inventors: Somanath R. Shenoy, Brian S. Cummings, and Wided Najahi- Missaoui. Assigned to the University of Georgia Research Foundation, Inc.

2022: *Invention Disclosure*: Let-7a-5p and miR-199a-5p Expression in Prostate cancer cells are a therapeutic target and biomarker for metastatic prostate cancer

2021: *European Union patent* (EP 3 416 623 B1) *"IPA-3-Loaded liposomes and methods of use thereof"*-Granted

2019: UGA Distinguished Research Professor Award Nominee from the College of Pharmacy

2019: Excellence in Manuscript Review and Editorship Award Certificate from *Molecular and Therapeutics Medicine* Journal

2019: American Legion Research Award

2018: *Invention Disclosure*: sPLA2 responsive liposomes of IPA3 for prostate and breast cancer

2018: Excellence in Manuscript Review and Editorship Certificate from *Molecular Medicine Reports*

2017: *Invention Disclosure*: Use of MMP3 activity assay in biological fluids as a novel biomarker and prognostic marker for ARDS
2017: *Invention Disclosure*: Use of MMP3 (UK356618) and FoxO (AS1842856) inhibitors in the treatment of acute respiratory distress syndrome (ARDS)
2016: Idea Development Award, US Department of Defense-PCRP Program
2016: Excellence in Manuscript Review and Editorship Certificate from *Oncology Reports*
2015: *Invention Disclosure*: Inhibition of GSK3 using SB415286 for both early androgen-dependent and advanced androgen-independent prostate cancer
2015: *Invention Disclosure*: Akt inhibitor 'Triciribine' for the treatment of Pulmonary Arterial Hypertension (PAH) and Idiopathic Pulmonary Fibrosis (IPF)
2015: UGA-GRU Inter-University Collaborative seed grant award (2015-2016)
2014: International Travel Award, UGA Senior VP for the International Oncology meeting in Greece
2014: Summer Research Award for the productive College Faculty, 2nd consecutive year
2014: American Legion Research Award
2013: Summer Research Award for the productive College Faculty, UGA OVPR
2013: Elected Fellow of the American Heart Association (FAHA)
2012: Outstanding Achievements in Research Award at the 15th International Symposium on Molecular Medicine, Crete, Greece
2012: International Travel Award by UGA Senior VP to attend FASEB TGFβ meeting, Italy
2009-26: Wilson Pharmacy/Dean's Endowment Intramural Awards for 15+ years
2008: Young Investigator Award, 12th Biennial Midwest Platelet Conference, Lexington, KY
2008: Scientist Development Grant (National) Award by the American Heart Association
2007: New Investigator Travel Award, American Heart Association (BCVS Council)
2007: Award of Research Excellence by the Cleveland Clinic for the 2nd consecutive year
2006: Junior Investigator Award of Research Excellence by the Cleveland Clinic
2005: Irvine H. Page Award, Cleveland Clinic
2005: *Invention Disclosure*: Novel approaches to control vascular permeability and maturation: submitted to the Cleveland Clinic Foundation, Cleveland, OH
2005: Innovator Award (Cleveland Clinic): Novel approach to control vascular maturation
1999: Senior Research Fellowship, Council of Scientific and Industrial Research, India
1996: Runner-up, Best Student, the Society of Biological Chemists, Annamalai Chapter
1996: Junior Research Fellowship, NDRI, Indian Council of Agricultural Research, India

AWARDS AND RECOGNITION FOR TRAINEES

2026: Mohamed Selim, B. Pharm, People's Choice Award, 1st Place, VA Research Day, Augusta.
2025: Mohamed Selim, B. Pharm, People's Choice Award, 2nd Place, Centenary Celebration of VA Research, Augusta VA Research Day.
2025: Mohamed Selim, B. Pharm, Graduate Student, received 1st Prize for Basic Research Presentation at the Southeast Regional Clinical & Translational Science Conference.
2024: Yin Zhu, MS, Ph.D., Postdoctoral Fellowship, American Heart Association (Co-Mentor).
2023: Shengshuai Shan, Ph.D., Research Presentation (Oral) Award, 1st Place, VA Research Day.
2023: Nidhi Shenoy won the Best Science Award at the CSRA Science Fair
2023: Madhuri Rudraraju, PharmD, Research Poster Award, 1st Place, VA Research Day.
2023: Madhuri Rudraraju, PharmD, People's Choice Award, 2nd Place, VA Research Day.
2022: Edith Ford, PharmD student - poster competition FINALIST, ACCP Global Conference, SFO, CA.
2021: Mir Adil won an "international research award" - 2021-European Chemical Biology Symposium
2021: Mir Adil won a Travel Award at the Ion Channels Regulation Conference by FASEB

2021: Mir Adil received recognition and a cash award for his service at the VA Research Day
2021: Madhuri Rudraraju, PharmD, Award of Research Excellence, AU- Grad. Research Day
2020: Stacey Risk, PharmD, Best Clinical Seminar Presentation, spring 2020.
2020: Madhuri Rudraraju, PharmD, UGA-CET Award for Excellence in Literature Evaluation
2019: Rana Kadry, PharmD, MS, UGA-CET Award for Excellence in Literature Evaluation
2019: Mir Adil, PharmD, Ph.D., 2nd Runner Up, "Best Graduate Research Award", VA Research Day
2018: Mir Adil, PharmD, Ph.D., UGA-CET Award for Excellence in Literature Evaluation
2017: Sandeep Artham, PharmD, Ph.D., UGA Grad. Travel Award, Gordon Conference, Newport, RI
2017: Sandeep Artham, PharmD, Ph.D., "Best Graduate Research Award" at the VA Research Day
2017: Arti Verma, Ph.D., STaR Travel Award, STaR Conference-2017, Augusta, GA.
2017: Abdul Alwhaibi, PharmD, Ph.D., UGA Grad. Travel Award for AACR Conference at Orlando, FL
2016: Justin Joy, PharmD, Best Clinical Seminar Presentation, Spring 2016.
2016: Harika Sabbineni, BPharm, Ph.D., "People's Choice Award for Best Science", VA ResearchDay
2016: Benjamin Andrick, PharmD, "Best Graduate Research Award", STaR Conference
2015: Ahmad Al-Azayzih, PharmD, Ph.D., "People's Choice Award for Best Science", VA Research Day
2014: Maha Abdalla, PharmD, Ph.D., "Graduate Research Award", VA Research Day, Augusta, GA
2013: Samith Thomas, MD, "Rahn-Peacock Award for Research Excellence", MCG
2013: Maha Abdalla, PharmD, Ph.D., UGA Grad. Travel Award, ACCP meeting at Albuquerque, NM
2013: Maha Abdalla, PharmD, Ph.D., Runner-up, UGA-Graduate Research Day Research Award
2013: Maha Abdalla, PharmD, Ph.D., Award of Research Excellence, AU Graduate Research Day
2013: Maha Abdalla, PharmD, Ph.D., American Heart Association Pre-Doctoral Fellowship Award
2013: Fei Gao, MD, Ph.D., "STaR Postdoctoral Award for the Best Translational Research"
2013: Ahmad Al-Azayzih, PharmD, Ph.D., Award of Research Excellence, AU-GRD
2012: Maha Abdalla, PharmD, Award of Excellence in CET, GRU Graduate Research Day
2012: Anna Goc, Ph.D., Postdoctoral Fellow, received the STaR Travel Award
2012: Anna Goc, Ph.D., 2nd runner-up, Postdoctoral Research Award, STaR conference
2011: Samith Thomas, MD, Runner up, Postdoctoral Research Award, VA Research, Augusta
2011: Anna Goc, Ph.D., Best Postdoctoral Research Award, VA Research Day, Augusta
2010: Samith Thomas, MD, "STaR Postdoctoral award for the best translational research"
2010: Samith Thomas, MD, "Rahn-Peacock Award for Research Excellence", MCG, Augusta
2010: Anna Goc, Ph.D., Best Postdoctoral Research Award at the VA Research Day, Augusta
2009: Anna Goc, Ph.D., Best Postdoctoral Poster Award, UGA Centre for Drug Discovery conference

PROFESSIONAL SERVICES TO SCIENTIFIC JOURNALS

Editorial Board Member for journals (2010-Present):

PLoS One (Associate Editor), MDPI Life (Senior/Section Editor)
Oncology Reports, Spandidos Publications, Greece (Editorial Board Member), Experimental and Therapeutic Medicine (Editorial Board Member)
Medicinal Chemistry: Current Research (Editorial Board Member)
Physiologia (MDPI) - Section Editor
Frontiers in Molecular Biosciences (Associate/Topic Editor)
Life (MDPI) – Section Board Member
Cells (MDPI) – Guest Editor on Special issue: Vascular Biology: From Molecular Mechanisms to Precision Therapies (2026)

Reviewer for journals (2006-Present**)–** The list include, but is not limited to, "*Blood, Journal of Biological Chemistry, Proceedings of National Academy of Sciences, USA, Journal of Pharmacology and Experimental Therapeutics, Journal of Cellular Physiology, International Journal of Cancer,*

Oncogene, Molecular Biology of Cell, PLoS One, British Journal of Pharmacology, Biochemical Pharmacology, Pharmacological Research, Carcinogenesis, International Journal of Oncology, BMC-Cancer, BMC-Complementary & Alternative Medicine, Biochimica Biophysica Acta- Reviews in Cancer Biology, Biochimica Biophysica Acta- Molecular Cell Research, Cancer Research, Molecular Cancer Research, Molecular Cancer Therapeutics, Arteriosclerosis Thrombosis & Vascular Biology, Molecular Medicine, Frontiers in Immunology, Journal of Cell Biology, Heliyon (Cell Publications), Scientific Reports, Science Signalling, Science Advances, and Nature Communications".

2015 – Present: Senior Editor, North American Vascular Biology Organization NAVBO 'Vascular Biology Publications Alert'. Oversee a nationally renowned scientific board of associate editors on NAVBO's monthly publication on important research articles published in the field of vascular biology.

Invitations to other college/university committees:

2025 Fall: *King Saud University*, Riyadh, Saudi Arabia - Faculty Promotion Reviewer
2025 Spring: *King Saud University*, Riyadh, Saudi Arabia - Faculty Promotion Reviewer
2024: *McGovern Medical School at UT Health Houston,* Houston, TX - Faculty Promotion Reviewer
2023: *Mercer University*, Atlanta, GA - Faculty Promotion Reviewer
2023: *King Saud University*, Riyadh, Saudi Arabia - Faculty Promotion Reviewer
2023: *Jordan University of Science and Technology*, Irbid, Jordan - Faculty Promotion Reviewer
2023: *Emory University*, Atlanta, GA - Faculty Promotion Reviewer
2023: *Cleveland Clinic*, Cleveland, OH - Faculty Promotion Reviewer
2021: *Yarmouk University* Faculty Promotion Reviewer, Yarmouk, Jordan.

Invited study sections to the international grant review agency panels:

2026: Peer Review Panel for 2026 by OARU's Florida Department of Health (FL DOH) the Bankhead-Coley Cancer, James and Esther King Biomedical, and Live Like Bella Pediatric Cancer research programs 2027.
2026: Peer Review Panel for 2026 by OARU's Pennsylvania Department of Health Final Performance Peer Review Cycle B 2025-2026
2021: *Swiss National Science Foundation* Grant Proposal Reviewer.
2020: *Nazarbayev University's* (Kazakhstan)
2020: Peer Review Panel for 2020 by OARU.
2019: *Cancer Research Wales (UK)* - Invited Grant Proposal Review Member
2012-2018: *Prostate Cancer UK*
World Cancer Research Fund International-UK
Medical Research Council-UK
Italian Ministry of Health "Infection, immunity, and lung diseases" Group
European Research Council (Belgium & UK),
European Commission for Research and Innovation

Invited study section member in the grant review panels of US funding agencies:

2019-2020: INBRE Program Grant Invited Reviewer- University of Nebraska
2020: Invited Reviewer, Iner-Clarke Atlanta & Augusta University Inter-institutional Grant
2010: Member, American Heart Association Fellowships Basic Cell CSS Review Panel
2017-Present: Member, Georgia CTSA TL1 Pre- and post-doctoral Fellowship Review Panel
2017-Present: Member, Georgia CTSA KL2 Career Development Grant Review Panel
2017-Present: Member, Georgia CTSA Pilot Seed Grant Review Panel
2022: Review panel member, COVID Research Recovery Funding Program Review, UGA
2022: Review panel member, COVID Research Recovery Funding Program Review, UGA

American Heart Association

American Heart Association Vas Wall Bio BSc2.2012.1
American Heart Association Vas Wall Bio BSc2.2013.1
American Heart Association Vas Wall Bio BSc2.2013.2
American Heart Association Vas Wall Bio BSc2.2014.1
American Heart Association Vas Wall Bio BSc2.2016.1
American Heart Association Vas Wall Bio BSc2.2017.1
American Heart Association Fellowships Basic Cell CSS.2018.2
American Heart Association Career Development Award Basic Cell Sciences.2018.1
American Heart Association Fellowship Basic Cell CSS.2019.2
American Heart Association Career Development Award Basic Cell Sciences 2.2019.2
American Heart Association 2021 Fellowships Basic Science 1
American Heart Association 2022 TPA Cardiology
American Heart Association 2023 TPA Cardiology
American Heart Association 2024 TPA Cardiology
American Heart Association 2025 TPA Cardiology
American Heart Association 2026 Y27 AHA Fellowship Basic Cardiovascular

National Institutes of Health

2024: ZRG1 RCCS-D (80) AREA/REAP: Resp., Cardiac and Circ. Sci. Study Section (NIH)
2025 (Spring): ZRG1 RCCS-D (80) AREA/REAP: Resp., Cardiac and Circ. Sci. Study Section (NIH)
2025 (Fall): ZRG1 RCCS-D (80) AREA/REAP: Resp., Cardiac and Circ. Sci. Study Section (NIH)
2026: ZRG1 RCCS-U (94) S: Resp., Card. Circ. Sci. Career Development Grant Study Section (NIH)

PENDING RESEARCH GRANT APPLICATIONS

R01EY036007 (NIH/NEI) Shenoy/Narayanan (MPI), 04/01/2027-03/31/2032. The Claudin-17-Claudin-5 System as a Regulator of Blood-Retinal Barrier Integrity and Retinal Inflammation. (3 mo.) Total Funding: $2,579,700.

R21EY039968 (NIH/NEI) Shenoy (PI), 05/01/2027-06/30/2029. Role of Claudin-17 in endothelial tight junction and redox homeostasis regulation (1.5 mo.) Total Funding: $430,000.

R21AI205121 (NIH/NIAID) Zhang/Shenoy (MPI), 05/01/2027-06/30/2029. Targeted CD59 Delivery via Engineered Extracellular Vesicles to Preserve Pulmonary Vascular Integrity. Role: Co-Investigator (1 mo.) Total Funding: $430,000.

Other: National Multiple Sclerosis Society Pilot Grant (Co-I), CTSA K12/T32 Grant Renewals (Co-I)

CURRENTLY FUNDED RESEARCH AWARDS

R01 HL178801 (NIH/NHLBI) Zhang (PI), 08/01/2026-07/31/2031. Long Noncoding RNA Regulation in Complement-Mediated Endothelial Barrier Disruption: From Mechanism to Therapy. Role: Co-Investigator (3 mo.) Total Funding: $2,899,682.

1I01 RD001251-01A1 (VA Merit Review) Narayanan (PI). 09/01/2026-08/31/2030. Targeting blood-retinal barrier dysfunction in multiple sclerosis. Role: Co-Investigator (1 mo). Total Funding: $1,039,768.

UL1 TR002378 Georgia CTSA Pilot Grant (NCATS/Emory Sub-Award) Shenoy (PI) 08/01/2026-07/31/2027 Georgia Clinical and Translational Science Alliance (Georgia-CTSA). Peptidomimetic Targeting of Claudin-5+ Extracellular Vesicles to Attenuate Retinal Inflammation. Total funding: $40,000 (1 year).

R43 CA298410 (NIH/NCI-SBIR) MetasTx Inc., 07/01/2025-06/30/2027 (NCE). Epithelial-Mesenchymal Transition Signature Markers (EMTsm) with Machine Learning-Based Analysis as a Predictor of Metastatic Prostate Cancer. Role: Co-Investigator (1 mo.) Total Funding: $ 460,000

UL1 TR000454 (NIH/NCATS); Taylor/Phillips (PIs); 09/01/2022-08/31/2027; Georgia Clinical and Translational Science Alliance (GA-CTSA). The goal is to promote clinical and translational science research in Georgia. Role: Co-Investigator, Total funding: $45 Million (5 years)

KL2 TR002381 (NIH/NCATS) Blumberg (PI) 09/01/2022-08/31/2027. Institutional junior faculty career development award through Georgia-CTSA. The goal of this project is to promote junior faculty research in clinical and translational science. Role: Co-Investigator (Co-Director of the KL2 Training Core), Total Funding: $7 Million (5 years)

TL1 TR002382 (NIH/NCATS) Blumberg (PI) 09/01/2022-08/31/2027. Institutional Pre/Postdoctoral training award through Georgia-CTSA. This project aims to promote clinical and translational science research to pre-/postdoctoral fellows in Georgia. Role: Co-Investigator (Co-Director of the TL1 Training Core) Total Funding: $5 Million (5 years)

UGA-Office of Research, Shenoy (PI). 07/01/2026-06/30/2027. "Extracellular Vesicle-Mediated Atypical Functions of Claudin-5 in Retinopathy." Total Funding: $15,000 (1 year)

COMPLETED EXTRAMURALLY FUNDED RESEARCH PROJECTS

R56 HL163607 (NIH/NHLBI) Zhang (PI), 09/01/2023-08/31/2026. The Function and Potential Application of Extracellular Vesicle-Derived Clara Cell Protein 16 in Gram-negative Bacterial Pneumonia. Role: Co-Investigator (3 mo.) Total Funding: $ 501,483

R03 AI169063 (NIH/NIAID) Wang (PI) 05/01/2022-04/30/2026. Mechanistic Insights of TIMP-1 in Influenza Virus Infection. The goal is to study the role of TIMP-1 in IAV infection. Role: Co-Investigator, Total funding: $151,000 (2 years)

R03 AI171967 (NIH/NIAID) Grimsey (PI) 05/10/2022-04/30/2026. Characterization of Atypical P38 Signaling in Acute Lung Injury. The goal is to study the role of Atypical P38 Signaling in Acute Lung Injury. Role: Co-Investigator. Total Funding: $142,208 (2 years).

R01 NS104573 (NIH/NINDS) Ergul/Shenoy (Multi-PI) 09/01/2020-08/31/2025. Progressive Post Stroke Cognitive Impairment: Mechanisms & Intervention. The goal is to study the effect of microglial activation in the neurovascular unit after stroke. Total Funding: $1,390,878

PC 150431 (Department of Defense) Shenoy (PI) 09/15/2016-09/14/2021
sPLA2-Responsive Liposomal Delivery of IPA-3 for Prostate Cancer Therapy
This study aims to develop a nanotechnology-based approach to target P21-activated kinase in treating metastatic prostate cancer. Total Funding: $472,500 (3 years)

R01 HL103952 (NIH/NHLBI) Shenoy (PI) 06/01/2011-05/31/2018
Protein kinase B (Akt)-mediated pathway regulating endothelial barrier function. Total Funding: $1,575,000 (5 years)

UL1 TR000454 (NIH/NCATS) Taylor/Phillips (PIs) 10/01/2017-09/30/2022
Georgia Clinical and Translational Science Alliance (Georgia-CTSA). The goal of this project is to promote clinical and translational science research in Georgia. Role: Co-Investigator Total funding: $44,102,365 (5 years)

KL2 TR002381 (NIH/NCATS) Blumberg (PI) 10/01/2017-09/30/2022
Institutional junior faculty career-development award through Georgia-CTSA.
The goal of this project is to promote junior faculty research in clinical and translational science. Role: Co-Investigator (Co-Director of the KL2 Training Core). Total Funding: $6,501,540 (5 years)

TL1 TR002382 (NIH/NCATS) Blumberg (PI) 10/01/2017-09/30/2022
Institutional Pre/Postdoctoral training award through Georgia-CTSA. This project aims to promote clinical and translational science research to pre-/postdoctoral fellows in Georgia. Role: Co-Investigator (Co-Director of the TL1 Training Core) Total Funding: $4,645,870 (5 years)

UL1 TR002378-02S1 (NIH/NCATS) Phillips/Shenoy 09/22/2018-06/30/2020. Strategic Plan and Development of Online Education at the Georgia Clinical and Translational Science Alliance. Role: *UGA Site Lead (Sub-PI on the Supplement)*. Total Funding: $367,194 (1 year)

PC 150431-P (Department of Defense) Cummings (PI). 09/15/2016-09/14/2020 Secretory

Phospholipase A2-Responsive Liposomal Delivery of IPA-3 for Prostate Cancer Therapy. This study aims to develop a nanotechnology-based approach to target P21-activated kinase in treating metastatic prostate cancer.

Role: Co-Investigator. Total Funding: $566,250 (3 years)

American Legion Shenoy (PI) 07/01/2019-06/30/2020 Targeting NODAL for Prostate Cancer. Total Funding: $7,000 (1 year)

American Legion Shenoy (PI) 07/01/2014-06/30/2015 IPA-3 for Prostate Cancer. Funding: $10,000

I01 BX000891 (VA Merit Review) Fagan (PI) 04/01/2011-03/31/2015 Mechanisms and Consequences of Hypertension after Stroke. Role: Co-Investigator. Total Funding: $660,000 (4 years)

08-30326N (AHA-National) Shenoy (PI) 06/01/2008-05/30/2013. Molecular mechanisms regulating Akt1-stimulated integrin activation, extracellular matrix secretion, and assembly. Role: *Principal Investigator*. Total Funding: $260,000 (4 years)

Indian Council of Agricultural Research- Junior Research Fellowship (Pre-Doc). The mechanisms of acrosome reaction. Shenoy (PI) 07/01/1996-06/30/1998. Total Funding: Indian Rupees ₹ 43,200

Council of Industrial and Scientific Research- Senior Research Fellowship (Pre-Doc). Progesterone and acrosome reaction. Shenoy (PI) 07/01/1998-06/30/2000. Total Funding: Indian Rupees ₹ 67,200

Georgia Research Alliance Award Shenoy (PI) 10/01/2022-09/30/2024. MetasTx LLC: Novel formulations for metastatic prostate cancer therapy (Phase Ia). Total Funding: $50,000 (2 years).

COMPLETED EXTRAMURALLY FUNDED TRAINING GRANTS

26CDA1600866 Career Development Award (American Heart) Yin Zhu (PI) 04/01/2026-03/31/2029 Targeted Delivery of CD59 via Engineered EVs Protects Endothelial Barrier in Acute Lung Injury. Role: Faculty Co-Mentor. Total Funding: $231,000 (3 years, Relinquished due to overlap).

25POST1378431 Postdoctoral Fellowship Award (American Heart) Yin Zhu (PI) 01/01/2025-12/31/2027 Lncenc1 modulates lung endothelial-barrier integrity via CD59. Role: Faculty Co-Mentor. Total Funding: $152,836 (2 years).

KL2 Career Development Award (Georgia-CTSA) Xiaoyun Wang (PI) 08/01/2023-07/31/2025 TIMP1 as a biomarker in acute respiratory distress syndrome. The goal of this project is to study the benefits of targeting TIMP1 as a biomarker in ARDS. Role: Co-Investigator (Faculty Sponsor). Total Funding: $272,000 (2 years)

F32 HL147437 (NIH/NHLBI-NRSA) Wang (PI) 05/15/2019-05/14/2022. TIMP-1 in Influenza-A Virus (IAV) infection. The goal of this project is to study the role of TIMP-1 in exacerbating IAV infection. Role: Co-Investigator (Faculty Sponsor). Total Funding: $205,134 (3 years)

KL2 Career Development Award (Georgia-CTSA) Newsome (PI) 10/01/2019-09/30/2021. Stromelysin1 in ARDS. The goal of this project is to study the benefits of targeting stromelysin1 in ARDS. Role: Co-Investigator (Faculty Sponsor). Total Funding: $272,000 (2 years)

TL1 Pre-doctoral Award (NIH/NCATS/Georgia-CTSA) Jones (PI) 08/01/2020-07/30/2021 Microglial activation in stroke recovery. The goal of this project is to determine the role of microglial activation in stroke recovery. Role: Co-Investigator (Faculty Co-Sponsor). Total Funding: $35,000.

13 PRE17100070 (AHA-Fellowship) Abdalla (PI) 07/01/2013-06/30/2015 Akt1-mediated pathway leading to pulmonary arterial hypertension. Role: *Sponsor*. Total Funding: $56,000 (2 years)

TL1 Predoctoral Award. (NIH/NCATS/GA-CTSA) Burton (PI) 08/01/2022-09/30/2023. The Atypical Approach: Identifying and Characterizing TAB1-mediated p38 Activation by GPCRs in the Progression of Lung Disease. Role: Co-Investigator (Faculty Co-Sponsor). Total Funding: $35,000

COMPLETED INTRAMURAL GRANT AWARDS

UGA Graduate School Student Success & Well-Being Grant Martinez (PI) 07/01/2025-06/30/2026. Total Funding: $4,000 (1 year); Role: Co-Investigator.

UGA-COP Foundation and the OVPR (UGA), Shenoy (PI). 07/01/2025-06/30/2026. "Atypical Role of TIMP1 in Diabetes-Associated Lung Injury." Total Funding: $18,000 (1 year)

UGA-COP Foundation, Villa-Zapata (PI). 07/01/2025-06/30/2026. "Studying Telehealth Access: A Pilot Study of Oral Therapy Management Among Rural Breast Cancer Patients in Georgia". Total Funding: $6,000 (1 year). Role: Co-investigator.

UGA-COP Foundation Shenoy (PI) 07/01/2024-06/30/2025. Claudin-5 peptidomimetics for ischemic retinopathy treatment. Total Funding: $14,000 (1 year)

UGA-COP Foundation Shenoy (PI) 07/01/2023-06/30/2024 Paradoxical regulation of Claudin-5 and Claudin-17 in ischemic retinopathy. Total Funding: $10,000 (1 year)

UGA-COP Foundation Shenoy (PI) 07/01/2022-06/30/2023 Exosomal Claudin-5 and promotion of inflammation in lung injury. Total Funding: $12,000 (1 year)

UGA-COP Foundation Chastain (PI) 07/01/2021-06/30/2022 Acetazolamide for cerebral edema in *Cryptococcus neoformans* meningoencephalitis. Role: Co-Investigator (Co-Investigator) Total Funding: $8,000 (1 year)

Wilson Pharmacy Foundation Seed Grant Newsome (PI) 07/01/2020-06/30/2021. Characterization of acute respiratory distress syndrome (ARDS) by stromelysin-1 (MMP3) expression. Total Funding: $5,000 (1 year); Role: Co-Investigator.

Wilson Pharmacy Foundation Seed Grant Shenoy (PI) 07/01/2020-06/30/2021. The status of claudin-17 (CLDN-17) in COVID-19-associated ARDS. Total Funding: $7,500 (1 year)

Clinical & Translational Research Unit Grant (UGA) Newsome (PI) 07/01/2018-06/30/2019 Clinical evaluation of MMP-3 activity in Bronchoalveolar lavage samples from patients with ARDS. Total Funding: $40,000 (1 year); Role: Co-Investigator.

Translational Research Initiative Grant Shenoy (PI) 07/01/2017-06/30/2019 ALK-5 and Stromelysin1: New diagnostic and therapeutic targets for deadly lung diseases. Total Funding: $50,000 (2 years)

Wilson Pharmacy Foundation Seed Grant Newsome (PI). 07/01/2019-06/30/2020. Mechanistic characterization of cisatracurium on stromelysin-1 expression and activity by the endothelial cells and inflammatory cells in ARDS. Total Funding: $5,000 (1 year); Role: Co-Investigator.

Wilson Pharmacy Foundation Seed Grant Shenoy (PI) 07/01/2018-06/30/2019 Crumbs-3 in endothelial-barrier function and lung injury. Total Funding: $10,000 (1 year)

Earl and Carol Wright Program for Cancer Chastain (PI) 01/01/2018-12/31/2018 Evaluating the role of aquaporin-4 channels in Cryptococcus neoformans CNS infections. Total Funding: $6,000 (1 year); Role: Co-Investigator.

Wilson Pharmacy Foundation Seed Grant Shenoy (PI) 07/01/2016-06/30/2018 miR-669h-3p regulation in metastatic prostate cancer. Total Funding: $7,500 (2 years)

UGA-COP Foundation Shenoy (PI) 01/01/2018-12/31/2018 Claudin-17 in acute respiratory distress syndrome (ARDS). Total Funding: $10,000 (1 year)

Morgan Fund in Pharmacy Newsome (PI) 01/01/2018-12/31/2018 Clinical evaluation of MMP-3 activity in patients with ARDS. Total Funding: $5,000 (1 year); Role: Co-Investigator.

UGA-GRU Inter-Institutional Grant Shenoy/Browning (PI) 07/01/2015-06/30/2016 Akt-FoxO-Protein Kinase G pathway in colorectal cancer. (Multi-PI Award). Total Funding: $40,000 (1 year)

Wilson Pharmacy Foundation Seed Grant Shenoy (PI) 07/01/2015-06/30/2016 Mechanisms regulating ARDS. Total Funding: $9,500 (1 year)

Provost's Summer Research Award (UGA) Shenoy (PI) 07/01/2014-06/30/2015 IPA-3 for Prostate Cancer. Total Funding: $5,000 (1 year)

Translational Research Initiative Grant (CAP) Shenoy (PI) 07/01/2013-06/30/2014 Examining TGFβ and Integrin $\alpha_V\beta_3$ Expression in Early and Aggressive Human Prostate and Bladder Cancer Tissues as Biomarkers for Early Detection and as Targets for Therapy. Total Funding: $25,000 (1 year)

UGA-COP Foundation Shenoy (PI) 07/01/2013-06/30/2014 Differential role of TGFβ in tumor growth and bone remodeling in prostate cancer. Total Funding: $10,000 (1 year)

Provost's Summer Research Award (UGA) Shenoy (PI) 07/01/2013-06/30/2014 Targeting Pak1 for Prostate Cancer. Total Funding: $5,000 (1 year).

Translational Research Initiative Grant DeRemer (PI) 07/01/2012-06/30/2013 Effects of cabazitaxel and dasatinib on prostate cancer micrometastasis. Total Funding: $15,000 (1 year); Role: Co-Investigator.

UGA-COP Dean's Special Endowment Funds Shenoy (PI) 07/01/2012-06/30/2013 Mechanisms Regulating Myofibroblast Differentiation and Pulmonary Fibrosis. Total Funding: $8,000 (1 year)

Wilson Pharmacy Foundation Seed Grant Shenoy (PI) 07/01/2011-06/30/2012 TGFβ signaling in Bladder cancer. Total Funding: $8,500 (1 year)

Translational Research Initiative Grant Shenoy (PI) 07/01/2011-06/30/2012 Is GSK-3 the gridlock in Akt-targeted prostate cancer therapy? Total Funding: $25,000 (1 year)

Wilson Pharmacy Foundation Seed Grant Shenoy (PI) 07/01/2010-06/30/2011 Statins for prostate cancer. Total Funding: $7,000 (1 year)

Wilson Pharmacy Foundation Seed Grant Shenoy (PI) 07/01/2009-06/30/2010 Akt-mediated reciprocity between prostate cancer and microenvironment. Total Funding: $10,000 (1 year)

MEDIA COVERAGE OF OUR RESEARCH

2011: Statins for prostate cancer highlighted by MedLinx and UK-based Lead Discovery

2013: *Atlanta Business Chronicle* UGA is working on a new prostate cancer drug: Access at Atlanta Business Chronicle 2013: UGA Today, UGA Columns and Technology

2014: Athens Herald: For access, click here, Athens Banner-Herald

2015: UGA Today and UGA Research on tissue fibrosis and Acute Lung Injury UGA Research

2015: Science Daily, Eurekalert, Technology, Times of India, Britain News, lung disease news, pulmonary hypertension news, Medlinx, etc. For access, click MedLinx, Science Daily, Lung Disease News, NewsMax, and Global News Connect.

2015: Newscast to 8 news agencies/blogs can be accessed here: Altmetric Data

2016: The nanotechnology drug (SSL-IPA3) inhibiting prostate cancer was highlighted in >25 News media sites and discussed in several blogs.

2016: Newscast to >25 news agencies/blogs can be accessed here: Altmetric Data

2019: Researchers find new drug targets for deadly lung disease - UGA Today, Technology and Drug Discovery: For access, click here: UGA Today, Technology and Drug Discovery

2020: Focus on Faculty – UGA Today

2022: Keeping Cancer in Place: Overcoming metastasis, Nature, November 2022 Issue.

2023: Drs. Shenoy, Narayanan Identify Potential 'Goldilocks' Treatment for Retinal Disorders

2024: Student in research focus

2026: Researchers Discover Diabetes' Hidden Impact on Lung Health UGA Script Spring 2026

RESEARCH PUBLICATIONS *(LISTED 'SOMANATH PR' IN PUBMED)*

A complete list of publications (NCBI Bibliography): ***Research Publications by "Somanath PR"***

1. Henry Ojo H, Matani B, Yuan Y, Liu F, Etrouth S, Zhu Y, Zahedi KA, Soleimani M, Somanath PR, Zhang D, Narayanan SP. Spermine Oxidase Deletion Attenuates Retinal Neuroinflammation by Modulating Interferon Responses and Myeloid Cell Activation in Experimental Autoimmune Encephalomyelitis. *J NEUROBIOL*. 2026 (Submitted).
2. Zhu Y, Etrouth S, Somanath PR, Narayanan SP, Liu Y, Wang X, Zhang D. Targeted Delivery of CD59 via Engineered Extracellular Vesicles Preserves Endothelial Integrity in Acute Lung Injury. *ADVANCED SCIENCE*. 2026 (Resubmitted).
3. Elshafie S, Clemmons A, Zuber M, Somanath PR, Villa-Zapata L, Patient Utilization and Perceptions of Telehealth in Oncology Care: Implications for Managed Care. *J MANAG CARE SPEC PHARM*. 2026 (Accepted; In Press).
4. Zuber M, Chia Jie T, Caballero J, Somanath PR, Godara A, Elshafie S, Villa-Zapata L. Target Trial Emulation to Compare Effectiveness and Safety of xicabtagene Ciloleucel Versus Lisocabtagene Maraleucel. *TRANSPLANT CELL THER*. 2026 Sep 26: S2666-6367(26)00776-1.
5. Dutta S, Dutta S, Han Y, Zhu Y, Almuntashiri S, Somanath PR, Narayanan SP, Islam S, Wang X, Zhang D. Extracellular Vesicles as Molecular Regulators of Viral Infection: Implications for COVID-19 and Future Viral Pandemics. *CURR ISSUES IN MOL BIOL*. 2026, Sep 10;48(9):924.
6. Henry Ojo H, Liu F, Alanazi AH, Zahedi KA, Soleimani M, Zhang D, Somanath PR, Narayanan SP. Proteomic Profiling of Optic Nerves From SMOX-Deficient Mice Identifies Regulators of Neuroinflammation and Axonal Damage in Optic Neuritis. *INVEST OPHTHALMOL VIS SCI*. 2026 Jul 1;67(8):4.
7. Chase AM, Almuntashiri S, Zhang D, Jones TW, Chen X, Somanath PR, Henry K, Sikora A. Predicting mortality in ARDS through machine learning and disease targeted biomarkers: a cohort analysis from the aerosolized β2-agonist for treatment of acute lung injury (ALTA) trial. *PHYSIOL*. *REP*. 2026 Mar;14(6):e70807.
8. Selim M, Narayanan SP, Somanath PR. Claudins in Retinal Disease: Beyond Barrier Integrity to Signaling and Therapy. *CELLS*. 2026, 15 (5), 417.
9. Alanazi AH, Selim M, Zhu Y, Zhang D, Narayanan SP, Somanath PR. Advanced Glycation End-Products Induce Cytokine Dysregulation and Weaken Lung Epithelial and Endothelial Barrier Integrity. *TISSUE BARRIERS*. 2026;14(1):2521136.
10. Zhu Y, Gamare S, Polverino F, Owen CA, Somanath PR, Wang X, Zhang D. CYP1B1 Mediates Cigarette Smoke-Induced Lipid Accumulation in Alveolar Type 2 Cells. *FASEB J*. 2025;39(18): e71062.
11. Selim M, Matani BR, Henry-Ojo HO, Narayanan SP, Somanath PR. Claudin 5 Across the Vascular Landscape: From Blood–Tissue Barrier Regulation to Disease Mechanisms. *CELLS*. 2025; 14(17):1346.
12. Alanazi AH, Selim M, Liu F, Zhang D, Narayanan SP, Somanath PR. Pre-existing Diabetes Aggravates Inflammation and Primes for Lung Injury in Sepsis. *FASEB J*. 2025;39(14): e70804.
13. Alanazi AH, Shenoy N, Somanath PR. Association of ATP-binding cassette transporter genomic alterations with patient survival in breast and prostate cancer. *PHYSIOL*. *REP*. 2025, Volume13 (13), e70460.
14. Adil MS, Parvathagiri V, Alanazi AH, Khulood D, Narayanan SP, Somanath PR. Claudin-17 Deficiency Drives Vascular Permeability and Inflammation Causing Lung Injury. *INT*. *J MOL*. *SCI*. 2025, Volume 26, Issue 8, 3612.
15. Dutta S, Dutta S, Somanath PR, Narayanan SP, Wang X, Zhang D. Circulating Nucleosomes and Histones in the Development of Lung Injury and Sepsis. *CURR ISSUES IN MOL BIOL*. 2025;

47(2):133.
16. Vo, J. M., La, L. M., Anderson, A. V., Alanazi, A. H., & Somanath, P. R. (2025). Genome analysis uncovers an inverse correlation between alterations in P21-activated kinases and patient survival across multiple cancer types. *PHYSIOL REP.*, 13, e70192.
17. Dutta S, Zhu Y, Almuntashiri S, Peh HY, Zuñiga J, Zhang D, Somanath PR, Ramírez G, Irineo-Moreno V, Jiménez-Juárez F, López-Salinas K, Regino N, Campero P, Crocker SJ, Owen CA, Wang X. PDGFRα-positive cell-derived TIMP-1 modulates adaptive immune responses to influenza A viral infection. *AM J PHYSIOL LUNG CELL MOL PHYSIOL*. 2025 Jan 1;328(1):L60-L74.
18. Zhu Y, Dutta S, Han Y, Choi D, Polverino F, Owen CA, Somanath PR, Wang X, Zhang D. Oxidative stress promotes lipid-laden macrophage formation via CYP1B1. *REDOX BIOL*. 2025 Feb;79:103481.
19. Alhumaid A, Liu F, Shan S, Jafari E, Nourin N, Somanath PR, Narayanan SP. Spermine oxidase inhibitor, MDL 72527, reduced neovascularization, vascular permeability, and acrolein-conjugated proteins in a mouse model of ischemic retinopathy. *TISSUE BARRIERS*. 2025 Jan 2;13(1):2347070.
20. Alfarhan M, Liu F, Matani B, Somanath PR, Narayanan SP. SMOX inhibition preserved visual acuity, contrast sensitivity, and retinal function and reduced neuro-glial injury in mice during prolonged diabetes. *CELLS,* 2024, 13 (24): 2049.
21. Alshammari A, Pillai B, Kamat P, Jones TW, Bosomtwi A, Khan MB, Hess DC, Li W, Somanath PR, Ergul A, Fagan SC. Angiotensin II Type 2 Receptor Agonism Alleviates Progressive Post-stroke Cognitive Impairment in Aged Spontaneously Hypertensive Rats. *TRANSL STROKE RES*. 2025 Jun;16(3):584-599.
22. Alanazi AH, Selim M, Zhang D, Narayanan SP, Somanath PR. The impact of diabetes mellitus on blood-tissue barrier regulation and vascular complications: Is the lung different from other organs? *TISSUE BARRIERS*. 2025;13(2):2386183.
23. Dutta S, Zhu Y, Almuntashiri S, Somanath PR, Wang X, Zhang D. The Impact of Circulating Nucleosomes on Inflammation in Acute Lung Injury. *FASEB J*. 2024 Dec;38(23):e70214.
24. Shan S, Alanazi AH, Han Y, Zhang D, Liu Y, Narayanan SP, Somanath PR. Pro-Inflammatory Characteristics of Extracellular Vesicles in the Vitreous of Type 2 Diabetic Patients. *BIOMEDICINES*. 2024; 12(9):2053.
25. Bokhtia R, Pham A, Gupta K, Warang S, Venugopal N, Sakhuja R, Somanath PR, Liu F, Jeon Yi, Guimaraes G, Bartlett M, Lokeshwar BL, Thangaraju M, Panda SS. Ursolic Acid Conjugates: A New Frontier in Anticancer Drug Development. *CHEMBIOCHEM*, 2024, e202400376.
26. Alanazi AH, Shan S, Narayanan SP, Somanath PR. Comparative Proteomic Analysis of Type 2 Diabetic versus Non-Diabetic Vitreous Fluids. *LIFE (BASEL)*. 2024 Jul 16;14(7):883.
27. Zhu Y, Choi D, Somanath PR, Zhang D. Lipid-Laden Macrophages in Pulmonary Diseases. *CELLS*. 2024 May 22;13(11):889.
28. Forehand C, Cook AM, Hamblin S, Somanath PR, Stollings JL. Developing Pharmacist Clinician-Scientists Through Non-Traditional Training Pathways. *AM J HEALTH SYSTEM PHARM*. 2024, Sep 9;81(18):833-842.
29. Alanazi AH, Almuntashiri S, Sikora A, Zhang D, Somanath PR. Secondary Analysis of Fluids and Catheters Treatment Trial (FACTT) data reveals poor clinical outcomes in acute respiratory distress syndrome patients with diabetes. *RESP MED*. (2024); Jan 28; 107540.
30. Rudraraju M, Shans S, Liu F, Tyler J, Caldwell RB, Somanath, PR*, Narayanan SP* (*Co-senior authors), Pharmacological Modulation of β-Catenin Preserves Endothelial Barrier Integrity and Mitigates Retinal Vascular Permeability and Inflammation. *J CLIN MED*. 2023, Nov 17;

12(22):7145.

31. Alanazi AH, Chastain DB, Rudraraju M, Parvathagiri V, Shan S, Lin X, Henao-Martínez AF, Franco- Paredes C, Narayanan SP, Somanath PR. A multi-arm, parallel, preclinical study investigating the potential benefits of acetazolamide, candesartan, and triciribine in combination with fluconazole for the treatment of cryptococcal meningoencephalitis. *EUR J PHARMACOL*. 2023 Nov 4:176177.
32. Alshammari A, Han Y, Jones TW, Pillai B, Zhang D, Ergul A, Somanath PR*(*Corresponding author), Fagan SC. Stimulation of Angiotensin II Type 2 Receptor modulates pro-inflammatory response in microglia and macrophages: Therapeutic Implications for the Treatment of Post-stroke Cognitive Impairment, *LIFE (MDPI)*, 2023 May 29;13(6):1274.
33. Jones TW, Almuntashiri S, Chase A, Alhunaid A, Somanath PR, Newsome A, Zhang D. Plasma MMP-3 predicts mortality in acute respiratory distress syndrome. *RESP RES.*, 2023 Jun 22; 24(1):166.
34. Shan S, Liu F, Ford E, Caldwell RB, Narayanan SP, Somanath PR. Triciribine Attenuates Pathological Neovascularization and Vascular Permeability in a Mouse Model of Proliferative Retinopathy, *BIOMED. PHARMACOTHER*. 2023; 162: 114714.
35. Somanath PR, Chernoff J, Cummings BS, Prasad SM, Homan HD. Targeting P21-Activated Kinase- 1 for Metastatic Prostate Cancer. *CANCERS*. 2023; 15(8):2236.
36. McGee, RE, Blumberg, HM, Ziegler, TR, Ofotokun, I, Bhatti, PT, Paulsen, DF, Quarshie, A, Somanath, PR, Comeau, DL. Mentor Training for Junior Faculty: A Brief Evaluation Report from the Georgia CTSA. *J INVEST MED*. 2023 Aug, 71(6): 577-585.
37. Almuntashiri S, Zhang D, Somanath PR, Newsome AS. MMP3 in Severe COVID-19: A Biomarker or Therapeutic Target? *INFECT DISORD DRUG TARGETS,* 2023; 23(1): e190622206159.
38. Han, Y, Zhu, Y, Almuntashiri, S, Wang, X, Somanath, PR, Owen, CA, Zhang, D. Extracellular vesicle encapsulated CC16 as novel nanotherapeutics for acute lung injury. *MOL THER*. 2023 Jan 11:S1525-0016(23)00009-6.
39. Liu F, Alfarhan M, Baler L, Shenoy N, Liao Y, Henry-Ojo HO, Somanath PR, and Narayanan SP. Treatment with MDL 72527 Ameliorated Retinal Ganglion Cell Loss, Optic Nerve Inflammation, and Improved Visual Acuity in an Experimental Model of Multiple Sclerosis, *CELLS*, 2022, Dec 16;11(24):4100.
40. Han Y, Zhu Y, Almuntashiri, S, Dutta S, Wang, X Somanath PR, Zhang, D. Nebulization of Extracellular Vesicles: A Promising Drug Delivery Approach for Lung Diseases. *J CONTROL RELEASE*. 2022; 352, 556-569.
41. Alanazi, A, Adil, MS, Lin, X, Chastain, D, Henao-Martinez, AF, Franco Paredes, C, Somanath, P.R. Elevated Intracranial Pressure in Cryptococcal Meningoencephalitis: Examining Old, New, and Promising Drug Therapies. *PATHOGENS*. 2022, 11(7):783.
42. Ahmad Z, Somanath PR. AKT Isoforms in the Immune Response in Cancer. Curr Top Microbiol Immunol. 2022;436:349-366.
43. Adil MS, Parvathagiri V, Verma A, Liu F, Rudraraju M, Narayanan SP, Somanath PR. Claudin-17 Deficiency in Mice Results in Kidney Injury Due to Electrolyte Imbalance and Oxidative Stress. *CELLS*. 2022; 11(11):1782.
44. Alwhaibi A, Parvathagiri V, Verma A, Artham S, Adil MS, Somanath PR, *Let-7a-5p* and *miR-199a- 5p* expression regulated by Akt1 modulate prostate cancer epithelial-to-mesenchymal transition. *CANCERS*. 2022, 14, 1625.
45. Adil MS, Parvathagiri V, Verma A, Liu F, Rudraraju M, Narayanan S, Somanath PR. *Cldn17*$^{-/-}$ mice display leaky vasculature and organ injury accompanied by oxidative stress and

inflammation. *RESEARCH SQUARE*. 2022 January. [preprint]. DOI: 10.21203/rs.3.rs-1270153/v1

46. Alfarhan M, Liu F, Shan S, Pichavaram P, Somanath PR, Narayanan SP. Pharmacological Inhibition of Spermine Oxidase Suppresses Excitotoxicity-Induced Neuroinflammation in Mouse Retina. *INT J MOL SCI.,* 2022 Feb 15;23(4):2133.
47. Rudraraju M, Narayanan SP, Somanath, P.R. Distinct mechanisms of human retinal endothelial barrier modulation by mediators of diabetes and uveitis. *LIFE (MDPI).* 2022, 12, 33.
48. Adil, MS, Khulood, D, Narayanan SP, Somanath, PR. Bioinformatics analyses reveal modulation of the cell-barrier junction and cytoskeletal genes in lung epithelial cell lines on SARS-CoV-2 infection. *TISSUE BARRIERS*. 2021. Nov 5: 2000300.
49. Candadai, AA, Liu, F, Verma, A, Alfarhan, M, Adil, MS, Fagan, SC, Somanath, PR, Narayanan, SP. Neuroprotective Effects of Fingolimod in Experimental Optic Neuritis. *CELLS,* 2021, 10(11), 2938
50. Kaur, SP, Verma A, Lee HK, Barnett LM, Somanath, PR. Cummings BS. Inhibition of glypican-1 expression induces an activated fibroblast phenotype in a human bone marrow-derived stromal cell line. *SCI REP*. 2021. 11(1):9262.
51. Adil, MS, Verma A, Rudraraju M, Narayanan SP, Somanath, PR. Akt-independent effects of triciribine on ACE2 expression in human lung epithelial cells: Potential benefits in restricting SARS-CoV-2 infection. *J CELL PHYSIOL*. 2021; 236:6597–6606
52. Kadry RW, Adil MS, Newsome AS, and Somanath P.R. Cisatracurium attenuates LPS-induced modulation of MMP3 and junctional protein expression in human microvascular endothelial cells. *BIOSCIENCE TRENDS,* 2021; 15(1):50-54.
53. Adil MS, Khulood D, and Somanath P.R. Targeting Akt-associated microRNAs for Cancer Therapeutics. *BIOCHEM PHARMACOL*. 2021. 189: 114384.
54. Alharthi A, Verma A, Sabbineni H, Adil, MS, Somanath, P.R. Distinct effects of stromelysin1 inhibition on EndMT and myofibroblast differentiation. *J CELL PHYSIOL*. 2021. 236(7): 5147-5161.
55. Verma A, Artham S, Somanath PR. ALK-1 to ALK-5 ratio dictated by the Akt1-β-catenin pathway regulates TGFβ-induced EndMT. *GENE,* 2021, 768: 145293.
56. Adil MS, Narayanan SP, Somanath PR. Cell-cell junctions: structure and regulation in physiology and pathology. *TISSUE BARRIERS*. 2021 Jan 2;9(1):1848212.
57. Adil MS and Somanath PR. Endothelial Permeability Assays *in vitro*. *SPRINGER PROTOCOLS, METHODS IN MOL. BIOLOGY*. 2021; 2367:177-191.
58. Adil MS and Somanath PR. Vascular Permeability Assays *in vivo*. *SPRINGER PROTOCOLS, METHODS IN MOL. BIOLOGY*. 2021; 2367:165-175.
59. Missaoui WN, Quach ND, Somanath PR, and Cummings BS. Liposomes targeting P21-activated kinase-1 (PAK-1) and selective for Secreted phospholipase A2 (sPLA2) decrease cell viability and induce apoptosis in metastatic triple-negative breast cancer cells. *INT J MOL SCI.,* 2020, 21 (24), 9396. 2020.
60. Kadry, R., Newsome, AS, and Somanath, P.R., Pharmacological inhibition of MMP3 as a potential therapeutic option for COVID-19 associated acute respiratory distress syndrome, *INFECTIOUS DISORDERS - DRUG TARGETS,* 2021; 21(6): e170721187996.
61. Almuntashiri S, Zhu N, Han Y, Wang X, Somanath PR, and Zhang D. Club Cell Secreted Protein CC16: Potential Applications in Prognosisand Therapy for Pulmonary Diseases. *J CLIN MED.,* 2020, 9(12), 4039.
62. Zhu N, Almuntashiri S, Han Y, Wang X, Somanath PR, and Zhang D. The roles of CCN1/CYR61

in pulmonary diseases. *INT J MOL SCI.,* 2020, 21 (21), 7810.

63. Adil MS, Narayanan SP, and Somanath P.R. Is amiloride a promising cardiovascular medication to persist in the COVID-19 crisis? *DRUG DISCOV THER.* 2020 Nov 4;14(5):256-258.
64. Verma A, Missaoui WN, Artham S, Cummings BS, Somanath PR. Sterically stabilized liposomes targeting P21-activated kinase-1 and secreted phospholipase A2 suppress prostate cancer growth and metastasis. *ONCOLOGY LETTERS* 2020, Nov;20(5):179.
65. Rudraraju M, Narayanan SP, Somanath, P.R. Regulation of blood-retinal barrier cell-junctions in diabetic retinopathy. *PHARMACOL RES.,* 2020 2020 Nov;161:105115.
66. Gah A, Adil, MS, Sabbineni H, Verma A, Somanath, P.R. Regulation of TGFβ type-I receptor (ALK1 and ALK5) expression in TGFβ1-induced myofibroblast differentiation. *CAN J PHYSIOL PHARMACOL*. 2020 Jul 23;841-848.
67. Somanath PR. Is targeting Akt a viable option to treat advanced-stage COVID-19 patients? *AM J PHYSIOL LUNG CELL PHYSIOL*. 2020 Jul 1;319(1): L45-L47.
68. Artham S, Verma A, Newsome A, Somanath PR. Acute lung injury patients exhibit increased stromelysin-1 activity in the blood samples. *CYTOKINE*. 2020 Apr 6;131: 155086.
69. Verma A, Artham S, Alwhaibi A, Adil MS, Cummings BS, Somanath PR. PAK1 inhibitor IPA-3 mitigates metastatic prostate cancer-induced bone remodeling. *BIOCHEM PHARMACOL*. 2020. Mar 30;177:113943.
70. Artham S, Verma A, Alwhaibi A, Adil MS, Manicassamy S, Munn DH, Somanath PR. Delayed Akt suppression in the lipopolysaccharide-induced experimental lung injury promotes resolution that is associated with enhanced effector regulatory T-cells. *AM J PHYSIOL LUNG CELL PHYSIOL*. 2020 Apr 1;318(4):L750-L761.
71. Liu F, Saul AB, Pichavaram P, Xu Z, Rudraraju M, Somanath PR, Smith SB, Caldwell RB, Narayanan SP. Pharmacological inhibition of spermine oxidase reduces neurodegeneration and improves retinal function in diabetic mice. *J CLIN MED*. 2020 Jan; 9 (2): pii: E340.
72. Alwhaibi A, Verma A, Artham S, Adil MS, Somanath PR. Nodal pathway activation due to Akt1 suppression is a molecular switch for prostate cancer cell epithelial-to-mesenchymal transition and metastasis. *BIOCHEM PHARMACOL*. 2019 Oct; 168:1-13.
73. Missaoui WN, Quach ND, Jenkins A, Dabke I, Somanath PR, Cummings BS. Silencing Pak-1 CLIN Med expression limits growth, migration, and invasion and sensitizes prostate and breast cancer cells to the Pak-1 inhibitor (IPA-3) *in vitro*. *PHARMACOL RES PERSPECT*. 2019 Sep 6;7(5): e00518.
74. Alwhaibi A, Verma A, Adil MS, Somanath PR. The unconventional role of Akt1 in advanced cancers and diabetes-promoted carcinogenesis. *PHARMACOL RES*. Volume 145, July 2019, 104270.
75. Alwhaibi A, Kolhe R, Gao F, Kobran EK, Somanath PR. Genome atlas analysis-based profiling of Akt pathway genes in the early and advanced human prostate cancer. *ONCOSCIENCE*. 2019 Jul 2;6(5- 6): 317-336.
76. Sabbineni H, Verma A, Artham S, Anderson D, Amaka A, Liu FL, Narayanan SP, Somanath PR. Pharmacological inhibition of β-catenin prevents EndMT in vitro and vascular remodeling in vivo, resulting from endothelial Akt1 suppression. *BIOCHEM PHARMACOL*. 2019 June; 164: 202-215.
77. Artham S, Gao F, Verma A, Alwhaibi A, Sabbineni H, Hafez S, Ergul A, Somanath PR. Endothelial stromelysin-1 regulation by the forkhead box-O transcription factors is crucial in the exudative phase of acute lung injury. *PHARMACOL RES*. 2019 Mar; 141: 249-263.
78. Gao, F., Alwhaibi, A., Artham S, Verma A, Somanath PR. 2018. Endothelial Akt1 loss promotes

prostate cancer metastasis through β-catenin. *BR. J CANCER*. 2018 May;118(11):1464-1475.
79. Alwhaibi A, Gao F, Artham S, Hsia BM, Mondal A, Kolhe R, Somanath PR. Modulation in the microRNA repertoire is responsible for the stage-specific effects of Akt suppression on murine neuroendocrine prostate cancer. *HELIYON*. 2018 Sep 17;4(9): e00796.
80. Sabbineni, H., Verma, A, Somanath PR. Isoform-Specific Effects of Transforming Growth Factor-β on Endothelial to Mesenchymal Transition. *J CELL PHYSIOL*. 2018 Nov;233(11):8418-8428.
81. Andrick, B., Alwhaibi, A., DeRemer, D.L., Qureshi, S., Khan, R., Somanath, P.R., and Pantin, J. Lack of adequate pneumococcal vaccination response in chronic lymphocytic leukemia patients receiving Ibrutinib. *BR. J. HAEMATOL*. 2018 Sep;182(5):712-714.
82. Gao, F., Alwhaibi, A., Sabbineni, H., Verma, A., Eldhahshan, W. and Somanath PR. (2017). Suppression of the Akt1-βcatenin pathway in advanced prostate cancer promotes TGFβ1-mediated EMT and metastasis. *CANCER LETTERS*. 402: 177-189.
83. Gao, F., Sabbineni, H., Artham, S., Somanath, PR. 2017. Modulation of long-term endothelial-barrier integrity is conditional on the crosstalk between Akt1 and Src signaling. *JOURNAL OF CELLULAR PHYSIOLOGY*. 232: 2599-2609.
84. Wang R, Bridges A, Islam B, Sharman S, Hu M, Somanath PR, Venable L, Singh N, Kim S, Sridhar S, Hofmann F and Browning DD. 2017, Cyclic-GMP signaling increases antioxidant gene expression by activating FoxO3a in the colon epithelium. *AM J PATHOL*. *187: 377-389*.
85. Gao F, Artham S, Sabbineni H, Al-Azayzih A, Peng XD, Hay N, Adams RH, Byzova TV, and Somanath P.R. 2016, Endothelial-specific Akt1 loss blunts Angiopoietin-1 and VEGF-induced endothelial barrier protection through tight-junction turnover. *CELL MOL LIFE SCI*. Oct;73(20):3917-33.
86. Patel A, Sabbineni H, Clarke A, Somanath PR. Novel roles of Src in cancer cell epithelial-to-mesenchymal transition, vascular permeability, and microinvasion. *LIFE SCI*. 2016; 157:52-61.
87. Al-Azayzih A, Missaoui WN, Cummings BS, and Somanath P.R. 2016, Liposomal delivery of the PAK-1 inhibitor IPA-3 limits prostate tumor growth *in vivo*. *NANOMEDICINE*. 12: 1231-1239.
88. Abdalla M, Thompson L, Gurley E, Burke S, Ujjin J, Newsome R, and Somanath PR. Dasatinib inhibits TGFβ-induced myofibroblast differentiation through Src-mediated serum response factor expression. *EUR J PHARM*. 2015 Nov 6; 769: 134-142.
89. Abdalla M, Sabbineni H, Prakash R, Ergul A, Fagan SC, Somanath PR. The Akt inhibitor triciribine ameliorates chronic hypoxia-induced vascular pruning and TGFβ-induced pulmonary fibrosis. *BR J PHARMACOL*. 2015 Aug; 172(16):4173-88.
90. Gao F, Al-Azayzih A, Somanath PR. Discrete functions of GSK3α and GSK3β isoforms in prostate tumor growth and micrometastasis. *ONCOTARGET*. 2015 Mar20;6(8):5947-62.
91. Al-Azayzih A, Gao F, Somanath PR. P21-activated kinase-1 mediates transforming growth factor β1-induced prostate cancer cell epithelial to mesenchymal transition. *BIOCHIM BIOPHYS ACTA, (MOL CELL RES.)*. 2015 May; 1853(5):1229-39.
92. Sabbineni H, Alwhaibi A, Goc A, Gao F, Pruitt A, Somanath PR. Genetic deletion and pharmacological inhibition of the Akt1 isoform attenuate bladder cancer cell proliferation, motility, and invasion. *EUR J PHARMACOL*. 2015 Oct 5; 764:208-14.
93. Fairaq A, Goc A, Artham S, Sabbineni H, Somanath PR. TNFα induces an inflammatory stress response in microvascular endothelial cells via Akt- and P38 MAP kinase-mediated thrombospondin-1 expression. *MOL CELL BIOCHEM*. 2015 Aug; 406(1-2):227-36.
94. Goc A, Sabbineni H, Abdalla M, Somanath PR. p70 S6-kinase mediates the cooperation between Akt1 and Mek1 pathways in fibroblast-mediated extracellular matrix remodeling.

BIOCHIM BIOPHYS ACTA, (MOL CELL RES.). 2015 Jul; 1853(7):1626-35.

95. Alhusban A, Al-Azayzih A, Goc A, Fagan S.C., Somanath P.R., 2014. Clinically relevant doses of candesartan inhibit prostate cancer growth *in vivo*. *J PHARM EXP THER,* Sep; 350(3):635-45.
96. Ma, L, Kerr, B, Naga Prasad SV, Byzova TV, Somanath, P.R. 2014. Differential effects of Akt1 signaling on short- vs. long-term consequences of myocardial infarction and reperfusion injury. *LABORATORY INVESTIGATION,* Oct; 94(10):1083-91.
97. Goc A, Al-Husein B, Katsanevas, K, Steinbach A, Lou U, Sabbineni H, DeRemer, D, Somanath P.R. (2014), Src-mediated tyrosine phosphorylation of GSK-3β is essential for prostate cancer micrometastasis *ONCOTARGET*. 15;5(3):775-87.
98. Soliman S, El-Remessy A, Ishrat T, Pillai A, Somanath PR, Ergul A, Fagan SC, (2014) Candesartan Induces A Prolonged Proangiogenic Effect and Augments Endothelium-Mediated Neuroprotection: Role of VEGF-A And B, *J PHARM EXP THER*. Jun; 349(3):444-57.
99. Abdalla M, Goc A, Segar L, Somanath PR, 2013. Akt1 Mediates α-Smooth Muscle Actin Expression and Myofibroblast Differentiation via Myocardin and Serum Response Factor, *J BIOL*. *CHEM*. 288 (46), 33483-33493.
100. Al-Husein B, Goc A, Somanath PR, 2013. Suppression of interactions between prostate tumor cell-surface integrin and endothelial ICAM-1 by simvastatin inhibits micrometastasis. *J CELL PHYSIOL*. 228(11):2139-48.
101. Kerr BA, Ma L, West XZ, Ding L, Malinin NL, Weber ME, Tischenko M, Goc, A, Somanath P.R., Penn MS, Podrez EA and Byzova T.V. 2013. Interference with Akt signaling protects against myocardial infarction and death by limiting the consequences of oxidative stress. *SCIENCE SIGNAL*. 6: (287), ra67.
102. Goc A, Al-Husein B, Abdalla M, Al-Azayzih A, Somanath PR, 2013. P21-activated kinase-1 (Pak1) promotes prostate tumor growth and microinvasion via inhibition of TGFβ expression and enhanced MMP9 secretion. *J BIOL CHEM*. 288 (5), 3025-3035.
103. Al-Husein B, Abdalla M, Trepte M, DeRemer D, Somanath, P.R. 2012. Anti-angiogenic therapy for cancer: An update, *PHARMACOTHERAPY*. Dec;32(12):1095-111
104. Al-Azayzih A, Gao F, Goc A, Somanath P.R. 2012. TGFβ1 induces apoptosis in invasive prostate cancer and bladder cancer cells via Akt-independent, p38 MAPK, and JNK/SAPK-mediated activation of caspases, *BIOCHEM*. *BIOPHYS*. *RES*. *COMMUN*. 427: 165–170
105. Goc A, Kochuparambil ST, Al-Husein B, Al-Azayzih A, Mohammed S, Somanath, P.R. 2012. Simultaneous modulation of the intrinsic and extrinsic pathways by simvastatin in mediating prostate cancer cell apoptosis, *BMC CANCER*. Sep 14;12(1):409
106. Goc A, Abdalla M, Al-Azayzih A, Somanath, P.R. 2012. Rac1 activation driven by 14-3-3 dimerization promotes prostate cancer cell-matrix interactions, motility, and transendothelial migration, *PLOS ONE*. 7(7): e40594
107. Prakash R, Somanath, P.R, El Remessy A., Kelly, C.A, Stern J., Dore D. P, Johnson M, Fagan SC, Ergul A. 2012. Enhanced Cerebral but Not Peripheral Angiogenesis in the Goto-Kakizaki Model of Type 2 Diabetes Involves VEGF and Peroxynitrite Signaling. *DIABETES*. Jun;61(6):1533-42.
108. Goc A, Liu, J, Byzova, T.V., Somanath, P.R. 2012. Akt1 mediates prostate cancer cell microinvasion and chemotaxis to metastatic stimuli via integrin β3 affinity modulation, *BR*. *J*. *CANCER*. 107(4):713-23.
109. Guan W, Somanath PR, Kozak A, Goc A, El-Remessy AB, Ergul A, Alhusban A, Soliman S, Fagan SC 2011. Vascular protection by angiotensin receptor antagonism involves differential VEGF expression in both hemispheres after experimental stroke. *PLOS ONE*., 6(9):e24551.
110. Goc A, Chaudhary, M, Byzova, T.V., Somanath, P.R. 2011. TGF-beta and bleomycin-induced

extracellular matrix secretion is mediated via Akt and mammalian target of rapamycin (mTOR). *J CELL PHYSIOL*. 226(11):3004-13

111. Kochuparambil, S.T, Al-Husein B, Goc A, Soliman, S, Somanath, P.R. 2011. Anti-cancer Efficacy of simvastatin on prostate cancer cells and tumor xenografts is associated with the inhibition of Akt and reduced expression of PSA. *J PHARM. EXP. THER*. 336(2): 496-505
112. Goc A, Al-Hussein, B, Kochuparambil, S.T, Liu, J, Heston, WD, Somanath, P.R. 2011. PI3 Kinase integrates Akt and MAP Kinase signaling pathways in the regulation of prostate cancer. *INT. J ONCOL*. 38(1): 267-277
113. Willis LM, El-Remessy AB, Somanath PR., Deremer D, Fagan SC. Angiotensin Receptor Blockers and Angiogenesis: Clinical and Experimental Evidence. (2011) *CLIN SCI*. 120(8): 307–319
114. Somanath P.R.*, (*Corresponding author) Podrez, E.A., Chen, J., Ma, Y., Marchant, K., Antoch, M., Byzova, T.V. 2011. Deficiency in the core circadian protein *BMAL1* is associated with a prothrombotic and vascular phenotype. *J CELL PHYSIOL*. 226(1):132-40
115. Kichina, J., Goc, A., Al-Husein, B., Somanath, P.R.*, Kandel, E.S*. (*Co-corresponding authors) 2010. PAK-1 as a therapeutic target. *EXPERT OPIN THER TARGETS,* 14(7): 703-25
116. Elewa, H.F., El-Remessy A.B., Somanath, P.R., Fagan, S.C. 2010. Diverse effects of statins on angiogenesis open new therapeutic avenues. *PHARMACOTHERAPY,* 30(2):169-76.
117. Somanath, P.R., Malinin, N.L, Byzova, T.V. 2009. Cooperation between VEGFR-2 and integrin alphav beta3 in angiogenesis. *ANGIOGENESIS*, 12 (2): 177-185.
118. Somanath, P.R., Ciocea, A, Byzova, T.V. 2009. Integrin and growth factor receptor alliance in angiogenesis. *CELL BIOCHEM. BIOPHYS*. 53(2):53-64.
119. Somanath, P.R., Vijai, J., Byzova, T.V., Kandel, E.S. 2009. The role of PAK-1 in activation of MAP kinase cascade and oncogenic transformation by Akt. *ONCOGENE,* 28: 2365-2369.
120. Somanath, P.R., Byzova, T.V. 2009. 14-3-3beta- Rac1 - p21 activated kinase signaling regulates Akt1-mediated cytoskeletal organization, lamellipodia formation, and fibronectin matrix assembly. *J CELL PHYSIOL.,* 7(3):335-347
121. Somanath, P.R., Chen, J., Byzova, T.V. 2008. Akt1 is necessary for vascular maturation and angiogenesis during cutaneous wound healing. *ANGIOGENESIS,* Apr 16; 11 (3): 277-288.
122. Feng, W., McCabe, N.P., Mahabeleshwar, G.H., Somanath, P.R., Phillips, D.R., Byzova, T.V. 2008. The angiogenic response is dictated by beta3 integrin on bone marrow-derived cells. *J CELL BIOL*. 183(6): 1145-1157.
123. Mahabeleshwar, G.H., Chen, J., Feng, W., Somanath, P.R., Razorenova, O.V., Byzova, T.V. 2008. Integrin affinity modulation in angiogenesis. *CELL CYCLE*. Feb; 7(3):335-347
124. Somanath, P.R., Kandel, E.S., Hay, N, Byzova, T.V. 2007. Akt1 regulates integrin activation, matrix recognition, and fibronectin matrix assembly. *J. BIOL. CHEM.* Aug 3 282(31): 22964-22976.
125. Mahabeleshwar, G.H., Somanath PR, Byzova TV. 2006. Methods for isolation of endothelial and smooth muscle cells. In: Cardiovascular disease: Methods and protocols. *METHODS IN MOLECULAR MEDICINE*. (Humana Press) 129:197-208.
126. Somanath, P.R, Razorenova, O.V., Chen, J., Byzova, T.V. 2006. Akt1 in endothelial cells and angiogenesis. *CELL CYCLE* 5(5): 512-518.
127. Somanath, P.R. & Chen, J. (Co-first authors), Chen, WS, Hay, N, Byzova, T.V. 2005. Akt1 regulates pathological angiogenesis, vascular maturation, and permeability *in vivo*. *NATURE MEDICINE* Nov.11 (11): 1188-1196.

128. Huang, Z., Somanath, P.R., Chakrabarti, R., Eddy, EM, Vijayaraghavan, S. 2005. Changes in intracellular distribution and activity of protein phosphatase PP1gamma2 and its regulating proteins in spermatozoa lacking AKAP4. *BIOL. REPROD.* 72(2): 384-392.
129. Somanath, P.R., Jack, S, Vijayaraghavan, S. 2004. Changes in sperm GSK-3 serine phosphorylation and activity accompany motility initiation and stimulation. *J. ANDROL.* 25(4): 605-617.
130. Somanath, P.R. and Gandhi, K.K. 2004. Isolation and partial characterization of the plasma and outer acrosomal membranes of goat spermatozoa. *SMALL RUMIN. RES*. 53(1-2), 67-74.
131. Myers, K, Somanath, P.R., Berryman, M, Vijayaraghavan, S. 2004. Identification of chloride intracellular channel proteins in spermatozoa. *FEBS LETTERS*. 566(1-3), 136–140.
132. Somanath, P.R. and Gandhi, K.K. 2002. Expression of membrane-associated non-genomic progesterone receptor(s) in caprine spermatozoa. *ANIM. REPROD. SCI.* 74(3-4), 195-205.
133. Mishra, S, Somanath, P.R., Huang, Z., Vijayaraghavan, S. 2003. Binding and inactivation of the germ cell-specific protein phosphatase PP1gamma2 by Sds22 during epididymal sperm maturation. *BIOL. REPROD*. 69(5), 1572–1579
134. Somanath, P.R. and Gandhi, K.K. 2002. The role of Ca^{2+} and Ca^{2+} channels in progesterone-induced acrosome reaction in caprine spermatozoa. *ASIA-AUST. J. ANIM.SCI.* 15(7), 949-956.
135. Somanath, P.R. and Gandhi, K.K. 2001. The role of diacylglycerol (DAG) in progesterone-induced acrosome reaction in caprine spermatozoa. *ASIA-AUST. J. ANIM.SCI.* 15(8), 1092-1097.
136. Somanath, P.R., Suraj, K. and Gandhi, K.K. 2000. Caprine sperm acrosome reaction: Promotion by progesterone and homologous zona pellucida. *SMALL RUMIN. RES*. 37(3), 279-286.

BOOKS AND BOOK CHAPTERS

137. Sabbineni H and Somanath PR. 2015. Pulmonary hypertension: Pathogenesis and Management. New York: *NOVA SCIENCE PUBLISHERS*; Chapter 1, Mechanisms of Vascular Remodeling in Pulmonary Arterial Hypertension; p.1-38.
138. Sabbineni H and Somanath PR. 2015. Pulmonary Arterial Hypertension: Pathogenesis and Management. New York: *NOVA SCIENCE PUBLISHERS*; Chapter 2, Methods to Study Cellular Plasticity in Vitro and Pulmonary Vascular Remodeling in vivo in Pulmonary Arterial Hypertension; p.39-66.
139. Belal Al-Husein, Anna Goc, and Somanath PR (2013), Simvastatin and Prostate Cancer: Molecular mechanisms regulating Cellular Functions *In vitro* and Tumor Growth *In vivo*. *SCHOLARS' PRESS*, AV Akademikerverlag GmbH & Co. KG, Saarbrücken, Germany (Book of 6 chapters in 135 pages).
140. Goc A, Abdalla A and Somanath P.R, 2012. Methods to study fibronectin secretion and assembly *in vitro* and *in vivo* (Chapter 6), In Fibronectin: Current Concepts in Structure, Function and Pathology, *NOVA SCIENCE PUBLISHERS,* pp. 141-154
141. Abdalla M, Goc A and Somanath P.R, 2012. Molecular mechanisms regulating fibronectin matrix secretion and assembly (Chapter 7), In Fibronectin: Current Concepts in Structure, Function and Pathology, *NOVA SCIENCE PUBLISHERS*, pp. 155-190.
142. Artham S and Somanath PR. 2017. Stage-specific effects of hypoxia on interstitial lung disease, Chap. 12, *Hypoxia in Human Diseases*, *INTECH PUBL.*, pp 227-242. *ISBN: 978-93-51-2896-0*.

PROCEEDINGS PUBLISHED IN JOURNALS (SELECTED)

1. Zuber M, Tan CJ, Caballero J, Shenoy S, Elshafie S, Villa Zapata L. Comparative effectiveness and safety of axicabtagene ciloleucel versus lisocabtagene maraleucel in large B-cell lymphoma: a real-world target trial emulation. *J CLIN ONCOLOGY*. 44, 11021(2026). DOI: 10.1200/JCO.2026.44.16_suppl.11021.
2. Zhu Y, Wang X, Somanath PR, Zhang D. Extracellular Vesicle Carried CD59 Mitigates Endothelial Barrier Dysfunction in Bacterial-induced Acute Lung Injury (A104-10), *AMERICAN JOURNAL OF RESPIRATORY AND CRITICAL CARE MEDICINE* 2026, Vol.212, Suppl. 1., aamag162. 087.
3. Matani BR, Henry-Ojo H, Yuan Y, Soleimani M, Zahedi K, Zhang D, Somanath PR, Narayanan SP. SMOX signaling regulates microglia-mediated neuroinflammation in ischemic retinopathies, *INVEST OPHTHALMOL VISUAL SCI,* 2026, Vol.67 (7), 5482.
4. Narayanan SP, Henry-Ojo H, Liu F, Yuan Y, Soleimani M, Zahedi K, Somanath PR. SMOX deficiency ameliorates optic nerve demyelination and improves axonal health in experimental autoimmune encephalomyelitis, *INVEST OPHTHALMOL VISUAL SCI,* 2026, Vol.67 (7), 4472.
5. Zhu Y, Wang X, Shenoy S, Zhang D. Lncenc1 modulates lung endothelial barrier integrity via CD59. *CIRCULATION*, Supplement 3, Volume 152, November 4, 2025.
6. Narayanan SP, Henry-Ojo H, Liu F, Somanath PR. SMOX deletion suppresses neuroinflammation and improves axonal conduction in Optic neuritis, *INVEST OPHTHALMOL VISUAL SCI,* 2025; Vol 66 (8), 4906.
7. Henry-Ojo H, Liu F, Somanath PR, Narayanan SP. SMOX deficiency attenuates optic neuritis by modulating interferon pathways and myeloid cell activation in experimental autoimmune encephalomyelitis. *INVEST OPHTHALMOL VISUAL SCI,* 2025; Vol 66 (8), 895.
8. Shan S, Alanazi A, Han Y, Liu Y, Zhang D, Somanath PR, Narayanan SP. Extracellular Vesicles from the Vitreous Humor of Diabetics Contain Claudin-5 and Exhibit Inflammatory Properties, *INVEST OPHTHALMOL VISUAL SCI,* 2024; Vol 65 (7), 302.
9. Somanath PR, Liu F, Shan S, Alanazi A, Narayanan SP. Claudin-17 loss Compromises Blood-Retinal Barrier Integrity: Implications for Ischemic Retinopathies. *INVEST OPHTHALMOL VISUAL SCI,* 2024; Vol 65 (7), 305.
10. Narayanan SP, Alhumaid A, Liu F, Jaffari E, Shan S, Nourin N, Somanath, PR, Spermine Oxidase inhibitor, MDL 72527, reduced neovascularization, vascular permeability, and acrolein conjugated proteins in a mouse model of ischemic retinopathy. *INVEST OPHTHALMOL VISUAL SCI,* 2024; Vol 65 (7), 1257.
11. Shan S, Liu F, Ford E, Caldwell RB, Narayanan SP, Somanath PR. Triciribine Attenuates Pathological Neovascularization and Vascular Permeability in a Mouse Model of Proliferative Retinopathy, *INVEST OPHTHALMOL VISUAL SCI,* 2023; Vol 64, 565.
12. Alfarhan M, Liu F, Somanath PR, Narayanan SP. Long-term Treatment with MDL 72527 Reduced Retinal Neuro-glial Injury and Improved Visual Acuity, Contrast Sensitivity, and Inner Retinal Function in Diabetic Mice. *INVEST OPHTHALMOL VISUAL SCI,* 2023; Vol 64, 1002.
13. Rudraraju M, Shans S, Liu F, Narayanan SP, Somanath, PR, Pharmacological modulation of cytoplasmic β-catenin strengthens cell junctions and alleviates pathological vascular permeability and inflammation in an experimental model of uveitis. *INVEST OPHTHALMOL VISUAL SCI,* 2023; Vol 64, 2952.
14. Alfarhan M, Liu F, Shan S, Pichavaram P, Somanath PR, Narayanan SP. Pharmacological Inhibition of Spermine Oxidase Suppresses Excitotoxicity-Induced Neuroinflammation in Mouse Retina. *INVEST OPHTHALMOL VISUAL SCI,* 2022; 63(7): 2970–F0211.
15. Narayanan, SP, Candadai, AA, Liu, F, Verma, A, Alfarhan, M, Adil, MS, Fagan, SC, Somanath, PR.

Neuroprotective Effects of Fingolimod in Experimental Optic Neuritis. *INVEST OPHTHALMOL VISUAL SCI,* 2021; 62(8): 2397.

16. Stromelysin-1 as a biomarker for acute lung injury. By Newsome, AS; Kadry, R; Artham, S; Jones, T; and Somanath, P.R. *J CLIN TRANSL SCI* Volume: 4 Supplement: 1 Published: JUL 2020.
17. Antibody response to the pneumococcal conjugate vaccine (PCV13) in CLL patients receiving Ibrutinib: Andrick, B; Alwhaibi, A; DeRemer, D; Qureshi, S; Somanath, PR.; Pantim, JM. *BLOOD* Volume: 128 (22): 5597. Published: DEC 2016
18. Targeting Traf6-pak1 signaling limits prostate tumor growth and TGF-beta1-induced prostate cancer cell epithelial to mesenchymal transition. By: Somanath, Payaningal R.; Al-Azayzih, Ahmad; Gao, Fei *FASEB JOURNAL* Volume: 30 Supplement: 1 Meeting Abstract: 1107.8 Published: APR 2016
19. Early AT1 Blockade Ameliorates Ischemia/reperfusion Injury By Pi3k/akt And Enos Pathways: In Vivo And In Vitro Evidence By: Ishrat, Tauheed; Pillai, Bindu; Somanath, Payaningal R.; et al. *STROKE* Volume: 46 Supplement: 1 Meeting Abstract: AWP111 Published: FEB 2015
20. Triciribine, a Selective Akt Inhibitor, Inhibits Myofibroblast Differentiation and Ameliorates Pulmonary Vascular Remodeling in Pulmonary Hypertension. By: Somanath, Payaningal R.; Chen, Juhua; Byzova, Tatiana V. *ARTER THROMB VASC BIOL* Volume: 34, (suppl_1), A353-A353, 2014.
21. Interference with Akt signaling in dyslipidemia diminishes myocardial infarction and promotes survival by inhibiting oxidative stress. By Ma, Lining; Kerr, Bethany A.; West, Xiaoxia Z.; et al. *HEART* Volume: 98 Supplement: 2 Pages: E62-E63 Published: OCT 2012
22. Protein kinase-B alpha differentially regulates hypoxia- and tumor-induced angiogenesis involving mTOR and forkhead transcription factors. By: Somanath, Payaningal R.; Chen, Juhua; Byzova, Tatiana V. *ARTER THROMB VASC BIOL* Volume: 28 Issue: 6 Pages: E45-E46 Meeting Abstract: 73 Published: JUN 2008
23. The angiogenic response is dictated by b3 integrin on bone marrow-derived cells. By: Weiyi Feng, N Patrick Mccabe, Ganapati H Mahabeleshwar, Payaningal R Somanath, David R Phillips, Tatiana V Byzova. *J EXP MED* Volume: 205 Issue: 13 Pages: 128, JUN 2008.
24. Akt-1 regulates angiogenesis in the skin. By: Byzova, T; Chen, JH; Somanath, PR *BLOOD* Volume: 104 Issue: 11 Pages: 241A-241A Part: 1 Meeting Abstract: 845 Published: NOV 16 2004
25. Andrick B, Alwhaibi A, DeRemer D, Qureshi, Khan R, Shenoy S, Pantin J. Antibody response to the pneumococcal conjugate vaccine (PCV13) in chronic lymphocytic leukemia patients receiving ibrutinib. *BLOOD* 2016 128:5597.
26. Integral Role of Akt-Serum Response Factor-Myocardin Signaling in Myofibroblast Differentiation with Implications in Pulmonary Arterial Hypertension Maha Abdalla, Anna Goc, Lakshman Segar, and Payaningal R Somanath Originally published 17 Mar 2016. *A ARTER THROMB VASC BIOL*. 2015;33: A221
27. Triciribine, a Selective Akt Inhibitor, Inhibits Myofibroblast Differentiation and Ameliorates Pulmonary Vascular Remodeling in Pulmonary Hypertension Payaningal R Somanath and Maha Abdalla Originally published 17 Mar 2015. *ARTER THROMB VASC BIOL*. 2018;34:A353
28. Gao, F., Al-Azayzih, A., & Shenoy, S. P. R. (2015). Unforeseen role of GSK3 alpha and GSK3 beta isoforms in prostate tumor growth and metastasis. *INT J OF MOL MED*, *36*, S111.
29. Gao, F., Al-Azayzih, A., & Shenoy, S. P. R. (2015). Discrete Functions of GSK3 alpha and GSK3 beta Isoforms in Prostate Tumor Growth and Micrometastasis. *FASEB JOURNAL*, *29*.
30. Shenoy, S. P. R., Al-Azayzih, A., & Gao, F. (2014). TGF beta signaling and epithelial-to-mesenchymal transition in prostate cancer. *INT J OF MOL MED*, *34*, S106.

31. Payaningal R Somanath, Juhua Chen, Tatiana V Byzova; Protein Kinase-B Differentially Regulates Hypoxia- and Tumor-Induced Angiogenesis Involving mTOR and Forkhead Transcription Factors, *ARTER THROMB VASC BIOL*. July 9, 2013 e-46
32. Shenoy, S. P. R., Gao, F., & Al-Azayzih, A. (2014). Mechanisms regulating Akt-mediated endothelial-barrier function. *INT J OF MOL MED*, *34*, S106.
33. Abdalla, M., Pruitt, A., Goc, A., Segar, L., Ergul, A., Fagan, S. C., & Shenoy, S. P. R. (2013). Triciribine, a selective Akt inhibitor, ameliorates idiopathic pulmonary fibrosis and pulmonary hypertension. In *PHARMACOTHERAPY* Vol. 33 (pp. E292-E293).
34. Thompson, L., Burke, S., Gurley, E., Newsome, R. C., Abdalla, M., & Shenoy, S. P. R. (2013). Dasatinib, a Src inhibitor, attenuates alpha-SMA synthesis: role in pulmonary fibrosis. In *PHARMACOTHERAPY* Vol. 33 (pp. E293-E294).
35. Gurley, E., Thompson, L., Abdalla, M., & Shenoy, S. P. R. (2013). Dasatinib inhibits alpha-SMA assembly in myofibroblasts differentiation: a potential role in pulmonary fibrosis. In *PHARMACOTHERAPY* Vol. 33 (pp. E293).
36. Newsome, R., Abdalla, M., & Shenoy, S. P. R. (2012). Effect of dasatinib on TGF&beta-induced fibroblast-to-myofibroblast differentiation. In *PHARMACOTHERAPY* Vol. 32 (pp. E299).
37. Shenoy, S. P. R., Goc, A., Abdalla, M., & Al-Azayzih, A. (2012). Unlocking the 14-3-3 code in the regulation of prostate cancer cell motility and transendothelial migration. *INT J OF MOL MED*, *30*, S18. Retrieved from
38. Soliman S, El-Remessy A, Cronic L, Somanath PR, Ergul A, Fagan SC, (2012) Vascular Protection Mediates Neuroprotection: Role of VEGF-A and B. *STROKE*. 43(1):A3261.
39. Shenoy, S. P. R., Abdalla, M., Goc, A., & Byzova, T. (2012). Protein kinase 'Akt'ions on extracellular matrix remodeling. *INT J OF MOL MED*, *30*, S18.
40. Shenoy, S., Kochuparambil, S. T., Al-Husein, B., & Goc, A. (2011). Statins for prostate cancer: a friend, a foe, or neither. *INT J OF MOL MED*, *28*, S36.
41. Kochuparambil, S. T., Al-Husein, B., Goc, A., Mohammad, S., Terris, M. K., Samuel, T. A., Shenoy, S. P. R. (2011). Effects of simvastatin and docetaxel on different pathways in the regulation of prostate and breast cancer cell survival. *JOURNAL OF CLINICAL ONCOLOGY*, *29*(15).
42. Kochuparambil, S.T, Al-Husein B, Goc A, Terris M, and Somanath, P.R. (2011). Anti-cancer efficacy of simvastatin on prostate cancer cells and tumor xenografts is mediated through the inhibition of Akt. *THE JOURNAL OF UROLOGY*, April 2011, Elsevier
43. Kochuparambil, S. T., Al-Husein, B., Goc, A., Soliman, S., Choudhary, M, Liu, J, and Shenoy, S. P. R., 2010, Abstract B47: Pleiotropic effects of simvastatin on prostate tumor growth and metastasis *CLIN CANCER RES*. AACR International Conference on Translational Cancer Medicine-- Jul 11-14, 2010; San Francisco, CA
44. Somanath, P.R., Chen, J. and Byzova T.V. 2007. Protein Kinase B alpha (Akt1)-mediated extracellular matrix remodeling is essential for vascular responses. 4th Annual meeting of BVCS, American Heart Association, Keystone, CO. Published in *CIRC RES*.
45. Byzova, T., Chen, J., Somanath P.R. 2006. Akt pathway and extracellular matrix control tumor growth *in vivo*. 11th World Congress on Advances in Oncology and 9th International Symposium on Molecular Medicine. Crete, Greece. *INT J OF MOL MED*
46. Somanath, P. R., Chen, J., & Byzova, T. V. (2008). Protein kinase-B alpha differentially regulates hypoxia- and tumor-induced angiogenesis involving mTOR and forkhead transcription factors. In *ARTER THROMB VASC BIOL* Vol. 28 (pp. E45-E46). Received Young Investigator Award
47. Protein phosphatase PP1 gamma 2, localized in the sperm head, is phosphorylated and bound to protein 14-3-3. January 2003. *BIOL REPROD* Volume: 68 SPR Shenoy, S Mishra, ZH Huang,

Srinivasan Vijayaraghavan

48. Somanath, P.R., Jack, S., Vijayaraghavan, S. 2003. Binding of Glycogen synthase kinase-3 to immobilized axin: A single-step purification method for assay of GSK-3 activity in sperm extracts. Society for the study of reproduction (Published in *BIOL REPROD*)
49. Somanath, P.R., Mishra, S, Huang, Z., Vijayaraghavan, S. 2003. Protein phosphatase PP1 gamma2, localized in the sperm head, is phosphorylated and bound to protein 14-3-3. Society for the study of reproduction (Published in *BIOL REPROD*)
50. Mishra, S, Somanath, P.R., Vijayaraghavan, S. 2003. Distinct pools of PP1 gamma 2 are regulated by SDS22, protein 14-3-3, and hsp90 within spermatozoa. American Society of Molecular Biology and Biochemistry (Published in *FASEB J*)

INVITED PRESENTATIONS

2026: Platform presentation – "Chronic Diabetes Induces Endothelial Stress and Proteotranscriptomic Remodeling in the Diabetic Lung" at the Southeast Regional Clinical and Translational Science Conference, Pine Mountain, GA. March 11.

2026: Invited Speaker – "Targeting Tight Junctions for Retinopathy" at the 5th Annual Savannah Eye Meeting, Augusta University, March 25.

2025: Invited Speaker – 'UnPAKing' Cancer's Secrets: Novel Allosteric Inhibition of a Pro-Metastatic Pathway. Mercer University College of Pharmacy and College of Medicine, Atlanta, GA, August 6.

2025: Invited Speaker – The impact of diabetes on lung injury. Augusta Veterans Health Care System - Centenary Research Celebration (1925-2025), May 29.

2025: Featured Speaker – Targeting Cell Junctions for the Treatment of Ischemic Retinopathies: Exploring Triciribine and Claudin-5 Peptidomimetics. Southeast Regional Clinical and Translational Science Conference, Pine Mountain, GA. March 6.

2025: Keynote Speaker – Targeting the pro-metastatic cancer pathway using novel allosteric inhibitor formulation. Research Institute for Medical and Health Sciences, University of Sharjah, Jan 29.

2024: Invited Presentation – "Loss of Claudin 17 Compromises Blood Retinal Barrier Integrity" at the Gordon Research Conference on Endothelial Phenotypes in Health and Disease, Barcelona, July 2.

2024: Invited Speaker – "Modulation of Tight Junctions in Retinopathy" at the 3rd Annual Savannah Eye Meeting, Augusta University, March 13.

2023: Guest Speaker - UnPAKing the pro-metastatic prostate cancer pathway using IPA-3. Uniting Minds in Global Health Sciences Conference, Monash University, Malaysia (December 14).

2023: Cell-cell junction protein modulations in organ injury. VA Research Expo 2023. Augusta VA Health, Augusta, GA, November 9.

2023: Triciribine prevents retinal injury and inflammation in a mouse model of oxygen-induced retinopathy, Southeast Regional Clinical & Translational Science Conference, Pine Mountain, GA.

2022: Invited panelist, Health-Connect South Symposium-2022, Atlanta, GA. Eds & Meds: Collaboration or Competition.

2021: International Conference on Cancer Metastasis, *Cldn17* loss in mice promotes tumor angiogenesis.

2021: World Conference on Lung & Respiratory Disease, Paris, Therapeutic benefits of targeting Akt pathway in the advanced stages of acute lung injury, Apr 24.

2020: The COVID-19 Conundrum: Pathophysiology and Evolving Therapeutic Strategies, Webinar

Organized by the ITC Limited's SciTech Program based in Bangalore, India, August 4.

2020: Targeting Stromelysin1 for acute lung injury: Preclinical Evidence, Southeast Regional Clinical & Translational Science Conference, Pine Mountain, GA, February 28.

2019: Tight-Junction Proteins in Physiology and Pathology: It takes more than one brick to build a wall. Department of Biochemistry and Molecular Biology Seminar Series, Augusta University, Nov. 15.

2019: TGFβ2 is the predominant isoform that induces endothelial-to-mesenchymal transition via Akt1-βcatenin signaling in endothelial cells, FASEB SRC, West Palm Beach, FL, July 31.

2019: Targeting FoxO Transcription factors for acute lung injury, Georgia-CTSA Annual Conference, Pine Mountain, GA, March 1.

2019: Akt inhibition post-lung injury protects vasculature and promotes resolution through CD4+/FOXP3+/CD103+/CTLA4+ effector T-regulatory cells (Tregs). Gordon Research Conference on Vascular Cell Biology, Ventura, CA, January 15.

2018: Targeting FoxO-Stromelysin pathway for ARDS at the Veterans Affairs VISN7 Meeting, Charleston, SC, Nov 1.

2018: FoxO-regulated endothelial stromelysin-1 promotes the exudative phase of acute respiratory distress syndrome at the International Vascular Biology Meeting, Helsinki, Finland, June 5.

2018: Invited Seminar on "Effective strategies in Graduate Education and Training" at the SSV College, Kerala, India on January 14.

2017: Invited Lecture, Cancer Research Symposium, The First Affiliated Hospital, Chongqing Medical University, Chongqing, China on June 16, 2017.

2017: Protein Kinase-B 'AKT 'ivity modulation in ARDS, Department of Medicine Research Conference, Keynote Speaker, Augusta University Medical Center, November 2, 2017.

2017: Visiting Professor, Chongqing Medical University, Chongqing, China (June 14-23, 2017).

2017: Gordon Research Conference on Angiogenesis, Newport, RI. August 6-11, entitled "Pulmonary endothelial Akt1-FoxO-MMP3 signaling as a novel therapeutic target for ARDS".

2017: FASEB SRC: The TGFβ Superfamily: Signaling in Development and Diseases, Lisbon, Portugal (July), Akt1-βcatenin suppression induced prostate cancer cell EMT via TGFβ pathway

2017: Gordon Research Conference on Vascular Cell Biology, Ventura, CA. January 15-20 entitled "Mechanisms regulating EndMT and vascular remodeling in Acute Lung Injury".

2016: Experimental Biology, San Diego, CA, entitled "Targeting TRAF6-Pak1 signaling inhibits prostate tumor growth and TGFβ1-induced prostate cancer cell epithelial to mesenchymal transition."

2016: Gordon Research Conference (Endothelial Cell Phenotypes in Health & Disease), Girona, Spain, July 17-22 - Akt1-mediated pathway regulating endothelial-to-mesenchymal transition.

2016: Visiting Professor, Department of Biochemistry, MS University of Baroda, India

2016: Invited lecture, The Vikram Sarabhai Center for Cell and Molecular Biology, Baroda, India

2015: 20th World Congress on Advances in Oncology, Athens, Greece (October), Unforeseen role of GSK-3 isoforms in prostate cancer growth & metastasis (Invited speaker and co-chair)

2015: Georgia Regents University Cancer Center entitled "Controversies, debates, and consensus on the 'Akt'tions of Protein Kinase Bα on tumor angiogenesis and prostate cancer."

2015: Experimental Biology Conference, Boston, MA (April) entitled "Discrete functions of GSK3 isoforms in prostate cancer growth and metastasis."

2014: 17th International Symposium on Molecular Medicine, Athens, Greece, Mechanisms regulating Akt1-mediated endothelial barrier function (Invited speaker)

2014: 19th World Congress on Advances in Oncology, Athens, Greece (October), TGFβ signaling in prostate cancer EMT (Invited speaker and co-chair)

2013: Featured Speaker: Georgia Urological Association (GUA) Spring Meeting, Lake Oconee, Greensboro, GA, Novel pathways mediating prostate cancer and their potential clinical

implications.

2012: 17th World Congress on Advances in Oncology, organized by the Spandidos Publication Group, Hersonissos, Crete, Greece (October), Unlocking the 14-3-3 code in the regulation of prostate cancer cell motility and trans-endothelial migration.

2012: 15th International Symposium on Molecular Medicine, Organized by the Spandidos Publication Group, Hersonissos, Crete, Greece, Protein kinase Bα: 'Akt 'ions on extracellular matrix remodeling

2011: 16th World Congress on Advances in Oncology, Organized by the Spandidos Publications, Rhodes Island, Greece (Oct), Statins for Prostate Cancer: A friend, a foe or neither

2011: 2nd Southern Translational Education and Research (STaR) Conference, Augusta, GA (September), Do Statins Protect Against Prostate Cancer?

2011: FASEB Summer Research Conferences: The TGFβ Superfamily: Signaling in Development and Diseases, Il Ciocco (Lucca), Italy (August), TGFβ and Bleomycin-induced extracellular matrix synthesis is mediated through Akt and Mammalian Target of Rapamycin

2010: University of Georgia, College of Pharmacy Grand Rounds, Augusta, GA (October), Statins and Cancer: A friend, a foe, or neither

2010: University of Georgia, College of Pharmacy Grand Rounds, Augusta, GA (April), Anti-angiogenic therapy: A novel approach for the treatment of cancer

2010: Medical College of Georgia, Department of Physiology, Seminar Series, Augusta, GA (December), Akt in vascular cells: Shibboleths in vasculature development

2009: University of Georgia, Centre for Drug Discovery Seminar Series, Athens, GA (October), Akt signaling in the regulation of angiogenesis and tissue remodeling

2008: University of Georgia, Clinical and Experimental Therapeutics, College of Pharmacy, Augusta, GA (October), Akt signaling in tissue remodeling and angiogenesis

2008: University of South Carolina, Department of Cell Biology and Anatomy, Columbia, SC (September), Akt–integrin axis in vascular biology

2008: Texas A&M University, Department of Molecular Cardiology, Temple, TX (July), Akt signaling in tissue remodeling and angiogenesis

2008: Cleveland Clinic, Department of Cancer Biology, Cleveland, OH (June), Akt signaling in tumor microenvironment and angiogenesis

2008: Somanath, P.R., Chen, J., Byzova, T.V. Multiple functions of Akt pathway in the regulation of angiogenesis. 15th International Vascular Biology Meeting, Sydney, Australia

2008: Somanath, P.R., Chen, J., and Byzova, T.V. Protein Kinase B alpha differentially regulates hypoxia- and tumor-induced angiogenesis by Akt1. 12th Biennial Midwest Platelet Conference, Lexington, KY (*Oral presentation; Received Young Investigator Award*)

2008: Protein Kinase B alpha differentially regulates hypoxia- and tumor-induced angiogenesis involving mTOR and Forkhead transcription factors. The annual meeting of ATVB, American Heart Association, Atlanta, GA; Published in *Arteriosclerosis. Thromb. Vasc. Biol*)

2007: Akt and extracellular matrix control tumor growth. 11th World Congress on Advances in Oncology and 9th International Symposium on Molecular Medicine, Crete, Greece

2004: Blood vessel development and maturation in the skin are controlled by the Akt1 kinase. American Society of Hematology Annual Meeting and Exposition, San Diego, CA

2003: Protein phosphatase PP1 gamma2 localized in the sperm head is phosphorylated and bound to protein 14-3-3. Society for the study of reproduction Meeting, Cincinnati, OH

SELECTED CONFERENCE ABSTRACTS/MEETINGS/WORKSHOPS (FROM >100)

2026: NIH Workshop on 'Extracellular Vesicles and Exosomes in Health, Aging, and Disease' on July 27.

2026: ZHU Y, Wang X, Somanath PR, and Zhang D. CD59 Protects Pulmonary Endothelial Barrier Integrity in Bacterial-Induced Acute Lung Injury. Southeast Regional Clinical & Translational Science Conference, Pine Mountain, GA

2026: Matani BR, Henry-Ojo H, Yuan Y, Soleimani M, Zahedi KA, Zhang D, Somanath PR, Narayanan SP. SMOX Signaling as a Regulator of Neuroinflammation in Ischemic Retinopathy. 5th Annual Savannah River Eye Meeting, GA and Southeast Regional Clinical & Translational Science Conference, Pine Mountain, GA

2026: Selim MS, Narayanan SP, and Somanath PR. Hyperglycemia-induced Claudin-5+ extracellular vesicles amplify inflammation and barrier dysfunction. 5th Annual Savannah River Eye Meeting, GA

2026: Zuber M, Tan CJ, Caballero J, Shenoy S, Elshafie S, Villa Zapata L. Comparative effectiveness and safety of axicabtagene ciloleucel versus lisocabtagene maraleucel in large B-cell lymphoma: a real-world target trial emulation. ASCO, Chicago, IL, June 2026.

2024: Narayanan P, Liu F, Alhumaid A, Shan S, Jafari E, Shenoy S, Cervelli M Impact of spermine oxidase modulation on neovascularization and vascular permeability in a mouse model of ischemic retinopathy, at the Gordon Research Conference on Endothelial Phenotypes in Health and Disease, Barcelona, July 1.

2024: Alanazi AH, Selim MS, Zhang D, Sikora A, Narayanan SP, and Somanath PR. Impact of Diabetes on Acute Lung Injury: Unravelling Mechanisms to Improve Outcomes. ACCP Annual Meeting, Phoenix, AZ, October 12-14, 2024.

2023: Shan S, Liu F, Somanath PR, and Narayanan SP. Triciribine Attenuates Pathological Neovascularization and Vascular Permeability in a Mouse Model of Proliferative Retinopathy. Association for Research on Vision and Ophthalmology (ARVO Annual Meeting), New Orleans, LA.

2023: Rudraraju M, Shan S, Liu F, Narayanan SP, and Somanath PR. Pharmacological modulation of cytoplasmic β-catenin strengthens cell junctions and alleviates pathological vascular permeability and inflammation in an experimental model of uveitis. ARVO annual meeting, New Orleans, LA.

2023: Alfarhan M, Liu F, Liao Y, Somanath PR, Narayanan SP. Long-term Treatment with MDL 72527 Reduced Retinal Neuro-glial Injury and Improved Visual Acuity, Contrast Sensitivity, and Inner Retinal Function in Diabetic Mice. ARVO annual meeting, New Orleans, LA.

2022: Adil MS, Parvathagiri, V, Narayanan SP, Somanath PR. Claudin-17 deficiency in mice results in vascular permeability, fluid-electrolyte imbalance, and oxidative stress, leading to lung injury, International Vascular Biology Meeting, Oakland, CA (Oct 2022).

2022: Verma A, Artham S, Alwhaibi A, Adil MS, Cummings BS, Somanath PR. PAK1 inhibitor IPA-3 mitigates metastatic prostate cancer-induced bone remodeling, Korean Society of Medical Oncology (KSMO) 15th Annual Meeting & 2022 International Conference, Seoul, South Korea (Sept 2022).

2022: Ford E, Liu F, Shan S, Somanath PR, and Narayanan SP. Impact of Triciribine in retinal neurovascular injury in a mouse model of ischemic retinopathy, Oct 2022. ACCP Global Conference, San Francisco, CA. (FINALIST for the poster award).

2022: Parvathagiri V, Adil MS, Narayanan SP, Somanath PR. Cldn17 loss in mice promotes tumor angiogenesis, UGA-Emory Winship Cancer Center Retreat, July 2022.

2022: Alwhaibi A, Parvathagiri V, Verma A, Somanath PR. Regulation of Let-7a-5p and miR-199a-5p Expression by Akt1 Modulates Prostate Cancer Epithelial-to-Mesenchymal Transition via the Transforming Growth Factor-β Pathway, UGA-Emory Winship Cancer Center Retreat, July 2022. 2021: SBIR/STTR Grant Workshop- Georgia-CTSA, Nov 2021.

2021: New Department Head Training Workshop- University of Georgia. 2021: AACP Equity, Diversity, and Inclusion Institute, January 20-22, 2021.

2019: Somanath P.R., Artham S, Manicassamy S, and Munn DH, Akt inhibition post lung injury protects vasculature and promotes resolution through CD4+/FOXP3+/CD103+/CTLA4+ effector T-regulatory cells (Tregs), Gordon Conference on Vascular Biology, Ventura, CA.

2018: Verma A, Missaoui WN, Ahmad A, Cummings BS, and Somanath PR. IPA-3 prevents prostate cancer-induced bone remodeling, VA-VISN7 Meeting, Charleston, SC.

2018: Alwhaibi A, Gao F, and Somanath PR. Targeting Akt1-Catenin in endothelial cells promotes prostate cancer invasion and metastasis. AACR Prostate Cancer Conference, Orlando, FL.

2017: Missaoui WN, Cummings BS, and Somanath PR. Liposomal-Mediated Delivery of PAK-1 Inhibitor IPA-3 Limits Prostate Tumor Growth In Vivo, 2017-AACR Annual Meeting.

2016: Missaoui WN, Al-Azayzih A, Cummings BS and Somanath PR. Liposomal-Mediated Delivery of the p21 Activated Kinase-1 (PAK-1) Inhibitor IPA-3 Limits Prostate Tumor Growth In Vivo, 2016-AAPS National Biotechnology Conference, Boston, MA.

2015: Harika Sabbineni, Maha Abdalla, and Somanath PR. Targeting the Akt pathway ameliorates TGFβ-induced vascular pruning and pulmonary fibrosis via regulation of thrombospondin-1 expression, *FASEB Summer Research Conference,* Snowmass, CO.

2014: Maha Abdalla and Somanath PR. Triciribine ameliorates TGFbeta-induced pulmonary arterial remodeling, *American Heart Association ATVB Annual Meeting*, Toronto, Canada.

2013: Maha Abdalla, Anna Goc, and Somanath PR. Protein Kinase B (Akt) promotes Myofibroblast Differentiation via SRF and myocardin signaling, *FASEB Conference: TGFbeta signaling in physiology and disease*, Steamboat Springs, CO, July 28, 2013.

2013: Ahmad Al-Azayzih, Fei Gao, and Somanath PR. TGF-Pak1 signaling in prostate cancer, *FASEB Conference: TGFbeta in physiology and disease*, Steamboat Springs, CO, July 28.

2013: Maha Abdalla, Anna Goc, and Somanath PR. Protein Kinase B (Akt) mediates αSMA Synthesis in Myofibroblast Differentiation and Pulmonary Vascular Remodeling via SRF and myocardin signaling, *Gordon Conference, NH*.

2013: Abdalla M, Goc A, Segar L, Ergul EA, Fagan SC and Somanath Shenoy. Triciribine, a Selective Akt Inhibitor, Ameliorates Idiopathic Pulmonary Fibrosis and Pulmonary Hypertension, American College of Clinical Pharmacy (ACCP) Annual Conference, Albuquerque, NM.

2013: Thompson L, Burke S, Gurley E, Newsome R, Abdalla M, and Somanath PR. Dasatinib, a Src/Abl inhibitor, attenuates alpha-SMA synthesis: Role in pulmonary fibrosis, American College of Clinical Pharmacy (ACCP) Annual Conference, Albuquerque, NM.

2013: Erin Gurley, LeeAnn Thompson, Maha Abdalla, and Somanath Shenoy. Dasatinib inhibits αSMA assembly in myofibroblast differentiation: Potential role in pulmonary fibrosis, American College of Clinical Pharmacy (ACCP) Annual Conference, Albuquerque, NM.

2013: Maha Abdalla, Anna Goc, and Somanath PR. Protein Kinase B (Akt) mediates αSMA Synthesis in Myofibroblast Differentiation and Pulmonary Vascular Remodeling via SRF and myocardin signaling, *American Heart Association ATVB Annual Meeting*, Orlando, FL.

2012: Abdalla A, Goc A, and Somanath PR. PKB is Integral for αSMA Synthesis in Myofibroblast Differentiation in Idiopathic Pulmonary Fibrosis, *Keystone Symposia* on Pulmonary Vascular Disease: Current Concepts and Future Therapies, Monterey, CA.

2012: Goc A, Liu J, Byzova TV and Somanath PR. "Chemotaxis and micrometastasis of prostate cancer cells are reliant on Akt-mediated affinity modulation of integrin ?vβ3". *American Association for Cancer Research* (AACR) on "Advances in Prostate Cancer Research", Orlando, FL
2013: NIH Angiogenesis Workshop at the National Institutes of Health, Bethesda.

2012: Al-Husein B, Goc A, Kochuparambil ST, Azayzih A and Somanath PR. "Effects of Simvastatin on Prostate Tumor Cell Proliferation and Micrometastasis". Hematology-Oncology Pharmacists Association (HOPA) Annual Meeting, March 21-24, Orlando, FL

2012: Katsanevas K, Al-Husein B, DeRemer D and Somanath PR. "Is GSK-3 the gridlock in Akt-targeted prostate cancer therapy?". Hematology-Oncology Pharmacists Association (HOPA) Annual Meeting, March 21-24, Orlando, FL

2012: Goc A, Liu J, Byzova TV and Somanath PR. "Chemotaxis and micrometastasis of prostate cancer cells are reliant on Akt-mediated affinity modulation of integrin alpha-v beta-3". AACR meeting on "Advances in Prostate Cancer Research", Orlando, FL

2011: Samith Kochuparambil, Belal Al-Husein, and Somanath PR. Simvastatin and docetaxel utilize different pathways in the regulation of prostate and breast cancer cell survival with an additive effect when used in combination, American Society of Clinical Oncologists (ASCO), Chicago

2011: Samith Kochuparambil, Belal Al-Husein, and Somanath PR. Simvastatin inhibits the Bcl-2-mediated survival pathway in prostate cancer cells. American Urological Society, Washington, DC

2011: Belal Al-Husein and Somanath PR. Simvastatin Enhances Endothelial Barrier Function through Stabilization of Adherens Junction, presented at the NAVBO, "Vasculata" International Research workshop and conference in 'vascular biology', Atlanta

2011: Anna Goc, Maha Abdalla, Somanath PR. "Akt/cRaf axis in ECM remodeling: It takes two to tango", presented at the North American Vascular Biology Organization (NAVBO), "Vasculata" International Research workshop and conference in 'vascular biology', Atlanta

2011: Ahmed Al-Azayzih, Ahmed Alhusban, Anna Goc, Diana Hong, Susan Fagan, and Somanath PR. Angiotensin receptor blockers enhance prostate cancer cell functions in vitro. *American College of Clinical Pharmacy*, Pittsburgh

2010: Goc A, Al-Husein B, Choudhury, M, Liu, J, and Somanath, P.R. TGFβ and Bleomycin-induced extracellular matrix secretion is mediated via Akt and mammalian target of rapamycin. Annual meeting of the ATVB, *American Heart Association,* San Francisco, CA

2010: Kochuparambil, S.T., Al-Husein B, Goc A, Soliman, S, and Somanath, P.R. Pleiotropic effects of Zocor on prostate cancer. *American Association for Cancer Research*, San Francisco, CA. *(Also presented at the Georgia Research Summit, Atlanta)*

2009: Grantsmanship Workshop, Organized by the UGA-OVPR.

2008: Somanath, P.R., Chen, J., Byzova, T.V. Multiple functions of Akt pathway in the regulation of angiogenesis. 15th International Vascular Biology Meeting, Sydney, Australia

2007: Somanath, P.R., Chen, J., and Byzova, T.V. Protein Kinase B alpha (Akt1)-mediated extracellular matrix remodeling is essential for vascular responses. 4th Annual meeting of BVCS. American Heart Association, Keystone, CO (Published in *Circ. Res.*)

2001: Workshop on surgical therapy for movement disorders, SCTIMST, Trivandrum, India

2000: Workshop on Electron Microscopy Technique, University of Punjab, Chandigarh, India

RECORD OF INSTRUCTION/TEACHING

Kurukshetra University, Department of Biochemistry, India

2001-2002: (For MS Biochemistry students). Courses taught: Enzyme Kinetics, Metabolism, Physiology and Anatomy, Clinical Biochemistry, and Laboratory training of research techniques in Biochemistry and Molecular Biology.

2002-2003: Kent State University, Kent, OH - Undergraduate/Graduate Research Training

2004-2009: Cleveland Clinic Lerner Research Institute, Cleveland, OH - Research Training for Graduate students and postdoctoral fellows at the Lerner College of Medicine, Cleveland Clinic.

The University of Georgia, College of Pharmacy, GA

Graduate (Ph.D. and MS) Programs

PHRM 8740 (Introduction to CET Research; Any 3 Semesters – 4CR)

2009: Belal Al-Husein
2010: Harika Sabbineni; Sally Elshaer; Sherif Hafez
2011: Ahmed Alhusban; Sahar Soliman
2012: Maha Abdalla; Ahmad Al-Azayzih
2013: Heba Ahmed; Arwa Fairaq
2014: Sandeep Artham; Abdulrahman Alwhaibi
2015: Wael Eldahshan
2017: Mir Adil
2018: Asma Gah; Ahlam Alharthi
2019: Madhuri Rudraraju; Rana Kadry (Summer)
2019: Eissa Jafari; Sultan Almuntashiri (Fall)
2020: Abdulaziz Alanazi; Varun Parvathagiri
2021: Nadia Nourin
2022: Abdulaziz Alanazi; Manya Yendamuri
2023: Mohamed Selim

PHRM 7000 (Master's Research – All 3 Semesters - 5-12 CR)

2017-2019: Ahlam Alharthi, PharmD; Asma Gah, PharmD.
2018-2020: Rana Kadry, PharmD.
2020-2022: Abdulaziz Alanazi, PharmD.
2022-2024: Manya Yendamuri, PharmD, MS.; Timothy Jones, PharmD, MS.

PHRM 7300 (Master's Dissertation – Summer Semester – 4-6 CR)

2019: Ahlam Alharthi, PharmD; Asma Gah, PharmD.
2020: Rana Kadry, PharmD.
2022: Abdulaziz Alanazi, PharmD.
2024: Manya Yendamuri, PharmD, MS.; Timothy Jones, PharmD, MS.

PHRM 9000 (Doctoral Research – All 3 semesters - 4-12 CR)

2009-2013: Belal Al-Husein, Ph.D.
2010-2014: Maha Abdalla, PharmD, Ph.D.
2010-2014: Ahmad Al-Azayzih, PharmD.
2012-2017: Harika Sabbineni, BPharm.
2014-2018: Sandeep Artham, PharmD.
2014-2019: Abdulrahman Alwhaibi, PharmD.
2017-2021: Mir S. Adil, PharmD.

2018-2023: Madhuri Rudraraju, PharmD.
2018-2024: Tim Jones, PharmD (Co-mentor)
2020-2023: Varun Parvathagiri, PharmD.
2022-2025: Abdulaziz Alanazi, PharmD.
2023-2028: Mohamed Selim, PharmD.

PHRM 9300 (Doctoral Dissertation; All 3 Semesters – 4-12 CR)

2012: Belal Al-Husein
2013: Belal Al-Husein; Maha Abdalla; Ahmad Al-Azayzih
2014: Maha Abdalla; Ahmad Al-Azayzih
2015: Maha Abdalla; Ahmad Al-Azayzih
2016/2017: Harika Sabbineni
2018: S. Artham; A. Alwhaibi
2019: A. Alwhaibi; M. Adil; M. Rudraraju
2020: M. Adil; M. Rudraraju; V. Parvathagiri
2021: M. Adil; M. Rudraraju; V. Parvathagiri; Tim Jones
2022: M. Rudraraju; V. Parvathagiri; Tim Jones
2023: M. Rudraraju; Tim Jones
2024/2025: Abdulaziz Alanazi

PHRM 7390 (Methods in Experimental Therapeutics; Spring Semester - 3 CR)

2013-Present: Experimental models of Cancer Research, Experimental models of pulmonary arterial hypertension, fibrosis, Endothelial barrier function, vascular permeability, and ARDS, Cutting-edge Techniques (RNA silencing, gene editing, and Nanostring technology)

PHRM 7210 (Research Ethics and Grantsmanship; Fall Semester – 3CR)

2011-2015: Specific Aims, Significance, Innovation, Preliminary Data, Research Design/Approach-1

PHRM 8020 (Molecular Pharmacology; Spring Semester - 4 CR)

2017: Lipid Metabolizing Drugs and Statins (2CR)

PHRM8080 (Grantsmanship; Fall Semester; Course coordinator – 3 CR)

2016-Present: Funding Sources, identifying research priority areas, Specific Aims, Abstract, Background, Significance, Innovation, Preliminary Data, Research Design, Approach, responding to reviewers, how to proofread writing, Assignments of grant applications, Instructions for review, Group Review, and Study section.

PHRM7230 (Ethical issues in research; Fall Semester; Course coordinator – 3CR)

2016-Present: Introduction and definitions, Authorship and publications, Funding Sources, Conflict of Interest, Data management, Responsible mentorship, Do's and Don'ts in Image Editing, Introduction to CITI program, Biosafety, Interactive instructional video, IACUC, IRB, Interactions with media and confidentiality, Student presentations and Quizzes.

PHRM 8600 (Drug Targets in Signal Transduction; Fall Semester – 3CR)

2011-2014: PI3Kinase-Akt/MAPK, Adhesion/cytoskeletal signaling, Cell polarity, and cell junctions.

2016-2018: Cell polarity and cell junctions, Vascular permeability, vascular normalization, and cancer metastasis, Cellular integrins: Affinity and avidity modulation, Cytoskeletal remodeling in cell adhesion and motility, TGFβ and BMP signaling in physiology and pathology, Pitfalls/Alternative/ Methods/collaborators (Team building), Cell differentiation: Mesenchymal cells/myofibroblasts in health & disease, Mechanisms of T-cell differentiation in inflammation.

2019-Present: Introduction to signal transduction mechanisms, Receptor Tyrosine Kinases, and their inhibitors, Protein Kinases A and G, Phospholipase C, DAG, IP3, Ca2+, and Protein Kinase-

C, Cell Stress-related kinases (MAPK, SAPK, JUNK), PI3-kinase, Protein Kinase-B, and eNOS signaling, Mammalian Target of Rapamycin and AMP-Kinase pathways, Cell polarity and cell junctions, Vascular permeability, vascular normalization, & cancer metastasis, Cellular integrins: Affinity and avidity modulation, Cytoskeletal remodeling in cell adhesion and motility, TGFβ and BMP signaling in physiology and pathology, Pitfalls/Alternative/ Methods/collaborators (Team building), Cell differentiation: Mesenchymal cells/myofibroblasts in health & disease, Mechanisms of T-cell differentiation in inflammation.

PHRM 8700 (Advanced Therapeutics I; Spring Semester – 4 CR)

2009-Present: Ischemic Heart Disease, Cardiac Arrhythmias and Congestive Heart Failure (CHF), Experimental therapeutics in CHF and hypertension, Introduction to Pharmacogenomics, Pharmacogenomics in Cardiovascular System

PHRM 8720 (Advanced Therapeutics II; Spring Semester; Course coordinator – 4CR)

2016-Present: Pulmonary Hypertension: Pathophysiology & Therapeutics, Pulmonary fibrosis: Pathophysiology & Therapeutics, Anti-cancer Drugs I and II, Anti-angiogenic cancer therapy, Immunotherapy, Gene Therapy, Mechanisms of inflammation and Anti-inflammatory drugs

PHRM 8730 (Advanced Therapeutics III; Spring Semester; Course coordinator – 4CR)

2013-2016: Pulmonary Hypertension: Pathophysiology and Therapeutics; Pulmonary fibrosis: Pathophysiology and Therapeutics; Anti-cancer Drugs I and II; Anti-angiogenic cancer therapy, Mechanisms of inflammation, and Anti-inflammatory drugs

PHRM 8730 (Journal Club/Seminar, Every Spring and Fall semesters – 1CR)

2009-Present: Instructor (25% Effort)
2011-2018: Course Coordinator and Instructor (50% Effort)

Thesis Reader

2016: Dinesh Babu (Graduated in February 2016 from Madras University, India)
2015: Akhilesh Prajapati (Graduated in March 2015 from MS University of Baroda, India)
2014: Seremwe, Mutsa (Graduated in April 2014 from Augusta University)
2012: Lakiea Bailey (Graduated in April 2012 from Georgia Regents/Augusta University)

PHARMD AND RESIDENCY PROGRAMS

PHRM 5920 (Clinical Seminar; Spring Semester – 1 CR)

2026: Gemma Aniezue
2025: Kim Ngan Mai; Christina Mapp; Yu Li Lam
2024: Hannah Smith; Aaliyah Robinson; Dooyoung Choi
2022: Edith Ford; Christopher Le; Laura Ramirez
2023: Alexander Duran; Kelly Adams; Alyssa Elmore
2020: Taylor Clifton; Brooke Cottle; JJ Lee; Stacey Risk
2021: Antonia Fagbamiye; Evan Kelley; Haley Peters; Rachel Shelley
2018: Bernard Hsia; Travis Tarleton
2019: Benjamin Crawford; Dimple Dhakal; Vincent Nguyen
2016: Zachary Hood; Margeret Keene; Rachel AnnStephens
2017: Annie Lee; Justin Joy; Priscilla Shibu
2014: Charles Fair; Kelvin Kamara; Brian West
2015: Skylar Hendricks; Taylor Capers; Patrick Walker
2012: Holly Mathews; Meghan Caylor; Jeffrey Wang
2013: Erin Gurley; Jennifer Lee; Nick Stiles
2010: Shawn Gahagan; Amy Rutland

2011: Kara Hartman; Michael Thiman

APPE (Advanced Pharmacy Practice Experience) – Research (P4 Students – 3 CR)

2019: Tim Jones
2020: Ahmad Zayd
2014: Jessica Rhodes; Kelvin Kamara; Yuhan Ji; Thuan Tran
2017: Tiffany Nina Park; Alex Lam
2011-2012: Robert Newsome
2012-2013: Erin Gurley; Samantha Burke; LeeAnn Thompson

PHRM 5980 (Special topics in pharmacy-Undergraduate Research - P3 Students – 3CR)

2022: Edith Ford; Christopher Le; Laura Ramirez
2023-2024: Jessie Vo; Ananda Anderson; Man Lin La
2019: Bernard Hsia
2021: Ziad Khalid
2017: Tiffany Nina Park; Van Bui
2018: Naphun Nimmanonda
2015-2016: Margret Keene; Emily Jean Murray; Ife-Atu Anachbe
2016-2017: Oge Okoye; Daniel T. Anderson
2014: Isra J. Rosales; Benjamin J. Albrecht; Ankit Patel (Spring)
2014: Jessica Rhodes; Kelvin Kamara; Yuhan Ji; Thuan Yen Tran
2012-2013: Erin Gurley; Samantha Burke; LeeAnn Thompson
2013: Jessica Ujjin
2009-2010: Diana Huang
2011-2012: Uvette Lou; Brian Griffin; Robert Newsome

PHRM 7390 (Advanced Residency Research for PGY2 Oncology – 3 CR)

2011-2012: Katsanevas, Katerina
2012-2013: Steinbach, Alison
2015-2017: Andrick, Benjamin

PHRM 5200 (Health Research Methods – Spring and Fall Semesters – 2 CR)

2021 Fall-Present: Data collection II: databases, and Research Ethics

PHRM 5210 (Special topics in pharmacy-Writing Electives – P3 Students – 3CR)

2013: Liu, Wen Fei, and Patel, Ami

PHRM 3550 (Human Pathophysiology; Fall Semester; Instructor – 4 CR)

2021-Present: Cancer pathophysiology-1, Cancer Pathophysiology-2, Lung pathophysiology-1, Lung Pathophysiology-2.

POST-DOCTORAL FELLOWS, RESIDENTS, AND JUNIOR FACULTY

2009-2013: Anna Goc, Ph.D. - Postdoc Fellow (Currently a Principal Scientist at Dr. Rath's Research Institute, CA)
2009-2010: Junxiu Liu, Ph.D. - Fellow (Currently an Assistant Professor at Icahn School of Medicine, Mount Sinai, NY)
2009-2012: Samith Thomas Kochuparambil, MD - Resident Fellow (Virginia Piper Cancer Institute, Minneapolis, MN, Currently Minnesota Oncology, MN)
2011-2015: Fei Gao, MD, Ph.D. - Postdoc Fellow (Currently an Attending Physician and Professor at The First Affiliated Hospital, Chongqing Medical University, China)
2012-2013: Alison Steinbach, PharmD - PGY2 Resident (Currently a Clinical Pharmacist in PA)

2011-2012: Katerina Katsanevas, PharmD - PGY2 Resident (Currently a Clinical Pharmacist at the University of Utah)

2014-2015: Ahmad Al-Azayzih, PharmD, Ph.D. - Postdoc Fellow (Currently an Associate Professor at the Jordan University of Science and Technology)

2015-2017: Benjamin Andrick, PharmD - PGY2 Resident (Pharmacist, Geisinger Health Care, PA)

2016-2019: Harika Sabbineni, Ph.D. - Postdoc Fellow (Currently the Director of Business Development at ConcertAI, TX)

2016-2021: Arti Verma, Ph.D. - Postdoc Fellow (Currently Research Scientist, Ohio State University)

2017-2021: Andrea Newsome, PharmD, MSCR - Clinical Assistant Professor and GA-CTSA KL2 Awardee (Currently, Associate Professor at the University of Colorado)

2021-2024: Shengshuai Shan, Ph.D. - Postdoc Fellow (Currently a Research Associate at Augusta University)

2022-2023: Yohan Han, P.D. - Postdoc Fellow (Currently Assistant Professor, Wonkwang University School of Medicine, Iksan 54538, Republic of Korea).

2022-Present: Xiaoyun Wang, Ph.D. – Postdoc Fellow and Assistant Research Scientist (Currently Assistant Professor, Baylor College of Medicine, Houston, TX)

2024-Present: Yin Zhu, MS, Ph.D. - Postdoc Fellow (AHA Fellowship Awardee, Co-mentored)

DOCTORAL GRADUATES (MAJOR ADVISOR)

2023-Present: Mohamed Selim, PharmD - Claudin-5 and vascular dysfunction in retinopathy

2022-2025: Abdulaziz Alanazi, PharmD - Effect of diabetes on ARDS outcomes. (Currently Faculty at Northern Border University, Saudi Arabia)

2018-2023: Madhuri Rudraraju, PharmD - Regulation of Blood-Retinal-Barrier junctions in Uveitis (Postdoctoral Fellow at the University of Virginia, and National Eye Institute/NIH)

2017-2021: Mir S. Adil, PharmD - Claudin-17 in blood-tissue barrier regulation and permeability (Postdoctoral Fellow, Stanford University, Currently Assistant Professor, Lincoln Memorial University, TN).

2014-2019: Abdulrahman Alwhaibi, PharmD - The unconventional role of Akt1 in advanced prostate cancer (Currently Assistant Professor, King Saud University, Riyadh)

2014-2018: Sandeep Artham, PharmD - Reciprocal regulation of lung injury and resolution by the AKT/FOXO signaling in ARDS (Postdoctoral Fellow at Duke University, NC, Currently Scientist at Jackson Laboratories)

2012-2017: Harika Sabbineni, B.Pharm - Akt-mediated pathway regulating endoMT transition and pulmonary vascular remodeling (Currently Director of Business Development at ConcertAI, TX)

2010-2014: Maha Abdalla, PharmD - Akt in myofibroblast differentiation and pulmonary vascular remodeling and idiopathic pulmonary fibrosis (Currently Associate Professor at South College of Pharmacy, TN)

2010-2014: Ahmad Al-Azayzih, PharmD - P21-activated kinase in prostate cancer metastasis (Currently Associate Professor at JUST, Jordan)

2**009-2013**: Belal Al-Husein, B.Pharm - Simvastatin-mediated inhibition of prostate cancer cellular functions in vitro and tumor growth in vivo (Currently Associate Professor and Assistant Dean at JUST, Jordan).

MASTER'S GRADUATES (MAJOR ADVISOR)

2019-2024: Timothy Jones, PharmD – MMP3 as ARDS marker (Currently Northside Hospital Atlanta)

2022-2024: Manya Yendamuri, PharmD - Targeting P21-activated kinase to prevent retinal endothelial cell dysfunction (Currently Associate Scientist at Sanofi, Hyderabad, India)

2020-2022: Abdulaziz Alanazi, PharmD - A multi-arm, parallel, preclinical study investigating the potential benefits of Acetazolamide, Candesartan, and Triciribine in the treatment of cryptococcal meningitis (Currently Faculty at Northern Border University, Saudi Arabia)

2020-2023: Varun Parvathagiri, PharmD - Claudin-17 in acute lung injury (Currently a graduate scholar at Wake Forest University, NC).

2019-2021: Andrea Newsome, PharmD - MMP3 as a biomarker for ARDS (MSCR-Emory University) (Currently Associate Professor at U Colorado)

2018-2020: Rana Kadry, PharmD - Cisatracurium-induced protection of endothelial-barrier function (Currently a Ph.D. Scholar at the University of Nebraska)

2017-2019: Asma Gah, PharmD - Tale of two Alks: alk1 and alk5 in TGFβ1-induced myofibroblast differentiation (Currently a Pharmacist in Saudi Arabia)

2017-2019: Ahlam Alharthi, PharmD - Distinct effects of pharmacological inhibition of stromelysin1 on endothelial-to-mesenchymal transition and myofibroblast differentiation (Currently a Pharmacist in Saudi Arabia)

DOCTORAL GRADUATES (ADVISORY COMMITTEE)

2025-: Shravani Etrouth, PharmD – TBD (CET, UGA)

2025-: Siddhika Gamare, MS – TBD (CET, UGA)

2023-: Mohammed Zuber, PharmD - Evaluating Cardiovascular Risk and Cost Burden of CAR T-Cell Therapy in Large B-Cell Lymphoma: A Target Trial Emulation (PHSOP, UGA)

2023-: Bayan Matani, PharmD – Smox signaling in MS-related optic nerve injury and inflammation (CET, UGA)

2022-2025: Saugata Dutta, BPharm, MS - Lung injury (CET, UGA)

2022-2025: Harry Henry Ojo, PharmD - Spermine oxidase and MS-induced vision disorders (CET, UGA)

2022-2024: Joseph Whitley - Extracellular vesicle-mediated delivery of CRISPR-Cas9 ribonucleoprotein for gene editing (PBS, UGA- Currently at USDA)

2021-2024: Sultan Almuntashiri, Pharm.D - Investigating TIMP-1 as a Potential Biomarker and Target in Acute Lung Injury (CET Ph.D. Scholar, UGA – Currently Faculty in Saudi Arabia)

2021-2024: Suhib Alhusban - Hexosamine biosynthesis pathway in PAD (Augusta University)

2020-2023: Ijeoma Aziz - RTK inhibitors as neoadjuvant therapy in RCC (Currently Regional Officer, Global Health at NIH/NIAID)

2020-2024: Yin Zhu, MS - microRNA regulation of pneumonia-induced lung injury (CET, UGA- Currently Postdoctoral Fellow, UGA)

2019-2024: Jeremy Burton, MS - Atypical p38MAP signaling in lung injury (CTSA Fellow, PBS, UGA- Currently at USDA)

2019-2023: Moaddey Alfarhan, BPharm, MS - Spermine oxidase in neuroinflammation in the retina (Currently Assistant Professor, King Khalid University, KSA)

2019-2023: Abdulkarim Alshammari, PharmD, MS - Spermine oxidase in neuroinflammation in the retina (Currently Assistant Professor, Northern Border University, KSA)
2014-2019: Wael Eldahshan, MS - Impact of angII receptor stimulation on recovery after stroke in females (Currently Assistant Professor, S.W. Oklahoma State University)
2012-2017: Mohammed Alsaggar, Pharm.D - Hydrodynamic delivery for cancer and obesity research (Currently Assistant Professor at the JUST, Jordan)
2011-2016: Sherif Hafez, B.Pharm - MMP-3 and tPA in neurovascular injury and worsening outcomes in hyperglycemic stroke (Currently Assistant Professor, Mercer University, GA)
2011-2015: Abdulrahman Fouda, B.Pharm - Mechanisms of neuroprotection with AT2 receptor stimulation after stroke (Currently Assistant Professor, University of Arkansas)
2010-2014: Sahar Soliman, B.Pharm - Mechanisms of protection by angiotensin II receptor antagonists after stroke (Assistant Professor, Sam Houston State University)
2009-2013: Roshini Prakash, BPharm - Cerebrovascular remodeling and plasticity in diabetes: relevance to stroke recovery (Medical Liaison, Jazz Pharmaceuticals, LA, CA)
2009-2013: Ahmed Alhusban, Pharm.D - Improving stroke outcomes by increasing the activity of the BDNF/TrkB system (Currently Associate Professor at the JUST, Jordan)
2009-2012: Mohamed Abdelsaid, B.Pharm - The imbalance of the cellular redox state impairs vascular endothelial growth factor survival and angiogenic signal (Currently Associate Professor, Mercer University SOM, Savannah, GA)

MASTER'S GRADUATES (ADVISORY COMMITTEE)

2024-2025: Siddhika Gamare, B Pharm - CYP1B1 Mediates Cigarette Smoke-Induced Lipid Accumulation in Alveolar Type 2 Cells. (Currently a Ph.D. Scholar at UGA)
2021-2023: Abdullah Alhumaid, PharmD - Targeting SMOX for ischemic retinopathy (Currently a Ph.D. Scholar at the University of Florida)
2019-2021: Sultan Almuntashiri, Pharm.D - CC16 in lung epithelial cells in response to *K. pneumoniae* (Currently a Ph.D. Scholar at UGA)
2018-2020: Amritha Candadai, B.Pharm - Fingolimod for multiple sclerosis-induced optic neuritis (Currently at Syngene International, Bangalore, India)
2017-2019: Waleed Althomali, PharmD - C21 for stroke (Currently a Pharmacist in Saudi Arabia)
2011: Eissa Jafari, PharmD - Neuronal SMOX on vascular damage in retinopathy (Currently a Ph.D. Scholar at the University of Florida)

OTHER TRAINEES

2025-Current: Vaishnavi Karnewar, BS – Research Associate.
2019-2021: Daulat Khulood, MBBS - Medical Student Volunteer, Currently at Stanford Univ.
2011-2013: Alanna Pruitt - Research Assistant (Currently at LabCorp, NC)
2011: Sejal Rana, MS - Research Assistant
2010-2011: Shuaib Mohamed, BS - Research Assistant (Currently in Medical School)
2010: Rahul Prasad - Summer Student (Currently in Medical School)
2010: Marqueena Dunn - Summer Student, Grovetown High
2009-2010: Mrunal Choudhary, BS - Research Technician II (Research Technician at AU)
2006-2009: Miroslava Tischenko, BS - Research Technologist, Cleveland Clinic (Currently Research Technologist at Case Western Reserve University).

Updated: October 5, 2026