

Shelley B. Hooks

Associate Vice President for Research Professor, Pharmaceutical and Biomedical Sciences University of Georgia, Athens, GA <u>shooks@uga.edu</u>

BACKGROUND

Academic appointments:

- 2019-present **Professor**, Department of Pharmaceutical and Biomedical Sciences, College of Pharmacy, University of Georgia
- 2019-present Adjunct Professor, Department of Biochemistry and Molecular Biology, Franklin College of Arts and Sciences, University of Georgia
- 2010-2019 Associate Professor, Department of Pharmaceutical and Biomedical Sciences, College of Pharmacy, University of Georgia
- 2004-2010 Assistant Professor, Department of Pharmaceutical and Biomedical Sciences, College of Pharmacy, University of Georgia
- 2004-present Graduate Faculty, University of Georgia Graduate School

Education and training:

- 2001-2004 **Postdoctoral Research**. University of North Carolina School of Medicine, Department of Pharmacology. <u>Mentor:</u> Dr. T. Kendall Harden, Kenan Professor.
- 1997-2000**PhD Dissertation**. University of Virginia School of Medicine, Department of
Biochemistry. <u>Mentor</u>: Dr. Kevin R. Lynch, Professor.
- 1992-1996 **Undergraduate B.S**. Clemson University, Department of Biochemistry.

LEADERSHIP

2018-present

Associate Vice President for Research, University of Georgia Director of Internal Grants, Awards, and Research Personnel.

- <u>Postdoctoral Affairs:</u> Serve postdoctoral scholars and faculty mentors through recruitment programs, community building, professional development programming, position management, policy development, and data reporting.
- <u>Research personnel</u>: Serve unique research personnel, including Research Scientists (non-tenure track faculty), Visiting Scientists, and Research Affiliates.
- <u>Internal Grants and Awards</u>: Manage review, award, assessment, reporting, and strategic investment of a \$750k portfolio of multiple internal funding programs, including seed grants, institutional support co-funding, bridge funding, and travel programs. Manage the annual competitive research awards program for faculty, postdocs, and students.

- <u>Communication</u>: Serve as a liaison between the Office of Research, academic units, centers and institutes, and faculty.
- <u>Strategic Planning</u>: Coordinate the development, annual updating, and reporting for the Office of Research's Strategic Plan and Diversity and Inclusive Excellence Plan.
- <u>Office:</u> Manage an office of 5 staff members and annual budget of \$185k.
- 2021-2022 Interim Department Head, Department of Pharmaceutical and Biomedical Sciences
 - Supported 24 faculty members in research, teaching, and service.
 - Managed a departmental budget of \$3M and supervised 6 administrative staff.
 - <u>Oversaw departmental B.S., M.S, Ph.D., and Pharm.D. academic programs, serving over</u> <u>1000 students.</u>

2016-2018 Interim Director, UGA Center for Drug Discovery, University of Georgia

- Re-launched an inactive Center
- Created a Drug Discovery Core high throughput screening shared laboratory

2010-2018 **Graduate Program Coordinator**, Department of Pharmaceutical and Biomedical Sciences

- Managed the recruitment, progress, retention, and graduation of graduate students
- Led comprehensive curriculum and policy redesign
- Reviewed policies, program reviews, appointments, and appeals for UGA's 200⁺ graduate programs as member of UGA Graduate council (2011-2014)

RESEARCH

Grant support:

<u>Pending</u>			
2024-2029	NIH (NIA) R01		
	"Regulation and Probe Development for RGS10 in micro	oglia"	
	\$1,983,856 total costs (Sjogren: PI)		
	\$524,112 subcontract to SB Hooks (Co-investigator)		
<u>Completed</u>			
2018-2023	NIH (NINDS) R01		
	"Targeting GPR109A for the treatment of pain in systemic lupus erythematosus"		
	\$1,640,625 total costs (Weng: PI)		
	\$40,900 annual subcontract to SB Hooks (Co-Investigate	or)	
2019-2022	NIH (NIA) R21		
	"Assay development, screening, and validation of small molecule RGS10 regulators"		
	\$424,534 (Hooks: dual P.I.)		
2019-2022	NIH (NINDS) R56		
Fall 2023	Curriculum Vita	P a g e 2 17	

	"RGS10 Regulation of Inflammatory Signaling" \$528,500 (Hooks: P.I.)	
2017-2020	NIH (NINDS) R21 "Identification of Novel Nuclear RGS10 Binding Partners" \$412,500 (Hooks: P.I.)	
2017-2019	BBGA, P.C. "Inflammatory Mechanisms in Ovarian Cancer" \$461,110 (Hooks: P.I.)	
2015-2016	College of Pharmacy Foundation Pilot Award "Identification of Novel Nuclear RGS10 Binding Partners" \$4000 (Hooks: P.I.)	
2014-2015	National Multiple Sclerosis Society "Anti-Inflammatory Mechanisms of Microglial Regulator of G-protein Signaling 10" \$44,000 (Hooks: P.I.)	
2012-2014	Marsha Rivkin Center for Ovarian Cancer Research "A One-Two Punch: Dual Mechanisms for RGS inhibition of cell survival signals" \$75,000 (Hooks: P.I)	
2010-2013	NIH (National Cancer Institute) R15 "Modulation of RGS proteins and Ovarian Cancer Chemoresistance" \$371,250 (Hooks: P.Idual)	
2010-2013	NIH (National Cancer Institute) Minority Supplement \$34,526 (Hooks: PI-dual)	
2011-2012	Dean's Pharmacy Special Endowment "LPA and S1P G protein-coupled receptor pathways intersect kinase-coupled receptor pathways to govern neural stem cell growth and differentiation" (Hooks: P.I.)	
2009-2010	Georgia Cancer Coalition Cancer Research Award \$55,000 (Hooks: P.I.)	
2006-2009	NIH (NIDA) R15 AREA grant "Regulation of dopamine signaling by striatal RGS9-2: mechanisms and specificity"; \$184,375 (Hooks: P.I.)	
2006-2009	American Foundation for Pharmaceutical Education <i>Student Fellowship</i> (for graduate student Jillian Hurst) \$18,000 (Hooks: P.I.)	
2008-2009	Elsa U. Pardee Foundation, Inc. "RGS Regulation of LPA Signaling in Ovarian Cancer" \$123,262. (Hooks: P.I.)	
2007-2009	Georgia Tech/UGA Biomedical Research Program Grant "Neurotransmitter-enabled Biofunctional Materials: Design and Mechanisms" \$100,000 (Hooks: Co-P.I; \$50,000 in direct costs to Hooks lab)	
2006-2008	Elsa U. Pardee Foundation, Inc. "RGS Proteins as Novel Molecular Targets for Ovarian Cancer Therapeutics" \$66,038 (Hooks: P.I.)	

2005	Georgia Cancer Coalition <i>Cancer Research Award</i> "RGS Protein Regulation of LPA Signaling in Ovarian Cancer" \$49,000 (Hooks: P.I.)
2006	The University of Georgia Research Foundation <i>Faculty Research Grant</i> "Role of Endogenous RGS9-2 in Neuronal Dopamine Signaling" \$7000 (Hooks: P.I.)
2005	The University of Georgia Research Foundation <i>Faculty Research Grant</i> "Signaling Properties of RGS9-2" \$8500. (Hooks: P.I.)
2002-2004	NIH (NIGMS) Postdoctoral F32 NRSA grant "GGL-RGS Proteins: Bifunctional G-protein Regulators"
1999-2001	NIH (NIDA) Predoctoral F31 NRSA grant "Lipid Phosphatases and Cannabinoid Biosynthesis"
1997-1999	NIH Cell and Molecular Biology training grant appointment

Research Mentoring

Primary Research Advisees:

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PhD students:			
2004-2009	Jillian Hurst		
2007-2012	Phillip Callihan		
2008-2013	Mourad Ali	Undergraduate students:	
2013-2019	Mohammed Alqinyah	2005-2006	Courtney Harper
2016-2020	Faris Almutairi	2005-2006	Ling Taing
2017-2020	Paul Freeman	2006-2007	Jonathan Smith
2016-2022	Menbere Wendimu	2006-2007	Paul Henkel
2017-present	Phillip Dean	2007-2008	Nisha Mendpara
Master's students:		2007-2009	Kathryn Turner
2005-2008	<u>:</u> Xiaoya Chen	2008-2010	Michael Stoeli*
2003-2008	Victoria Nelson	2008-2012	Song Kue
2015-2017	Priyanka Kota	2009-2011	Ariel Chan
2015-2017	Benjamin Jackwood	2009-2011	Eric Salgado*
2015-2018	Pooja Mohanty	2010-2011	Suhag Patel
2020-2023	Juliet Eneh*	2011-2013	Katie Tuggle
		2012-2014	Zoe Wickham
<u>PharmD students:</u>		2012-2014	Hector Salazar*
2005	Valerie Omidina*	2013-2014	Kyle Kye
2006	Shana Jackson	2013-2014	Mugdha Joshi
2007	Preeti Vallabh	2014-2015	Terri Cunningham*
2007	Melissa Cohen	2014-2016	Andrew Webster
2013	Brittany Yates	2013-2016	Huriyah Malik
		2015-2016	Victor Olorunyolemi*

2015-2017Parth Patel2016-2018Vitoria Kuzolitz2019-2022Drake Miller

Graduate Advisory Committees:

PhD Dissertation Committees: Sau Wai Hung (PBS) Becky Sweet (PBS) Molly Altman* (PBS) Jeong Kang (PBS) Huafeng Shen (PBS) Ibrahim Aljuffali (PBS) Ashwini Nadkarni (PBS) Meagan McManus (PBS) Kendra Stovall* (PBS) Achareeya Anguaraprassert (PBS) Amer Alanazi (PBS) Mohammed AlSaggar (PBS) Dylan Maixner (PBS) Melissa Young* (PBS) Sary Alsanea (PBS) Laura Hanold* (PBS) Babak Basiri (PBS) Mital Patel (PBS) Ali Alshamrani (PBS) Liza Ngo* (PBS) Melody Fulton* (PBS) Laura Wilt (PBS) Lishann Ingram* (PBS) Matt Wang (PBS) Charnel Byrnes (PBS) Jaeah Kim (PBS) Omar Alsaidan (PBS) Sukhneeraj Kaur (PBS) Kavitha Adusumilli (PBS) Parisa Darkhall (PBS) Hao Sun (PBS) Zhesi Zhu (PBS) Xiaohan Zhang (PBS) Leah Helton (PBS) Minkyung Kang (PBS)

<u>Peer-reviewed publications</u> <u>Articles:</u>

Jeremy Burton (PBS) Hannah Fulenwider (Phys/Pharm) Elizabeth Dudley (Phys/Pharm) Geneva Demars (Biochem) Kathy Lengel (Biochem) Jenny Mumaw (ADS) Belal Al-Husein (CET) Liyun Maggie Liu (Phys/Pharm) Amalia Cardenas (ADS) Buddy Trost (Biochem) Wenyuan Xiao (Biochem) Jonathan Viola (Biochem) Rajani Ravishankar (Biochem) Nagini Maganti (Biology, GSU) Hannah Stephen (Biochem) Josephine Dagher (Phys/Pharm) Benjamin Hoffman (Cell Bio) Alicer Andrew* (InfDis) Alysha Higgs* (Gene) Bidishi Chandra (Cell Bio) Christina Sabin (Cell Bio) Chibuike Obi* (Biochem) Jocelyn Gomez* (InfDis) Dylon Stephens (InfDis) Kristin Amico (Phys/Pharm) Kendall Clay (Cell Bio) Yasmin Anderson (PBS) Rida Osman (Cell Bio) Shannon Wagner (Biochem) Sneha Ghosh (PBS) Griffin Clabaugh (Biochem) Autumn Tobin (Chem) Macey Wilson (Cell Bio)

MS Thesis Committees: Ben Nguyen (PBS) Morgan Roos (PBS) Shivani Khatu (PBS) Madhura Tummalapally (PBS) Mitchell Wolfe (PBS) Megan MacFarlane (PBS) *: Underrepresented trainees

- 1. Dean, P. T. and **Hooks S.B***. (2023) Pleiotropic effects of the COX-2/PGE2 axis in the glioblastoma tumor microenvironment. *Front. Oncol.* 12: 1116014.
- Maixner, D. W.; Christy, D.; Kong, L.; Viatchenko-Karpinski, V.; Horner, K. A.; Hooks, S. B.; Weng, H.-R. (2022) Phytohormone abscisic acid ameliorates neuropathic pain via regulating LANCL2 protein abundance and glial activation at the spinal cord. *Molecular Pain* 18: 17448069221107781.
- 3. Wendimu, M.Y., **Hooks, S.B**.* (2022) Microglia Phenotypes in Aging and Neurodegenerative Diseases. *Cells* 11 (13): 2091.
- 4. Wendimu, M., Alqinyah, M., Vella, S., Dean, P., Almutairi, F., Rivera, R.D., **Hooks, S.B**.*. (2021) RGS10 physically and functionally interacts with STIM2 and requires store-operated calcium entry to regulate proinflammatory gene expression in microglia. Cellular Signaling 83: 109974.
- Ahlers-Dannen, K. E., Alqinyah, M., Bodle, C., Bou Dagher, J., Chakravarti, B., Choudhuri, S. P., Druey, K. M., Fisher, R. A., Gerber, K. J., Hepler, J. R., Hooks, S. B., Kantheti, H. S., Karaj, B., Lee, J.-K., Luo, Z., Martemyanov, K., Mascarenhas, L. D., Montañez-Miranda, C., Phan Thi Nhu, H., Roman, D. L., Shaw, V., Sjögren, B., Spicer, M. M., Squires, K. E., Sutton, L., Wendimu, M., Wilkie, T. M., Xie, K. and Zolghadri, Y. (2020) "Regulators of G protein Signaling (RGS) proteins (version 2020.5) in the IUPHAR/BPS Guide to Pharmacology Database", IUPHAR/BPS Guide to Pharmacology CITE, 2020(5). doi: 10.2218/gtopdb/F891/2020.5.
- 6. Yan, X., Maixner, D., Yadav, R., Gao, M., Ali, M., **Hooks, S.B**., Weng, H.-R. (2019) Interleukin-1beta released by microglia initiates the enhanced glutamatergic activity in the spinal dorsal horn during paclitaxel-associated acute pain syndrome. Glia. 67 (3) 482-497.
- Alqinyah, M., Almutairi, F., Wendimu, M.Y., Hooks, S.B.* (2018) RGS 10 Regulates the Expression of Cyclooxygenase-2 and Tumor Necrosis Factor Alpha through a G Protein-Independent Mechanism. *Molecular Pharmacology*, 94 (4) 1103-1113.
- 8. Alqinyah M., **Hooks S.B**.* (2018) Regulating the regulators: Epigenetic, transcriptional, and posttranslational regulation of RGS proteins. *Cell Signal*. 42:77-87. doi: 10.1016/j.cellsig.2017.10.007. PMID: 29042285.
- Alqinyah, M., Maganti, N., Ali, M.W., Yadav, R., Gao, M., Weng, H-R., Greer, S.F., Hooks, S.B.* (2017) Regulator of G-protein Signaling 10 (*Rgs10*) expression is transcriptionally silenced in activated microglia by histone deacetylase activity. *Molecular Pharmacology*, 91(3) 197-207. DOI: https://doi.org/10.1124/mol.116.106963.
- 10. Maixner, D.W., Yan, X., **Hooks, S.B.,** Weng, H.-R. (2016) AMPKα1 knockout enhances nociceptive behaviors and spinal glutamatergic synaptic activities via production of reactive oxygen species in the spinal dorsal horn. *Neuroscience*, 326 (21): 158-169.
- 11. Hooks, S.B., Murph, M.M. (2015) Cellular Deficiency in the RGS10 protein facilitates chemoresistant ovarian cancer. *Future Medicinal Chemistry*, 7(12): 1483-1489.
- 12. Hung S.W., Marrache S., Cummins S., Bhutia Y.D., Mody H., **Hooks S.B**., Dhar S., Govindarajan R. (2015) Defective hCNT1 transport contributes to gemcitabine chemoresistance in ovarian cancer subtypes: Overcoming transport defects using a nanoparticle approach. *Cancer Letters*, 359 (2):233-40.

- 13. Alqinyah, M. and Hooks, S.B.* (2015) R12 family: regulator of G-protein signaling 10. IUPHAR/BPS Guide to Pharmacology, http://www.guidetopharmacology.org/GRAC/ObjectDisplayForward? objectId=2818.
- 14. Tuggle, K., Ali, M.W., Salazar, H., **Hooks, S.B**.* (2014) Regulator of G-protein Signaling (RGS) transcript expression in human neural progenitor differentiation: R7 subfamily regulation by DNA methylation. *NeuroSignals*, 22(43-51).
- 15. Calihan, C.P., Ali, M., Salazar, H., Quach, N. Wu, X., Stice, S.L., **Hooks, S.B**.* (2014) Convergent regulation of neuronal differentiation and Erk and Akt kinases in human neural progenitor cells by Lysophosphatidic Acid, Sphingosine 1-phosphate, and LIF: specific roles for the LPA1 receptor. *ASN Neuro, 6(6):* 1759091414558416.
- 16. Cacan, E., Ali, M.A., Boyd, N.H., **Hooks, S.B**., Greer, S.F. (2014) Inhibition of HDAC1 and DNMT1 modulate RGS10 expression and decrease ovarian cancer chemoresistance. *PLOS One*, 9 (1): e87455. PMID: 24475290..
- Ali, M.W., Cacan, E., Liu, Y., Pierce, J.Y., Creasman, W.T., Murph, M.M., Govindarajan, R., Eblen, S.T., Greer, S.F, and Hooks, S.B.* (2013) Transcriptional suppression, DNA methylation, and histone deacetylation of the Regulator of G-protein Signaling 10 (RGS10) gene in ovarian cancer cells. *PLOS One*, 8 (3) e60185. PMID: 23533674
- 18. Callihan, C. P., Zitomer, N.C., Stoeling, M.V., Kennedy, P.C., Lynch, K.R., Riley, R.T., **Hooks, S.B**.* (2011) Distinct generation, pharmacology, and distribution of sphingosine 1-phosphate and dihydrosphingosine 1-phosphate in human neural progenitor cells. *Neuropharmacology*, 62 (2):988-96.
- 19. Callihan, C.P., Mumaw, J., Machacek, D.W., Stice, S.L., **Hooks, S.B.*** (2010) Regulation of stem cell pluripotency and differentiation by G-protein coupled receptors. *Pharmacology and Therapeutics*, 129 (3):290-306.
- 20. Hooks, S.B.*, Callihan, C.P., Altman, M., Ali, M., Hurst, J.H., Murph, M.M. (2010) Regulators of G-protein Signaling RGS10 and RGS17 regulate chemoresistance in ovarian cancer cells. *Molecular Cancer*, 9:289.
- 21. Hurst, J.H., and **Hooks, S.B.*** (2009) Regulator of G-protein Signaling (RGS) proteins in Cancer Biology. *Biochemical Pharmacology*, 78 (10):1289-97
- 22. Hurst, J.H. and **Hooks, S.B**.* (2009) Lysophosphatidic Acid stimulates cell growth by different mechanisms in SKOV-3 and Caov-3 ovarian cancer cells: Distinct roles for Gi and Rho. *Pharmacology*, 83:333-347.
- 23. Hurst, J.H., Mendpara, N., and **Hooks, S.B**.* (2009) Regulator of G-protein signaling expression and function in ovarian cancer cell lines. *Cellular and Molecular Biology Letters*, 14(1):153-74.
- 24. Hurst, J.H., Machacek, D., Stice, S.L. and **Hooks, S.B.*** (2008) Human neural progenitors express functional lysophospholipid receptors that regulate cell growth and morphology. *BMC Neuroscience*, 11(9): 118.
- 25. **Hooks, S.B.** and Cummings, B.S. (2008) Role of Ca2+-Independent Phospholipase A2 in Cell Growth and Signaling, *Biochemical Pharmacology*, 76(9):1059-67.
- Hurst, J.H., Henkel, P.A., Brown, A.L., Hooks, S.B.* (2008) Endogenous RGS Proteins Attenuate Galpha(i)mediated Lysophosphatidic Acid Signaling Pathways in Ovarian Cancer Cells, *Cellular Signaling*, 20(2), 381-9.

- 27. Hooks, S.B., Martemyanov, K., Zachariou, V. (2008) A role of RGS Proteins in Drug Addiction, *Biochemical Pharmacology*, 75(1), 76-84.
- 28. Jones, M., Siderovski, D., **Hooks, S.B.*** (2004). GGL-ing at convention: Novelty and selectivity in the Gβ² dimer. *Molecular Interventions.* 4: 200-214.
- 29. Wu, Y.-L., Hooks, **S.B**., Harden, T.K., Dohlman, H. (2004). Dominant-negative inhibition of pheromone receptor signaling by a single point mutation in the G protein α subunit. *Journal of Biological Chemistry*. 279: 35287-97.
- 30. **Hooks, S.B**. and Harden, T.K. (2004). Purification and *in vitro* functional analysis of R7-subfamily RGS proteins in complex with Gβ5. In *Methods in Enzymology* (D. Siderovski, Ed.), Vol. 390. Elsevier Inc., San Diego.
- 31. Bodor, E.T., Waldo, G.L., **Hooks, S.B**., Corbitt J., Boyer J.L., Harden T.K. (2003). Purification and functional reconstitution of the human P2Y12 receptor. *Molecular Pharmacology*. 64:1210-1216.
- 32. Hooks, S.B.*, Waldo, G.L., Corbitt, J., Bodor, E.T., Krumins, A.M., and Harden, T.K. (2003). RGS6, RGS7, RGS9 and RGS11 Stimulate GTPase activity of Gi family G-proteins with differential selectivity and maximal activity. *Journal of Biological Chemistry*. 278:10087-10093.
- *33.* Hooks, S.B., Lynch, K.R. (2001). Lysophospholipid signaling: The Edg and beyond. *Celltransmissions*. 17: 3-10.
- 34. **Hooks, S.B**., Santos, W.L., Im, D.S., Macdonald, T.L., and Lynch, K.R. (2000). Lysophosphatidic Acid induced mitogenesis is regulated by Lipid Phosphate Phosphatases and is Edg-receptor independent. *Journal of Biological Chemistry*. 276:4611-4621.
- Lynch, K.R., O'Neill, G.P., Liu, Q., Im D.S., Sawyer, N. Metters, K.M., Coulombe, N., Abramovitz, M., Figueroa, D.J., Zeng, Z., Connolly, B.M., Bai, C., Austin, C.P., Chateauneuf, A., Stocco, R., Greig, G.M., Kargman, S., Hooks, S.B., Hosfield, E., Williams, D.L. Jr., Ford-Hutchinson, A.W., Caskey, C.T., Evans, J.F. (1999).Characterization of the human cysteinyl leukotriene CysLT1 receptor. *Nature*. 399:789-93.
- 36. Hopper, D.W., Ragan, S.P., **Hooks, S.B**., Lynch, K.R., and Macdonald, T.L. (1999). Structure-activity relationships of lysophosphatidic acid: conformationally restricted backbone mimetics. *Journal of Medicinal Chemistry*. 42:963-970.
- Hooks, S.B., Ragan, S.P., Hopper, D.W., Honneman, C.W., Durieux, M.E., Macdonald, T.L., and Lynch, K.R. (1998). Characterization of a receptor subtype-selective lysophosphatidic acid mimetic. *Molecular Pharmacology*. 53: 188-194.
- 38. **Hooks, S.B**., Ragan, S.P. and Lynch, K.R. (1998). Identification of a novel human phosphatidic acid phosphatase type 2 isoform. *FEBS Letters*. 427:188-192.

Book Chapters:

- 1. Callihan P., Alqinyah, M., Hooks, S.B.*(2017) S1P Signaling in Human Neural Progenitors. Ed: Turksen, K., Pebay, A. *Sphingosine 1-Phosphate Signaling: Methods and Protocols.* Humana Press. (Citations: 2)
- 2. **Hooks, S.B**., Murph, M.M. (2017) Regulator of G-protein Signaling 10. Ed: Sangdun Choi, *Encyclopedia of Signaling Molecules*, Second Edition, Springer.

- 3. **Hooks, S.B.,** Murph, M.M. Cellular Deficiency in the Regulator of G-protein Signaling 10 Protein Facilitates Chemoresistant Ovarian Cancer. *Medicinal Chemistry Advances: Overcoming Multidrug Resistance in Oncology*, Ed.: Ryan De Vooght-Johnson. Future Science Group, **2014.**
- Hooks, S.B*. Kinase Coupled Receptors and G-Protein Coupled Receptors Regulate Neural Stem Cell Differentiation via Common Signaling Pathways: Emerging Evidence for Convergent Regulation. *New Development in Signal Transduction Research*. Ed: Masayoshi Yamaguchi. Nova Science Publishing, 2013.
- 5. Callihan P., Hooks, S.B. S1P Signaling in Human Neural Progenitors. *Sphingosine 1-Phosphate Signaling: Methods and Protocols.* Ed: Turksen, K., Pebay, A. Humana Press, **2012**. PMID: 22528449.

*: Corresponding author

<u>Abstracts</u>:

- PT Dean, **SB Hooks**. "Impact of Microglial RGS10 Regulation of Inflammatory Mediators in the Glioblastoma Tumor Microenvironment". (2023) Journal of Pharmacology and Experimental Therapeutics June 2023, 385 (S3) 50.
- KR Quintero, C Tope, RB Urbauer, **SB Hooks**, J Urbauer. "Integrating Techniques to Address Challenges in Protein Structural Biology STIM2 regulation by calmodulin and RGS10" (2023) Protein Science, vol 32.
- C Tope, RB Urbauer, **S Hooks**, J Urbauer. "Regulation of G-Protein Signaling: Physical Studies on the Interaction of RGS10 and Calmodulin" (2021) Protein Science, vol 30.
- PT Dean and **SB Hooks**. "Role of RGS10 in the Ovarian microenvironment." (2020) The FASEB Journal 34 (S1), 1-1.
- MY Wendimu, M Alqinyah, S Vella, SNJ Moreno, **SB Hooks**. "Regulator of G protein Signaling 10 (RGS10) functionally interacts with store-operated calcium entry machinery to regulate COX-2 and TNF-α in Microglia" (2020) The FASEB Journal 34 (S1), 1-1
- F Almutairi, M Alqinyah, M Wendimu, S Vella, S Moreno, **SB Hooks**. "The role of calcium in RGS10 regulation of inflammatory signaling in microglia" (2019) The FASEB Journal 33 (S1), 669.1-669.1
- MY Wendimu, M Alqinyah, P Freeman, S Vella, SNJ Moreno, **SB Hook**s. "A Novel Interaction between Regulator of G-protein Signaling (RGS10) and STIM2 Identifies New Mechanism for the Regulation of COX-2 in Microglia" (2019) The FASEB Journal 33 (S1), 669.2-669.2
- MY Wendimu, M Alqinyah, **SB Hooks**. "Regulator of G-protein Signaling (RGS10) regulates the expression of COX-2 and TNF-α in microglia via G-protein independent mechanism" (2018) The FASEB Journal 32, 557.8-557.8
- Jeffrey L. Urbauer, Cynthia Tope, **Shelley B. Hooks**, Ramona Bieber Urbauer. "Production of RGS Proteins for Physical Studies" (November 2017) Southeastern Regional Meeting of the American Chemical Society
- Mohammed Alqinyah, Nagini Maganti, Mourad Ali, Susanna Greer, Han-Rong Weng, **Shelley B, Hooks.** "Regulator of G Protein Signaling 10 (Rgs10) Expression Is Transcriptionally Silenced in Activated Microglia by Histone Deacetylase Activity" (April 2017) American Society for Pharmacology and Experimental Therapeutics (ASPET), Experimental Biology Annual Meeting. Chicago, IL.
- **Shelley B. Hooks**, Mohammed Alqinyah, Andrew Webster, Daitoku Sakamuro. "Functional and Transcriptional Interactions Between Regulator of G-protein Signaling Protein 10 (RGS10) and Tumor Suppressor

Proteins in Cancer Chemosensitization" (April 2016) American Society for Pharmacology and Experimental Therapeutics (ASPET), Experimental Biology Annual Meeting. San Diego, CA.

- Mugdha Joshi, Mohammed Alqinyah, and **Shelley B. Hooks. "**The Role of RGS10 in Regulating Neuroinflammation in Microglia" (March 2015) Council for Undergraduate Research Annual Posters on the Hill, Washington, D.C.
- Shelley B. Hooks. "Releasing the Brakes on Ovarian Cancer Cell Survival: Epigenetic Suppression of in Ovarian Cancer Chemoresistance" (September 2014) Marsha Rivkin Center for Ovarian Cancer Research 10th Symposium, Seattle WA.
- Shelley B. Hooks. "Lysophospholipid Regulation of Neuronal Differentiation and Erk and Akt Kinases in Human Neural Progenitor Cells", (March 2014) 45th Annual American Society for Neurochemistry Meeting. Long Beach, CA.
- Mourad W. Ali, Ercan Cacan, Yuying Liu, Scott T. Eblen, Susanna Greer, Shelley B. Hooks. "Transcriptional Suppression, DNA Methylation, and Histone Deacetylation of the Regulator of G-protein Signaling 10 (RGS10) Gene in Ovarian Cancer Cells" (April 2013) American Society for Pharmacology and Experimental Therapeutics (ASPET), Experimental Biology Annual Meeting. Boston, MA.
- Mourad W. Ali, Phillip Callihan, Ercan Cacan, Mandi Murph, Susanna Greer, Shelley B. Hooks. "Epigenetic Regulation of Regulator of G-protein Signaling (RGS) Proteins in Chemoresistant Ovarian Cancer Cells" (April, 2012) American Society for Pharmacology and Experimental Therapeutics (ASPET), Experimental Biology Annual Meeting. San Diego, CA.
- Phillip Callihan, Nicholas C. Zitomer, Michael V. Stoeling, Perry C. Kennedy, Kevin R. Lynch, Ronald T. Riley,
 Shelley B. Hooks. "Distinct generation, pharmacology, and distribution of sphingosine 1-phosphate and dihydro-sphingosine 1-phosphate in human neural progenitor cells." (April, 2012). American Society for Pharmacology and Experimental Therapeutics (ASPET), Experimental Biology Annual Meeting. San Diego, CA.
- Phillip Callihan, Ronald T. Riley, Steven L. Stice, Shelley B. Hooks. "Lysophospholipid mediated regulation of human neural progenitor cell function" (2011). 46th Annual Southeastern Regional Lipid Conference. Cashiers, N.C.
- Phillip Callihan, Mourad Ali, Shelley B. Hooks. "RGS Regulation of Cell Survival in Chemoresistant Ovarian Cancer" (April, 2011) American Society for Pharmacology and Experimental Therapeutics (ASPET) Colloquium on RGS and AGS Proteins in Physiology and Disease. Washington D.C.
- Mourad Ali, Phillip Callihan, **Shelley B. Hooks**. "Epigenetic Regulation of Regulators of G-protein Signaling RGS10 and RGS17 Expression in Chemoresistant Ovarian Cancer" (April, 2011). American Society for Pharmacology and Experimental Therapeutics (ASPET) Colloquium on RGS and AGS Proteins in Physiology and Disease. Washington D.C.
- Phillip Callihan, Janee Gelineau-van Waes, Steve Stice, Ron T. Riley, Shelley B. Hooks. "Lysophospholipid Signaling in Human Neural Progenitors." (2010) American Society for Pharmacology and Experimental Therapeutics (ASPET), Experimental Biology 2010. Anaheim, CA.
- Phillip Callihan, Jillian H. Hurst, Ronal Riley, Steve L. Stice, **Shelley B. Hooks**. (2009) "Sphingosine 1-Phosphate and Lysophosphatidic Acid Signaling in Human Neural Progenitors Following Fumonisin Exposure."

FASEB Summer Research Conferences: Lysophospholipid Mediators in Health and Disease. Carefree, AZ.

- Hurst, J.H., Callihan, P.C., Turner, K., **Hooks, S.B**. (2009) Gi G-protein Selective RGS Proteins Regulate Lysophosphatidic Acid Signaling in SKOV-3 Ovarian Cancer Cells. American Society for Pharmacology and Experimental Therapeutics (ASPET), Experimental Biology 2009. New Orleans, LA.
- Machacek, D.W., Sturkie, C.D., Dodla, M.C., Hurst, J.H., **Hooks, S.B.**, Stice, S.L. (2008) G-protein coupled receptor expression patterns are altered as human embryonic stem cell derived cultures differentiate. Society for Neuroscience. Washington D.C.
- Hurst, J.H. and Hooks, S.B. (2008) Lysophosphatidic Acid-stimulated cellular migration, proliferation and activation of p44/42 MAP kinases is modulated by endogenous RGS proteins in Ovarian Cancer Cells.
 Marsha Rivkin 7th Biennial Ovarian Cancer Research Symposium. Seattle, WA
- Hurst, J.H. and **Hooks, S.B**. (2008) Lysophosphatidic Acid-stimulated cellular migration, proliferation and activation of p44/42 MAP kinases is modulated by endogenous RGS proteins in Ovarian Cancer Cells. FASEB Experimental Biology 2010 Conference, Washington D.C.
- Hurst, J.H. and **Hooks, S.B**. (2008) Lysophosphatidic Acid-stimulated cellular migration, proliferation and activation of p44/42 MAP kinases is modulated by endogenous RGS proteins in Ovarian Cancer Cells. ASPET RGS Colloquium, Washington D.C.
- Zhang X., Talathi S., Hurst J.H., **Hooks S.B.** and Cummings B.S. (2007) Role of Calcium-Independent Phospholipase A₂ in Signal Transduction During Cytostasis and Cell Death in Prostate Cancer Cells. Society of Toxicology.
- Hurst, J.H., Brown, A.L., Henkel, P.A., and **Hooks, S.B**. (2007) Endogenous RGS proteins blunt Gi/o mediated responses to Lysophosphatidic acid in Ovarian Cancer Cells. Phosphorylation and G-protein mediated signaling networks; Gordon Research Conference.
- Hurst, J.H., Brown, A.L., Henkel, P.A., and **Hooks, S.B**. (2007) RGS2, RGS6, and GAIP differentially regulate Lysophosphatidic Acid Signaling in Ovarian Cancer Cells. G-protein Coupled Receptors ASPET Colloquium; FASEB Experimental Biology Conference.
- Hurst, J.H. and **Hooks, S.B**. (2006) The D2 Dopamine Receptor undergoes complex regulation by the Regulator of G protein Signaling 9 (RGS 9). University of Georgia Biomedical and Health Sciences Institute Annual meeting.
- Hurst, J.H., Omidina, V.O., and **Hooks, S.B.** (2005) The role of multiple domains in R7 family Regulator of G-protein Signaling activity. Molecular Pharmacology Gordon Research Conference.
- Hooks, S.B., Waldo, G.L., Corbitt, J., Bodor, E.T., Krumins, A.M., and Harden, T.K. (2003) RGS6, RGS7, RGS9 and RGS11 Stimulate GTPase activity of Gi family G-proteins with differential selectivity and maximal activity. Molecular Pharmacology Gordon Research Conference.
- Hooks, S.B., Santos, W.L., Heise, C.E., Im, D.-S., Macdonald, T.L., Lynch, K.R. (2001) Lysophosphatidic Acid induced mitogenesis is Edg-receptor independent. FASEB Conference.
- **Hooks, S.B**., Santos, W.E., MacDonald, T.L., Lynch, K.R. (2000) Pharmacology of Lipid Phosphate Phosphatases (LPPs): Synthesis and characterization of novel inhibitors. Western Pharmacology Society.

- **Hooks, S.B**., Lynch, K.R. (1999) The role of phospholipid phosphatases in the regulation of bioactive lipids. Western Pharmacology Society.
- Im, D.S., Honneman, C.W., Hooks, S.B., Hopper, D.W., Durieux, M.E., Marchese, A., George, S.R., O'Dowd, B.F., Macdonald T.L., and Lynch, K.R. (1998) Molecular cloning of a novel lysophosphatidic acid receptor. XIII Annual IUPHAR Congress.
- Rossi, J.A., **Hooks, S.B.**, Routenberg, K.E., Ragan, S.P., Lynch, K.R. and Macdonald, T.L. (1997) Structure activity relationship of lysophosphatidic acid: analogs of the head group portion. American Chemical Society.
- Hopper, D.W., **Hooks, S.B**., Ragan, S.P., Lynch K.R. and Macdonald, T.L. (1997) Structure activity relationship of lysophosphatidic acid: focusing on conformationally restricted backbone mimetics. American Chemical Society.

Invited seminars and research talks:

- "Unwrapping Big Surprises in a small Package: Novel Mechanisms and Interactions of Microglial RGS10 Inflammatory Signaling", Georgia State University, Neuroscience Institute Seminar Series. Atlanta, GA. April 2019.
- "Novel Mechanisms and Interactions of Microglial RGS10 Inflammatory Signaling", University of Vermont, Department of Pharmacology, December 2018.
- "Regulator of G protein Signaling 10 (RGS10) suppresses COX-2 and TNFα in microglia and cancer cells through a G protein-independent mechanism". (July 2018) 18th World Congress of Basic and Clinical Pharmacology, meeting of International Union of Pharmacologists (IUPHAR). Kyoto, Japan.
- "RGS10 regulates COX-2 and TNFalpha through G protein independent mechanisms", Gordon Research Conference on Phosphorylation and G-Protein Mediated Signaling Networks, University of New England. Biddeford ME, June 2018.
- "Silencing of Regulator of G-protein Signaling 10 (RGS10) in cancer chemoresistance", Emory University, Department of Pharmacology, April 2016.
- "Releasing the Brakes on Ovarian Cancer and Neuroinflammation: Epigenetic silencing of G-protein regulators", Mechanisms of Disease (MOD) Seminar series, GRU-UGA Medical Partnership, December 10, 2015.
- "Silencing of G-protein Regulators in Microglia", UGA Neuroscience Program, September 3, 2015.
- "RGS10 expression and function: releasing the brakes on cell survival and inflammation", UGA/GRU Clinical and Experimental Therapeutics Program, January 23, 2015.
- "RGS10 expression and function: releasing the brakes on cell survival and inflammation". Michigan State University, Department of Pharmacology and Toxicology seminar series, August 27, 2014.
- "Epigenetic regulation of RGS10 in chemoresistant ovarian cancer". University of Iowa, Department of Pharmaceutical Sciences and Experimental Therapeutics. Iowa City, IA, April 8, 2014.
- "Lysophospholipid Regulation of Neuronal Differentiation and Erk and Akt Kinases in Human Neural Progenitor Cells", 45th Annual American Society for Neurochemistry Meeting. Long Beach, CA, March 9, 2014.

- "G-protein coupled receptor expression and function in human neural stem cells", University of Georgia 2012 Neuroscience Symposium. Athens, GA, April 20, 2012.
- Session chair for "G-protein Coupled Receptors in Stem Cell Biology" symposium, Experimental Biology 2011, Washington D.C.
- "GPCR expression and function in human neural stem cells", Experimental Biology 2011 FASEB conference, Washington D.C.
- "RGS Proteins in Ovarian Cancer", American Society for Pharmacology and Experimental Therapeutics (ASPET) Colloquium on RGS and AGS Proteins in Physiology and Disease, Washington D.C. 2011
- "Novel Roles for Regulators of G-protein Signaling in Ovarian Cancer Chemoresistance", University of South Florida College of Medicine, Department of Pathology and Cell Biology, Tampa, FL. 2010
- "Novel Roles for Regulators of G-protein Signaling in Ovarian Cancer Chemoresistance", 2010 Ovarian Cancer Research Symposium, Marsha Rivkin Center for Ovarian Cancer Research, Seattle, WA.
- "Lysophospholipids Signaling Pathways in Development and Cancer", University of Nebraska Medical Center, Department of Pharmacology and Experimental Neuroscience, Omaha Nebraska. 2010
- "Regulation of Lipid Signaling Pathways: Implications in Ovarian Cancer and Neural Development", Georgia State University Department of Biology, Atlanta, GA. 2008
- "Human embryonic stem cell-derived neural progenitor cells express functional Lysophospholipid receptors that stimulate proliferation and morphology changes", Neuroscience 2008, Society for Neuroscience annual meeting, Washington, D.C.
- "Human Neural progenitors express functional lysophospholipid receptors that regulate cell growth and morphology", 43rd Southeastern Regional Lipid Conference, Cashiers, NC. 2008
- "Lysophospholipids Grease the wheels of Lysophospholipids Grease the Wheels of Neural Progenitor Development: mechanisms of growth and morphology changes", Symposium for Stem Cell Initiatives, Athens, Georgia. 2008
- "Lysophospholipid Signaling in Cancer and Development", University of Georgia, Department of Cell Biology. 2007.
- "Molecular Pharmacology of G-protein signaling: Regulation by Multifunctional RGS Proteins," University of Georgia Center for Drug Discovery. 2006
- "Regulation of G-proteins by Multifunctional RGS Proteins: Mechanisms and Significance," University of Georgia Department of Pharmacology and Physiology, College of Veterinary Medicine. 2006
- "Multifunctional RGS Proteins: Implication from Addiction to Ovarian Cancer," University of Georgia Department of Biochemistry and Molecular Biology. 2006
- "Lysophosphatidic Acid induced mitogenesis is EDG-receptor Independent", American Society of Pharmacology and Experimental Therapeutics satellite G-protein Coupled Receptor Symposium, Orlando, FL. 2001
- "Identification of a novel human phosphatidic acid phosphatase type 2 isoform", Western Pharmacology Society annual meeting, Maui, HI. 1999

Awards and affiliations:

1998-present	Member, American Society of Pharmacology and Experimental Therapeutics (ASPET)
2016-2017	UGA Women's Leadership Fellow
2014	UGA Future Leaders Academic Leadership Development Program
2005	UGA Searle Scholar nominee
2005	Alfred P. Sloan Research Fellowship nominee
2000	Michael J. Peach Outstanding Graduate Student Award
1999	Oral communication award, Western Pharmacology Society conference
1992-1996	Clemson Scholars program scholarship

TEACHING

Curriculum Development and Instructional Leadership

- 2009, 2014 UGA Teaching Academy Academic Affairs Faculty Symposium invited participant
- 2015 Council for Undergraduate Research "Posters on the Hill" Event in Washington D.C. Met with members of legislature and White House Office of Science and Technology Policy
- 2014 Redesigned and relaunched M.S. program in Pharmaceutical and Biomedical Sciences
- 2014 Created Research Track within PharmD curriculum tracks program
- 2012 Redesigned Ph.D. curriculum

Instruction

Pharm D Professional program:

2019-now Instructor (2 lecture hours) for Neuropharmacology (PHRM3320), every Spring term

- 2016-2019 **Course Coordinator and instructor** (25 lecture hours) for Neuropharmacology (PHRM3320), every Spring term
- 2006-2016 Instructor (22 lecture hours) for Pharmacology II (PHRM 4420), every Spring term

Graduate program:

- 2019-now **Instructor** (18 lecture hours) *Principles of Pharmaceutical and Biomedical Sciences* (PHRM 8020), every Spring term.
- 2007-2018 **Course coordinator and Instructor** (32 lecture hours) for *Signal Transduction Pathways as Drug Targets* (PHRM 8600); Fall term, odd years.
- 2008-2019 **Course coordinator and Instructor** (24 lecture hours), *Principles of Pharmaceutical and Biomedical Sciences* (PHRM 8020); every Fall term.
- 2009-2018 Course Coordinator, PBS Departmental Seminars (PHRM 8200), Fall and Spring terms
- 2015-2018 **Instructor** (2 lecture hours) for *Advanced Genetics, Cell, Biochemistry and Molecular Biology II* (BCMB/CBIO/GENE 8212), every fall term.
- 2006-2019 Instructor (3 lecture hours) for Grant Writing (PHRM 8080), every Spring term.
- 2009-2017 **Instructor** (1-2 lecture hours) for *Developmental and Reproductive Toxicology* (EHSC 8550), every Spring term.

- 2009-2014 **Course Coordinator** and **Instructor** (6 lecture hours), *Graduate Student Survival Skills Seminar* (GRSC7770), every Fall term.
- 2012-2014 **Course Coordinator and Instructor** (8 lecture hours), *Pharmaceutical and Biomedical Analysis* (PHRM8040), every Fall term.
- 2012-2014 Course Coordinator, Laboratory rotations I (PHRM7800), Fall term
- 2012-2015 **Course Coordinator**, *Laboratory Rotations II* (PHRM7900), Spring term

Undergraduate program:

- 2016 **Coordinator and instructor** (15 lecture hours), FYOS Roots and Branches of Modern Medicine (FYOS1001), Fall term.
- 2015 **Coordinator and instructor** (15 lecture hours), FYOS Herbal Drugs and Medicinal Plants (FYOS1001), Fall term.
- 2005-2022 **Instructor**, Undergraduate Research in Biology/Biochemistry (BIOL 4960/BCMB4960/BHSI4960/ CBIO4960/GENE4960), 2-4 students per semester.

SERVICE

Professional Service:

- 2020-2023 Executive Committee member of the Molecular Pharmacology Division of ASPET
- 2019-2022 Grant Reviewer, Marsha Rivkin Center for Ovarian Cancer
- 2016-2020 **Editorial Board** member, *Molecular Pharmacology*, published by the American Society for Pharmacology and Experimental Therapeutics (ASPET)
- 2015-2016 **Guest Editor**, Special Issue: "Heterotrimeric G Protein-based Drug Development", The AAPS Journal, American Association of Pharmaceutical Scientists.
- 2014 Planning Committee for American Society for Neuroscience (ASN) annual conference
- 2011 **Chair** of symposium at ASPET national meeting
- 2009-2011 Secretary-Treasurer of the Molecular Pharmacology Division of ASPET
- 2009-2013 **Executive Committee** member of the Molecular Pharmacology Division of ASPET
- 2005-present **Reviewer** for Cell Biology and Toxicology, Biomed Central-Pharmacology, Stem Cells and Development, Journal of Medicinal Chemistry, Molecular Pharmacology, Journal of the National Cancer Institute, International Journal of Cancer, Cell Biology International, Neurosignal, Carcinogenesis, PLOS-ONE, Endocrine-related Cancer, Journal of Natural Products,
- 2008-present ad hoc Reviewer for NSF and NIH grant proposals

Institutional Service:

University of Georgia

2019-present Office of Research Strategic Planning Liaison

- 2019-present Member, Experiential Professional Development Board
- 2020-2021 International Rankings working group
- 2020-2021 Search Committee, UGA Associate Dean of UGA Graduate School
- 2020-2021 Member, Broader Impacts working group
- 2019-2022 UGA SACSCOC Compliance Team
- 2019-2020 Presidential Fellows Review Panel
- 2019-2020 PRAC Unit Review for Office of Global Engagement
- 2019-2020 Review and Search Committee, Vice-Provost and Dean of UGA Graduate School
- 2016-2018 Interim Director, UGA Center for Drug Discovery
- 2016-2018 Interim Director, UGA Center for Drug Discovery
- 2015-2016 Associate Director, UGA Center for Drug Discovery
- 2015-2022 Mentoring Committee, Lee, Physiology and Pharmacology (Veterinary Medicine)
- 2013-2017 Graduate Recruitment and Admissions Committee (GRAC), Integrated Life Sciences
- 2015 UGA Faculty Post Tenure Review Advisory Committee, appointed by Provost
- 2015 **Research misconduct Inquiry Committee**, appointed by Vice-President for Research
- 2014-2015 Search Committee for Dean of UGA Graduate School
- 2014 Selection Committee for UGA Searle Scholar Nominee
- 2011-2014 UGA Graduate Council, Member
- 2012-2014 UGA Graduate Council, Appointment and Reappointment Committee
- 2011-12 UGA Graduate Council, Programming Committee
- 2012 Faculty Search Committee, Department of Biochemistry and Molecular biology
- 2010 **"Faculty Torchbearer"**, Biomedical Heath Sciences Institute/Center for Undergraduate Research Opportunities (BHSI/CURO) expansion committee
- 2010-2011 **Five Year Review Committee**, Comprehensive Carbohydrate Research Center (CCRC)
- 2007-2009 Seminar Committee, UGA Cancer Center

2006 **Faculty Search Committee**, Department of Pharmacology and Physiology, College of Veterinary Medicine

College of Pharmacy:

- 2020-2022 College of Pharmacy Awards Committee
- 2015-2018 Comprehensive Campaign Board Member
- 2015-2017 Coordinator of Research track, PharmD Curriculum tracks program development team
- 2010-2017 Graduate Education and Curriculum Committee

- 2015-2016 Chair, Administrative Review Team, Office of Business Affairs
- 2015-2016 **Chair**, Academic and Professionalism committee
- 2013-2016 Academic and Professionalism Committee
- 2012 Search Committee, Assistant Dean for Academic and Strategic Initiatives
- 2010-2011 Chair, College of Pharmacy Research Retreat Planning Committee
- 2008-2010 Chair, College of Pharmacy Facilities and Safety Committee
- 2008-2010 Pharmaceutical and Biomedical Sciences Department Head Search Committee
- 2004-2007 College of Pharmacy Graduate Education and Curriculum Committee
- 2006-2007 College of Pharmacy Curriculum Committee
- 2006-2008 Architects' advisory committee for new building laboratory design

Department of Pharmaceutical and Biomedical Sciences:

- 2020-2022 PBS Research Committee
- 2019-2021 PBS Mentoring Committee
- 2018-2020 Chair, PBS Management Committee
- 2011-2017 PBS Executive Committee
- 2010-2016 Chair, Graduate Program Committee
- 2010-2016 Graduate Coordinator
- 2015 Chair, Faculty search committee
- 2011-2012 Chair, Graduate Program Curriculum redesign Task force
- 2004-2007 Graduate Program Committee
- 2006-2009 Common Equipment lab Manager
- 2006, 2008 Administrative Manager search committee