STEPHEN L. ROGERS, PH.D.

Associate Professor of Biology &
Integrative Program for Biological and Genome Sciences
422 Fordham Hall, CB#3280,
University of North Carolina at Chapel Hill
Chapel Hill, NC 27599-3280

srogers@bio.unc.edu
steve.rogers411@gmail.com
http://rogerslab.unc.edu
919-265-4945 T

Education:

B.S. Molecular Biology 1991, Purdue University, West Lafayette, IN

Ph.D. Cell Biology 1999, University of Illinois, Urbana-Champaign, IL
Dissertation, "Regulation of pigment granule transport in *Xenopus* melanophores"
Graduate advisor: Dr. Vladimir Gelfand completed in October 1999

Post-doctoral 1999-2004, Cell Biology, University of California, San Francisco
Advisor: Dr. Ron Vale

Professional Positions:

1992	TA Laboratory in Cell and Tissue Histology, University of Illinois
1993	TA Laboratory in Cell and Developmental Biology, University of Illinois
1993-1999	Manager of Confocal and Light Microscopy, The Beckman Institute Imaging Technologies Group, University of Illinois at Urbana-Champaign
2000-2004	Postdoctoral Fellow with Dr. Ron Vale, UCSF, Department of Cellular and Molecular Pharmacology (Vale lab)
2004-2010	Assistant Professor, Department of Biology and Carolina Center for Genome Sciences, UNC-Chapel Hill
2006-Present	Affiliate member, Lineberger Comprehensive Care Center, UNC-Chapel Hill
2010-Present	Associate Professor, Department of Biology and Carolina Center for Genome Sciences, UNC-Chapel Hill
2016-2019	Director, NSF Summer Undergraduate Research Experience (SURE) Program
2020-2021	Member, UNC CURE Faculty Learning Community
2023-Present	Director of Undergraduate Studies, UNC Department of Biology

Awards and Fellowships

1991	Second place, Nikon Small World Photomicrography Competition
1996	University of Illinois Travel Award
2002-2004	NIH National Research Service Award Fellowship
2006-2008	March of Dimes Basil O'Connor Starter Scholar
2006-2010	American Heart Association Scientist Development Grant
2008-2010	Beckman Young Investigator Award

Grants

2006-2008	**March of Dimes Foundation:** Basil O'Connor Starter Scholar Award 5-FY06-10. "Functional genomic analysis of cellular migration." Role: PI
2006 - 2009	**American Heart Association:** Scientist Development Award "Functional Genomics of filopodia assembly and disassembly." Role: PI
2008-2011	**March of Dimes Foundation:** "Mechanisms of cellular protrusion and motility" 1FY08-429. Role: PI
2008-2011	**Arnold and Mabel Beckman Foundation:** Young Investigator Award "A systems-level analysis of cellular contractility." Role: PI
2011	**Lineberger Cancer Center** UNC Inter-campus collaborative support

Role: Co-PI with Ted Miegs, UNC-Ashevile.

2011-2015 **NIH:** "Molecular mechanisms of cytoskeletal regulators", R01 GM094415. Role: Co-PI with Kevin Slep

2008-2012 **NIH:** "Regulation of cellular morphology by cytoskeletal crosstalk", R01 GM-081645. Role: PI

2013-2015 **NIH:** "Single-molecule analysis of cytoskeletal cross-linking proteins**",** R03 MH101647. Role: PI

2013-2015 **NIH:** "Understanding the role of Ric-8 in Gα12/13 signaling", R03 HD077523. Role: PI

2017 UNC Biology/iBGS Pilot Study Award

2021 **NIH:** " Identification of proteins that structurally couple epidermal cells to somatosensory neurons", R21 NS125795, Role: Co-PI

2021 **Lenovo Instructional Innovation Grant:** "The machines of the cell: Testing cellular mechanisms using high-throughput data processing, computational modeling, and 3D printing." Role: Co-PI

2023 **UNC System Office Undergraduate Research Program Grant: "**Establishment of an Undergraduate Microscopy Learning Laboratory." Role: PI

Professional Memberships

1997-Present American Society for Cell Biology

2011-2016 Editorial Board, Cellular Logistics

2012-Present Advisory Committee, *Drosophila* Genomics Resource Center

2013 NIH National Study Section, Intracellular Interactions (ICI), *Ad Hoc* Member

Teaching

1992 Teaching Assistant, Laboratory in Cell and Tissue Histology, University of Illinois

1993 Teaching Assistant, Laboratory in Cell and Developmental Biology, University of Illinois

2007 Instructor, "My Fly Project Workshop," University of Miami

2006-2023 Lecturer, UNC Biology 205, Cellular and Developmental Biology

2012-2013 Lecturer, UNC Biology 691, Biology Honors Symposium, UNC-Chapel Hill

2015-2020 Instructor, UNC Biology 643, Molecular cytoskeleton

2018-Present Lecturer, UNC CBPH 851, Modern concepts in cell biology

2020-Present Instructor, UNC BIO544L, Diseases of the Cytoskeleton Course-based Undergraduate Research Experience

2023-Present Lecturer, UNC Biology 240, Cell Biology

Advising:

Postdoctoral Research Supervised

2004-2008 Gregory Rogers, Ph.D., subsequently Assistant Professor at the Arizona Cancer Center, University of Arizona, Tucson, AZ

2007-2014 Derek Applewhite, Ph.D., subsequently Assistant Professor of Biology at Reed College, Portland, OR

Graduate Research Supervised

2005-2011 Joshua Currie, subsequently postdoctoral fellow, Dr. Elly Tanaka, Center for Regenerative Therapies, Dresden, Germany.

2005-2012 Kimberly Peters, subsequently postdoctoral fellow, Dr. Bob Goldstein, UNC Biology

2006-2013 Alyssa Cope, subsequently postdoctoral fellow, Dr. David Kimelman, University of Washington, Seattle, WA.
2010-2015 Kyle Grode, subsequently postdoctoral fellow, US Environmental Protection Agency (EPA), Raleigh, NC
2011-2015 Kathryn Trogden, subsequently postdoctoral fellow, Dr. Irina Kaverina, Vanderbilt University, Nashville, TN.

UNC Rotation Students Supervised

Andrea Uetrect, Matthew Cooper, Joshua Currie, Kimberly Peters, Stephanie Freer, Nathan Harris, Adam Werts, Alyssa Cope, Jill Harunaga, Kyle Grode, Ivan Sabath, Chris Higgins, Benjamin Ritchie, Elizabeth Haynes, Joshua Lawrimore, Clayton Harry

Undergraduate Research Supervised

2010 Shawna Kelly, later Analyst at Elizabeth Glaser Pediatric AIDS Foundation
2010 Ashton Butler, later D.D.S. student at the University of Maryland
2012 Greg Schimizzi, subsequently M.D./Ph.D. student at Washington University in St. Louis, MO
2012 Sina Tashakkori, subsequently research assistant Duke University, Durham, NC
2012 Haley Simpson, subsequently M.D. student at the University of Maryland in Baltimore
2012 Darby Keller, subsequently analyst at Quintiles, Raleigh, NC
2013 Emily Simon, subsequently a Ph.D. student at Carnegie Mellon University in Pittsburgh, PA
2013 Michelle Kuei, subsequently M.D. student at the University of North Carolina, Chapel Hill, NC
2014 Elizabeth Detmar, subsequently research assistant at Duke University, Durham, NC
2015 Kacy Yount, subsequently a Ph.D. student at Wake Forest University in Winston-Salem, NC
2018 Ahaj Shroff
2020 Junior Jaramillo, subsequently a student at UNC School of Dentistry
2020 Dana Hunt, subsequently a graduate student at NCSU
2020 Thi Vu
2020 Amber Collins
2021 Clarisel Lozano, subsequently a Ph.D. student at the University of Miami
2021 Tiffany Amber Butcher, subsequently a Ph.D. student at Columbia University
2021 Claire Skinner
2022 Stephen Wenzel
2022 Shadwa Bayoumi, subsequently postbac researcher at the Broad Institute
2022 Makalah Saunders
2024 Joshua Lopez

Awards to Trainees

2007 Joshua Currie, Molecular and Cellular Biology Training Grant
2008 Kimberly Peters, Developmental Biology Training Grant
2009 Alyssa Manning, Developmental Biology Training Grant
2011 Kyle Grode, Developmental Biology Training Grant
2011 Derek Applewhite, American Cancer Society Postdoctoral Fellowship
2012 Kyle Grode, ASCB Travel Award
2012 Kyle Grode, Keystone Symposium Travel Award
2012 Kyle Grode, AHA Pre-doctoral fellowship
2012 Derek Applewhite, K01 CA163972 NIH/NCI
2013 Emily Simon, Outstanding Undergraduate Presentation, *Drosophila* Research Conference

2020 Clarisel Lozano, Jack Kent Cooke Scholar

Invited Seminars

2003 Gordon Research Conference: Motile and Contractile Systems
2003 University of Illinois, Urbana, IL, Department of Cell and Structural Biology
2003 University of California, Davis, CA, Section of Cell and Developmental Biology
2003 43rd Meeting of the American Society for Cell Biology, Washington, D.C.
2004 The Scripps Research Institute, La Jolla, CA, Department of Cell Biology
2004 University of Michigan, Ann Arbor, MI, Department of Mol., Cell, Dev. Biology
2004 Washington University, St. Louis, MO, Department of Genetics
2004 Columbia University, New York, NY, Department of Pathology
2006 47th Annual *Drosophila* Research Conference, Houston, TX
2007 Northwestern University, Chicago, IL, Department of Cell and Molecular Biology
2007 University of Pennsylvania, Philadelphia, PA, Pennsylvania Muscle Institute
2007 University of Maryland, College Park, MD, Biotechnology Institute
2009 NIH, Bethesda, MD
2011 Eighteenth Annual Beckman Young Investigators Symposium, University of California, Irvine
2011 Virginia Tech, Blacksburg, VA, Department of Biology
2012 Santa Cruz Developmental Biology Meeting, Santa Cruz, CA
2015 National Institute of Environmental Health Sciences, Raleigh, NC
2015 University of North Carolina at Asheville, Asheville, NC
2017 Duke University, Durham, NC
2019 University of Toronto, Toronto, CA
2020 University of Connecticut, Farmington, CT

Seminars at UNC-Chapel Hill outside of Biology

2005 Curriculum in Genetics and Molecular Biology
2005 Department of Cell and Developmental Biology
2006 Department of Biology
2006 Department of Pharmacology
2006 Department of Chemistry
2011 Department of Cell and Developmental Biology

UNC Committees and Service

2005-present Departmental Space Committee, Biology Department
2005-2006 Advisor to first-year Molecular/Cell/Development grad students in Biology
2006 Biology Department Faculty Search Committee for Genetics/Molecular Biology
2006-Present Microscopy Committee, Biology Department
2011 PMBB Admissions Committee
2013 PMBB Admissions Committee
2015-Present Undergraduate Studies Committee, Biology Department
2015-Present MCDB Graduate Studies Committee, Biology Department
2015-Present Undergraduate Research Honors Awards, Biology Department
2016-2019 Director, NSF Summer Undergraduate Research Experience (SURE) Program
2017-Present Departmental Library Committee, Biology Department
2018-2023 BBSP Admissions Committee
2020 Summer Undergraduate Research Fellowship Selection Committee
2019-2023 Chair, Goldwater Foundation Scholarship selection committee
2023-Present Director of Undergraduate Studies, Biology Department
2023-Present Biology New Curriculum Assessment Committee

National Committees and Service

2016-2024 Member, *Drosophila* Genomics Resource Center Advisory Board

PhD Thesis Committees

Lena Randhawa (Bautch), Carrie Wilson (Searles), Anne White (Duronio), Andrea Uetrecht (Bear), Nien-Hsi Ko (Pringle), Brandon Burch (Marzluff), Minna Roh (Goldstein), Liang Cao (Bear), Thomas Marshall (Bear), Kate Lee (Duronio), Ryan O'Quinn (Salmon), Kimberly Peters (Rogers), Joshua Currie (Rogers), Matthew Cooper (Baldwin), Kelly Sullivan (Marzluff), Alex Raines (Cheney), Kevin Blauth (Bhat), Adam Werts (Goldstein), Stephanie Nowotarski (Peifer), Jason Yi (Hammer/NIH), Jamie Alan (Cox), Andrius Masedunskas (Weigert/NIH), Anthony Blount (Adelstein/NIH), Kavita Praveen (Matera), Jaeda Coutinho-Budd (Polleaux), Amanda Hicks (Matera), Erin Romes (Slep), Elizabeth Haynes (Bear), Matthew Kutys (Yamada/NIH), Rebecca Sinott (Whitehurst), Mira Pronobis (Peifer), Catherine Wright (Bautch), Zhixian Yu (Bautch), Alyssa manning (Rogers), Kyle Grode (Rogers), Kathryn Trogden (Rogers), Lucy Kotlyanskaya (Giniger/Peifer/NIH), Lydia Smith (Maddox), Amanda Moawad (Crews), Destiney Buelto (Duncan), Clayton Harry (Goldstein), Sherry Hsu (Cohen)

Journal Peer Reviews

Cell Cycle, Cell Reports, Current Biology, Development, Developmental Biology, EMBO Journal, EMBO Reports, FASEB Journal, Genetics, Journal of Cell Biology, Journal of Cell Science, Mechanisms of Development, Molecular Biology of the Cell, Nature Communications, Nature Genetics, Plos One, PNAS

Publications

Undergraduate student co-authors are designated by underline.

Peer-reviewed publications

1. **Rogers, S.L.**, I.S. Tint, P.C. Fanapour, and Gelfand, V.I. (1997) Regulated bidirectional motility of melanophore pigment granules along microtubules in vitro. Proceedings of the National Academy of Sciences USA 94: 3720-3725.
2. **Rogers, S.L.** and Gelfand, V.I. (1998) Myosin cooperates with microtubule motors during organelle transport in melanophores. Current Biology 8: 161-164.
3. **Rogers, S.L.**, I.S. Tint, and Gelfand, V.I. (1998) In vitro motility assay for melanophore pigment organelles. Methods in Enzymology 298: 361-372.
4. Szczesna-Skorupa, E., Chen, C.D., **Rogers, S.**, and Kemper, B. (1998) Mobility of cytochrome p450 in the endoplasmic reticulum membrane. Proceedings of the National Academy of Sciences USA 95: 14793-14798.
5. **Rogers, S.L.**, R.L. Karcher, J.T. Roland, A.A. Minin, W. Steffen, and Gelfand, V.I. (1999) Regulation of melanosome movement in the cell cycle by reversible association with myosin V. The Journal of Cell Biology 146: 1265-1276.
6. **Rogers, S.L.** and Gelfand, V.I. (2000) Membrane trafficking, organelle transport, and the cytoskeleton. Current Opinion in Cell Biology 12: 57-62.
7. Reilein, A.R., **Rogers, S.L.**, Tuma, C.T., and Gelfand, V.I. (2001) Regulation of organelle transport. International Review of Cytology and Cell Biology 204: 179-238.
8. Klopfenstein, D.R., R.D. Vale, and **Rogers, S.L.** (2001) Motor protein receptors: moonlighting on other jobs. Cell 103: 537-540.
9. **Rogers, S.L.**, G.C. Rogers, D.J. Sharp, and Vale, R.D. (2002) *Drosophila* EB1 is essential for proper assembly, dynamics, and positioning of the mitotic spindle. The Journal of Cell Biology 158:873-884.

10. Rothenberg, M.E., **Rogers, S.L.**, Vale, R.D., Jan, L.Y. and Jan, Y.N. (2003) *Drosophila* Pod-1 controls the targeting but not outgrowth of axons and cross-links both actin and microtubules. Neuron 39:779-791.
11. **Rogers, S.L.**, U. Weidemann, N. Stuurman, and Vale, R.D. (2003) Molecular requirements for actin-based lamella formation in *Drosophila* S2 cells. The Journal of Cell Biology 162: 1079-1088.
12. Rogers, G.C., **Rogers, S.L.**, Schwimmer, T.A., Stubbert, J., Walczak, C.E., Vale, R.D., Scholey, J.M., and Sharp, D.J. (2004) Identification and characterization of three Kin I family members in *Drosophila*: evidence that mitosis in this system involves the coordinated action of functionally distinct classes of Kin I motors. Nature 427: 364-370.
13. **Rogers, S.L.**, U. Weidemann, U. Hacker and Vale, R.D. (2004) *Drosophila* RhoGEF2 associates with microtubule plus ends in an EB1-dependent manner. Current Biology 14: 1827-1833.
14. Barmchi, P.B., **Rogers, S.L.**, and Hacker, U. (2005) DRhoGEF2 regulates actin organization and contractility in the *Drosophila* blastoderm embryo throughout morphogenesis in *Drosophila*. The Journal of Cell Biology 168: 575-585.
15. Rogers, G.C., **Rogers, S.L.**, and Sharp, D.J. (2005) Spindle microtubules in flux. Journal of Cell Science 118: 1105-1116.
16. Menella, V., G.C. **Rogers, S.L.** Rogers, D.W. Buster, R.D. Vale, and Sharp, D.J. (2005) Functionally distinct kinesin-13 family members cooperate to regulate microtubule dynamics during interphase. Nature Cell Biology 7: 235-245.
17. Slep, K.C., S.L. **Rogers, S.L.** Elliott, H. Ohkura, P.A. Kolodziej, and Vale, R.D. (2005) Structural determinants for EB1-mediated recruitment of APC and spectraplakins to the microtubule plus end. The Journal of Cell Biology 168: 587-598.
18. Dzhindzhev, N., **Rogers, S.L.**, Vale, R.D., and Ohkura, H. (2005) Distinct mechanisms govern the localization of *Drosophila* CLIP-190 to unattached kinetochores and microtubule plus ends.' Journal of Cell Science 118: 3781-90.
19. Dean, S.O., **Rogers, S.L.**, Stuurmann, N., Vale, R.D., and Spudich, J.A. (2005) Distinct pathways control the initial recruitment and the subsequent maintenance of myosin II at the cleavage furrow during cytokinesis. Proceedings of the National Academy of Sciences USA. 102:13473-8.
20. Kim, H., S. Ling., Rogers, G.C., Kural, C., Selvin, P.R., **Rogers, S.L.**, and Gelfand, V.I. (2007) Microtubule binding by dynactin is required for microtubule organization but not cargo transport. The Journal of Cell Biology 176: 641-651.
21. Gates, J., J.P. Mahaffey, **Rogers, S.L.**, Emerson, M., E.M., Rogers, E.M. Sottile, VanVactor, D., Gertler, F.B., and Peifer, M. (2007) Enabled plays key roles in embryonic epithelial morphogenesis in *Drosophila*. Development 134: 2027-39.
22. Ciavatta, D., **Rogers, S.L.**, and Magnuson, T. (2007) *Drosophila* CTCF is required for Fab-8 enhancer blocking activity in S2 cells. Journal of Molecular Biology 373:233-9.
23. Jiang, L., **Rogers, S.L.**, and Crews, S.T. (2007) The *Drosophila* Dead end Arf-like 3 GTPase controls vesicle trafficking during tracheal fusion cell morphogenesis. Developmental Biology 11: 487-99.
24. **Rogers, S.L.** and Rogers, G.C. (2008) Culture of *Drosophila* S2 cells and their use for RNAi-mediated loss-of-function studies and immunofluorescence microscopy. Nature Protocols 3: 606-11.
25. Rogers, G.D., N.M. Rusan, M. Peifer, and **Rogers, S.L.** (2008) Identification of assembly factors that contribute to the formation of acentrosomal microtubule arrays in interphase *Drosophila* cells. Molecular Biology of the Cell 19: 3163-78.
26. Spero, R.C., Vicci, L., Cribb, J., Bober, D., Swaminathan, V., O'Brien, E.T., **Rogers, S.L.**, and Superfine, R. (2008) High throughput system for magnetic manipulation of cells, polymers, and biomaterials. Review of Scientific Instrumentation 79: 083707.

27. Rogers, G.C., D.M. Roberts, N. Rusan, M. Peifer, and **Rogers, S.L.** (2009) The SCF-Slimb ubiquitin ligase regulates Plk4/Sak levels to block centriole duplication. The Journal of Cell Biology 184: 241-252.
28. Wheeler, S.R., Banerjee, S., Blauth, K., **Rogers, S.L.**, Bhat, M.A., and Crews, S.T. (2009) Neurexin IV and Wrapper interactions mediate *Drosophila* midline glial migration and axonal ensheathment. Development 136: 1147-57.
29. Taylor, S.M., Nevis, K.R., Park, H.L., Rogers, G.C., **Rogers, S.L.**, Cook, J.G., and Bautch, V.L. (2010) Angiogenic factor signaling regulates centrosome duplication in endothelial cells of developing blood vessels. Blood. 116: 3108-17.
30. Schimizzi, G.V., Currie, J.D., and **Rogers, S.L.** (2010) Expression levels of a kinesin-13 microtubule depolymerase modulates the effectiveness of anti-microtubule agents. PLOS One. 5:e11381.
31. Applewhite, D.A., Grode, K.D., Keller, D., Zadeh, A., Slep, K.C., and **Rogers, S.L.** (2010) The spectraplakin Short stop is an actin-microtubule crosslinker that contributes to organization of the microtubule network. Molecular Biology of the Cell. 21: 1714-24.
32. Banerjee, S., Blauth, K., Peters, K., **Rogers, S.L.**, Fanning, A.S., and Bhat, M.A. (2010) *Drosophila* Neurexin IV interacts with Roundabout and is required for repulsive midline axon guidance. Journal of Neuroscience. 30: 5653-67.
33. Currie, J.D., Stewman, S., Schimizzi, G., Slep, K.C., Ma, A., and **Rogers, S.L.** (2011) The microtubule lattice and plus-end association of *Drosophila* Mini spindles is spatially regulated to fine-tune microtubule dynamics. Molecular Biology of the Cell. 22:4343-61.
34. Currie, J.D. and **Rogers, S.L.** (2011) D17-C3, a novel *Drosophila* melanogaster cell culture system for studying cell motility. Nature Protocols. 18:1632-41.
35. Zhang, D., Grode, K.D., Stewman, S., Diaz, D., Liebling, E., Currie, J.D., Buster, D.W., Asenjo, A.B., Sosa, H.J., Ross, J., Ma, A., **Rogers, S.L.**, and Sharp, D.J. (2011) *Drosophila* Katanin is a microtubule depolymerase that regulates cortical-microtubule plus end interactions and cell migration. Nature Cell Biology. 13:361-9.
36. Bosch, D.E., Kimple, A.J., Manning, A.J., Muller, R.E., Willard, F.S., Machius, M., **Rogers, S.L.**, and Siderovski, D.P. (2012) Structural determinants of RGS-RhoGEF signaling critical to *Entamoeba histolytica* pathogenesis. Structure. 21:65-75.
37. Leano, J.B., **Rogers, S.L.**, and Slep, K.C. (2013) A Cryptic TOG Domain with a Distinct Architecture Underlies CLASP-Dependent Bipolar Spindle Formation. Structure. 21:939-50.
38. Applewhite, D.A., Grode, K.D., Duncan, M.C., and **Rogers, S.L.** (2013) The actin-microtubule cross-linking activity of *Drosophila* Short stop is regulated by intramolecular inhibition. Molecular Biology of the Cell. 24:2885-93.
39. Peters, K.A. and **Rogers, S.L.** (2013) *Drosophila* Ric-8 interacts with the Gα12/13 subunit, Concertina, during activation of the Folded gastrulation pathway. Molecular Biology of the Cell. 24:3460-71.
40. Manning, A.J., Peters, K.A., Peifer, M., and **Rogers, S.L.** (2013) Regulation of epithelial morphogenesis by a G-protein coupled receptor, Mist, and its ligand, Fog. Science Signaling. 6:ra98.
41. Montgomery, E.R., Temple, B.R.S., Peters, K.A., Tolbert, C.E., Booker, B.K., Martin, J.W., Hamilton, T.P., Smolski, W.C., **Rogers, S.L.**, Jones, A.M., and Meigs. T.E. (2014) Gα12 structural determinants of Hsp90 interaction are necessary for Serum Response Element-mediated transcriptional activation. Molecular Pharmacology. 85:586-97.
42. **Rogers, S.L.** (2014) Short-circuiting microtubule plus and minus end proteins in spindle positioning. EMBO J. 33:96-8.
43. Kushner, E.J., Ferro, L.S., Liu, J.Y., Durrant, J.R., **Rogers, S.L.**, Dudley, A.C., and Bautch, V.L. (2014) Excess centrosomes disrupt endothelial cell migration via centrosome scattering. Journal of Cell Biology. 206:257-72.

44. Fox, J.N., Howard, A.E, Currie, J.D., **Rogers S.L.**, and Slep, K.C. (2014) The XMAP215 family drives microtubule polymerization using a structurally diverse TOG array. Molecular Biology of the Cell.25:2375-92.
45. Manning, A.J, and **Rogers, S.L.** (2014) The Fog signaling pathway: Insights into signaling in morphogenesis. Developmental Biology. 394:6-14.
46. Grode, K.D and **Rogers, S.L.** (2015) The non-catalytic domains of *Drosophila* katanin regulate its abundance and microtubule-disassembly activity in living cells. PLOS One. 10(4):e0123912.
47. Trogden, K.P. and **Rogers, S.L.** (2015) TOG Proteins Are Spatially Regulated by Rac-GSK3β to Control Interphase Microtubule Dynamics. PLOS One. 10(9):e0138966.
48. Girdler, G.C., Applewhite, D.A., **Rogers, S.L.,** and Röper, K. (2015) The Gas2 family protein Pigs is a +TIP microtubule tracker that affects cytoskeletal organization. Journal of Cell Science. 129:121-34.
49. Mino, R.E., **Rogers, S.L.**, Risinger, A.L., Rohena, C., Banerjee, S., and Bhat, M.A. (2016) *Drosophila* Ringmaker regulates microtubule stabilization and axonal extension during embryonic development. Journal of Cell Science.129: 3282-94.
50. Peters, K.A., Detmar, E., Sepulveda, L., Del Valle, C., Valsquier, R., Ritz, A., **Rogers, S.L.,** Applewite, D.A. (2018) A cell-based assay to investigate non-muscle myosin II contractility via the Folded-gastrulation signaling pathway in *Drosophila* S2R+ cells. Journal of Visual Experimentation 138: http://www.jove.com/video/58325.
51. Yan, C., Wang, F., Peng, Y., Williams, C.R., Jenkins, B., Wildonger, J., Kim, H., Perr, J.B., Vaughan, J.C., Kern, M.E., Falvo, M.R., O'Brien, T., Superfine, R., Tuthill, J.C., Xiang, Y., **Rogers, S.L.,** and Parrish, J.Z. (2018) Microtubule acetylation is required for mechanosensation in *Drosophila.* Cell Reports. 25: 1051-1065.e6. **(Note: co-corresponding author).**
52. Chai, F., Xu, W., Musoke, T., Tarabelsi, G., Assaad, S., Freedman, J., Peterson, R., Piotrowski, K., Byrnes, J., **Rogers, S.L.**, Veraksa, A., (2019) Structure-function analysis of β-arrestin Kurtz reveals a critical role of receptor interactions in downregulation of GPCR signaling in vivo. Developmental Biology. 455:409-419.
53. Coombes, C.E., Saunders, H.A., Johnson-Schlitz, D.M., Reid, T.A., Parmar, S., **Rogers, S.L.,** Parrish, J.Z., Wildonger, J., and Gardner, M.K. (2020) Non-enzymatic Activity of the α-Tubulin Acetyltransferase αTAT Limits Synaptic Bouton Growth in Neurons. Current Biology. S0960-9822(19)31617-3.
54. Platenkamp, A., Detmar, E., Sepulveda, L., Ritz, A., **Rogers, S.L.**, Applewhite, D.A. (2020) The *Drosophila melanogaster* Rab GAP RN-tre cross-talks with the Rho1 signaling pathway to regulate non-muscle myosin II localization and function. Molecular Biology of the Cell. 31(21):2379-2397. doi: 10.1091/mbc.E20-03-0181.
55. Luhur A., Mariyappa D., Klueg K.M., **Rogers S.L.**, Zelhof A.C. (2021) Serum-free adapted Drosophila S2R+ line is amenable to RNA interference. MicroPublication Biology. 10.17912/micropub.biology.000362. doi: 10.17912 micropub.biology.000362.
56. Zhao, A.J., Montes-Laing, J., Perry, W.M.G., Shiratori, M., Merfeld, E., **Rogers, S.L.**, Applewhite, D.A. (2022) The *Drosophila* spectraplakin Short stop regulates focal adhesion dynamics by cross-linking microtubules and actin. Molecular Biology of the Cell. 33(5):ar19. doi: 10.1091/mbc.E21-09-0434.
57. Buglak, D.B., Bougaran, P., Kulikauskas, M.R., Liu, L., Monaghan-Benson, E., Gold, A.L., Marvin, A.P., Burciu, A., Tanke, N.T., Oatley, M., Ricketts, S.N., Kinghorn, K., Johnson, B.N, Shiau, C.E., **Rogers, S.**, Guilluy, C., and Victoria L Bautch, V.L. (2023) Nuclear SUN1 Stabilizes Endothelial Cell Junctions via Microtubules to Regulate Blood Vessel Formation. Elife. 2023 Mar 29;12:e83652. doi: 10.7554/eLife.83652.
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