Rebecca Cressey Adikes, PhD
Assistant Professor Department of Biology,
Siena College
Email: radikes@siena.edu
Lab: adikeslab.com

Professional Employment

2021-Present	Assistant Professor, Department of Biology, Siena College, Loudonville NY
2019-2021	Instructor, Department of Biochemistry and Cell Biology, Stony Brook University, NY
2018-2021	Postdoctoral Research Fellow, Department of Biochemistry and Cell Biology, Stony Brook University, NY
2013, 2015	Teaching Assistant, Department of Biology, University of North Carolina at Chapel Hill, NC
2011-2012	Fulbright Research Fellow, Center for Genomic Regulation, Barcelona, Spain
2011	Lab Instructor, Department of Biology, Mount Holyoke College, South Hadley, MA

Education

2012-2018	PhD in Molecular Cellular and Developmental Biology, Department of Biology, University North Carolina Chapel Hill, NC
2007-2010	B.A. in Biochemistry, Mount Holyoke College, South Hadley, MA

Membership in Scholarly/Profession Organizations

Current
American Society for Cell Biology
Society for Developmental Biology

Past
International Zebrafish Society
Biophysical Society
AAAS
Genetics Society of America

Teaching

Courses Taught Siena College
Cellular Biology with Lab (BIOL220)
General Biology II with Lab (BIOL120)
Writing and Research Skills for Biologists (BIOL190)
Cancer Biology (BIOL400)

Course Taught Before Siena

Structural Biology and Spectroscopy, Stony Brook University, Spring 2020 and 2021
Taught 3 Lectures on Light and Fluorescence Microscopy
Developmental Genetics with Lab, Stony Brook University, Spring 2019 and 2020
Cellular Biology Lab, Mount Holyoke College, Spring 2011

Guest Lecturer:
Cell Biology, Stony Brook University, Fall 2019
Molecular Cytoskeleton, University of North Carolina, Fall 2014

Teaching Assistant:
Microscopy Teaching Assistant: Embryology: Concepts and Techniques in Modern Developmental Biology. Marine Biological Laboratory, Woods Hole M.A. 2019
Course Assistant/Research Facilitator: Analytical and Quantitative Light Microscopy Course, Woods Hole, MA, May 2014, 2015, 2018, 2019

Peer Led Undergraduate Mentor:
Genetics/Molecular Biology and Cell Biology, Mount Holyoke College, 2009-2011

Recent Instructional Material Developed

Investigating the role of genes in the egg laying apparatus of *C.elegans* using RNAi (2023)
Cancer Cell Biology Course (2023-2024)
Studying regeneration in Planaria (2023-2024)

Students Mentored 32 undergraduates, five graduate students and three high school students mentored in 15 years. 3 are co-authors on peer reviewed papers

Students Mentored: Adikes Lab- Siena College

Rebekkah Clauson	Fall 2022 – Current	Senior Data Science Major
Edna Binga	Summer 2023-Current	Senior Biology Major
Alyssa Lunman	Summer 2023-Current	Senior Biology Major
Eve Butler	Fall 2023-Current	Senior Biology Major
Nahal Jangda	Fall 2023-Current	Junior Biology Major (LECOM)
Rithika Patnam	Spring 2024-Current	Junior Biology Major (AMC)
Daniel Leake	Fall 2024-Current	Junior Biology Major
Grace Branshaw	Fall 2024-Current	Junior Biology Major
Tavish Gupta	Fall 2024- Current	High School Student
Sarina Gianatasio	Spring 2025-Current	Sophomore Biology Major
Killian McNamee	Spring 2025-Current	Biology BS '24 Data and Analytics Masters
Megan Razzano	Spring 2025-Current	High School Student

Former Members

Angelle Philip	Spring 2023-Fall 2023	Albany Medical College
Terri McKnight	Fall 2021-Spring 2022	B.S. Biology SHU
Sana Shehzad	Fall 2021-Spring 2024	Research Tech Mace Lab Columbia
Mishal Razi	Spring 2022 –Spring 2024	NYU College of Dentistry
Maria Fitian	Summer 2022 – Spring 2024	B.S. Biochemistry/B.A. English Siena College
Thea Akhrass	Fall 2022 – Spring 2024	Albany Medical College
Honora LaRock	Summer 2023-Spring 2024	University of Nebraska Lincoln
Emma Rasch	Fall 2023	B.S. Biology Siena College

Matus and Martin Labs- Stony Brook University, Fall 2018-Spring 2021

PhD Students Mentored:

Nuri Kim	Spring 2018-2019	MD/PhD Stony Brook University
Sam Stettnisch	Summer 2020 - 2021	Graduate Student SBU
Courtney Tello	Summer 2020 - 2021	Graduate Student SBU
Maryam Azimi	Fall 2019 – Fall 2020	Graduate Student SBU
Qinyun Zhao	Fall 2019 – Spring 2021	Graduate Student Applied Math SBU

Undergraduates Mentored:

Anya Fang	Fall 2019 – Fall 2021	Clinical Lab Sciences Major
Ononnah Ahmed	Fall 2018 – Fall 2021	NYITT Medical School

Slep Lab - University of North Carolina, Spring 2013 – Spring 2018

Zeyun(Angela) Xue	Fall 2016 - Spring 2018	Medical Student, UNC
Sofia Corella	Fall 2017 - Spring 2018	MSTP Student, Case Western
Claudia Szlek	Fall 2017 - Spring 2018	Emergency Dept Tech
April Hamer	Fall 2013 - Spring 2017	Senior Copywriter, Evoke Create
Brian Saway	Spring 2015 - Spring 2016	MD – Neurosurgery Resident
Ashley Gwyn	Summer 2015-Summer 2016	PA - Transylvania Regional Hospital
Tanner Fadero	Spring 2013-2015	PhD – Imaging Specialist

Quintero Lab – Mount Holyoke College/Penn State Hershey, Summer 2009, 2010

Undergraduates Mentored:

Nellie Davis	Summer 2009	Nellie Rose Textiles
Thoung Minh La	Summer 2010	Pfizer/Mass General Hospital

Student Letters of Recommendation

~4-8/year

Courses and/or Workshops Attended
CURE Workshop. Organizer: Dr. Susan Walsh. 2024 University of San Diego

Academics for Black Survival and Wellness. Organizers: Pearis L. Bellamy and Dr. Della V. Mosley. 2020

SciPhD Training: Preparing scientists for professional careers. Instructors: Dr. Randall Ribaudo and Larry Petcovic. 2020

Junior Scientists Workshop on Biological Optical Microscopy. Janelia Research Campus, Ashburn, VA. Directors: Dr. Ilaria Testa, Dr. Kaspar Podgorski, Dr. Luke Lavis and Dr. Philipp Keller. 2019

Grant Writers' Seminars and Workshops: NIH Grant Writing Workshop. Stony Brook University. 2019

EMBO Practical Course: Light Sheet Microscopy. Max Plank Institute. Dresden, Germany. Directors: Dr. Pavel Tomancak, Dr. Jan Peychl, Dr. Emmanuel G. Reynaud. 2018

Embryology: Concepts and Techniques in Modern Developmental Biology. Marine Biological Laboratory, Woods Hole, M.A. Directors: Dr. Rich Schneider UCSF and Dr. David Sherwood Duke University. 2017

NSF-Pan American Studies Institute training course on the function and regulation of the cytoskeleton. Rio de Janeiro, Brazil. Director: Dr. Margaret Titus, University of Minnesota. 2010

Scholarship

2021-Present **Dynamics of Cell Migration and Regeneration**
Assistant Professor, Department of Biology, Siena College

Molecular mechanisms of cell migration, proliferation and differentiation of mesodermal precursors during *C.elegans* development

Roles of nuclear hormone receptors in planaria regeneration

2018-2021 **Mechanisms of Cell Migration and Invasion**
Postdoctoral Fellow, Department of Biochemistry and Cell Biology, Stony Brook University
Advisors: Dr. Dave Matus, Dr. Ben Martin and Dr. Ryan Kerney

Molecular mechanisms of cell migration of mesodermal precursors during *C.elegans* and *D.rerio* development

Cellular mechanisms and role of algal (*Oophila amblystomatis*) migration and invasion in the spotted salamander (*Ambystoma maculatum*) embryo

2012-2018 **Molecular Mechanisms of Cytoskeletal Form and Function**
Graduate Student, Department of Biology, University of North Carolina
Advisors: Dr. Kevin Slep and Dr. Ted Salmon

Development of a novel optogenetic system to study the effect of microtubule associated proteins on microtubule dynamics in a spatiotemporal manner

Investigating the role of the Drosophila XMAP215 family member, Mini spindles, at centrosomes and kinetochore microtubule plus ends during mitosis

2011-2012 **Microtubule Function and Cell Division**
Fulbright Researcher, Department of Cell and Developmental Biology,
Center for Genomic Regulation, Barcelona, Spain
Advisors: Dr. Isabelle Vernos and Dr. Sylvain Meunier

Investigation of the role of motor proteins in acentrosomal aster assembly

2010-2011 **The Molecular Basis of Fatigue and Heart Failure**
Research Assistant/Technician, Department of Kinesiology, University of Massachusetts, Amherst, MA Advisor: Dr. Edward Debold

Determining the effects of a cardiomyopathy causing mutation in TnT, a subunit of the muscle regulatory protein troponin, on the regulation of actomyosin motility

2008-2010 **Biochemical and Biophysical Characterization of Myosin-XIX**
Research Assistant, *HHMI Research Mentee* Department of Cellular and Molecular Physiology, Penn State College of Medicine, Hershey, PA and Department of Physics, University of Massachusetts, Amherst, MA
Advisors: Dr. Omar Quintero, Dr. Chris Yengo and Dr. Jennifer Ross

Purification and Biochemical analysis of the myosin-XIX motor domain

Collaborations

Columbia University and Marine Biological Laboratories
Mace, Kumar and Parent Labs- using advanced microscopy paired with a xenograft model to understand cancer cell migration and extravasation in vivo (2023-present)

Submitting NSF Grant to Division of Molecular and Cellular Biosciences Core Programs (MCB) Winter 2025

Ithaca College
Lo Lab- using genetic techniques paired with fluorescence imaging to investigate cytoskeletal dynamics in FGF/FEFR mutant *C. elegans* (2023-present)

Janelia Research Campus
Betzig Lab – using advanced imaging technologies (Lattice Light Sheet) to image zebrafish and *C. elegans* development (2019)

Stony Brook University
Deng Lab – Applied Mathematics: image segmentation and analysis (2019-2021)
Rest Lab – Ecology and Evolution: confocal time lapse imaging of single celled marine eukaryotes (2018-2020)
Citovsky Lab – Cell Biology: Confocal imaging of BiFC in tobacco plants (2020)
Neiman Lab – Cell Biology: Four color confocal imaging in mammalian cells (2019)
iGEM Stony Brook experience for undergraduates – Guidance on imaging techniques and analysis (2019)

Peer-Reviewed Publications

*designates undergraduate author ^designates directly mentored individual

Mondal, C., Gacha-Garay, M.J., **Adikes R.C**., Larkin, K., Di Martino J, Chien C-C., Fraser, M., Eni-Aganga, I., Agullo-Pascual, E., Ozbek,U., Naba, A., Gaitas, A., Fu, T-M., Upadhyayula, S., Betzig, E., Matus, D.Q., Martin, B.L., and Bravo-Cordero, J.J. (2022) A proliferative-to-invasive switch is mediated by srGAP1 downregulation through the activation of TGFβ2 signaling Cell Reports.

Palmisano, N.J.[#], Azmi, M.A.^[#], Medwig-Kinney, T.N., Moore, F.E.Q.*, Rahman R.*, Zhang, W, **Adikes, R.C.[%],** Matus, D.Q.[%]. (2022). A laboratory module that explores RNA interference and codon optimization through fluorescence microscopy using *Caenorhabditis elegans*. Course Source.
[#]these authors contributed equally, [%]co-corresponding

Smith, J.J., Xiao, Y., Parsan, N., Martinez, M.A.Q., Moore, F.E.Q.*, Palmisano, N.J., Kohrman, A.Q., Chandok Delos Reyes, M., **Adikes, R.C.,** Medwig-Kinney, T.N., Liu, S., Bracht, S.A.*, Zhang, W., Wen, K., Krastsios, P., Matus, D.Q. (2022) The SWI/SNF chromatin remodeling assemblies BAF and PBAF differentially regulate cell cycle exit and cellular invasion *in vivo*. PLOS Genetics.

Morabito, R. D., **Adikes, R. C.**, Matus, D. Q., Martin, B. L. (2021) Cyclin-Dependent Kinase Sensor Transgenic Zebrafish Lines for Improved Cell Cycle State Visualization in Live Animals**.** *Zebrafish*. DOI: 10.1089/zeb.2021.0059.

Adikes, R.C.[#], Kohrman, A.Q.[#], Martinez, M.A.Q.[#], Palmisano, N.J., Smith, J.J., Medwig-Kinney, T.N., Min M., Sallee, M.D., Ahmed, O.B.*^, Kim, N.^, Liu, S., Morabito, R.D., Weeks, N., Zhao, Q., Zhang, W., Feldman, J.L., Barkoulas, M., Pani, A.M., Spencer S.L., Martin, B.L., and Matus, D.Q. (2020). Visualizing the metazoan proliferation-differentiation decision **in vivo.** eLife 9:e63265 DOI: 10.7554/eLife.63265
[#]these authors contributed equally

Bocanegra, J.L.[#], **Adikes, R.C.[#],** Quintero O.A. (2020) Myosin XIX. Myosins - A Superfamily of Molecular Motors. Springer. [#]These authors contributed equally

Adikes, R.C., Hallett, R.A., Saway, B.F.*^, Kuhlman, B., Slep, K.C. (2018) Control of cytoskeletal dynamics via light mediated microtubule actin crosslinking. JCB 217(2) 779-793.
DOI: 10.1083/jcb.201705190 Prepint on BioRxiv DOI: https://doi.org/10.1101/142414

Plevock, K.P.[#], Fox, J.C. [#], Byrnes, A.E. [#], **Adikes, R.C. [#],** Speed., S.K.*, Haase, J., Freidman, B., Cook, D.M., Bloom, K., Rusan, N.M., Slep, K.C. (2018) Stu2 uses a 15-nm parallel coiled coil for kinetochore localization and concomitant regulation of the mitotic spindle. MBoC. 29(3):285-294. DOI: 10.1091/mbc.E17-01-0057 [#]these authors contributed equally

Adikes, R.C.*, Unrath W.C., Yengo, C.M., and Quintero, O.A. (2013) Biochemical analysis of the myosin-XIX motor domain. Cytoskeleton 70(5), 281-9. DOI: 10.1002/cm.2111

Quintero, O.A., DiVito, M.M., **Adikes, R.C**.*, Kortan, M.B.*, Case, L.B.*, Lier, A.J.*, Panaretos, N.S.*, Slater S.Q.*, Rengarajan, M.*, Feliu M.*, Cheney R.E. (2009) Human myo19 is a novel myosin that associates with mitochondria. Current Biology 19, 2008-2013. DOI: 10.1016/j.cub.2009.10.026

Presentations: Talks

Assistant Professor

Adikes, R.C. (2025) Cytoskeletal regulation in cell migration in complex environments Biology Department Seminar, Union College, Schenectady, NY

Adikes, R.C. (2024) Applying Novel Fast Line Scanning Microscopy to Complex Models of Lymphocyte 3D Migration. ASCB|EMBO Annual Meeting subgroup on Transendothelial Migration: A Romance of Leukocytes and Endothelium, San Diego, CA.

Adikes, R.C. (2024) *The path to the light sheet: some considerations for sample preparation.* Light Sheet Fluorescence Microscopy Workshop. Marine Biological Laboratories, Woods Hole, MA.

Shehzad, S., and Razi M. (2024) Investigating the roles of actin binding proteins, focal adhesion proteins, and spectrin in *C. elegans* Sex Myoblast Development. Capital District Imaging Seminar Series – Virtual and Siena Academic Showcase.

Adikes, R.C. (2023) *The path to the light sheet: considerations for sample preparation.* Light Sheet Fluorescence Microscopy Workshop. Marine Biological Laboratories, Woods Hole, MA.

Shehzad, S. and Fitian, M. (2023) *Investigation the roles of cytoskeletal genes in C. elegans sex myoblast development*. Capital District Imaging Seminar Series. Virtual

Adikes, R.C. (2022) *Roles of cytoskeletal genes in C. elegans sex myoblast development*. RPI, Troy, NY.

Adikes, R.C. (2022) *How do cells move and navigate complex environments?* Bennington College, Bennington, VT.

Adikes, R.C. (2022) *Matching Sample to System*. Light Sheet Fluorescence Microscopy Workshop. Marine Biological Laboratories, Woods Hole, MA

Adikes, R.C. (2021) *Membrane and cytoskeletal dynamics during muscle progenitor migration.* ASCB Cell Bio Annual Meeting subgroup on Cytoskeletal dynamics in health and disease. Virtual

Postdoctoral

Adikes, R.C. (2021) *Regulation of cell migration during development and disease.* Siena College Biology Department Seminar. Virtual

Adikes, R.C. (2020) *Visualizing the metazoan proliferation-differentiation decision in vivo*. Cell and Developmental Biology Virtual Meeting. Lab Roots and Imaris.

Adikes, R.C. (2020) *Visualizing the metazoan proliferation-differentiation decision in vivo*. TAGC. Virtual Meeting

Adikes, R.C. (2020) *Visualizing the metazoan proliferation-differentiation decision* in *C. elegans.* New York Area Worm Meeting. New York, NY.

Adikes, R.C. (2019) *Cell Migration and Invasion During Developmen*t. Junior Scientists Workshop on Biological Optical Microscopy. Janelia Research Campus, Ashburn, VA.

Adikes, R.C. (2019) *Generating, implementing and analyzing ratio-metric kinase-based biosensors in C. elegans.* International *C. elegans* Conference. Los Angeles, CA.

Adikes, R.C. (2019) *Cell cycle and cytoskeleton regulation of cell migration and differentiation of C. elegans sex myoblasts and zebrafish paraxial mesoderm.*
North East Developmental Biology Meeting. Woods Hole, MA.

Posters

Assistant Professor

Lunman A.L., Binga Leboundou, E.K., Fitan, M., Razi, M., Shehzad, S., Ahmed, O.B., Jangada N., McKnight, T.L., LaRock, H., Fang, A., Pani, A.M., Matus, D.Q., **Adikes, R.C.** Targeted Screen for Cytoskeletal and Adhesion Genes Reveals Regulators of *C.elegans* Myoblast Development. 2024 ASCB|EMBO Annual Meeting, San Diego, CA.

Butler, E., **Adikes, R.C**. Investigating the Roles of Reactive Oxygen Species on Regeneration of Brown Planaria. Fall 2024 Siena Summer Research Symposium and Developmental Biology of New York Meeting

Patnam, R., Ahkrass, T., **Adikes R.C**. Investigating the Roles of Nuclear Hormone Receptors on Regeneration in Planaria. Fall 2024 Developmental Biology of New York Meeting.

Binga Leboundou, E.K., Lunman, A., Shehzad S., Fitan, M., Razi, M., LaRock, H., Jangada, N., **Adikes, R.C.** Fall 2024 Siena Summer Research Symposium.

Lunman, A.L., Fitan, M., Parent, M., Mace, E. Kumar, A., **Adikes, R.C**. Investigating the role of Septin in C. elegans sex myoblast migration. Summer 2024 Marine Biological Laboratories Undergraduate Research Poster Session, Woods Hole M.A. and Fall 2024 Siena Summer Research Symposium.

Clauson, R., Fang, A., Ahmed O.B., Martinez M.A.Q., Matus, D.Q., Stern, M., **Adikes, R.C.** Examining the relationship between cell cycle and cell migration rates. Spring 2024 Siena Academic Showcase

Butler, E., Akhrass, T., Patnam, R., **Adikes, R.C**. Investigating regeneration in planaria. Spring 2024 Siena Academic Showcase

Lunman, A.L., Fitan, M., **Adikes, R.C**. Investigating the role of Septin in C. elegans sex myoblast migration. Spring 2024 Siena Academic Showcase

Binga Leboundou, E.K., Lunman, A., LaRock, H., **Adikes, R.C.** Regulation of cell migration in *C. elegans*. Fall 2023 Siena Summer Research Symposium.

Fitian, M.A. and **Adikes, R.C.** Septin dynamic in migrating sex myoblast cell in *C.elegans.* Fall 2023 Siena Summer Research Symposium.

Akhrass, T., **Adikes, R.C.** Investigating the role of nuclear hormone receptors in Planaria. Fall 2023 Summer Research Symposium.

Shehzad, S.A., Fitian, M.A., Razi M., Philip A., **Adikes, R.C.** The role of actin-binding proteins in cell migration during development. Spring 2023 Siena Academic Showcase.

Razi M., Fitian, M.A., Philip A., Shehzad, S.A., **Adikes, R.C.** The role of focal adhesions in SM cell migration. Spring 2023 Siena Academic Showcase

Fitian, M.A., Fitian, M.A., Razi M.,Shehzad, S.A., **Adikes, R.C.** Investigating the role of ring-forming proteins in cell migration. Spring 2023 Siena Academic Showcase.

Philip A., Shehzad, S.A., Fitian, M.A., Razi M., **Adikes, R.C.** The effect of signaling proteins on cell migration during development of *C.elegans*. Spring 2023 Siena Academic Showcase

Clauson, R., Fang, A., Ahmed O.B., Martinez M.A.Q., Matus, D.Q., Stern, M., **Adikes, R.C.** Examining the relationship between cell cycle and cell migration rates. Spring 2023 Siena Academic Showcase.

Fitian, M.A., Razi M., Shehzad, S.A., Ahmed, O.B., McKnight, T.L, Fang, A., Gibney, T., Pani, A.M., Matus, D.Q., **Adikes, R.C.** Investigating the Roles of Cytoskeletal Genes in SM Cell Migration in *C. elegans.* 2022 ASCB Annual Meeting, Washington, D.C.

Fitian, M.A., Razi M., Shehzad, S.A.* McKnight, T.*, **Adikes, R.C**. Investigating the Roles of Cytoskeletal Genes in SM Cell Migration in *C. elegans.* 2022 DBNY Undergraduate Research Symposium, Ithaca College. Maria won a poster prize.

Clauson, R.*, Sterling, B., Matus, D.Q., Martin, B.L., Deng, Y., **Adikes, R.C**., Computation pipline to analyze protrusion dynamics. 2022 DBNY undergraduate research symposium, Ithaca College.

Fitian, M.A.*, Razi M.*, Shehzad, S.A.* McKnight, T.*, **Adikes, R.C**. Investigating the Roles of Cytoskeletal Genes in SM Cell Migration in *C. elegans.* Spring 2022 Siena Summer Research Symposium.

Shezhad, S.A.*, McKnight, T.*, **Adikes, R.C.** Cell migration in *C. elegans* as a model for development and disease. Spring 2022 Siena Academic Showcase.

Adikes, R.C., Moore, F.E.Q, Fang, A.*, Martinez M.A.Q.M., Ahmed O.B.*, Medwig-Kinney T.N., Zhang W., Gibney, T., Pani, A.M., Stern, M.J., Matus, D.Q. Understanding the Quiescence to Proliferative Switch *in vivo*. 2021 ASCB Annual Meeting. Virtual

Postdoctoral * designates undergraduate author ^designates directly mentored individual

Moore, F.^, **Adikes, R.C.**, Fang, A.^, Martinez, M, Ahmed O.A.^, Medwig-Kinney, T., Stern M., Matus, D., Investigating the G0/G1 transition: Insights from a C. elegans cdk-4 mutant with a sex myoblast specific proliferation defect. 2021 Society for Developmental Biology and 2021 International Worm Meeting

Abraha Z.S., Sepulveda, S., Toledo-Jacobo L., Harris-Smith, K., Matus, D.Q., **Adikes R.C**., Henson, J., Shuster, C.B. Cell Cycle Regulation & Polarity Reversal of the Epithelial-Mesenchymal Transition During Sea Urchin Gastrulation. 2021 Society for Developmental Biology

Adikes, R.C., Ahmed O.A.*^, Gacha Garay, M.J.^, Stettnisch, S.R.^, Zhao Q.^, Pani, A.M., Martin, B.L, Matus, D.Q. Cytoskeletal dynamics during muscle progenitor migration. 2020 Cell Bio Meeting

Burns J.A., Hui, Y., **Adikes R.C**., Matus, D.Q., Duhamel, S., Kerney, R., When plants and animals become one: Organismal and cellular interactions in a vertebrate-alga symbiosis. 2020 Cell Bio Meeting

Karthikaichamy, A. **Adikes, R.C.**, Matus D.Q., Rest, J.S., Collier, J.L. Cytoplasmic Membrane Extensions in a Non-model Protist. 2020 Cell Bio Meeting

Abraha Z.S., Sepulveda, S., Toledo-Jacobo L., Harris-Smith, K., Matus, D.Q., **Adikes R.C**., Shuster, C.B. Spatiotemporal Markers of the Epithelial-Mesenchymal Transition During Sea Urchin Gastrulation. 2020 Cell Bio Annual Meeting

Ahmed O.B.^, **Adikes R.C**., Kim, N.^, Zhao, Q.^, Zhang, W., Swayze, K., Goldstein, B., Pani, A.M., Deng, Y., Matus D.Q. Cytoskeletal dynamics during *C. elegans* muscle progenitor migration. Presented at the 2020 Triangle Cytoskeleton Meeting

Adikes, R.C., Gacha Garay, M.J.^, Stettnisch, S.R.^, Martin, B.L, Matus, D.Q. Cell cycle and cytoskeletal dynamics in the zebrafish tailbud. 2020 EMBO conference on Neuromesodermal Progenitors Virtual

Al Anber, Kinney, B.A., **Adikes, R.C.**, Martin, B.L., The role of canonical Wnt signaling and Sox2 in maintenance and fate determination of neuromesodermal progenitors in the zebrafish tailbud.

Presented at 2020 EMBO conference on Neuromesodermal Progenitors Virtual

Ahmed, O.A.*^, **Adikes, R.C**, Kim, N.^, BIO327 Developmental Genetic Lab*^, Matus, D.Q. The role of actin rich protrusions in sex myoblast migration and differentiation in C. elegans. Presented at 2019 Northeast Region Society for Developmental Biology

Adikes R.C., Ahmed O.B.*^, Kim, N^, Goldstein, B., Pani, A.M., Matus, D.Q. Cell cycle and cytoskeletal dynamics during muscle progenitor migration. Presented at the 2019 ASCB Annual Meeting. Ahmed O.B. awarded first place for her poster presentation.

Adikes R.C., Kim, N.^, Martin, B.L., Matus, D.Q. Cell cycle and cytoskeleton regulation of cell migration and differentiation of C. elegans sex myoblasts and zebrafish paraxial mesoderm. Presented at the 2018 ASCB Annual Meeting.

Adikes R.C., Kim, N.^, Burns, J., Kerney, R., Matus, D.Q. Cell Migration and Invasion During Development. Presented at the 2018 EMBO Light Sheet Fluorescence Microscopy Conference. Dresden, Germany

Service

Siena College Community Service

Advanced Imaging Center – consultation sessions on microscopy equipment and grant writing for imaging needs at Siena

Nobel Hall Animal Facility – consultation on room architecture and set up for a zebrafish facility

Tours of Biology Department/Imaging Facilities for Prospective and Accepted students

Search Committees

Department of Biology
Visiting Assistant Professor, Summer 2022

Department of Finance
Tenure-track Assistant Professor, Spring 2024

Standish Library
Coordinator of Library Instruction Spring/Summer 2024

College Committees

Committee on Teaching and Faculty Development (COTFD) 2023-2026

Other Biology Department Activity

Invited Department Seminar Speakers
Te Wen Lo, Ithaca College 2023
Emily Mace, Columbia University Irving Medical Center 2024
Lisa-Marie Nisbett, Cornell University 2025
Carlos Patino Deschovitch, MSK Cancer Center 2025

Biology Department DEI working group member
Awarded a Departmental Grant to Diversify Curriculum, Enhance Inclusive Teaching Practices, and Recruit Diverse Majors from the Provost

Service to Scholarly/Professional Organizations

Panelist: Leading Edge application process for tenure-track positions 2022

Sub Session Co-Chair: Leading Edge Building Your Brand: PUI Edition, 2022 and 2023

Co-Organizer: Society for Developmental Biology Satellite Symposium – Emerging Leaders in Live Cell Imaging Approaches for Developmental Biology, 2020

Select Other Community Service Prior to Siena College

Relations Coordinator: Academic and Research-Intensive Career Cohort, 2016

Co-Founder and Organizer: ASCB sponsored Triangle Cytoskeleton Meeting, 2014

Science Club Creator: Connections Program, William Peck Middle School, Holyoke, MA, 2010-2011

Fellowships, Honors and Awards

Grants Submitted

2025 NSF 24-539: Division of Molecular and Cellular Biosciences Core Programs, Co-PI with Emily Mace, Matthew Parent and Abhishek Kumar: Cytoskeletal Regulation in Cell Migration in Complex Environments

Grants Previously Awarded

2021-2024 CURCA Summer Scholars Grants
2019-2021 NIH NIGMS F32: Cytoskeletal and Cell Cycle Regulation of Cell Migration During Development
2016-2018 NIH NRSA F31: Investigating the role of the Drosophila XMAP215 family member, Mini spindles, at centrosomes and kinetochore microtubule plus ends during mitosis.
2017 Edwin Grant Conklin Memorial Fund to attend the Embryology Course, Woods Hole, MA
2017 The Company of Biologists Ltd Scholarship to attend the Embryology Course, Woods Hole, MA
2017 L.I. Gilbert Travel Award for Society for Developmental Biology 75th Annual Meeting
2015, 2017 ASCB Graduate Student Travel Award
2014 ASCB Local Meeting Grant
2014 North Carolina Biotechnology Center: Biotechnology Event Sponsorship
2011-2012 Fulbright Research Grant
2010 Ellen P. Resse Research Fund for undergraduate independent research
2009 Feldman-Koster Fund for independent summer research
2008 HHMI Cascade Mentoring Program Mount Holyoke College, Summer 2008

Honors

2021 Leading Edge New Faculty Fellow. Founded and organized by Dr. Kara Mckinley Sponsored by HHMI Janella Research Campus
2017 Graduate student poster prestation Society for Developmental Biology: Honorable Mention
2014 National Science Foundation Graduate Research Program: Honorable Mention
2011 National Science Foundation Graduate Research Program: Honorable Mention
2011 Graduated *magna cum laude* from Mount Holyoke College
2011 Edna H Graham '41 Prize awarded to a chemistry or biochemistry major who shows promise of continued professional activity in her discipline, Mount Holyoke College
2011 Excellence in Teaching Award, Mount Holyoke College
2010 Barry M. Goldwater Scholarship and Excellence in Education: Honorable Mention for Excellence in Mathematics, Science and Engineering
2010 Bernice MacLean Awards for Excellence in the Biological Sciences, Mount Holyoke College
2009-2011 NEWMAC Academic All-Conference Team, Mount Holyoke College