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EMPLOYMENT

Assistant Professor	Emory University (Atlanta, GA) Department of Biology	2019-present
Postdoctoral Fellow	Brown University (Providence, RI) Molecular Biology, Cellular Biology, Biochemistry Dr. Erica Larschan, PI	2013-2019
Visiting Postdoctoral Researcher	Princeton University (Princeton, NJ) Molecular Biology Dr. Paul Schedl, supervising PI	2018-2019
Associate Scientist I	Biogen Idec, Inc. (Cambridge, MA) Molecular Profiling Department	2006-2008

EDUCATION

Ph.D.	Brown University (Providence, RI) Molecular Biology, Cellular Biology, Biochemistry Dr. Robert Reenan, PI	May 2013
M.A.	Brown University (Providence, RI) Molecular Biology, Cellular Biology, Biochemistry Dr. Robert Reenan, PI	May 2011
B.A.	Reed College (Portland, OR) Biology Dr. Keith Karoly, advisor	May 2006

PUBLICATIONS

- Duan, JE*, **LE Rieder***, A Huang[☺], WT Jordan, III, M McKenney, S Watters, N Fawzi, and EN Larschan (2021) CLAMP and Zelda function together as pioneer transcription factors to promote *Drosophila* zygotic genome activation. *ELife* 10:e69937 *Equal contributors
- Koreski, KP, **LE Rieder**, LM McLain[☺], A Chaubal, WF Marzluff*, RJ Duronio* (2020) *Drosophila* Histone Locus Body assembly and function involves multiple interactions. *Molecular Biology of the Cell* 1; 31(14): 1525-1537. *Equal contributors.
- Rieder, LE***, WT Jordan III*, EN Larschan (2019) Targeting of the dosage-compensated male X-chromosome during early *Drosophila* development. *Cell Reports* 29(13): 4268-4275. *Equal contributors
- Jordan, WT III, **LE Rieder**, EN Larschan (2019) Diverse genome topologies characterize dosage compensation across species. *Trends in Genetics* 35(4):308-315.
- Rieder, LE***, KP Koreski*, KA Boltz, G Kuzu, JA Urban, S Bowman, A Zeidman[☺], WT Jordan, III, MY Tolstrukov, WF Marzluff, RJ Duronio, EN Larschan (2017) Histone locus body regulation by the *D. melanogaster* dosage compensation adaptor protein CLAMP. *Genes and Development* 31(14): 1494-1508. *Equal contributors

- Urban, JA, CA Doherty[◊], WT Jordan, JE Bliss, J Feng[◊], MM Soruco, **LE Rieder**, M Tsiarli, EN Larschan (2016) The essential *Drosophila* CLAMP protein differentially regulates non-coding *roX* RNAs in males and females. *Chromosome Research* 25(2):101-113.
- Rieder, LE**, YA Savva, MA Reyna, YJ Chang, JS Dorsky[◊], A Rezaei[◊], RA Reenan (2015) Dynamic response of RNA editing to temperature in *Drosophila*. *BMC Biology* 13(1): 1. *Highly Accessed
- Rieder, LE**, EN Larschan (2014) Wisdom from the fly. *Trends in Genetics* 30(11): 479-81.
- Rieder, LE**, CJ Staber, B Hoopengardener, RA Reenan (2013) Tertiary structural elements determine the extent and specificity of messenger RNA editing. *Nature Communications* 4: 2232.
- Rieder, LE**, RA Reenan (2012) The intricate relationship between RNA structure, editing, and splicing. *Seminars in Cell and Developmental Biology* 23(3):281-8.
- Savva, YA*, **LE Rieder***, RA Reenan (2012) The ADAR protein family. *Genome Biology* 13(12):252-32.
*Equal contributors
- Allaire, NE, **LE Rieder**, J Bienkowska, JP Carulli (2008) Experimental comparison and cross-validation of Affymetrix HT plate and cartridge array gene expression platforms. *Genomics* 92(5):359-65.
- Rieder, LE**, AF Mensinger (2001) Strategies for increasing growth of juvenile toadfish. *Biological Bulletin* 201(2):283-5.

◊ Denotes undergraduate student co-authors

MyBibliography: <https://www.ncbi.nlm.nih.gov/myncbi/1zCh5Lsk8qikg/bibliography/public/>

ORCID: <https://orcid.org/0000-0001-9851-0145>

Pedagogical Publications:

L Hodkinson, J Gross, **LE Rieder**. A muscular dystrophy case study illustrating the phenotypic effects of mutation. Accepted, pending revision at *CourseSource*.

In Preparation:

Xie, M[◊], G. Kimmerer[◊], S Comstra, C Schmidt, LJ Hodkinson, and **LE Rieder**. Max is likely not at the *Drosophila* histone locus. Under revision for *MicroPublication*.

Hodkinson, L*, J Gross, G Puckett, T Aoiki, P Schedl, and **L Rieder**. Contextual signals dictate transcription factor recognition in *Drosophila*. Under preparation for *Genetics*.

Xie, M[◊], L Hodkinson, and **L. Rieder**. MSL2 overexpression drives localization to the *Drosophila* histone genes. In preparation for G3 submission.

Kimmerer, G[◊], H Torres[◊], and **L Rieder**. Zen: a new transcription factor at the histone genes. In preparation for *MicroPublication*.

Schmidt, CA, L Hodkinson, S Comstra, and **L Rieder**. A course-based undergraduate research experience in which students discover new histone gene regulatory proteins in *Drosophila*. In preparation for *JMBE*.

GRANTS and FELLOWSHIPS

Independent:

NIH NIGMS R35 MIRA Award	Aug 2021-present
NIH NICHD R00 Pathway to Independence Award	May 2019-June 2022
Emory University Research Council Award	2021-2022

Post-doctoral

NIH NICHD K99 Pathway to Independence Award (Perfect Impact Score of 10)	2018-2019
NIH NIGMS Ruth Kirschstein NRSA F32 Fellowship (Scored at 3 rd percentile)	2014-2017

Doctoral

NSF Graduate Research Fellowship Program award	2009-2012
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Undergraduate

Howard Hughes Undergraduate Research Grants, Reed College	2005-2006
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TEACHING EXPERIENCE

Assistant Professor , Emory University Undergraduate- BIO264: <i>Introductory Human Genetics</i> Graduate- GMB570R, BCDB501	May 2019-present
Invited guest lecturer (undergraduate), Emory University BIO264: <i>Human Genetics</i>	April 2019
Teaching Assistant , Princeton University (Princeton, NJ) Guided undergraduate students through “Modern Genetics and Public Policy” (WWS 354), taught by Dr. Shirley Tilghman	fall, 2018
Adjunct Professor , Bryant University (Smithfield, RI) Organized and taught a full-semester genetics course (SCI-363), including laboratory activities, to Bryant University undergraduate students.	fall 2017
Summer@Brown (high school), Brown University <i>From Mad Cow Disease to Alzheimer’s: The Biological Basis of Disease</i> Organized and taught a two-week lecture/laboratory course for advanced high school students.	summer 2014, 2013, 2015
Invited guest lecturer (undergraduate), Brown University BIOL1540/2540: <i>Molecular Genetics</i> NEUR 1040: <i>Introduction to Neurogenetics</i>	March 2014, 2015, 2016 March 2016, Feb 2017
Teaching Assistant Brown University (undergraduate) <i>Genome Explorers</i> <i>Plant Organism</i>	summer 2012 fall 2010
Reed College (undergraduate) <i>Introductory Chemistry Laboratory</i>	2003-2006

WRITING EXPERIENCE

Freelance Writer <i>Infobase Learning, Science News Today</i> Wrote >60 pieces on current and noteworthy scientific advances targeted at advanced high school students.	2014-2018
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HONORS

Poster Prizes: <i>Poster of the day</i> , EMBO Conference (Birmingham, UK)	Sept 2015
<i>First prize, postdoc</i> , <i>Drosophila</i> Research Conference (Chicago, IL)	March 2015
Brown MCB Department annual retreat (Providence, RI)	Sept 2011
EMBO Workshop: chromatin structure, organization, dynamics (Prague, CZ)	April 2011
Histochemical Society Travel Fellowship To attend the Marine Biological Laboratory “Immunohistochemistry and Microscopy” course	March 2014
Molecular Biosciences Training Grant , University of Wisconsin-Madison	2008-2009
Commendation for Excellence in Scholarship , Reed College	2003-2006

ADDITIONAL RESEARCH EXPERIENCE

Ph.D. Research	University of Wisconsin, Madison Cellular and Molecular Biology Department Dr. Michael Sussman, PI	2008-2009
Research Assistant	Marine Biological Laboratory (Woods Hole, MA) Dr. Allen Mensinger, PI	summer 2000-03, '05

SERVICE and OUTREACH

Emory University:

Biology Department Diversity, Equity, and Inclusion (DEI) committee member	2020-present
<u>ASCB COMPASS outreach grant recipient (insect petting zoo)</u>	fall, 2021
East Atlanta Kids Club outreach: "Insect petting zoo," "DNA demo"	summer 2021
Invited panelist, virtual K99/R00 panel at Brown University "Transitioning to the R00"	summer 2021
ATL science festival volunteer, Winterville Elementary	spring 2021
Postdoctoral diversity seminar series, invited speaker, Emory "How to give a successful chalk talk"	2019-2021
<u>Center for Faculty Development and Excellence community engaged learning grant</u>	2021

Brown University:

Brown University Fly Club founder and co-organizer:	2013-2017
Zeiss M1 Imager fluorescent microscope coordinator:	2014-2017
Molecular Biology, Cellular Biology and Biochemistry Data Club Postdoctoral Liaison:	2016-2018
Brown SPARK and summer@brown programs:	Summers, 2014-2017

Biogen, Inc:

Biogen community laboratory:	2006-2008
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External Outreach:

Advisor to Columbia High School (alma mater) Science Olympiad Team	2014-2016
Vartan Gregorian Elementary School (Providence, RI) Science Conference	June, 2017

Manuscript Review Service:

Proceedings of the National Academy of Sciences, PLOS Genetics, Molecular Cell, ELife, Genes, Cells, International Journal of Medical Science

Grant Reviews:

NIH DEV1	summer, 2022
NIH DEV2 (Early Career Reviewer)	fall, 2021
Invited review panelist: National Science Foundation GRFP	2017, 2020, 2021

PROFESSIONAL MEMBERSHIPS

Society for Developmental Biology	2018-present
Genetics Society of America	2013-present
American Society for Cell Biology	2016-2018
National Postdoctoral Association	2016-2018
RNA Society	2012
American Association for the Advancement of Science	2011-2012

PROFESSIONAL DEVELOPMENT

Career Courses and Workshops

Alan Alda Center for Communicating Science Workshop	May 2022
Genetics Society of America New Faculty Forum	March 2019
Society for Developmental Biology New PI Bootcamp	July 2018
Cold Spring Harbor Leadership in Biosciences Workshop	2019

Teaching Advancement Courses and Workshops

Yearlong courses at the Brown University Sheridan Center for Teaching and Learning:	
Certificate III: <i>Professional Development</i>	2014
Certificate I: <i>Reflective Teaching</i>	2011

Molecular CaseNet Workshop: Developing Case Studies Using Molecular Representations for use in Introductory Chemistry, Biology, and Biochemistry Classes	May 4, 2019
Atlanta Society of Mentors (ASoM) Mentor Training Workshop	Fall, 2019
Emory Center for Faculty Development and Excellence, personalized community engaged learning workshop	Feb 2021
Emory Center for Faculty Development and Excellence flipped classroom workshop	May 2021

Research Courses and Workshops

Cold Spring Harbor "The Genome Access Course"	2019
Cold Spring Harbor Quantitative Imaging course	2018
Cold Spring Harbor Proteomics course	2017
Nikon Imaging Center Microscopy Care and Maintenance Workshop	2017
Nikon Imaging Center Fluorescence Microscopy Workshop, Harvard Medical School	2017
Immunohistochemistry and microscopy course, Marine Biological Laboratory	2014
<i>Drosophila</i> species workshop, <i>Drosophila</i> Research Conference, San Diego CA	2014

RESEARCH COMMUNICATIONS**Invited presentations: International Conferences**

Virtual EMBO workshop:	2020
"Molecular and Developmental Biology of <i>Drosophila</i> " (speaker)	
European Molecular Biology Organization conference, Birmingham UK (speaker, poster)	2015
European Molecular Biology Organization conference, Nice FR (poster)	2012
European Molecular Biology Organization workshop on chromatin structure organization, and dynamics, Prague CZ (session chair and poster)	2011

Invited presentations: National Conferences

FASEB The Nuclear Bodies Conference (invited speaker)	2022
<i>Drosophila</i> Research Conference (platform speaker and junior session chair)	2019
Society for Developmental Biology (invited short talk)	2018
Cold Spring Harbor Nuclear Organization and Function Meeting (poster)	2018
<i>Drosophila</i> Research Conference (platform speaker)	2017
American Society for Cellular Biology meeting (microsymposium speaker, poster)	2016
Claremont-McKenna Keck Science Department Seminar Series (speaker)	2016
Rhode Island College Research Colloquium (speaker)	2016
4 th Annual Northeast Regional Chromosome Pairing Conference (speaker)	2015
<i>Drosophila</i> Research Conference (poster)	2015
<i>Drosophila</i> Research Conference (poster)	2014
Gene Expression RNA Series (GEARS), Harvard Medical School (speaker)	2013
Gordon-Kenan Conference and Research seminar on RNA editing (poster)	2013
RNA Society annual meeting (speaker)	2012
Gordon-Kenan Conference and Research seminar on RNA editing (poster)	2011

Invited seminars:

Case Western, Biology Dept.	2022
University of Georgia, Genetics Dept.	2022
UA Birmingham Biology Department seminar series	2020
UNC Asheville Biology Department seminar series	2020
Rutgers Department of Biochemistry and Molecular Biology seminar series	2020
NIH Laboratory of Cellular and Developmental Biology seminar series	2021

Invited presentations: Internal

Emory Fly Club	2021
Emory Winship Cancer seminar series	2021
Emory Chromatin Club (speaker)	2019
Providence Area Aging Research Forum (PAARF; invited speaker)	2017
Molecular Biology, Cell Biology and Biochemistry department Data Club (speaker)	2016

Brown University Fly Club (speaker)
Developmental Biology Research in Progress meeting (speaker)

2013-2016
2014