

Laura Montier, MBiot, PhD
Research Associate
Laboratory of Dr. Alica Goldman
Department of Neurology
Baylor College of Medicine
Email: LMontier@bcm.edu

EDUCATION

- Ph.D.** **University of Houston**, Houston, TX
August 2018
Biology: Cell and Molecular Biology
Mentor: Dr. Jokūbas Žiburkus

Dissertation Title: Adenosine A₁R Agonist Protects Against Mortality, Astrogliosis, and Behavioral Comorbidities in a Dravet Syndrome Mouse Model
- M.S.** **Texas A&M University**, College Station, TX
May 2005
Biotechnology
Graduate Business Certificate *December 2004*
- B.S.** **Oklahoma State University**, Stillwater, OK
May 2002
Biochemistry and Molecular Biology
-

AWARDS

- **Grass Young Investigator Award**, American Epilepsy Society, Baltimore, MD, *December 2019*
 - **Young Investigator Award**, American Epilepsy Society, Houston, TX, *December 2016*
 - **Best Poster**, Biology of Behavior Institute Retreat, Houston, TX, *May 7, 2016*
 - **Best Microscopy Image**, 7th Annual Biology and Biochemistry Graduate Student Symposium, *December 4, 2015*
 - **Excellent Review Award: "Number matters: control of mammalian mitochondrial DNA copy number"**, Journal of Genetics and Genomics, *2014*
-

PUBLICATIONS

1. **Montier L**, Haneef Z, Gavvala J, Yoshor D, North R, Verla T, Van Ness P, Drabek J, Goldman A (2019) "Somatic mutation in MEN1 detected in periventricular heterotopia tissue obtained from depth electrodes." *Epilepsia*. 60(10):e104-e109.
2. Lotfollahi M, Berisha S, Saadatifar L, **Montier L**, Ziburkus J, Mayerich D (2019) "Three-Dimensional GPU-Accelerated Active Contours for Automated Localization of Cells in Large Images." *PLoS One*, 14(6):e0215843.
3. Saadatiford L, Abbott LC, **Montier L**, Ziburkus J, Mayerich D. (2018) "Robust Cell Detection for Large-Scale 3D Microscopy Using GPU-Accelerated Iterative Voting." *Frontiers Neuroanat.*, 12:28.
4. Bapanpally C, **Montier L**, Khan S, Kasra A, Brunelle SL. (2014) "SAS molecular tests Salmonella detection kit. Performance tested method 021202." *J AOAC Int.* 2014, 97(3):808-19.

5. Bapanpally C, **Montier L**, Khan S, Kasra A, Brunelle SL. (2014) "SAS molecular tests Escherichia coli 0157 detection kit. Performance tested method 031203." J AOAC Int., 97(3):798-807.
 6. Yang Y, Cimen H, Han MJ, Shi T, Deng JH, Koc H, Palacios OM, **Montier L**, Bai Y, Tong Q, Koc EC. (2010) "NAD⁺-dependent deacetylase SIRT3 regulates mitochondrial protein synthesis by deacetylation of the ribosomal protein MRPL10." J Biol Chem, 285(10): 7417-29.
 7. **Montier L**, Deng, J, and Bai Y (2009) "Number matters: control of mammalian mitochondrial DNA copy number". Journal of Genetics and Genomics, 36(3):125-31.
 8. Ibrahim Malik, Turk J, Mancuso DJ, **Montier L**, Wohltmann M, Wozniak DF, Schmidt RE, Gross RW, and Kotzbauer PT(2008) "Disrupted Membrane Homeostasis and Accumulation of Ubiquitinated Proteins in a Mouse Model of Infantile Neuroaxonal Dystrophy Caused by PLA2G6 Mutations." The American Journal of Pathology, 172(2):406-16.
 9. Knebel-Morsdorf D, Quadt I, Li Y, **Montier L**, Guarino LA (2006) "Expression of Baculovirus Late and Very Late Genes Depends on LEF-4, a Component of the Viral RNA Polymerase Whose Guanyltransferase Function Is Essential." Journal of Virology, 80(8):4168-4173.
-

GRANTS and SCHOLARSHIPS

- **Biology of Behavior Institute Summer Research Fellowship**, University of Houston, Houston, TX, *June 2015 – August 2015*
 - **Houston Livestock and Rodeo Scholarship**, University of Houston, Houston, TX, *3x Recipient: August 2014 – May 2017*
 - **NIH/NIA Training Grant on the Biology of Aging**, Grant #2 T32 AG021890-06, University of Texas Health Science Center at San Antonio, TX, *May 2009 – August 2010*
 - **Regents Biotechnology Fellowship**, Texas A&M University, College Station, TX, *May 2004 – December 2004*
 - **Nonresident Achievement Scholarship**, Oklahoma State University, Stillwater, OK, *August 1998 – May 2001*
 - **Early Admissions Scholarship Program**, University of the Virgin Islands, St. Croix, US Virgin Islands, *August 1997 – May 1998*
-

LEADERSHIP

- **Co-chair Organizing Committee**, ComSciCon-Houston 2020, Science Writers' Conference, *February 2020*
- **Co-Lead**, YES4Wikipedia Project, Young Epileptologist Section (YES), American Epilepsy Society *January 2019 – December 2019*
- **Social Outreach Co-Chair**, Postdoctoral Association, Baylor College of Medicine *September 2018 – August 2020*

- **Organizing Committee Member**, ComSciCon-Houston 2019, Science Writers' Conference
July 2018 – May 2020
- **Team Lead**, Jr. Microbiology Judging Team, Annual Science and Engineering Fair of Houston
February 2018
- **Founder and Organizer**, Astrocyte Journal Club, University of Houston *September 2015 – April 2017*
- **Secretary of Alpha Delta Chapter**, Phi Lambda Upsilon (Honorary Chemical Society) *August 2000-
July 2001*

TEACHING

Adjunct Faculty at University of St. Thomas, Houston, TX

BIOL 3121	Genetics Lab	1 semester
BIOL 3339	Neuroscience (undergraduate)	1 semester
MLBIO 5339	Neuroscience (graduate)	1 semester

Teaching Assistant at University of Houston, Houston, TX:

BIOL 1161	General Biology Lab I	2 semesters
BIOL 1162	General Biology Lab II	2 semesters
BIOL 3311	Genetics Lab	8 semesters
BCHS 3311	Biochemistry Lab I	1 semester

Teaching Assistant at University of Texas Health Science Center at San Antonio, San Antonio, TX:

CSBL 5083	Practical Optical Microscopy	1 semester
-----------	------------------------------	------------

MEMBERSHIPS

American Epilepsy Society (AES) *Since 2016*

Genetics Society of America (GSA) *Since 2019*

Young Epileptologist Section (YES), American Epilepsy Society *Since 2018*

CERTIFICATION and TRAINING

- **Peer Review Training Program**, *Genetics Review Board, November 2019-present*
- **NRMN Certified Facilitator of Entering Mentoring**, Center for the Improvement of Mentored Experiences in Research (CIMER), *August 2019*
- **MGMT/BIOE 633, Roles of Scientists, Physicians, and Engineers in High-Tech Startups**, Rice Alliance and Rice Business School, Houston, TX, *Spring 2019*
- **Graduate Business Certificate**, Texas A&M University, *December 2004*

WORKSHOPS

Facilitated:

- **Entering Mentoring: Mentor Training for Biomedical Researchers**, Co-facilitated with Drs. Leslie Coward, Rajan Chaudhari, and Robert Tillman, GCC/NRMN, Houston, TX, *May 2, 2019*
- **Mentor/Mentee Communications Workshop**, Co-facilitated with Dr. Leslie Coward, Baylor College of Medicine, Houston, TX, *April 16, 2019*

Attended:

- **Mentor Facilitator Training Workshop**, NIH-funded, National Research Mentoring Network, Gulf Coast Consortia, Houston, TX, *December 14, 2018*
 - **Postdoc Mentor Training Workshop**, NIH-funded, National Research Mentoring Network, Gulf Coast Consortia, Houston, TX, *December 12, 2018*
 - **Biodesign Workshop series**, Enventure, Houston, TX, *December 2018*
-

MENTORSHIP

- **Skype a Scientist**, NRMN *September 2019*
 - **Saturday Morning Science (SMS) Mentor**, Baylor College of Medicine, Houston, TX *January – April 2019*
 - **Christine, Troskie**, Masters student at University of British Columbia, Epilepsy Wikipedia Project, *February 2019 -June2019*
 - **Elsbeth Chow**, Dulles High School student, Math and Science Academy Graduation Project, *May – August 2016*
 - **Carol Upchurch**, University of Houston biomedical engineering undergraduate research assistant, *January 2016 – April 2018*
 - **Cara Riffe**, University of Houston undergraduate honors student, SURF and PURS recipient, *January 2013 – May 2016*
-

COMMUNITY SERVICE

Judge for Online Medicine and Health section

62st Annual Science and Engineering Fair Houston
Houston, TX

February 13, 2021

Judge for Biochemistry and Microbiology Senior section

61st Annual Science and Engineering Fair Houston
George R. Brown Convention Center, Houston, TX

February 22, 2020

Judging Team Lead for Senior Biochemistry and Microbiology section

60th Annual Science and Engineering Fair Houston
University of Houston, Houston, TX

February 23, 2019

Judging Team Lead for Junior Biochemistry and Microbiology section

59th Annual Science and Engineering Fair Houston
University of Houston, Houston, TX

February 24, 2018

Judge for Biochemistry and Microbiology Senior section

58th Annual Science and Engineering Fair Houston
University of Houston, Houston, TX

February 25, 2017

Judge for Biochemistry and Microbiology Senior section

57th Annual Science and Engineering Fair Houston
University of Houston, Houston, TX

February 27, 2016

CONFERENCE PRESENTATIONS

Talks:

“Astroglialosis in an Epileptic Mouse Model: Quantification and 3D Modeling of GFAP+ Cells”

Vizapalooza: Texas Institute for Measurement, Evaluation, and Statistics, Houston, TX

May 13, 2016

“Adenosine Therapy in Dravet Syndrome”

7th Annual Graduate Student Biology Symposium, University of Houston, Houston, TX

December 4, 2015

“Adenosine Therapy in Dravet Syndrome”

Biology of Behavior Fall Symposium Keynote Speaker, Houston, TX

November 13, 2015

“Brown Bag’s Grab Bag: Adenosine, Astrocytes, Neurons, and Stem Cells”

BoBI Brown Bag Journal Club, University of Houston, Houston, TX

December 5, 2014

“Adenosine Treatment in Dravet Syndrome”

Biology of Behavior Institute Retreat, Houston, TX

May 10, 2014

Posters:

“Detection of somatic mutations in brain lesions from stereoelectroencephalography (SEEG) depth electrodes”

Laura Montier, Z Haneef, J Gavvala, D Yashor, R North, T Verla, P Van Ness, J Drabek, AM Goldman
American Epilepsy Society, Baltimore, MD

December 6-10, 2019

“Control of Astroglialosis with an A1R Agonist”

Laura Montier, M. Megjhani, Y. Lu, P. Kulkarni, G. Musial, C. Riffe, J. L. Leasure, B. Roysam, J. Žiburkus
American Epilepsy Society, Washington D.C.

December 1-5, 2017

“Control of Astroglialosis with an A1R Agonist”

Laura Montier, M. Megjhani, Y. Lu, P. Kulkarni, G. Musial, C. Riffe, C. Upchurch, J. L. Leasure, B. Roysam, J. Žiburkus

Innovations in Interdisciplinary Neuroscience

27th Annual Keck Research Conference

BioScience Research Collaborative, Houston, TX

October 27, 2017

“Novel Adenosine Therapy in Dravet Syndrome”

Laura Montier, F. Gu, C. Riffe, M. Megjhani, P. Kulkarni, G. Musial, C. Upchurch, J. L. Leasure, B. Roysam, J. Žiburkus
American Epilepsy Society, Houston, TX

December 2-6, 2016

“Novel Adenosine Therapy in Dravet Syndrome”

Laura Montier, F. Gu, C. Riffe, M. Megjhani, P. Kulkarni, C. Upchurch, J. L. Leasure, B. Roysam, J. Žiburkus
Biology of Behavior Institute Retreat, Houston, TX

May 7, 2016

“Novel Adenosine Therapy in Dravet Syndrome”

Laura Montier, F. Gu, C. Riffe, M. Megjhani, P. Kulkarni, C. Upchurch, J. L. Leasure, B. Roysam, J. Žiburkus
Gulf Coast Consortium Symposium on Membrane Biophysics
BioScience Research Collaborative, Houston, TX

May 6, 2016

“Novel Adenosine Therapy in Dravet Syndrome”

Laura Montier, F. Gu, C. Riffe, C. Upchurch, M. Megjhani, P. Kulkarni, J. L. Leasure, B. Roysam, J. Žiburkus
Texas A&M Institute for Neuroscience – 8th Annual Symposium
Texas A&M University, College Station, TX

April 15, 2016

“Novel Drug Therapy in Dravet Syndrome Reduces Astrogliosis”

Laura Montier, M. Megjhani, P. Kulkarni, C. Riffe, J. L. Leasure, B. Roysam, J. Žiburkus
Graduate Research And Scholarship Projects 2015
University of Houston, TX

October 30, 2015

“Adenosine A1 receptor agonist reduces mortality, improves social and hippocampal-based learning behavior, and prevents astrogliosis in a model of Dravet syndrome”

Laura Montier, C. Riffe, F. Gu, J.L. Leasure, J. Žiburkus
6th Annual Biology and Biochemistry Graduate Student Symposium
University of Houston, Houston, TX

December 4, 2014

“Novel Drug Therapy for Dravet Syndrome and Its Comorbidities”

Laura Montier, C. Riffe, F. Gu, J. Žiburkus
Graduate Research And Scholarship Projects 2014
University of Houston, TX

October 31, 2014

“Adenosine A1 receptor agonist reduces mortality and improves social and hippocampal-based learning behavior in a model of Dravet syndrome”

Laura Montier, C. Riffe, F. Gu, J. Žiburkus
Biology of Behavior Institute Student Symposium
University of Houston, TX

September 26, 2014

“Adenosine A1 receptor agonist effects on mortality and anxiety, social and hippocampal-based learning behavior in a model of Dravet syndrome”

Laura Montier, C. Riffe, F. Gu, J. Žiburkus
Catastrophic Epilepsy Symposium
Baylor College of Medicine, Houston, TX

April 28-29, 2014

“Adenosine A1 receptor agonist effects on synaptic physiology, febrile seizure threshold, and social, anxiety, and learning behavior in Dravet syndrome”

Laura Montier, F. Gu, C. Riffe, J. Žiburkus
5th Annual Biology and Biochemistry Graduate Student Symposium
University of Houston, Houston, TX

December 6, 2013

WORKSHOPS

Facilitated:

- **Research Mentor Training Workshop for Postdocs (co-facilitated with Dr. Rajan Chaudhari, Dr. Leslie Coward, and Dr. Robert Tillman)**, BioScience Research Collaborative, Rice University, Houston, TX, *May 2, 2019*
- **Mentor/Mentee Communications Workshop (co-facilitated with Dr. Leslie Coward)**, Baylor College of Medicine, Houston, TX, *April 16, 2019*

Participant:

- **Basic EEG in Epilepsy: Fundamentals and Interpretation**, American Epilepsy Society, Washington DC, *December 5, 2017*
- **ComSciCon-Houston**, Inaugural Science Communication Workshop, Houston, TX, *March 11 and 18, 2017*
- **Why is n always 3? An Introduction to Statistics in Computational Biology in R**, Bioscience Research Collaborative, Houston, TX, *December 13, 2016*
- **Neural and Cognitive Systems Workshop**, Bioscience Research Collaborative, Houston, TX, Supported by NSF 1533708, *September 15-16, 2016*

PROFESSIONAL POSITIONS

- Baylor College of Medicine**, Houston, TX *7/2019 - present*
Postdoc Administrative Fellow, Career Development Center
Supervisor: Derek Haseltine, PhD
Programs Developed:
1. Candid Conversation with Faculty Series
 a. Dr. Kelly Bijanki, July 2019
 b. Dr. Daniel Yoshor, September 2019
2. BCM Biomedical Industry Mentor Match Program
3. Co-facilitated Peer Mentoring Career Development Group
4. Undergraduate Research/Postdoc Mentor Program with St. Thomas and BCM
- University of Texas Health Science Center at SA**, San Antonio, TX *4/2012 – 12/2012*
Lab Manager/Research Assistant, Comprehensive Dentistry
PI: Dr. Xiao-Dong Chen, PhD
- SA Scientific**, San Antonio, TX *10/2010 – 12/2011*
Research Assistant, Research and Development
- University of Texas Health Science Center at SA**, San Antonio, TX *8/2007 – 8/2010*
Graduate Student, Cellular and Structural Biology
PI: Dr. James Lechleiter, PhD
- Washington University School of Medicine**, St. Louis, MO *7/2005 – 7/2007*

Laura Montier, MBiot, PhD
LMontier@bcm.edu

Research Technician II, Department of Neurology
PI: Dr. Paul Kotzbauer, MD, PhD

- | | |
|---|-------------------------|
| Monsanto , Chesterfield, MO
Biotechnologist Intern, Department of Ag Traits
Supervisor: Dr. Jeff Seale, PhD | <i>1/2005 – 4/2005</i> |
| Texas A&M University , College Station, TX
Research Assistant, Department of Entomology
PI: Dr. Linda Guarino, PhD | <i>2/2002 – 5/2004</i> |
| Juan F. Luis Hospital , St. Croix, US Virgin Islands
Laboratory Technologist Intern
Supervisor: Mr. Joseph Mark, MS | <i>6/2001 – 8/2001</i> |
| Oklahoma State University , Stillwater, OK
Undergraduate Research Assistant, Department of Biochemistry
PI: Dr. John Cushman, PhD | <i>8/1999 – 6/2000</i> |
| Technology Licensing Office , Texas A&M University, College Station, TX
Technology Licensing Intern
Supervisor: Mr. Juan Consuegra, BS | <i>6/2004 – 12/2004</i> |
| VirOligo Database Project , Oklahoma State University, OK
Database Technician
PI: Dr. Ulrich Melcher, PhD | <i>8/2001 – 12/2001</i> |