

Alicia M. Ebert

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| Contact Information | Department of Biology 305 Marsh Life Science University of Vermont Burlington, VT 05405 | (802) 656-0458 Alicia.Ebert@uvm.edu |
| Education | PhD Zoology , Colorado State University Molecular, Cellular and Integrative Neurosciences Program Mentor: Dr. Deborah Garrity Title: "New Roles for Calcium Channel Beta Subunits in zebrafish Development" | July, 2004 - October, 2008 |
| | B.S. Molecular Biology , University of Wyoming Minors: Chemistry and Psychology | August, 1998 - May, 2002 |
| Professional Experience | Director Undergraduate Neuroscience Program University of Vermont | August, 2019 - Present |
| | Associate Professor Department of Biology, University of Vermont | July, 2018 - Present |
| | Co-Director Undergraduate Neuroscience Program University of Vermont | August, 2017 - August, 2019 |
| | Assistant Professor Department of Biology, University of Vermont | July, 2012 - July 2018 |
| | Postdoctoral Fellow Department of Cell Biology and Anatomy, University of Calgary Mentor: Dr. Sarah McFarlane | October, 2008 - July, 2012 |
| | Professional Research Assistant Department of Neuroscience, University of Colorado Health Sciences Center Employer: Dr. Nicholas Seeds | July, 2002 - September, 2003 |
| Publications (* undergraduate author) | Emerson SE, Stergas HR, Bupp-Chickering SO, Ebert AM . 2020 Shootin-1 is required for nervous system development in zebrafish. <i>Developmental Dynamics</i> Oct;249(10):1285-1295. PMID: 32406957 Schmoker AM, Weinert JL, Markwood JM, Albrechtsen KS, Lunde ML, Weir ME, Ebert AM , Hinkle KL, Ballif BA. 2020. FYN and ABL regulate the interaction networks of the DCBLD receptor family. <i>MOL Cell Proteomics</i> . Oct;19(10):1586-1601. PMID: 32606017 Mullen P, Abbott JA, Wellman T, Aktar M, Fjeld C, Demeler B, Ebert AM , Francklyn CS. 2020. Neuropathy-associated histidyl-tRNA synthetase variants attenuate protein synthesis in vitro and disrupt axon outgrowth in developing zebrafish. <i>FEBS Journal</i> Jan;288(1):142-159. PMID: 32543048 Mead AF, Kennedy GG, Palmer BM, Ebert AM , Warshaw DM. 2020 Mechanical characteristics of ultrafast zebrafish larval swimming muscles. <i>Biophys J</i> . Aug 18;119(4):806-820 PMID: 32755560 St Clair RM, Dumas CM, Williams KS*, Goldstein MT*, Stant EA*, Ballif, Ebert AM , Ballif BA. 2019. PKC Induces Release of a Functional Ectodomain of the Guidance Cue Semaphorin6A. <i>FEBS Letters</i> Nov;593(21):3015-3028. PMID: 31378926 Waldron AL, Wilcox CE*, Francklyn CS, Ebert AM . 2019. Knock-down of Histidyl-tRNA synthetase causes G1-arrest of neuronal progenitor cells <i>in vivo</i> . <i>Frontiers in Cell and Developmental Biology</i> Schmoker AM, Ebert AM , Ballif BA. 2019. The DCBLD receptor family: emerging signaling roles in | |

development and disease. *Biochemical Journal* 476:931-950 PMID: 30902898

Emerson SE, Grebber BK*, Orr A*, Gonzalez J*, Deming PB, **Ebert AM**. 2018. Developmental Expression patterns of Protein Kinase A catalytic subunits in zebrafish. *Gene Expression Patterns* Jan;3:1-6 PMID: 30468770

Schmoker AM, Driscoll HE, Geiger SR*, Vincent JJ, **Ebert AM**, Ballif BA. 2018. An *in silico* proteomics screen to predict and prioritize protein-protein interactions dependent on post-translationally modified motifs. *Bioinformatics* 15;34(22):3898-3906 PMID: 29868839

St. Clair RM, Emerson SE, D'Elia KP*, Weir ME, Schmoker AM, **Ebert AM**, Ballif BA. 2017. Fyn-dependent phosphorylation of PlexinA1 and PlexinA2 at conserved tyrosines is essential for zebrafish eye development. *FEBS Journal*. Jan;285(1):72-86. PMID: 29091353

Emerson SE, Light SE*, Ballif BA, **Ebert AM**. 2017. PlexinA family expression patterns in zebrafish development. *Gene Expression Patterns* Oct 28;27:56-66. PMID: 29107805

Schmoker AM, Weinert JL*, Kellett KJ*, Johnson HE*, Joy RM, Weir ME, **Ebert AM**, Ballif BA. 2017. Dynamic multi-site phosphorylation by Fyn and Abl drives the interaction between CrkL and the novel scaffolding receptors Dcbld1 and Dcbld2. *Biochemical Journal*. Nov 21;474(23) 3963-3984. PMID: 29025973

Waldron AL, Helms Cahan S, Francklyn CS, **Ebert AM**. 2017. A single *Danio rerio* *hars* gene encodes both cytoplasmic and mitochondrial histidyl-tRNA synthetases. *PLOS One*. September 12(9): e0185317. PMID: 28924268

Emerson SE, St Clair RM, Waldron AL, Bruno SR*, Duong A*, Driscoll HE, McFarlane S, Ballif BA, **Ebert AM**. 2017. Identification of target genes downstream of Semaphorin6A/PlexinA2 signaling. *Developmental Dynamics*. April 246:539-549. PMID: 28440030

Mirando AC, Fang P, Williams TF, Baldor LC, Howe AK, **Ebert AM**, Wilkinson B, Lounsbury K, Guo M, Francklyn CS. 2015. Aminoacyl-tRNA synthetase dependent angiogenesis revealed by a bioengineered macrolide inhibitor. *Nature Scientific Reports* Aug 14;5:13160. PMID: 2671225

Ebert AM, Childs SJ, Hehr C, Cechmanek PB, McFarlane S. 2014. Sema6a and Plxn2 mediate spatially regulated repulsion within the developing eye to promote eye vesicle cohesion. *Development* 141(12):2473-2482. PMID: 24917502

Rohs P*, **Ebert AM**, Zuba A*, McFarlane S. 2013. Neuronal expression of fibroblast growth factor receptors in zebrafish. *Gene Expression Patterns* Jul 9;13(8):354-361. PMID: 23850987

Chernyavskaya Y, **Ebert AM**, Milligan E, Garrity DM. 2012. Voltage-gated calcium channel CACNB2 (β 2.1) protein is required in the heart for control of cell proliferation and heart tube integrity. *Developmental Dynamics* Apr; 241(4):648-662. PMID: 22274990

Ebert AM, Lamont RE, Childs S, McFarlane S. 2012. Neuronal expression of class 6 semaphorins in zebrafish. *Gene Expression Patterns* Mar/Apr; 12(3-4):117-122. PMID: 22330030

Ebert AM, McAnelly CA, Handschy AV, Mueller RL, Horne WA, Garrity DM. 2008. Genomic organization, expression and phylogenetic analysis of Ca²⁺ channel β 4 (CACNB4) genes in thirteen vertebrate species. *Physiological Genomics*. Oct 8;35(2): 133-44. PMID: 18682574

Ebert AM, McAnelly CA, Srinivasan A, Muller RL, Garrity DB, Garrity DM. 2008. The calcium channel beta2 (CACNB2) subunit repertoire in teleosts. *BMC Molecular Biology* April 17; 9(38). PMID: 18419826

Ebert AM, McAnelly CA, Srinivasan A, Linker JL, Horne WA, Garrity DM. 2008. Ca²⁺ Channel-independent requirement for MAGUK-family CACNB4 genes in initiation of zebrafish epiboly. *Proc. Natl. Acad. Sci. USA* 105(1);198-203. PMID: 18172207

Ebert AM, Hume GL, Warren KS, Cook NP, Burns CG, Mohideen MA, Siegal G, Yelon D, Fishman MC, Garrity DM. 2005. Calcium extrusion is critical for cardiac morphogenesis and rhythmicity in embryonic zebrafish hearts. *Proc. Natl. Acad. Sci. USA* 102(49);17705-17710. PMID: 16314582

Forthcoming, in Review & Submitted Manuscripts

Stergas HR, Kalbag Z, St. Clair RM, Ballif BA, Talbot JC, **Ebert AM**. Crk adaptor proteins are essential for development of the zebrafish retina. In review *Developmental Dynamics*

Working Manuscripts

Wysolmerski EE, Stergas HR*, Flinn BA*, Ferarro AR*, Deming PB, **Ebert AM**. FGF8-mediated vascularization is required for retinal development. Planned submission to *Developmental Biology*

Emerson SE, Fabian-Fine R, **Ebert AM**. "Providing student-led hypothesis-driven zebrafish modules to undergraduate institutions in Vermont" Planned submission to *Journal of Undergraduate Neuroscience Education*

Joy RM, Waldron AL, Stergas HR*, Kellett KJ*, Ballif BA, **Ebert AM**. "DCBLD2 is essential for the development of the zebrafish retina and optic tract." Planned submission to *FEBS Letters*.

Current Funding

National Science Foundation: IOS-Neural Systems Cluster* 2017 - 2020
\$540,000 - Co-PI - "A biochemical, proteomic, and functional delineation of Dcbld1 and 2 signaling during zebrafish neural retina development" *Federal peer review (pre-proposal success rate - 24%, Full-proposal success rate - 25-30%, overall success rate 6-7%).

Previous Funding

National Science Foundation: IOS-Neural Systems Cluster* 2016 - 2019
\$520,000 - PI - "Delineation of Semaphorin6A/PlexinA2 Signaling in Zebrafish Eye Development." *Federal peer review (pre-proposal success rate - 24%, full-proposal success rate - 25-30%, overall success rate 6-7%).

National Science Foundation: Research Experience for Undergraduates* 2016 - 2019
\$287,000 -Co-PI- "REU Site: Summer Neuroscience Undergraduate Research Fellowship Program at UVM" Federal Peer review

University of Vermont College of Arts and Sciences Seed grant* 2016 - 2017
\$8,426 - PI - "Using CRISPR/Cas genetic modification to develop a zebrafish model of a human deafness-blindness mutation." *Competitive UVM internal peer review.

University of Vermont Neuroscience Behavior and Health Microgrant* 2015 - 2016
\$9,000 - Co-PI - "Construction of an Usher Syndrome Type 3B blindness and deafness model in zebrafish." *Competitive UVM internal peer review.

Course Development

Developmental Molecular Genetics (Biol 265) Fall 2017
Neurobiology (Biol 261) Spring 2017
Biology First Year Interest Group (FIG) (AS 095) Fall 2015
Model Systems in Developmental Biology (Biol 295A) Fall 2015
Biology Graduate Seminar (Biol 381D) Fall 2014
Topics in Development (Biol 371D) Fall 2013
Neurodevelopment (Biol 266) Spring 2013
Techniques in Microscopy (Biol 296) Spring 2013

Mentoring

High School trainees (Puerto Rico exchange program)
Mara Ramos
John Velez

6/15 - 7/15
5/14 - 7/14

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| Kathyana Santiago | 5/13 - 7/13 |
| Jose Marrero Rosado | 5/13 - 7/13 |

Undergraduate Trainees (*Honors Thesis)

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| Abigail Siniscalco - CAS Neuroscience | | 1/20 - present |
| Nicole Tessier - CAS Biological Science | | 8/20 - present |
| Cory Raymond* - CAS Honors Biology | | 8/19 - present |
| Sarah Hutcheon - Summer Neuroscience Fellow | | Summer 2019 |
| Kendra Miller - CAS Neuroscience | MS Pharmacology UVM | 1/19 - 5/19 |
| Caitlin Hunt* - CAS Biochemistry | | 10/18 - present |
| Jenna Bourdeau - CAS Neuroscience | | 9/18 - present |
| Caroline Duksta - CAS Neuroscience | | 8/18 - 12/18 |
| Madison Chlebowski - Summer Neuroscience Fellow | Peace Corps | Summer 2018 |
| Violet Bupp-Chickering* - CAS Biology | | 1/18 - present |
| Bryce Olson - CAS Biology | Optometry Berkley | 8/17 - 5/19 |
| Zoë Kalbag* - CALS Biological Science | | 1/18 - 5/20 |
| Elizabeth Stant - Summer Neuroscience Fellow | | Summer 2017 |
| Caroline Dumas* - CAS Neuroscience | MS Biology UVM | 7/17 - 5/19 |
| Claire Wilcox* - CAS Honors Biological Science | Medical School Buffalo | 8/16 - 5/18 |
| Benjamin Recchia - CALS Zoology | MS Biology UVM | 8/16 - 5/18 |
| Morgan McNellis* - CALS Microbiology | Immunology PhD Tufts | 8/16 - 5/18 |
| Benjamin Grebber* - CAS Honors Biology | Medical School UVM | 8/16 - 5/17 |
| Graham Wright* - CAS Honors Neuroscience | Tech Start-up company | 5/16 - 5/17 |
| Micaïla Baroffio* - CAS Honors Neuroscience | Medical School UVM | 9/15 - 5/17 |
| Helaina Stergas - CALS Biological Science | Ph.D. UVM | 9/14 - 5/17 |
| Ariana Ferraro* - CALS Honors Biological Science | DVM Cornell University | 9/14 - 5/17 |
| Matt Goldstein* - CAS Honors Biology | Boston IVF Technician | 9/14 - 5/17 |
| Shannon Lozito* - CNHS Honors MLRS | Applying to MD | 9/15 - 12/16 |
| Meredith Lackie - CAS Neuroscience | Medical School UVM | 9/15 - 5/16 |
| Abagael Lasseigne - CAS Neuroscience | Ph.D. U. Oregon | 5/15 - 7/15 |
| Amanda Mirando - CAS Neuroscience | Research Assistant CU Denver | 9/15 - 5/15 |
| Meghan Fitzpatrick - CAS Neuroscience | PharmD Mass. College | 1/15 - 5/15 |
| Sarah Light* - CAS Honors Neuroscience | Ph.D. OSU | 8/12 - 5/15 |
| Feresha Patel - CAS Neuroscience | OT Le Moyne College | 9/13 - 5/14 |
| Anna Duong - CAS Neuroscience | OT Murphy Deming College | 9/13 - 5/14 |
| Sierra Bruno - CAS Biology | Ph.D. UVM | 8/12 - 5/14 |
| Ashley Waldron - CAS Biology | Ph.D. UVM | 8/12 - 5/13 |

Work Study Students

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| Rebecca D'Agostino - CAS Biology | 8/15 - 5/16 |
| Georgia Mulone - CALS Public communications | 8/12 - 5/15 |
| Kasey Permenter - CAS Biology | 8/12 - 12/12 |

Undergraduate Committees

Elise Prehoda - CAS Honors Neuroscience 2019
 Collin Villarin - CAS Honors Neuroscience 2019
 Keira Goodell - CAS Honors Biology 2019
 Hina Rattu - CAS Honors Neuroscience 2019
 XiXi Halvorson-Phelan - CAS Honors Biology 2019
 Andrea Schmidt - CAS Honors Biology 2019
 Emily Holt - CAS Honors Neuroscience 2019
 Jessica Souza - CAS Honors Biology - 2019
 Stefanie Geiger - CAS Honors Biology - 2018
 Justin Abbott - CAS Honors Biology - 2018
 Sarah Bullock - CAS Honors Biology 2017

George Chrisafis - CAS Honors Biology 2017
 Jenny Michael - CAS Honors Biological Science 2017
 Samuel Raszka - CAS Honors Biology 2016
 Jenna Todero - CNHS Honors MLRS 2016
 Austin Merrill - CAS Honors Biology 2016
 Dan Peipert - CAS Honors Neuroscience 2016
 Jon Karp - CALS DUR/Honors Biological Science 2015
 Hannah Johnson - CAS Honors Biological Science 2015
 Ben Flinn - CAS Honors Biochemistry 2015
 James Contompassis - CAS Honors Biology 2015
 Hannah Rickner - CAS Honors Biology 2014
 Jacqueline Mann - CAS Honors Biology 2014

Graduate Trainees

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| Jacqueline Guillemain - PhD Biology | | 8/20 - present |
| Helaina Stergas - PhD Biology | | 8/19 - present |
| Caroline Dumas - PhD Biology (Co-advised) | | 6/1 - present |
| Theresa Legan - PhD Neuroscience rotation | | 2/18 - 4/18 |
| Helaina Stergas - MS Biology | PhD Biology UVM | 6/17 - 5/18 |
| Patrick Mullen - PhD Neuroscience (Co-advised) | | 8/16 - present |
| Alisha Linton - PhD Neuroscience rotation | | 3/15 - 5/15 |
| Ashley Waldron - PhD Biology | Postdoctoral Fellow Brown | 8/14 - 8/19 |
| Sarah Emerson - PhD Biology | Postdoctoral Fellow Yale | 8/14 - 5/19 |
| Laura Solomon - MS CMB rotation | Biotechnology | 6/13 - 11/13 |
| Erin Wysolmerski - MS Biology | High School Science teacher | 1/13 - 5/15 |

Graduate Committees (* Denotes Chair)

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| Nicholas Toker* - MS Neuroscience (Spees Lab) | 5/2019 - 10/20 |
| Warrick Sahene* - MS Pharmacology (Amiel Lab) | September 2019 |
| Burcu Edroğan - PhD Biology (External reader, Lowery Lab Boston College) | June 2019 |
| S. Bradley King* - PhD Psychological Sciences (Hammack lab) | 7/18 - 1/19 |
| Anna Schmoker - PhD Biology (Ballif lab) | 9/16 - 5/20 |
| Brendan Chandler - MS Biology (Ballif lab) | 9/16 - 5/18 |
| April Garrett - MS Biology (Pespeni lab) | 3/16 - 11/20 |
| Md. Ashikun Nabi - PhD Biology (Van Houten lab) | 8/15 - 5/18 |
| Rehan Ali* - MS Neuroscience (Berger lab) | 8/15 - 5/18 |
| Dave Harris - PhD Neuroscience (Delay lab) | 12/14 - 12/15 |
| Riley St Clair - PhD Neuroscience (Ballif lab) | 5/13 - 5/19 |
| Ryan Joy - MS Biology (Ballif lab) | 7/12 - 2/16 |
| Tyler Picariello - PhD Biology (Van Houten lab) | 7/12 - 12/14 |
| Michelle McNamara* - PhD Neuroscience (Forehand lab) | 7/12 - 8/15 |

Teaching Workshops

UVM Center for Teaching and Learning

Pivotal Pedagogy - Summer 2020
 What's the Hype about Hybrid - Spring 2019
 Teaching Effectively Online - Spring 2019
 Design for learning (Semester-long course) - Spring 2018
 Writing learning outcomes for course design
 Designing collaborative assignments that work
 Guide student reading with annotated PDFs
 Universal Design for Learning: UDL in action
 Tips for engaging class discussion

University of Calgary Center for Teaching and Learning

Engaging students in the Undergraduate Classroom
 Instructional Skills Workshop

Invited Talks

"Signaling mechanisms in zebrafish retinal development" Connecticut Valley Zebrafish Meeting

March 13, 2020 (Cancelled due to COVID)

“Semaphorin/Plexin Signaling mechanisms and their role in zebrafish nervous system development.” Northeast Society for Developmental Biology, Woods Hole, MA, April 2019.

“A “per-Plexin” role for guidance molecules in zebrafish eye development.” Northeast Society for Developmental Biology, Woods Hole, MA, April 2016.

“PlexinA signaling in zebrafish eye development.” Department of Biochemistry, University of Vermont, Burlington VT, March 2016.

“FGF signaling is required for proper vascularization in the zebrafish retina.” Center for Computational and Integrative Biology. Rutgers-Camden, Camden, NJ, March 2016.

“FGF signaling is required for proper vascularization in the zebrafish retina.” Department of Molecular Physiology and Biophysics, University of Vermont, Burlington VT, February 2016.

“Zebrafish as a model for neurodevelopment.” Neuroscience, Behavior and Health Research Forum, University of Vermont, Burlington, VT, January 2014.

“Zebrafish as a tool for vascular research” Department of Pharmacology, University of Vermont, Burlington, VT January 2014.

“Molecular mechanisms of eye development” Cell and Molecular Biology Program, University of Vermont, Burlington, VT September 2013.

“Keeping it together: Zebrafish retinal development.” Department of Biology, High Point University, High Point, NC February 2012.

“Keeping it together: Zebrafish retinal development.” Department of Biology, University of Vermont, Burlington, VT January 2012.

“Zebrafish retinal development” Department of Biology, University of Colorado at Colorado Springs, Colorado Springs, CO February 2011.

Select Abstracts

Neuroscience Behavior and Health Research Forum, UVM, January 23, 2021

- Patrick Mullen “Investigating the mechanisms linking aminoacyl-tRNA synthetase mutations to peripheral neuropathy” (Won best talk)
- Caroline Dumas “Characterization of *Sema6A* reverse signaling in zebrafish eye development.”
- Helaina Stergas “Crk adaptor proteins are necessary for the development of the zebrafish retina”

Neuroscience Behavior and Health Research Forum, UVM, February 7-8, 2020

- Patrick Mullen “Bi-allelic mutations in aminoacyl-tRNA synthetase interacting multifunctional protein 2 are linked to severe developmental encephalopathy and cause attenuation of protein synthesis and impaired cell cycle progression”
- Helaina Stergas, Zoë Kalbag, Riley M. St. Clair, Jared C. Talbot, Bryan A. Ballif, and Alicia M. Ebert. “Crk adaptor proteins are necessary for the development of the zebrafish retina.”

North East Regional IDEa Conference (NERIC), Mt. Washington, NH, August 14-15, 2019

- Emerson SE, St Clair RM, Waldron AL, Dumas CM, Williams KS, Goldstein MT, Stant EA, D'Elia KP, Weir ME, Schmoker AM, Ballif, BA, **Ebert AM**. “Mechanisms of Semaphorin6A/PlexinA2 signaling in zebrafish nervous system development”
- Anna M. Schmoker, Heather E. Driscoll, Stefanie R. Geiger, James J. Vincent, **Alicia M. Ebert** and Bryan A. Ballif. “An *in silico* proteomics screen to predict and prioritize protein-protein interactions dependent on post-translationally modified motifs”.

Northeast Society for Developmental Biology, Woods Hole MA, April 5-7, 2019

- Dumas CM, St. Clair RM, Ballif BA, **Ebert AM** “Characterization of Sema6A forward and reverse signaling in zebrafish eye development.”
- Markwood J, Hinkle K, Ballif BA, Joy R, Waldron AL, Schmoker AM, Stergas HR, Kellet K, **Ebert AM**, Albretsen “Essential retinal, optic tract, and vascular developmental regulator DCBLD2 interacts with Ras-signaling member GRB2 in a phosphorylation-dependent manner.”
- Waldron AL, Francklyn CS, **Ebert AM** “Compilation of Aminoacyl-tRNA synthetase expression patterns in development.”
- Yacawych W, Chandler B, Schmoker AM, Weinhart J, Kearns C, Hinkle K, **Ebert AM**, Ballif BA “Abl introduces the binding of SH2 domain-containing family members to the CrkL-SH2 domain via phosphorylation in YxxP motifs.”

Neuroscience Behavior and Health Research Forum, UVM, February 8-9, 2019

- Ashley Waldron “Knock-down of histidyl-tRNA synthetase causes cell cycle arrest and apoptosis of neural progenitor cells.”
- Sarah Emerson “The role of Shootin-1 in zebrafish neurodevelopment.”
- Chandler BW, Schmoker AM, Weinhart JL, Kearns CA, Yacawych WT, **Ebert AM**, Ballif BA. “Abl-dependent phosphorylation of SH family adaptors promotes their interaction with the CrkL-SH2 domain.”
- Dumas CM, St. Clair RM, Ballif BA, **Ebert AM**. “Characterization of Sema6A forward and reverse signaling in zebrafish development.”
- St. Clair RM, Emerson SE, D’Elia KP, Weir ME, Schmoker AM, Williams KS, Goldstein MT, Stant E, **Ebert AM**, Ballif BA. “Investigating Sema6A-PlxnA signaling mechanisms in development: Identification of key phosphorylation sites and the discovery of a novel secreted sema.”
- Mullen P, Patterson P, Waldron AL, Abbott J, Fjeld C, Aktar M, Siekierska A, deWitte P, Stamberger H, De Jonghe P, Maroofian R, **Ebert AM**, Francklyn CS. “Investigating the pathogenic mechanisms responsible for the spectrum of neurological diseases caused by dominant and recessive mutations affecting ARS function.”

Strategic Conference of Zebrafish Investigators, January 14-18, 2019

- **Ebert AM** “Knock-down of histidyl-tRNA synthetase results in neuronal progenitor cell G1 arrest and apoptosis.”

Society for Developmental Biology, Portland Oregon, July 20-24, 2018

- Waldron AL, Wilcox CE, Wright G, Francklyn CS, **Ebert AM**. “Characterizing the role of histidyl-tRNA synthetase in neurodevelopment.”

UVM Student Research Conference, April 20, 2018

- Wilcox CE, Waldron AL, **Ebert AM**. “Life or Death? Its HARS to tell: A characterization of Histidyl-tRNA synthetase function in zebrafish eye development.”
- McNellis ME, St Clair RM, **Ebert AM**. “Expression of collapsing response mediator proteins in the vertebrate visual system and their roles in eye development.”

Northeast Society for Developmental Biology, Woods Hole MA, April 20-22, 2018

- Ashley Waldron “Knock-down of Zebrafish Histidyl-tRNA synthetase results in fewer retinal neurons and mechanosensory hair cells.”
- Stergas HR, St Clair RM, Ballif BA, **Ebert AM**. “Crk-ing The Code: The role of Crk Adaptor Proteins in Zebrafish Eye Development.”
- Dumas C, St Clair RM, Lasseigne AM, Damon LJ, Emerson SE, Cammarata GM, Lowery LA, Ballif BA, **Ebert AM**. “Characterization of Sema6A and its downstream effectors in zebrafish eye development.”

Experimental Biology, San Diego CA, April 20-24, 2018

- St Clair RM, Emerson SE, D’Elia K, Weir ME, Schmoker AM, Williams K, Goldstein MT, Stant E, **Ebert AM**, Ballif BA. “Investigating Sema6A-PlxnA signaling Mechanisms in Development: Identification of Key PlxnA Phosphorylation Sites and the Discovery of a Novel Soluble Sema.”

- Schmoker AM, Weinert J, Kellett K, Johnson H, Joy RM, Weir ME, Ebert AM, Ballif BA. “Dynamic multi-site phosphorylation by Fyn and Abl drives the interaction between Crk and the novel scaffold receptors DCBLD1 and DCBLD2.”

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| Awards and Honors | UVM College of Arts and Science Dean’s Lecture Award | 2019 |
| | Faculty Advisor of the Year, UVM Graduate Student Senate | 2019 |
| | Nominated for Undergraduate Advisor of the year award, UVM | 2019 |
| | Nominated for Vermont Society for Neuroscience President | 2017 |
| | Nominated for the Kroepsch-Maurice Excellence in Teaching Award | 2016, 2017, 2018 |
| | Canadian Institutes for Health Research Postdoctoral Fellowship Award | 2010 - 2012 |
| | Alberta Innovates Health Solutions/ Foundation Fighting Blindness Postdoctoral Fellowship Award | 2010 - 2012 |
| | Hotchkiss Brain Institute Postdoctoral Fellowship Award | 2009 - 2010 |
| | CIHR Training Grant in Genetics, Child Health and Development Postdoctoral Fellowship Award | 2008 - 2009 |
| | Service and Scholarly Activities | Pivotal Pedagogy facilitator (Center for Teaching and Learning) |
| Chair, Biology Tenure Track Neuroscience Faculty Search | | 8/19 – 4/20 |
| Director of UVM Undergraduate Neuroscience Program | | 2019 - present |
| Co-Director of UVM Undergraduate Neuroscience Program | | 2017 – 2019 |
| UVM Faculty Representative VT Society for Neuroscience (3 year term) | | 2016 - 2019 |
| Steering Committee member UVM Undergraduate Neuroscience Program | | 2016 - present |
| Steering Committee member UVM Neuroscience Graduate Program | | 2016 - present |
| Grant Reviewer Rhode Island INBRE | | 2020, 2021 |
| Faculty mentor for Vermont Genetics Network Dr. Ruth Fabian Fine, St Michaels College | | 2016 - 2017 |
| Journal Reviewer: Developmental Biology Gene Expression Patterns Experimental Biology and Medicine | | |
| Session Chair, Northeast Society for Developmental Biology Meeting | | 2014, 2018 |
| Grant reviewer for Vermont Genetics Network | | 2013 - 2017 |
| Professional Associations | | American Society of Cell Biology |
| | Vermont Chapter, Society for Neuroscience | 2013 - present |
| | Society for Neuroscience | 2010 – 2015, 2019 |
| | Society for Developmental Biology | 2006 - present |
| | Colorado Front Range Neuroscience Group | 2003 - 2008 |
| Absences | Maternity leave October – December 2012 | |
| | May - October 2009 | |