Brett M. Condon

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Education and Training

Drexel University 2020-present

Teaching Postdoctoral Fellowship. - Biology

- 50% Teaching (SEA-PHAGES)
- 50% Education Research

Duke University 2013-2020

Ph.D. – Biochemistry

• Thesis: Regulation of the COPII Outer Coat by O-GlcNAc

Certificate in College Teaching

Certificate in Cellular and Molecular Biology

Wake Forest University School of Medicine

2009-2011

- Honors and satisfactory grades in every course
- Frequent case-centered and small-group problem-solving learning experiences (CBL, PBL)

Brigham Young University

2002-2003, 2005-2009

B.S. – Physiology & Developmental Biology Minor: Music

- Honors Program (with Thesis)
 - Summa Cum laude, GPA: 3.99

Teaching Experience

Assistant Professor: Cells and Biomolecules

Fall 2021-present

Fall 2020-present

Drexel University

Active-learning approach to topics essential for students concurrently taking General Biology Lab or SEA-PHAGES

Drexel University

- 3 Sections of a discovery-based undergraduate research course
- Adapted laboratory-focused course to remote teaching with focus on engagement (2020)

Adjunct Professor: Biology 111

Co-Instructor: SEA-PHAGES

Fall 2019, Winter 2020

Durham Technical Community College

• Instructor of record, active learning exercises, learning-objective centered and engaging lecture style

Guest Lecturer: Biology 111

Fall 2018

Durham Technical Community College

• Two invited lectures consisting of presentations, worksheets, in-class activities, and student feedback

Graduate Student Teaching Assistant: Biochemistry 302

Spring 2018

Duke University

- Taught a 75-minute lecture each week
- Office hours, test-reviews, test-question writing, test- and homework grading (often with no answer key provided by instructor)

Teaching Triangles Spring 2018

Duke University

Spring 2010

- College Certificate in Teaching Program
- Teaching evaluations of self and others during semester long teaching experience

Student Athlete Tutor 2011-2013

Wake Forest University & Duke University

- Full- and part-time tutoring of individuals and small groups up to 15
- Physiology, Chemistry, Biology, Statistics, Astronomy, Physics, Microbiology, Spanish

Undergraduate Teaching Assistant

2005-2009

Brigham Young University

- Writing for Publication, Publication Lab, Bio 360, Nursing 390R and 318R
- Writing Fellow: writing and pedagogy

Teaching English as a Second Language

Volunteer Missionary Service – Jacksonville, FL

- Proficient in Spanish
- Experience teaching diverse cultures and age groups

Research Experience

Postdoctoral Research 2020-present

Advisors: Dr. Jennifer Stanford and Dr. Donna Murasko

- Discipline-based education research
- Promoting Student Learning in Large STEM Classrooms, faculty development, active learning
- Using CLASS tools to identify students for institutional support in the first term of college

Doctoral Research 2013-2020

Advisor: Dr. Michael Boyce

- Glycobiology, biochemistry, cellular and molecular biology, signal transduction, cancer
- Regulation of early secretory pathway by monosaccharide post-translational modification (O-GlcNAc)
- Regulation of cytoskeleton by O-GlcNAc, technology development

Undergraduate Research 2006-2009

Advisor: Dr. William Winder

- Diabetes, exercise endocrinology, AMPK
- Honors Thesis: Regulatory Factors Involved in the Dephosphorylation of AMPK by PP2Cα

Publications (* Co-first author)

Bisnett BJ, *Condon BM, Linhart N, Lamb CH, Huynh D, Bai J, Smith TJ, Hu J, Georgiou GR, Boyce M. *Evidence for nutrient-dependent regulation of the COPII coat by O-GlcNAcylation*. Submitted to Journal of Glycobiology, under review.

Bisnett BJ, *Condon BM, Lamb CH, Georgiou GR, Boyce M. *Export Control: Post-transcriptional Regulation of the COPII Trafficking Pathway*. Front Cell Dev Biol. 2021 Jan 12;8:618652. doi: 10.3389/fcell.2020.618652. PMID: 33511128; PMCID: PMC7835409.

Nelsen E, Hobson CM, Kern ME, Hsiao JP, O'Brien Iii ET, Watanabe T, **Condon BM**, Boyce M, Grinstein S, Hahn KM, Falvo MR, Superfine R. *Combined Atomic Force Microscope and Volumetric Light Sheet System for Correlative Force and Fluorescence Mechanobiology Studies*. Sci Rep. 2020 May 18;10(1):8133. doi: 10.1038/s41598-020-65205-8. PMID: 32424215; PMCID: PMC7234992.

Chen PH, Hu J, Wu J, Huynh DT, Smith TJ, Pan S, Bisnett BJ, Smith AB, Lu A, **Condon BM**, Chi JT, Boyce M. *Gigaxonin glycosylation regulates intermediate filament turnover and may impact giant axonal neuropathy etiology or treatment*. JCI Insight. 2019 Nov 26;5(1):e127751. doi: 10.1172/jci.insight.127751. PMID: 31944090; PMCID: PMC7030874.

Tarbet HJ, Dolat L, Smith TJ, Condon BM, O'Brien ET 3rd, Valdivia RH, Boyce M. Site-specific glycosylation regulates the form and function of the intermediate filament cytoskeleton. Elife. 2018 Mar 7;7. pii: e31807. doi: 10.7554/eLife.31807.

Cox NJ, Unlu G, Bisnett BJ, Meister TR, **Condon BM**, Luo PM, Smith TJ, Hanna M, Chhetri A, Soderblom EJ, Audhya A, Knapik EW, Boyce M. *Dynamic Glycosylation Governs the Vertebrate COPII Protein Trafficking Pathway*. Biochemistry. 2018 Jan 9;57(1):91-107. doi: 10.1021/acs.biochem.7b00870. Epub 2017 Dec 15.

Branvold DJ, Allred DR, Beckstead DJ, Kim HJ, Fillmore N, **Condon BM**, Brown JD, Sudweeks SN, Thomson DM, Winder WW. *Thyroid hormone effects on LKB1, MO25, phospho-AMPK, phospho-CREB, and PGC-1alpha in rat muscle*. J Appl Physiol. 2008 Oct;105(4):1218-27. Epub 2008 Jul 31.

Thomson DM, Brown JD, Fillmore N, **Condon BM**, Kim H-J, Barrow JR, Winder WW. *LKB1 and the Regulation of Malonyl-CoA and Fatty Acid Oxidation in Muscle*. Am J Physiol Endocrinol Metab, 293: E1572-E1579, 2007.

2003-2005

Poster Presentations

SEA-Symposium 2021

Virtual Annual Meeting

- Brett M Condon, Susan M Gurney. Efforts to deliver authentic lab experiences to students in a virtual lab: adapting SEA-PHAGES to Zoom.
- Tara F Al-Saleem, Aneri U Amin, Rudra B Amin, Sana R Amin, Vivek J Babu, Siean Benson, John Beshara, Yajat Bungatavula, Rohan V Dasari, Emma D Ducceschi, Krishi Dudhia, Sally Ehlers, Jared A Featherston, Carol G Gerges, Gabrielle L Greco, Auburn M Hackney, Megan A Hua, Skander Leroux, Graham G Lewis, Kelsey P Lucenius, Vedasri A Madala, Max F Maser, Rachel D Miller, Michael B Minkovsky, Steven R Muller, Bisher O Nasir, Graeme F Newcombe, Max V Olstad, Shreya V Palacherla, Rishika Pasula, Deep S Patel, Nisha Patel, Preet P Patel, Virali S Patel, Kareena Patel, Alesha B Philip, Diana G Pimentel-Lomeli, William L Rainow, Shyam Saravanan, Manali Shah, Manan S Shah, Yashvi Shah, Krisha S Shah, Aashraya Singiri, Dylan A Smoot, Serena J Sohmen, Shaheen Soltani, Albert Tang, Alexander J Vallarta, Soumya Vavilala, Anhelina V Volchok, Samuel R Zion, **Brett M Condon**, Susan M Gurney. *Isolation and characterization of Microbacterium phages through a virtual lab experience*.

Triangle Cytoskeleton Meeting (ASCB local meeting)

2019

Saxapahaw, NC

• **Brett M. Condon**, Duc Huynh, Jimin Hu, Heather J. Tarbet, Po-Han Chen, Lee Dolat, E. Timothy O'Brien III, Jen-Tsan Chi, Raphael H. Valdivia, Michael Boyce. *Multi-level Regulation of the Intermediate Filament Cytoskeleton by Site-Specific Glycosylation*.

Cellular and Molecular Biology Symposium

2018

Duke University

• Brett M. Condon, Alex Broussard. Role-Playing Cellular Respiration in Introductory Biology.

Triangle Cytoskeleton Meeting (ASCB local meeting)

2018

Saxapahaw, NC

• **Brett M Condon**, H.J. Tarbet, L. Dolat, T.J. Smith, E.T. O'Brien III, R.H. Valdivia, M. Boyce. *Site-specific glycosylation regulates the form and function of the intermediate filament cytoskeleton*.

American Society for Cell Biology Annual Meeting

2017

Philadelphia, PA

• Brett M. Condon, Nathan J. Cox, Thomas R. Meister, Brittany J. Bisnett, Eric Soderblom, Michael Boyce. *Regulation of the COPII Outer Coat by O-GlcNAc*.

American Diabetes Association Annual Meeting

2007

Chicago, IL

Devon J. Branvold, David R. Allred, David J. Beckstead, David M. Thomson, Hyung-Jun Kim, Natasha Fillmore, Brett M. Condon, Jacob D. Brown, William W. Winder. Regulation of LKB1-STRAD-MO25 Complex Expression and Activation of AMPK in Skeletal Muscle by Thyroid Hormone.

Awards and Honors

${\bf American \ Society \ for \ Cell \ Biology \ Travel \ Award \ } \\ ASCB$

2017

Dissertation Research Travel Award

2017

Duke University Graduate School

Kamin Travel Fellowship

2017

Department of Biochemistry, Duke University

Edwin S. Hinckley Scholarship

2007-2008

Brigham Young University

Full Academic Scholarships

2005-2007

Brigham Young University

Bicentennial Scholarship 2002-2003

Brigham Young University

President's Volunteer Service Award 2007

Awarded by the President of the United States of America, George W. Bush

Eagle Scout 1998

Boy Scouts of America

Mentoring

Biology Senior Projects Mentored:

2020-present

Amanda Chen, Cara DePiano, Ashley Harkins, Angelo Lodato, Richard Lu. Impact of Gut Microbiota on Crohn's Disease.

Graduate Students Mentored (rotation students)

2016-2020

Zoe Shan. Sec31A PTM responsiveness to extracellular stimuli.

Austin Maduka. Sec31A quantitative PTM analysis.

Duc Huynh. Sec31A mutagenesis, stable cell line generation.

Ran Ming. Sec31A PTM characterization, antibody testing.

Undergraduate Students Mentored

2016-2020

Caitlin Lamb. *COPII research*, *Sec24C focus*. Peter Luo. *COPII research*, *Sec23A focus*.

Service

Biochemistry Graduate Student Council

2016-2017

Organizing founder, elected council member

• Student liaison between Biochemistry graduate students and faculty and administrators both within and without the Department of Biochemistry at Duke University

Community Health Center Volunteer

2009-2011

Medical Student volunteer for triage, translator for Spanish-speakers in Winston-Salem, NC.

Full-Time Missionary Service

2003-2005

Red Cross Volunteer in Jacksonville, FL

• Hurricane cleanup/preparation, administrative responsibilities

HabiJax volunteer (Habitat for Humanity in Jacksonville, FL)

• Worked on two houses

Ronald McDonald House volunteer

• In both Jacksonville and Gainesville, FL

Resident Halls Association Volunteer

2002-2003

Area President of Helaman Halls (BYU Freshman Housing complex)

Organized and engaged in service opportunities, setup and cleanup for all Freshmen activities

Courage Reigns Volunteer

2002-2003

Physical and emotional therapy for handicapped children

• Cared for children and their horses

Professional Development

CIRTL First Year Faculty Teaching Academy

2021

Center for the Integration of Research, Teaching, and Learning (national network)

• Intensive course focused on teaching fundamentals, beneficial student learning environments, knowledge application, evidence-based teaching techniques and learning exercises

CASTLE Pedagogical Happy Hour

2020-present

Center for the Advancement of STEM Teaching and Learning Excellence, Drexel University

Biweekly meetings, pedagogy presentations, inter-departmental community development

College Certificate in Teaching

2015-2020

Duke University

Courses in teaching, pedagogy, diversity and inclusion

Teaching experiences

Peer teaching evaluations (teaching triangles)

Teaching portfolio development (Teaching statement, philosophy, diversity statement, website, teaching evaluations)

Teaching & Learning Conference

Summer 2018

Elon University

Active learning workshops, lectures, and breakout sessions

American Society for Cell Biology Annual Meeting

Fall 2017

Philadelphia, PA

Teaching and learning workshops