**ALLISON M. PORMAN SWAIN, Ph.D.**

Department of Biochemistry & Molecular Genetics

University of Colorado Anschutz Medical Campus

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**EDUCATION**

**University of Colorado Anschutz Medical Campus, Aurora, CO Feb 2017-Present**

Postdoctoral Fellow, Laboratory of Dr. Aaron M. Johnson

Biochemistry and Molecular Genetics Department

**Brown University, Providence, RI Aug 2009-July 2014**

Ph.D. in Molecular Biology, Cell Biology, and Biochemistry Program

Laboratory of Dr. Richard Bennett, Molecular Microbiology & Immunology Department

**Lehigh University, Bethlehem, PA Aug 2005-May 2009**

B.S. Molecular Biology

Academic Honors: Pool Scholar, Dean’s List, High Honors, Biology Departmental Honors

Laboratories of Dr. Stefan Maas and Dr. Linda Lowe-Krentz

**RESEARCH EXPERIENCE**

**K99 Research: m6A in *Candida albicans* phenotypic switching and mating**

* Combining previous areas of study, I implemented new ideas and collaborations to pioneer a research direction independent from my postdoctoral mentor’s work.
* Identified a new role for m6A in *C. albicans* white-opaque switching and mating.
* Discovered expression specificity of m6A methyltransferase *IME4* to mating type homozygous strains

*This work has a senior author publication in preparation (publication 1). This work is funded by a K99/R00 Pathway to Independence Award from NIDCR.*

**Postdoctoral Research: m6A in HOTAIR-mediated breast cancer**

* Through co-developing an m6A eCLIP method, I mapped single nucleotide m6A sites and identified sites in the lncRNA HOTAIR. My work discovered an antimorph mutation at a single m6A site in HOTAIR and identified a key role for this site in induction of cancer growth & invasion.
* I developed assays to m6A-modify RNA molecules *in vitro* and examine interactions with proteins, chromatin, and other RNA molecules.

*This work resulted in four publications (publications 2,3,4,6), including one first author manuscript (publication 2), as well as a provisional patent. This work was funded through a Department of Defense Postdoctoral Fellowship (including independent research funding) and a T32 Postdoctoral fellowship from the CU Anschutz Cancer Biology Program.*

**Graduate Thesis Research: Phenotypic switching and sexual mating in *Candida tropicalis***

* Pioneered research methods in an understudied human fungal pathogen *C. tropicalis*
* Discovered a parasexual cycle in *C. tropicalis* and the role of a white-opaque phenotypic switch
* Identified regulatory transcription factors and determined a toggle-switch mechanism for a multistate switch between white, opaque, and a third hybrid state in *C. tropicalis*

*This work resulted in two first author publications (publications 10,11) and four additional publications (publications 5,7,8,9). This work was funded through a F31 NRSA Predoctoral Fellowship from NIDCR and a T32 Fellowship from the Molecular Biology, Cell Biology, and Biochemistry Graduate Program.*

**Undergraduate Thesis Research: Statins effect on MAPK activation in vascular smooth muscle cells**

* Designed new project based on literature to investigate effect of statins on MAPK activation in primary rat vascular smooth muscle cells.
* Performed over 100 Western Blots to analyze effects of statin treatment on MAPK pathway.

*This work was funded through the Pool Premedical Scholars Program and resulted in obtaining Biological Sciences Departmental Honors.*

**HHMI Summer Research: Experimental validation of computationally identified RNA editing sites**

* Worked as part of a collaborative team to identify new sites of A-to-I RNA editing by developing computational tools and validating in the lab with RNA obtained from human brain tissue.

*This work resulted in one publication (publication 12).*

**PUBLICATIONS**

1. Bushkin GG, Ahmed H, **Porman AM**. The conserved RNA methyltransferase *IME4* regulates white-opaque switching and mating in *Candida albicans*. In preparation.
2. **Porman AM**, Roberts JT, Duncan ED, Chrupcala ML, Levine AA, Kennedy MA, Williams MM, Richer JK, Johnson AM. (2022) A single N6-methyladenosine site regulates lncRNA HOTAIR function in breast cancer cells. *PLOS Biology* 20(11): e3001885. <https://doi.org/10.1371/journal.pbio.3001885>
3. Cable, J, Heard, E, Hirose, T, Prasanth, KV, Chen, LL, Henninger, JE, Quinodoz, SA, Spector, DL, Diermeier, SD, **Porman, AM**, Kumar, D, Feinberg, MW, Shen, X, Unfried, JP, Johnson, R, Chen, CK, Wilusz, JE, Lempradl, A, McGeary, SE, Wahba, L, … Liu, X. (2021). Noncoding RNAs: biology and applications-a Keystone Symposia report. *Annals of the New York Academy of Sciences*, 1506(1), 118–141. <https://doi.org/10.1111/nyas.14713>
4. Roberts, JT, **Porman, AM** & Johnson, AM. Identification of m6A residues at single-nucleotide resolution using eCLIP and an accessible custom analysis pipeline. *RNA* (2020). <https://doi.org/10.1261/rna.078543.120>
5. Mancera E, Frazer C, **Porman AM**, Ruiz S, Johnson AD, Bennett RJ. Genetic Modification of Closely Related *Candida* Species. *Front Microbiol*. 2019 Mar 19;10:357. <https://doi.org/10.3389/fmicb.2019.00357>
6. Balas MM, **Porman AM**, Hansen KC, Johnson AM. SILAC-MS Profiling of Reconstituted Human Chromatin Platforms for the Study of Transcription and RNA Regulation. *J Proteome Res*. 2018 Oct 5;17(10):3475-3484. <https://doi.org/10.1021/acs.jproteome.8b00395>
7. Anderson MZ, **Porman AM**, Wang N, Mancera E, Huang D, Cuomo CA, Bennett RJ. A Multistate Toggle Switch Defines Fungal Cell Fates and is Regulated by Synergistic Genetic Cues. *PLoS Genetics*. 2016 Oct 6;12(10):e1006353. <https://doi.org/10.1371/journal.pgen.1006353>
8. Mancera E, **Porman AM**, Cuomo CA, Bennett RJ, & Johnson AD. Finding a Missing Gene: EFG1 Regulates Morphogenesis in *Candida tropicalis*. *G3* (Bethesda). 2015 Mar 9;5(5):849-56. <https://doi.org/10.1534/g3.115.017566>
9. Seervai RN, Jones SK Jr, Hirakawa MP, **Porman AM**, & Bennett RJ. Parasexuality and Ploidy Change in *Candida tropicalis.* *Eukaryotic Cell.* 2013 Dec;12(12):1629-40. <https://doi.org/10.1128/EC.00128-13>
10. **Porman AM,** Hirakawa MP, Jones, SK Jr, Wang N, & Bennett, RJ. *MTL*-independent phenotypic switching in *Candida tropicalis* and a dual role for Wor1 in regulating switching and filamentation. *PLoS Genetics*. 2013 Mar;9(3): e1003369. <https://doi.org/10.1371/journal.pgen.1003369>
11. **Porman** **AM**, Alby K, Hirakawa MP, & Bennett RJ. Phenotypic switching regulates sexual mating in the opportunistic pathogen Candida tropicalis. *Proc Natl Acad Sci* *U S A*. 2011 Dec 27;108(52):21158-63. <https://doi.org/10.1073/pnas.1112076109> (Featured: https://www.livescience.com/17313-yeast-sexual-reproduction.html; https://news.brown.edu/articles/2011/12/candida)
12. Maas S, Godfried Sie CP, Stoev I, Dupuis DE, Latona J, **Porman AM**, Evans B, Rekawek P, Kluempers V, Mutter M, Gommans WM, Lopresti D. Genome-wide evaluation and discovery of vertebrate A-to-I RNA editing sites. *Biochem Biophys Res Commun*. 2011 Sep 2;412(3):407-12. <https://doi.org/10.1016/j.bbrc.2011.07.075>

**PATENTS**

Johnson AM, **Swain AMP**, and Roberts JT. “Compositions and methods of use for mutated HOTAIR in the treatment of cancers.” PCT/US2022/029068.

**FUNDING**

**NIH K99/R00 Pathway to Independence Award, NIDCR**

“N6-methyladenosine in *Candida* white-opaque switching and oral infection”

1K99DE030528-01A1 March 2022-present

Role: PI

Amount: $90,000/year, 2 years (mentored); $249,000/year, 3 years (Independent)

**Department of Defense Breast Cancer Research Program Breakthrough Fellowship Award**

BC170270, W81XWH-18-1-0023 July 2018-Feb 2022

Role: PI (Postdoctoral Fellow) $100,000/year for 3 years

**NIH T32 Training Grant, Cancer Biology Program**

5T32CA190216 June 2017-June 2018

Role: Trainee (Postdoctoral Fellow)

**NIH NRSA F31 Predoctoral Award, NIDCR**

1F31DE022703 July 2012-July 2015

Role: Graduate Fellow

**NIH T32 Training Grant, MCB Graduate Program**

T32GM007601 September 2010-May 2011

Role: Predoctoral Trainee

**HONORS & AWARDS**

1. Poster Award, Cancer Metabolism Workshop, University of Colorado Anschutz Medical Campus, August 2023
2. Future Faculty Award, Symposium on RNA: From Biology to Drug Discovery, The Herbert Wertheim UF Scripps Institute for Biomedical Innovation and Technology, January 2023
3. RNA Society Poster Award, RNA Society Conference, June 2022
4. Eclipse Bioinnovations RNA Grant, “m6A modifications in *C. albicans*,” February 2020
5. RNA Bioscience Travel Grant, for Travel to Keystone Symposia on Noncoding RNAs, January 2020
6. PDRD First Place Poster Presentation, University of Colorado Denver | Anschutz Medical Campus Postdoc Research Day, July 2019
7. PDRD Travel Award, University of Colorado Denver | Anschutz Medical Campus Postdoc Research Day, July 2019
8. Young Investigator Award, FEBS Advanced Lecture Course on Human Fungal Pathogens, May 2013
9. Oliver Cromwell Gorton Arnold Biological Predoctoral Fellow, 2012
10. ASM Student Travel Grant to attend the 11th ASM Conference on Candida and Candidiasis, 2012
11. Lehigh University Pool Premedical Scholar, 2005-2009

**PRESENTATIONS**

**Invited Presentations**

1. United States Air Force Academy Chemistry Department Seminar. Colorado Springs, CO. November 8, 2023. Invited Oral Presentation, “Investigating mechanisms of *IME4* and m6A in *Candida albicans* phenotypic switching and mating.”
2. Colorado College Molecular Biology Department Seminar. Colorado Springs, CO. April 6, 2023. Invited Oral Presentation, “Mechanisms of the m6A RNA modification in meditating cell state switches, from breast cancer to pathogenic yeast.”
3. CU Cancer Biology T32 Career Development Seminar. Aurora, CO. February 24, 2023. Invited Oral Presentation / Discussion Leader, “A personal perspective on how to navigate a faculty search.”
4. RNA Bioscience Initiative Chalk Talk Seminar Series. Aurora, CO. February 23, 2023. Invited Oral Presentation, “How do commensals become pathogens? Investigating the RNA modification m6A.”
5. University of Wyoming Molecular Biology Department Seminar. Laramie, WY. February 16, 2023. Invited Oral Presentation, “Mechanisms of the m6A RNA modification in mediating cell state switches, from breast cancer to pathogenic yeast.”
6. University of Chicago Chemistry Department Seminar. Chicago, IL. December 9, 2022. Invited Oral Presentation, “Roles of the m6A RNA modification in regulating cell states, from yeast to breast cancer.”
7. New York University Department of Molecular Pathobiology Seminar. Virtual. October 21, 2022. Invited Oral Presentation, “Regulation of cell states by the RNA modification m6A, from cancer to fungi.”
8. Colorado State University Biochemistry and Molecular Biology Department Seminar Series. Fort Collins, CO. October 17, 2022. Invited Oral Presentation, “Regulation of cell states by the RNA modification m6A, from breast cancer to pathogenic yeast.”
9. National Institute for Dental and Craniofacial Research Clinical Case Conference. Virtual. September 16, 2022. Invited Oral Presentation, “Regulation of white-opaque phenotypic switching in *Candida* species.”
10. Mycology Course Panel hosted by Dr. Jose Vargas-Muniz at Southern Illinois University. Virtual. September 15, 2022. Oral Presentation, “Mechanisms of Cell State Switching in *Candida*.”
11. Biochemistry & Molecular Genetics Friday Research Talks. Aurora, CO. June 10, 2022. Oral Presentation, “Investigating the function of the m6A methyltransferase *IME4* in *Candida albicans*.”
12. CU AMC Women in STEM Symposium, “Combatting biases: fighting for diversity in STEM.” May 24, 2022. Invited workshop leader, “The Intricacies of Identity, Power, and Privilege: An Identity Workshop.”
13. University of North Carolina Charlotte Biological Sciences Department Seminar. Charlotte, NC. April 1, 2022. Invited oral Presentation, “*A tale of two systems, one RNA modification:* Role of a single m6A site in lncRNA HOTAIR function in breast cancer and m6A in *Candida albicans* cell switching.”
14. University of Denver Chemistry and Biochemistry Department Seminar. Denver, CO. February 17, 2022. Invited oral Presentation, “A tale of two systems:Investigating RNA modifications in lncRNA HOTAIR in breast cancer and in *Candida albicans* switching.”
15. Western Washington University Biology Seminar Series. Bellingham, WA. January 17, 2022. Invited oral Presentation, “*A tale of two systems:* Role of a single m6A site in lncRNA HOTAIR function in breast cancer and m6A in *Candida albicans* cell state switching.”
16. Medical Mycology Trainee Seminar Series. Virtual. November 11, 2021. Invited Oral Presentation, “The conserved methyltransferase IME4 regulates white-opaque switching and mating in *Candida albicans*.”
17. Colorado Cancer Biology Program Retreat. Denver Zoo, Denver, CO. November 5, 2021. Invited Oral Presentation, “The Mysteries of RNA and its Modifications: Basic Biology Leads to Identification of a new Therapeutic Target.”
18. EMBL Symposium on The Complex Life of RNA. Virtual Event. October 6, 2020. Invited Oral Presentation, Eclipse Biosciences Webinar Guest Speaker.
19. RNA Biosciences Initiative RNA Collaboration Club. Aurora, CO. March 3, 2020. Invited Chalk Talk Oral Presentation, “Investigating the role of m6A in *Candida albicans* white-opaque switching and mating.”
20. Cancer Biology Program Retreat. Denver, CO. November 2, 2018. Invited Oral Presentation, “A role for RNA modification m6A in mediating HOTAIR-induced heterochromatin.”
21. Cancer Biology T32 Postdoc Symposium. Aurora, CO. May 18, 2018. Invited Oral Presentation, “A role for RNA modification m6A in mediating HOTAIR-induced heterochromatin in breast cancer.”
22. RNA Biosciences Initiative RNA Collaboration Club. Aurora, CO. May 9, 2017. Invited Oral Chalk Talk Presentation, “The role of the RNA modification m6A in HOTAIR-mediated gene repression.”

**Selected Presentations**

1. University of Colorado Anschutz Cancer Center. Cancer Center Student Symposium (C2S2). Virtual. January 11, 2024. Selected talk, “From Bench to Bedside: Translating Cancer Research into Clinical Use.”
2. Denver FanExpo 2023. Denver, CO. June 2, 2023. Selected Panelist, “Fungus Among Us: Medical and Scientific Accuracy in *The Last of Us*.”
3. The Microbiology Society Meeting on *Candida* and Candidiasis 2023. Montreal, Quebec, Canada. May 13-17, 2023. Selected Oral Presentation, “'A role for IME4 and m6A in regulating the *C. albicans* parasexual cycle.”
4. The Herbert Wertheim UF Scripps Institute Symposium on RNA: From Biology to Drug Discovery. Jupiter, FL. January 17, 2023. Selected Oral Presentation, “Mechanisms of the m6A RNA modification in meditating cellular switches, from breast cancer to pathogenic yeast.”
5. 2022 Molecular Pathogenesis of Infectious Disease Symposium: Communicating Microbiology and Infectious Disease Research. Aurora, CO. October 9, 2022. Oral Presentation Lightning Talk: “Communicating about *Candida tropicalis* white-opaque switching: a musical.”
6. Colorado RNA Club. Aurora, CO. September 20, 2022. Oral Presentation, “Epigenetic Mechanisms of Cell State Switching and a Role for the m6A RNA Modification.”
7. University of Colorado Anschutz Medical Campus Postdoc Seminar Series. Virtual. June 9, 2022. Oral Presentation, “Science Comes Full Circle: My Research Journey from Chromatin to RNA Mechanisms.”
8. Fragile Nucleosome Seminar Series. Virtual. May 4, 2022. Oral Presentation, “From chromatin to RNA and back again: Identifying unique mechanisms of regulation in Candida and lncRNA HOTAIR.”
9. Colorado RNA Club’s RNA Day Gong Show. Denver, CO. August 1, 2021. Oral presentations, “RNA Day Singalong” and “The secret life of the yeast that live on you.”
10. University of Colorado Anschutz Medical Campus Postdoc Research Day. Aurora, CO. July 21, 2021. Oral Gong Show Presentation, “The Secret Life of the Yeast that Live on You.”
11. Keystone Symposia on Noncoding RNAs: Biology & Applications. Virtual Event. May 10-14, 2021. Oral and poster presentation, “A single N6-methyladenosine site in lncRNA HOTAIR regulates its function in breast cancer cells.”
12. Keystone Symposia on Noncoding RNAs: Mechanism, Function, and Therapy. Whistler, CO. January 12, 2020. Oral and poster presentation, “N6-Methyladenosine and YTHDC1 Regulate Long Noncoding RNA HOTAIR Function in Breast Cancer.”
13. An Evening with RNA, University of Colorado Anschutz Medical Campus RNA Bioscience Initiative. Aurora, CO. November 19, 2019. Oral presentation, “m6A RNA modifications regulate lncRNA HOTAIR in breast cancer.”
14. CU AMC Women in STEM Symposium, “Inclusivity and Intersectionality in STEM.” Aurora, CO. June 8, 2018. Oral presentation, “Communication strategies for community engagement: Singing your science.”
15. Molecular Biology Program Symposium. Aurora, CO. April 19, 2018. Selected Lightning Talk Oral Presentation, “Epigenetics & Epitranscriptomics: Investigating m6A in lncRNA HOTAIR function.”
16. Proteintech Webinar Wednesdays Presentation. April 2, 2018. “Molecular Mechanism of lncRNA HOTAIR.” <https://fast.wistia.net/embed/iframe/05bd48oqxm>
17. CU AMC Women in STEM Symposium, “EmpowHERment.” Aurora, CO. July 13, 2017. Selected Oral TED-like talk, “Why do we love science? And how can we improve it? The perspective of a Postdoc.”
18. Brown University Graduate Program in Molecular Biology, Cell Biology, and Biochemistry. Providence, RI. July 23, 2014. PhD Thesis Defense, “Identification and Regulation of White-Opaque Phenotypic Switching in *Candida tropicalis*.”
19. 11th ASM Meeting on *Candida* and Candidiasis. San Francisco, CA, March 29-April 2, 2012. General Session Oral Presentation, “A Phenotypic Switch Regulates the Program of Sexual Mating in *Candida tropicalis*.”

**Poster Presentations**

1. Cancer Metabolism Workshop at University of Colorado Anschutz Medical Campus. Aurora, CO. August 7-8, 2023. Poster presentation, “lncRNA HOTAIR requires methylation to induce breast cancer cell proliferation, invasion, and media acidification.”
2. 2nd Annual Rocky Mountain RNA Symposium. Aurora, CO. April 14, 2023. Poster presentation, “Mechanisms of the m6A RNA modification in mediating cell state switches.”
3. University of Colorado Anschutz Medical Campus Dental Research Day 2023. Aurora, CO. February 24, 2023. Poster presentation, “A role for the RNA modification m6A in mediating cell state switching in the fungal pathogen *Candida albicans*.”
4. University of Colorado Anschutz Medical Campus Postdoc Research Day 2022. Aurora, CO. July 13, 2022. Poster Presentation, “A single m6A site mediates the effects of lncRNA HOTAIR in breast cancer.”
5. RNA Society Conference. Boulder, CO. May 31-June 5, 2022. Poster presentation, “A single site of N6-methyladenosine regulates long noncoding RNA HOTAIR function in breast cancer.”
6. RNA Society Conference. Virtual Event. May 26-31, 2020. Poster presentation, “A single m6A site regulates HOTAIR function in breast cancer.”
7. University of Colorado Denver | Anschutz Medical Campus Postdoc Research Day 2019. Aurora, CO. June 11, 2019. Poster Presentation, “A role for m6A RNA modifications in mediating HOTAIR-induced breast cancer metastasis.” Gong Show Presentation, “Modified HOTAIR Helps Breast Cancer Take Flight.”
8. Abcam Conference on the Functions of Epitranscriptomes. Chicago, IL. June 17-18, 2019. Poster Presentation, “A role for m6A RNA modifications in mediating HOTAIR-induced breast cancer metastasis.”
9. Molecular Biology Graduate Program Retreat. Granby, CO. Poster Presentation, “lncRNA HOTAIR gets m6A modified in breast cancer.”
10. 12th ASM Meeting on *Candida* and Candidiasis. New Orleans, LA, March 26-30, 2014. Poster Presentation, “Divergent Regulation: Highlighting Differences in White-Opaque Switching Between *Candida tropicalis* and *Candida albicans*.”
11. 5th FEBS Advanced Lecture Course on Human Fungal Pathogens: Molecular Mechanisms of Host-Pathogen Interactions and Virulence. La Colle-sur-Loup, France, May 25-31, 2013. Poster Presentation, “Defining the role of the MTL and the Wor1 transcription factor in the regulation of white-opaque phenotypic switching in *Candida tropicalis*.”

**TEACHING EXPERIENCE**

**Visiting Professor / Block Visitor, Colorado College** April 2023

*Course:* Introduction to Molecular Biology and Cell Biology

*Responsibilities:* Served as the Lecturer for Block 7 of this course. Class included 27 students; delivery of 13

lectures; 17 assessments including 13 quizzes, 2 exams, and 2 presentations; and creative assignments

including preparation and performance of a parody related to final presentation topic.

**Teaching Assistant, Cold Spring Harbor Labs** Summer 2022

*Course*: Chromatin, Epigenetics, and Gene Expression

*Responsibilities*: Co-organized 3-week long course with 16 students. Led 7 different experiments including

histone octamer reconstitution, nucleosome reconstitution, electrophoretic mobility shift assay, histone

peptide binding assays, nucleosome binding assays, and histone methyltransferase assays.

**Teaching Assistant, University of Colorado Anschutz Medical Campus** Fall 2021

*Course*: Gene Regulation and RNA Biology in Disease (IDPT 7810-006)

*Responsibilities*: Led discussion on paper “A cis-acting mechanism mediates transcriptional memory at

Polycomb target genes in mammals.” (Holoch *Nature Genetics* 2021) and provided evaluation of

student presentations and participation to course leader Dr. Aaron Johnson.

**Lecturer, University of Colorado Denver** Fall 2020

*Course*: General Genetics (BIOL3832)

*Responsibilities*: Developed hybrid course using materials from previous lecturers. Designed and posted

virtual lecture videos twice a week, weekly quizzes, quarterly exams, and final project to Canvas.

Graded assignments for 30 students.

**Guest Lecturer, University of Colorado Anschutz Medical Campus** 2020-2021

*Course*: Foundations in Molecular Biology (BSBT6073)

*Responsibilities*: Invited to co-teach one 2-hour lecture on techniques in molecular biology with 5 other

postdocs. Organized and assigned topics to other postdocs. Taught 20-minute lecture on qRT-

PCR and northern blotting techniques. Developed discussion and test questions. Invited back to

teach for a second year.

**Lecturer, University of Colorado Denver** Spring 2019

*Course*: Molecular Biology Laboratory for Master’s Students (BIOL5125)

*Responsibilities*: Working with Dr. Chris Phiel, I independently led a section of the Molecular Biology

Laboratory Course for students in the Biomedical Sciences and Biotechnology Master’s Program

on performing CRISPR in human cells. Designed and delivered lectures before laboratory class. Designed and graded weekly quizzes. Helped students and TA troubleshoot experiments. Addressed questions during laboratory sessions.

**Teaching Assistant, University of Colorado Anschutz Medical Campus** Fall 2017

*Course*: Advanced Topics in Molecular Biology (MOLB7800)

*Responsibilities*: Under the guidance or Dr. Robert Sclafani, led discussion on the paper “Differential assembly

of Cdc45p and DNA polymerases at early and late origins of DNA replication” (Apararicio, Stout, &

Bell *PNAS* 1999) for a section of the Molecular Biology Core course and provided evaluation of student

participation.

**Initiative for Maximizing Student Development Senior Scholar, Brown University** Spring 2014

*Course*: Scientific Writing: Key Principles

*Responsibilities*: Serving as the Senior Scholar, I helped answer workshop participants questions, reviewed

assignment submissions, and provided support for instructors.

**Teaching Assistant, Brown University** Fall 2011

*Course*: Advanced Biochemistry Lab

*Responsibilities*: Under guidance of Dr. Rebecca Page, organized and led one section of the Advanced

Biochemistry Laboratory course, including lecturing; testing, setting up and guiding experiments; grading reports; and answering student questions.

**MENTORING EXPERIENCE**

Edgardo Linares, Biomedical Sciences Program PhD Rotation Student Fall 2023

Frances Zorensky, Professional Research Assistant August 2023-present

Clara Sandberg, RNA Bioscience Initiative Summer Internship Program Summer 2023

Audrey Combs, RNA Bioscience Initiative Summer Internship Program Summer 2023

 Former student from Colorado College MB131 Introduction to Molecular and Cellular Biology Course

Gabrielle Padilla, CU AMC Preparation in Interdisciplinary Knowledge to Excel (PIKE) PREP

Postbaccalaureate Program Intern 2022-2023

*Current: Biomedical Sciences PhD Program at University of Colorado Anschutz*

Hamza Ahmed, Undergraduate Intern from CU Denver 2021-2023

RBI Summer Intern, EUReCA Program, McNair Scholar

Received CU Denver RaCAS Poster Award and Suma Cum Laude Biochemistry Honors

 *Current: Research Assistant at University of Texas Southwestern Medical Center*

Sydney Vik, Cancer Research Experience for Undergraduates (CREU) Intern Summer 2022

Mlana Lore, Rotation Student, Molecular Biology Program Graduate Student Winter 2021

 *Current: Associate Scientist 2 at Mosaic Biosciences*

Samantha Oetjen, Rotation Student, Biomedical Sciences Program Graduate Student Winter 2021

 *Current: Pharmacology Program Graduate Student in Dr. Ulli Bayer’s Lab*

Pedro X. Medina, Student from University of Puerto Rico-Arecibo, Mentee in the National Summer

Undergraduate Research Project (NSURP) Summer 2020

*Current: CDC/CSTE Applied Epidemiology Fellow at the Illinois Department of Public Health*

Ariel Levine, High School Volunteer and RNA Biosciences Summer Intern 2018-2019

 *Current: Undergraduate at Duke University*

Students from BIOL5125 Course Spring 2019

Allison Phelan, *Current: Research Nursing Project Manager at Illingworth Research Group*

Charles Satterlee, *Current: Senior Laboratory Associate at SomaLogic*

Tyler Matlock, *Current:* *Researcher at University of Colorado AMC*

Kenneth Link, *Current: Research Associate at Inscripta*

Alecia Morgan, *Current: D.O. Medical Student at New York Institute of Technology*

Kayla Kurzawa, *Current: Regulatory Affairs Coordinator at University of Colorado AMC*

Chau Le, *Current: Student, School of Dental Medicine, University of Colorado AMC*

TA Maria Nikulkova, *Current: PhD Student at New York University*

Madeline Chrupcala, RNA Biosciences Intern Summer 2018

 *Current: PhD Student at Dartmouth University*

Justin Roberts, Molecular Biology Program Graduate Student 2017-2022

 *Current: Postdoctoral Fellow at University of Alabama Birmingham*

Natasha Nelson, Undergraduate Student at Brown University 2012-2014

 *Current: Project Coordinator at Thrasio*

Riyad Seervai, Undergraduate Student at Brown University 2011-2014

 *Current: Physician-Scientist in Training at Baylor College of Medicine*

Benjamin Cowan, Undergraduate Student at Brown University 2011-2013

 *Current: Resident Physician, Anesthesiology at NYU Langone Health*

Na Wang, Undergraduate Student and Lab Assistant at Brown University 2010-2014

 *Current: Resident, Podiatric Surgeon at Long Island Jewish Medical Center*

**LEADERSHIP & SERVICE**

Organizer and Leader, CU Anschutz K99 Career Development Group 2023-2024

Mentor in Women in STEM Mentorship Program at CU Anschutz 2023-2024

Biochemistry & Molecular Genetics Diversity, Equity, Anti-Racism, and Inclusion (DEAR) Initiative,

Inclusion Subcommittee Co-chair 2020-Present

*Organized initiatives including Diversity Discussions and Department Field Day to promote inclusivity and a sense of community within the department.*

Organizer and Host of Postdoc Research Day Social Justice Workshop & Panel Summer 2021

Departmental Representative Program Chair, CU Anschutz Postdoctoral Association 2020-2022

*Developed new structure and initiatives including Postdoc Video Series and Postdoc Lunch Program*

Mentorship Program Founder & Director for Women in STEM at CU Anschutz 2019-2022

*Implemented mentorship program, creating one-on-one mentorship pairs. Program has continued to grow for the past 3 years since its start in 2019 and now has over 50 mentor-mentee pairs.*

Co-organizer of 2019 Women in STEM symposium, “Impostor Syndrome and Overcoming Obstacles”

 *Organized speaker invitations and symposium format, gained financial support from external companies,*

 *budgeted for and organized purchases, hosted speakers* Spring 2019

Interim Treasurer of Women in STEM at CU Anschutz Fall 2019

*Served this role while treasurer was on maternity leave, gaining valuable budget experience*

President of Women in STEM at CU Anschutz 2018-2019

*Leadership experience, new program development, and recipients of Peer Supporter Award*

Co-organizer of 2018 Women in STEM Symposium, “Inclusivity & Intersectionality in STEM” Spring 2018

Trainee Search Committee for Biochemistry & Molecular Genetics Department Chair Fall 2018

*Interviewing, recruiting, and deciding on chair with an underlying goal of increasing departmental diversity*

Biochemistry and Molecular Genetics Department Representative, CU Anschutz Postdoc Association

*Organized department postdoc lunches & activites, served as a resource for new postdocs* 2017-2022

Postdoctoral Liaison of Women in STEM at CU Anschutz 2017-2018

Chair of the Cancer Biology Program Postdoctoral Symposium Committee at CU AMC 2017-2018

Volunteer at Denver Public Schools CareerCoach Program Fall 2017

Judge for Gates Summer Internship Program, University of Colorado Anschutz August 2017

Graduate-Undergraduate Mentoring Initiative Mentor, Brown University 2014

Graduate Student Council Representative, MCB Program 2012-2014

MCB Graduate Program Admissions Committee 2012-2013

Judge for Sigma Xi Student Research Showcase March 2014

Judge at Rhode Island Science and Engineering Fair 2011-2012

MCB Graduate Program Sheridan Center Liaison 2010-2011

Brown University Women in Science Mentor 2010-2011

**OTHER TRAINING**

CU Anschutz iCERch Career Exploration Program 2023-2024

Nature Masterclass in Scientific Writing and Publishing March 2023

CU AMC Women in STEM Mentorship Program, Mentor: Dr. Julia P. Cooper 2021-2022

The Postdoc Academy: Succeeding as a Postdoc and PALS, National Postdoc Association Spring 2021

CSC Understanding and Interrupting Implicit Bias, BMG Department DEAR Training Initiative Fall 2021

Fragile Nucleosome Mentorship Program, Mentor: Dr. Maria Aristizabal, Queen’s University 2020-present

Colorado Academic Instruction and Research Nexus (CAIRN) Pilot Program, Mentor: Dr. Megan Filbin, Metro

State University 2020-2021

Building Up Training Program for Diversity in Medical Science, CU Anschutz 2020-2021

CU AMC Women in STEM Mentorship Program, Mentor: Dr. Sarah Borengasser 2019-2020

Diversity on Campus Workshop, CU Boulder May 2018

Learning How to Teach Workshop Spring 2018

Implicit Bias Training, Molecular Biology Retreat Fall 2018

Clinical Translational Experience, Breast Cancer Tumor Boards & shadowing Dr. Peter Kabos 2017-2018

Sheridan Center Teaching Certificate I & II Programs Fall 2012

**REFERENCES**

Dr. Aaron M. Johnson, PhD

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