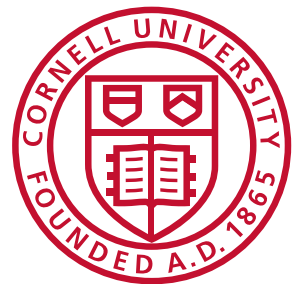


Arianna (Ari) M. Broad

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Objective

I am a student-centered **educator** and **mentor** with a *deep understanding of the academic research trajectory* and its challenges, informed by years navigating both the undergraduate and doctoral pathways. My **commitment to educational equity** is reflected in my longstanding leadership with the High School Outreach Program (HSOP), where I have provided both strategic direction and day-to-day administrative support. I **bring extensive experience in advising students**—particularly those from historically underrepresented backgrounds—on pursuing and sustaining research, with a realistic and compassionate lens grounded in lived experience. My **strengths in scientific communication and public speaking** allow me to effectively engage with diverse stakeholders, advocate for programmatic needs, and secure continued support and funding. *I aim to leverage these skills to strengthen and expand inclusive research and outreach initiatives that empower students across educational levels.*

Skills and Competencies

Humanistic Proficiencies

- **Equity-Driven Leadership** with a track record of fostering inclusive, accessible learning environments for diverse and underrepresented student populations.
- **Strategic Vision and Planning** demonstrated through successful leadership in program development, curriculum innovation, and systemic educational improvement.
- **Leadership Development and Mentorship** honed through guiding over 60 mentees to academic success, research publications, and prestigious university admissions.
- **Scientific and Grant Writing Excellence** demonstrated through the successful authorship and editing of numerous research publications in reputable journals, competitive grant applications, and funding proposals, with 10 awarded grants and a strong record of securing external funding.
- **Engaging Communication and Public Speaking** exemplified by delivering interactive lectures, professional workshops, and presentations that resonate with diverse audiences.
- **Adaptability and Problem-Solving** proven by navigating complex program logistics, developing innovative teaching strategies, and addressing evolving educational needs.

Technical Proficiencies

- | | | |
|----------------------|--------------------|-------------------|
| - Workday | - R and R Studio | - Statistical |
| - Salesforce | - JavaScript | Testing/Modeling |
| - Qualtrics | - Linux | - AI Informed |
| - Microsoft Suite | - ImageJ and other | Refinement |
| - Adobe Photoshop | image processing | - AI Optimization |
| and Illustrator | softwares | - Work-stream |
| - Fast-paced learner | - Database Dev | Efficiency |

Education

Cornell University

Ithaca, NY

08/2020 – 08/2024

PhD Candidate: Biochemistry – In progress of 5th year

- *Earned Master of Science in Biochemistry in May 2022 by passing the doctoral candidacy exam.*
- *On Leave of Absence as of 08/2024 – pause in terminal doctoral degree progress.*

Florida State University (FSU)

Tallahassee, FL

08/2016 – 05/2020

Bachelor of Science in Biological and Chemical Sciences

With Honors– Magna Cum Laude + Honors Thesis Defense

Work Experience

Cornell University **Ithaca, NY** **05/2023 – Present** **Office of Inclusive Excellence**

Director – High School Outreach Programs (HSOP)

- **Program Logistics Management:** Oversees participant data collection, caregiver communication, activity coordination, and purchasing to ensure smooth event execution.
- **Program Applications and Admissions:** Reviews application pool annually and collaboratively defines the cohort each year with the admissions committee.
- **Survey Analysis and Reporting:** Designs and analyzes formative and summative surveys to create grant efficacy reports for funding and endowment purposes.
- **Participant and Staff Coordination:** Manages participant intake, waivers, and forms while supervising staff and coordinating with Cornell departments for seamless event planning.
- **Event Leadership:** Serves as the primary point of contact during events, resolving issues, ensuring participant well-being, and handling miscellaneous event planning tasks.
 - *Held Program Associate title before promotion to Director in January 2025.*

The American Dance Competition, Inc. **St. Petersburg, FL** **11/2024 – Present** *Information Technologies Director*

- **Database Automation:** Designs and implements programmatically automated databases to streamline administrative workflows, enhancing efficiency and accuracy.
- **Technology Innovation:** Leads technology-driven process improvements, leveraging advanced-level JavaScript and other languages as needed to meet organizational needs.
- **Software Development:** Developing innovative software systems, including real-time video and audio synchronization for judge feedback and flexible solutions for registration, tabulation, and reporting.
- **Team Management and Training:** Manages and trains administrative and operational staff on adopting and effectively using new online platforms and custom-built systems.

Cornell Engineering CURIE Academy **Ithaca, NY** **07/2022, 2023, 2024** *Resident Hall Director (RHD)*

- Responsible for the proper conduct and interpersonal communications of 50 young women from the ages of 15-17 who are interested in pursuing engineering for their undergraduate degree.
- Prepared their dormitories, facilitated research sessions, and facilitated all social events, transportation, and accommodations.
- Legal guardian of all 50 students, dispensed medications, wrote incident reports, and wrote daily reports on research progress and conduct.

Wildes Doggy Daycare, LLC **Dryden, NY** **07/2021 – 01/2023** *Co-Founder | Chief Financial Officer*

- Wildes Doggy Daycare is a home dog daycare, boarding, and grooming center. We specialize in the treatment and rehabilitation of dogs with severe behavior and anxiety problems to better support this need in our community.
- Business strategist, financial analyst, and administrator that facilitates the daily administration operations of the business, runs financial reports, and advises the Chief Operations Officer of the most prudent strategy to expand the business and better client satisfaction and retention.
- Other duties include spear heading the legal battles with the Village of Dryden Zoning Board of Appeals, mitigating client dissatisfaction and support, and taking on all other projects outside of daily operations.

MixLab, Rx. **Manhattan, NY** **05/2020 – 08/2020**
Veterinary Compounding Pharmacy Technician

- Compounded pharmaceutical drugs for animals of all kinds including dogs, cats, rodents, reptiles, and primates.
- Spear-headed MixLab's COVID-19 outreach program where we compounded several hundred gallons of hand sanitizer and distributed it to first responders, health care workers, and protestors.

Florida State University **Tallahassee, FL** **12/2017 – 12/2018**
Laboratory Manager – Zhu Lab

- Organized, maintained, and smoothly ran day to day functions in lab.
- Efficiently completed essential laboratory tasks and continued to advance laboratory functionality.

Teaching Experience

Cornell University **Ithaca, NY** **03-05/2023 & 2024**
BIOMG7941 Lecturer

- Developed and conducted two engaging lectures independently each year for the BIOMG7941 course, aimed at doctoral candidates preparing for their candidacy exams.
- In 2023, the first lecture focused on the specific aims section of the candidacy exam, emphasizing the importance of designing SMART (Specific, Measurable, Attainable, Realistic, and Time-bound) specific aims. The second lecture addressed the use and misuse of figures in the candidacy exam, highlighting common pitfalls and best practices.
- In 2024, the lectures encompassed the specific aims section and expanded on them to construct the body of the candidacy exam, ensuring thorough coverage and understanding of these critical exam components.
- Employed an engaging teaching approach across all four lectures, utilizing interactive methods to enhance comprehension and retention of course material. Organized interactive activities within each lecture, allowing students to apply the concepts learned immediately, fostering active learning and retention. Structured each lecture with approximately 10-15 minutes of lecture followed by a 5–10-minute interactive activity relevant to the topic discussed, promoting student engagement and participation throughout the session.

Lumiere Education **Cambridge, MA** **05/2021 – 12/2023**
Lead Biochemistry Individual Program Graduate Research Mentor

- Lumiere Education is an online intensive independent research program for high school students and undergraduates. Mentees are paired with Ivy League University PhD students in their desired discipline.
- Program entails guiding the students in a literature review or individual research project, providing insight to graduate level questions on their topic, and editing their review paper they write from their literature search. The goal of the program is for the student to publish their work in a reputable high school science journal.
- Lead biochemistry mentor, panel member on publication seminar by Kyros.AI's and Lumiere's new merger.

Lumiere Education **Cambridge, MA** **06-08/2022 & 2023**
Introductory Biochemistry Instructor

- Designed and implemented a comprehensive course titled "Introduction to Biochemistry: DNA, Proteins, and their Applications" from scratch, aimed at high school students.
- Delivered engaging lectures covering fundamental topics in DNA and protein biochemistry, including DNA structure, replication, repair mechanisms, Unfolded Protein Response, post-translational modifications, and protein recycling and retention mechanisms.

- Integrated real-life research applications into the curriculum, such as cancer biology and CRISPR genomic editing, to provide students with practical insights into the relevance of biochemistry in modern scientific advancements.
- Facilitated student-centered learning by guiding students through the process of selecting and researching specific biochemistry topics of interest.
- Mentored students in developing their research questions, drafting research proposals, creating research outlines, compiling annotated bibliographies, and writing multiple drafts of their research manuscripts.
- Successfully supported students in submitting their research papers to prestigious high school science journals, leading to several publications (*see publications section – [2-4]*), and enhancing students' academic achievements and scientific literacy.

Cornell University Upward Bound **Ithaca, NY** **06/2023**

Lead Instructor of Introductory Chemistry

- Lead chemistry instructor for the summer component of Upward Bound, designed to prepare students for the classes they will be taking the coming school year to get them ahead of the game, hopefully increasing their average grades due to premature exposure to the course content. Also aids them in NYS Regents standard examination of chemistry.
- Role was to design and teach a new college-style chemistry course for students to inform them of the college-like seminar-style lecture/lab components while also preparing them for the NYS Regents exam. This course was written from scratch by Ari and co-instructor Claudia Chambliss.

Florida State University **Tallahassee, FL** **05/2019 – 05/2020**

BSC1005L Teaching Assistant

- Teaching Assistant for Biology for Non-Major Laboratory; interacting with students approximately ~17 hrs/wk.
- Duties included weekly preparation for the next week's experiment, teaching two laboratory sections, holding office hours, grading, and communicating with students.

Florida State University **Tallahassee, FL** **01/2019 – 5/2020**

Chemistry Tutor

- Facilitated group and one-on-one tutoring for the late-night, walk-in library tutoring on campus.
- Tutored subjects include general chemistry up to biochemistry.

Research Experience

Cornell University **Ithaca, NY** **07/2021 – 08/2024**

Weill Institute for Cell and Molecular Biology

Graduate Research Assistant – Fromme Lab

- Graduate student in Chris Fromme's lab that studies the eukaryotic endomembrane trafficking system, with a specialty in the Golgi apparatus resident GTPases.
- Thesis project is investigating the structure and function of the Golgi apparatus resident protein complex Mon2-Dop1. This investigation is employing cutting edge techniques such as cryo-EM, confocal fluorescent microscopy, and *in vitro* biochemistry.

Cornell University **Ithaca, NY** **05 – 07/2021**

Rotation Student – Crickard Lab

- Member of Brooks Crickard's lab that studies the function of DNA motor proteins in Homologous Recombination.
- Project entailed optimizing a cross-linking assay between Rad54 homo-oligomers to conduct a structural analysis via cross-linking mass spectrometry (CLMS).

Cornell University **Ithaca, NY** **03 – 05/2021**

Rotation Student – Smolka Lab

- Member of Marcus Smolka's lab that studies the phosphoproteome during the DNA Damage Response.
- Project entailed determining cell-cycle defects in PPM1G knock down cell lines.

Cornell University

Ithaca, NY

01 – 03/2021

Rotation Student – Sevier Lab

- Member of Carolyn Sevier's lab that studies the effect of redox stress on protein folding.
- Project entailed functional assays between the redox mediators Sec63 and Kar2 in *S. cerevisiae* to elucidate how oxidation of cysteines modulates the Unfolded Protein Response (UPR).

Cornell University

Ithaca, NY

11/2020 – 01/2021

Rotation Student – Whittaker and Daniel Labs

- Joint rotation student in the labs of Gary Whittaker and Susan Daniel that studies coronaviruses.
- Project entailed bulk membrane fusion assays to determine the effect of lipid composition on sars-CoV2 fusion peptide membrane insertion.

Cornell University

Ithaca, NY

09 – 11/2020

Rotation Student – Kellogg Lab

- Member of Elizabeth Kellogg's lab that studies the structure of nucleic acid binding proteins.
- Project entailed optimization of advanced heterogenous isolation protocols to enrich RNAPII in the pause state bound to chromatin, RNA, NELF, and its other pause factors.

Florida State University

Tallahassee, FL

01/2019 – 05/2020

Undergraduate Research Assistant – Bienkiewicz Lab

- Undergraduate research assistant in Ewa Bienkiewicz's translational biophysics laboratory completing honor's thesis working full-time.
- Honor's thesis project on testing the binding affinities and potential cell membrane interactions of the neuroprotective cellular prion protein (PrP^C) octarepeat (OR) peptide mutants. Project entails utilizing surface plasmon resonance (SPR), *in vitro* liposome assays, and computational biology.

Harvard University

Cambridge, MA

06 – 08/2019

Research Intern – Gaudet Lab

- Participant of the Leadership Alliance (LA) Summer Research Opportunities at Harvard (SROH). LA participation included presenting my summer research at the Leadership Alliance National Symposium in July 2019.
- Member of Rachelle Gaudet's lab researching the substrate specificity of the inducible gustatory receptor ion channel in insect orthologs and conducting mutagenesis of hypothesized substrate binding residues.

Florida State University

Tallahassee, FL

12/2016 – 12/2018

Research Assistant – Zhu Lab

- Undergraduate research assistant in Fanxiu Zhu's virology laboratory studying Kaposi's Sarcoma-Associated Herpesvirus (KSHV).
- Research investigated KSHV ORF52's role in viral infectivity and production of viral progeny.

Cornell University

Ithaca, NY

06 – 08/2018

Research Intern – Vogt Lab

- Participant of the National Science Foundation's (NSF) Research Experiences for Undergraduates (REU) in the Department of Molecular Biology and Genetics.
- Member of Volker Vogt's lab comparing the *in vitro* assembly of the structural protein Gag in Simian Immunodeficiency Virus (SIV) with the Gag protein in HIV via transmission electron microscopy and small molecule interaction assays.
- Research experience resulted in first publication – See Publications section of CV [10].

Louisiana State University

New Orleans, LA

06 – 08/2017

Research Intern – Wang Lab

- Participant of the National Science Foundation's (NSF) Research Experiences for Undergraduates (REU) in the Department of Microbiology, Immunology, and Parasitology.
- Member of Ping Wang's lab characterizing the morphologies of different clinical strains of the pathogenic, drug resistant fungus *R. delemar*.

Publications

- [1] S. Goel and **A.M. Broad** (2023) Predictive Modeling of CDC25 Isoforms for Dual-action Phosphatase Substrate Specificity. *Journal of Student Research*. 12:4 <https://doi.org/10.47611/jsrhs.v12i4.5147>
- [2] N. Srivastava and **A.M. Broad** (2023) An evolutionary review on the substrate specificity of the gustatory receptors. *International Journal of Science and Research*. ISSN: 2319-7064
<https://www.ijsr.net/archive/v12i10/SR231016181227.pdf>
- [3] S. Wang and **A.M. Broad**. (2023) Elucidating the Epigenetic Mechanisms that Modulate Biological Age. *Journal of Research High School*. Volume 2023(1):214-221. ISSN 2688-3651
https://www.journalresearchhs.org/ISSN_2688_3651
- [4] P. Bordoloi and **A.M. Broad**. (2023) Investigating the Roles of TRP Channels in Nociception and Analgesic Applications. *Vanderbilt Young Scientists Journal*. Vol 2023 – ISSN 2163-7830
<https://wp0.vanderbilt.edu/youngscientistjournal/article/investigating-the-roles-of-trp-channels-in-nociception-and-analgesic-applications>
- [5] K. Agrawal and **A.M. Broad**. (2023) Can we predict the future?: Modelling SARS-CoV-2 epidemic to endemic transition. *Journal of Student Research*. 11(3). doi: <https://doi.org/10.47611/jsrhs.v11i3.2898>
- [6] N. Pyarali and **A.M. Broad**. (2022) Investigating the DNA Damage Response Elicited by Transposable Element Integration. *Journal of Student Research*. 11(2). <https://doi.org/10.47611/jsrhs.v11i2.2544>
- [7] R.A. Dick, C. Xu, D.R. Morado, V. Kravchuk, C.L. Ricana, T.D. Lyddon, **A.M. Broad**, J.R. Feathers, M.C. Johnson, V.M. Vogt, J.R. Perilla, J.A.G. Briggs, F.K.M. Schur. (2020). Structures of immature EIAV Gag lattices reveal a conserved role for IP6 in lentivirus assembly. *PLoS Pathog*. 16(1): e1008277. doi: <https://doi.org/10.1371/journal.ppat.1008277>
- [8] B. Sureka and **A.M. Broad**. (In Review). HMGB1: Exploring scaffolding factors that shape chromosomal organization. *The National High School Journal of Science*.
- [9] R.A. Kumar and **A.M. Broad**. (In Review). Investigating the use of neuropeptides as an immediate treatment to reduce hemin toxicity in hemorrhagic stroke. *Columbia Junior Science Journal*.
- [10] A.A. Panderath and **A.M. Broad**. (In Review). Examining the crosstalk network between the DNA damage response and cisternal maturation of the Golgi complex. *National High School Journal of Science*.
- [11] S. Subramanian and **A.M. Broad**. (In Review). Orthodontic AI: Investigating how AI can be integrated into the laws of biomechanics and biophysics to improve orthodontic applications. *International Journal of High School Science*.
- [12] S. Rajgharia and **A.M. Broad**. (In Review). Structural Insights into Sugar-Responsive Gustatory Receptors Utilizing Computational Modelling. *Journal of Student Research*.
- [13] S. Charvatsky and **A.M. Broad**. (In Review). Inositol Metabolite Depletion Induces Hallmarks of ER Stress Without Activating the UPR. *Journal of Student Research*.

Notable Poster* & Oral^ Presentations

“Creating Inclusive and Accessible Education for All – Broad Spectrum Education, Inc.”

Arianna Broad and Chris Casler-Gonçalves

- 2024 Cornell University Neurodiversity Celebration Week Poster Session*
- 2024 CURIE Academy^

“From Struggle to Innovation: My Journey through Science”

Arianna Broad

- 2024 CURIE Academy^
- 2024 Florida State University Women in Math, Science, and Engineering (WIMSE) Retreat^
- 2023 CURIE Academy^
- 2023 BRIDGES Scholars Retreat^
- 2023 Health Occupations Students of America Chapter^
- 2023 Florida State University Women in Math, Science, and Engineering (WIMSE) Retreat^
- 2022 CURIE Academy^

“Mon2-Dop1: Elucidating the structure and function of a peculiar Golgi protein complex”

Arianna Broad, Bryce Brownfield, Kaitlyn Manzer, and Chris Fromme

Weill Institute for Cell and Molecular Biology, Cornell University

- 2023 North East Regional Yeast (NERY) Conference*
- 2023 Sloan UCEM Annual Conference^
- 2022 Cornell University Molecular Biology and Genetics Department Retreat Symposium*
- 2022 Cornell University BMCB-GGD Symposium*

“Investigating substrate specificity and crucial residues of an insect gustatory receptor”

Arianna Broad, Heather Frank, and Rachelle Gaudet

Department of Molecular and Cellular Biology, Harvard University

- 2019 Harvard University Summer Institute of Life Sciences Symposium*
- 2019 Princeton University MOL BIO Scholars Symposium *
- 2019 Brown University PhD Preview Symposium*

“Blind Quantification of Murine Model Hematomas with Potential Therapeutic Peptide”

Arianna Broad and Ewa Bienkiewicz

Department of Biomedical Sciences, Florida State University

- 2019 WIMSE Symposium*

“A Comparison of In Vitro Assembly of HIV and SIV”

Arianna Broad, Robert Dick, and Volker Vogt

Department of Molecular Biology and Genetics, Cornell University

- 2019 ACC Meeting of the Minds^
- 2019 Florida Undergraduate Research Conference*
- 2018 Cornell University Summer Institute for Life Sciences*/^

“Mapping Functional Domains and Crucial Residues of ORF52/KiGAS in KSHV Virion Production and Assembly”

Arianna Broad, Siming Ma, and Fanxiu Zhu

Department of Biological Sciences, Florida State University

- 2018 WIMSE Symposium*

“Investigating the Resistance and Sensitivity of Rhizopus delemar Strains to Various Drugs and Utilizing the CRISPR/Cas9 Endonuclease to Create Auxotrophic Mutants”

Arianna Broad, Gillian O'Brian, and Ping Wang

Department of Microbiology, Immunology, and Parasitology, Louisiana State University Health Sciences Center

- 2018 Florida Undergraduate Research Conference*
- 2017 ASM Southeastern Branch Conference*
- 2017 LSUHSC Summer Symposium*

“Determining Subcellular Localization of Herpesvirus Saimiri (HVS) Open Reading Frame 52 (ORF52)”

Arianna Broad, Siming Ma, and Fanxiu Zhu

Department of Biological Sciences, Florida State University

- 2017 WIMSE Symposium*

Research Support

National Science Foundation Graduate Research Fellowship (NSF GRFP)	2022 – 2026
Cornell University Alfred P. Sloan Foundation Fellowship	2020 – 2025
Leadership Alliance Research Support – Harvard University	06 – 08/2019
WIMSE Research Experience Program Grant	2017 – 2019
NIH Grants R01DE016680 and R01DE026101	2017 – 2018
NSF REU Research Support – Cornell University	06 – 08/2018
NSF REU Research Support – Louisiana State University	06 – 08/2017

Awards & Achievements

Cornell University Graduate School Advanced Career Exemplary Service Award	2023
National Science Foundation Graduate Research Fellowship (NSF GRFP) Recipient	2022 – 2026
Cornell University Sloan Fellow (Dean's Fellow)	2020 – 2026
Honorable Mention NSF Graduate Research Fellowship Program	04/2020
GEM Consortium Fellow	04/2020
Florida State University John M. Caffrey Scholarship	11/2019
Florida State University McAllister Scholarship	11/2019
Florida State University Alumni Scholarship	11/2019
Brown University PhD Preview Program + Full Travel Award	10/2019
Princeton MOL BIO Scholar	10/2019
Yale Diversity PhD Preview Program + Full Travel Award	08/2019
ACC Meeting of the Minds Conference Travel Award	03/2019
Florida Undergraduate Research Conference (FURC) Travel Award	01/2019
Florida State University Thrower Scholarship	10/2018
ABRCMS Undergraduate Student Full Travel Award	09/2018
Florida Undergraduate Research Conference (FURC) Travel Award	01/2018
ASM Southeastern Branch Conference 'Best Undergraduate Poster'	11/2017
ASM Southeastern Branch Conference Travel Award	11/2017
Florida State University Dean's List	2016-19
Bright Futures Scholarship	2016-20
Florida State University Merit Scholarship	2016-20
Jess Parrish Medical Center Scholarship	2016-17
One Blood Medical Achievement Scholarship	2016-17

Involvement & Service

Broad Spectrum Education, Inc. <i>Founder & Co-President</i>	<i>Ithaca, NY</i>	04/2024 – Present
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- **Operational Management:** Lead daily operations, develop strategic plans, foster a culture of innovation.
- **Financial Oversight:** Manage budget and financial operations, secure funding through grants and partnerships.
- **Logistical Planning:** Coordinate resource allocation, oversee events and program delivery.
- **Grant Management:** Identify and pursue grant opportunities, prepare proposals and reports, monitor compliance.
- **Scientific Communication:** Liaise for scientific communication, design educational content, create graphics and visual aids.
- **Team Leadership and Development:** Recruit and mentor staff, encourage professional development, foster an inclusive environment.

- **Stakeholder Engagement:** Build relationships with stakeholders, represent the organization publicly, ensure transparent communication.
- **Program Development and Evaluation:** Oversee program development and evaluation, ensure alignment with mission, use evidence-based practices.

Cornell University Assembly

Ithaca, NY

05/2023 – 05/2024

Executive Vice Chair of Operations

- The UA is dedicated to expanding and enhancing the student and employee benefits and workers' rights by approving resolutions brought forth by the student assemblies (undergraduate and graduate & professional) and employee assembly, bringing said resolutions up to the correct departments and Board of Trustees if needed, and aiding in the implementation of said resolutions to create or modify existing policies.
- Role as the executive vice chair of operations is to fill all committee vacancies, oversee committee actions and meetings, and to advise the rest of the executive committee on issues brought forth by the minor committees.

Graduate & Professional Student Assembly *Ithaca, NY*

09/2021 – 05/2024

Biological Sciences Voting Member

- The GPSA is dedicated to expanding and enhancing student benefits and workers' rights by writing resolutions to existing policies for the University Assembly to assess and implement as needed.
- Serving as a voting member for the Biological Sciences Committee. Duties entail attending all assembly meetings and voting in all proposed resolutions as a biological sciences voting member.
- Served as the representative for the Biochemistry, Molecular and Cell Biology Doctoral Field from 2021 – 2023, duties entailed attending all assembly meetings.

CU Molecular Biology & Genetics (MBG)

Ithaca, NY

11/2020 – 05/2024

Graduate Student Administrator

- 2024 graduate student representative for the faculty search committee.
- 2024 advisory lead of the MBG new student recruitment organization committee.
- 2023 new graduate student orientation committee member and tax information session speaker.
- 2023 co-lead of the MBG new student recruitment organization committee.
- 2022 new graduate student orientation committee member and tax information session speaker.
- 2022 co-lead of the MBG National Science Foundation Research Experiences for Undergraduates student organizer for peer mentor activities.
- 2021 voting council member of MBG Diversity Council.
- 2020 peer mentor for the MBG National Science Foundation Research Experiences for Undergraduates.

SACNAS

Ithaca, NY

08/2020 – 05/2024

Member

- Attends meetings which include career workshops, grant/fellowship writing workshops, and lectures from BIPOC faculty and their journey as a minority in STEM.
- Attended SACNAS NDiSTEM 2022 National Conference in San Juan, Puerto Rico to table and recruit students to Cornell University and specifically, MBG.

Cornell Office of Federal Relations

Washington, D.C.

03/2023

Lobbyist

- Having benefited from several federally funded initiatives aimed at enhancing diversity within the STEM workforce, such as TRIo Upward Bound, the National Science Foundation Research Experiences for Undergraduates, and the Graduate Research Fellowship, as well as the National Institutes of Health Diversity Initiatives, Ari is resolute in her commitment to securing increased funding for these programs and other similar initiatives that play a pivotal role in diversifying the STEM workforce.
- In the context of the FY 2024 Congress appropriations, Ari took an active role in lobbying on Capitol Hill alongside Cornell's Office of Federal Relations. Her advocacy efforts were directed toward urging the

allocation of additional funding for the National Science Foundation (NSF) and the National Institutes of Health (NIH) during the fiscal year, with the overarching goal of advancing diversity and inclusivity in STEM.

Vaccination Conversations with Scientists (VaCS) Ithaca, NY

12/2021 – 07/2022

Data Committee Leadership

- VaCS is a collaborative organization with Cornell University undergraduate students, graduate students, and faculty to increase vaccination rates locally and engage the public to learn more about COVID-19 vaccinations and public health regulations.
- The Data Committee analyzes the data collected through phone banking to report to the Tompkins County Health Department.

American Society for Microbiology (ASM)

Tallahassee, FL

08/2017 – 05/2020

President

- One of the founders of the Florida State University student chapter of ASM.
- Maintained the society's good standing with national and branch affiliations, issued event and health permits, oversaw activities of the society, and enforced the mission statement of the society.
- Attended ASM's annual national conference in New Orleans, LA Microbe 2017.
- Attended ASM's Southeastern Branch Conference (11/2017) and won best undergraduate poster.

Women in Math Science & Engineering

Tallahassee, FL

08/2016 – 05/2020

Alumni

- Selected to conduct part-time paid research through this living-learning community (LLC).
- Student mentor to younger students within the LLC and on the interview committee for new LLC members.

Mentorship Experience

Ari boasts a network of over 80 mentees, resulting in thirteen publications and numerous admissions to prestigious universities for undergraduate and graduate programs. Below is a comprehensive list of all of Ari's mentees and their notable achievements.

*Key: * = high school student; ** = undergraduate student; *** = graduate student*

Mentee Name	Program Mentored Through	Dates Mentored	Role in Mentoring Relationship	Last Known Current Position
Nicole**	FSU Chemistry	01/2019 – 08/2020	Academic Advisor	Texas Instruments Engineer
Mariana**/***	FSU ASM	08/2018 – Present	Academic Advisor	University of Florida BBS PhD Student
Isabella**	FSU WIMSE	08/2019 – 05/2020	Academic Advisor	Real Estate Advisor in Higher Education
Ava**	FSU WIMSE	08/2019 – 05/2020	Academic Advisor	FSU Undergraduate Student
Saachi*	Women in STEM Association	01/2020 – 05/2022	Academic Advisor	Cornell University BS Student
Lauren*	Private Tutoring	01/2021 – Present	Academic Advisor and Tutor	Highschool Student
Tanya*	Lumiere Education	06/2021 – 08/2021	Research Advisor	Highschool Student
Rivcka*	Lumiere Education	06/2021 – 08/2021	Research Advisor	University of Washington Seattle, B.S. Biochemistry Student
Andrew*	Lumiere Education	06/2021 – 12/2021	Research Advisor	Highschool Student
Naima*	Lumiere Education	09/2021 – 12/2021	Research Advisor	Washington University St. Louis B.S. Biology Student
Samika*	Lumiere Education	12/2021 – 04/2022	Research Advisor	Highschool Student

Krish*	Lumiere Education	12/2021 – 05/2022	Research Advisor	University of College London, B.Sc. Student
Tongda*	Lumiere Education	12/2021 – 04/2022	Research Advisor	Highschool Student
Salem*	Lumiere Education	06/2022 – 09/2022	Research Advisor	Highschool Student
Sarvani*	Lumiere Education	06/2022 – 09/2022	Research Advisor	Highschool Student
Stuti*	Lumiere Education	06/2022 – 09/2022	Research Advisor	Highschool Student
Claudia***	Fromme Lab	06/2022 – 08/2022	Graduate Rotation Student Advisor	Cornell University Biophysics PhD Student
Cyrus**/***	Cornell MBG REU	06/2022 – Present	Academic Advisor	Cornell University Biochemistry PhD Student
Dominique**	Cornell MBG REU	06/2022 – 08/2022	Academic Advisor	University of Pennsylvania PhD Student
Alyssa**	Cornell MBG REU	06/2022 – 08/2022	Academic Advisor	University of Pennsylvania PhD Student
Justin**	Cornell MBG REU	06/2022 – 08/2022	Academic Advisor	Morehouse University, BS
Myles**	Cornell MBG REU	06/2022 – 08/2022	Academic Advisor	University of Pittsburgh PhD Student
Priya*	Lumiere Education	06/2022 – 01/2023	Research Advisor	McMaster University, BS Student
Grace*	CURIE Academy	07/2022 – 05/2023	Academic Advisor	Cornell University, BS Student
Jade*	CURIE Academy	07/2022 – 05/2023	Academic Advisor	Cornell University, BS Student
Kathleen*	CURIE Academy	07/2022 – 05/2023	Academic Advisor	Cornell University, BS Student
Ethan*	Private Tutoring	08/2022 – Present	Academic Advisor & Tutor	Highschool Student
Kareena*	Lumiere Education & CURIE Academy	09/2022 – 12/2022	Research & Academic Advisor	Highschool Student
Jia*	Lumiere Education	09/2022 – Current	Research Advisor	UC San Diego, BS Student
Rohit*	Lumiere Education	01/2023 – 05/2023	Research Advisor	Highschool Student
Stuti*	Lumiere Education	01/2023 – 05/2023	Research Advisor	Highschool Student
Sanjana*	Lumiere Education	01/2023 – 05/2023	Research Advisor	Highschool Student
Advait*	Lumiere Education	02/2023 – 12/2023	Research Advisor	Highschool Student
Gokce*	Lumiere Education	03/2023 – 12/2023	Research Advisor	Highschool Student
Defne*	Lumiere Education	03/2023 – 10/2023	Research Advisor	Highschool Student
Bhumika*	Lumiere Education	03/2023 – Present	Research Advisor	Highschool Student
Shreyas*	Lumiere Education	03/2023 – Present	Research Advisor	Highschool Student
Jhanvi*	Lumiere Education	04/2023 – 08/2023	Research Advisor	Highschool Student
Siya*	Lumiere Education	06/2023 – Present	Research Advisor	Highschool Student
Kenya*	Lumiere Education	06/2023 – Present	Research Advisor	Highschool Student
Noor*	Lumiere Education	06/2023 – 11/2023	Research Advisor	Highschool Student
Tanya*	Lumiere Education	06/2023 – 09/2023	Research Advisor	Highschool Student
Isabella*	CURIE Academy	07/2023 – 01/2024	Academic Advisor	Highschool Student
Kylie*	CURIE Academy	07/2023 – 01/2024	Academic Advisor	Highschool Student
Emma*	CURIE Academy	07/2023 – Present	Academic Advisor	Highschool Student
Anna Maria*	CURIE Academy	07/2023 – 01/2024	Academic Advisor	Highschool Student
Kiyr*	CURIE Academy	07/2023 – 01/2024	Academic Advisor	Highschool Student
Saisha*	CURIE Academy	07/2023 – 01/2024	Academic Advisor	Highschool Student
Alexandria*	Lumiere Education	07/2023 – Present	Research Advisor	Highschool Student
Samanvi*	Lumiere Education	09/2023 – Present	Research Advisor	Highschool Student
Sitara*	Lumiere Education	09/2023 – Present	Research Advisor	Highschool Student
Malaika*	Lumiere Education	09/2023 – 02/2024	Research Advisor	Highschool Student
Mayra**	Cornell University	07/2022 – 05/2024	Academic Mentor	Environmental Engineering Industry Workforce
Sara**	Cornell University	07/2024 – Present	Academic Mentor	Undergraduate Student at Cornell University
Shirlyne**	Cornell University	07/2024 – Present	Academic Mentor	Undergraduate Student at Cornell University
Cira**	Cornell University	07/2024 – Present	Academic Mentor	Undergraduate Student at Cornell University
Fatima**	Cornell University	07/2024 – Present	Academic Mentor	Undergraduate Student at Cornell University

Regina**	Cornell University	07/2024 – Present	Academic Mentor	Undergraduate Student at Cornell University
Abigail**	Cornell University	07/2022 – Present	Academic Mentor	M.Eng. Student at Cornell University
Vanessa**	Cornell University	07/2022 – Present	Academic Mentor	Undergraduate Student at Cornell University
Serena**	Cornell University	07/2022 – Present	Academic Mentor	Undergraduate Student at Cornell University
Daniela **	Cornell University	07/2022 – Present	Academic Mentor	Undergraduate Student at Cornell University
Celeste**	Cornell University	07/2023 – Present	Academic Mentor	Undergraduate Student at Cornell University
Shefali **	Cornell University	07/2023 – Present	Academic Mentor	Undergraduate Student at Cornell University

References

	Reference 1	Reference 2	Reference 3
Name	Audrianna Broad, M.A.	Cindy Mosqueda, M.S.	Chris Casler-Gonçalves. Ed.D.
Title	Founder/President	Senior Associate Director	Co-President
Company	American Dance Competition, Inc.	Office of Inclusive Excellence Cornell University	Broad Spectrum Education, Inc.
Relationship	Direct Supervisor	Direct Supervisor	Co-President
Acquaintance Length	10+ years	4+ years	4+ years
Email			