

Bijoya (Bijou) Basu
10730 Euclid Ave Apt 715 Cleveland, OH 44106
425-802-2521
bx424@case.edu
www.bijoubasu.com

EDUCATION

- 2019-2027 Case Western Reserve University School of Medicine
- Medical Scientist Training Program
 - Doctor of Medicine (expected)
 - Doctor of Philosophy, Genetics and Genomic Sciences (expected)
- 2014-2018 Washington University in St. Louis
Bachelor of Arts
- *Cum Laude*
 - Major in Math (Statistics)
 - Major in Biology
 - Thesis Title: “Modeling ‘addiction’ in *Drosophila melanogaster* from the perspective of neuronal homeostasis”

HONORS AND AWARDS

- 2018 Intramural Research Training Award
2018 Graduation *cum laude* in Biology
2014 Dean’s List
2014 National Merit Scholar Recipient

WORK EXPERIENCE

- 2018-2019 National Institutes of Health, Bethesda, MD
- Worked under David Brody, MD PhD
 - Screened clones of A-beta VHH to obtain higher binding affinity clone and optimized certain laboratory techniques and machinery

RESEARCH EXPERIENCE

- 2020- Harrington Discovery Institute
Case Western Reserve University, Genetics and Genomics
PI: Atul Chopra, MD PhD
- PhD student
 - Working on the effects of the hormone asprosin on memory and cognition in Alzheimer’s Disease.
- 2015-2018 Biology Department, Washington University in St. Louis
PI: Yehuda Ben-Shahar, PhD
Project: “Modeling ‘addiction’ from the perspective of neuronal homeostasis”
- Designed a project measuring the modulation of neuronal homeostatic processes due to chronic drug exposure in *Drosophila melanogaster*.

Summer 2015

Institute for Systems Biology

PI: Nathan Price, PhD

Project: "Mapping the Transcriptional Regulatory Network of Bipolar Disorder with Computational Modeling and CRISPR/Cas9"

- Helped Create a Transcriptional Regulatory Network
- Used CRISPR/Cas9 machinery to knock out identified transcription factors from HEK293 cells

BIBLIOGRAPHY

Peer Reviewed Articles

Pearl JR, Colantuoni C, Bergey DE, Funk CC, Shannon P, **Basu B** et. al. Genome-scale transcriptional regulatory network models of psychiatric and neurodegenerative disorders. *Cell Systems*. 2019.

Abstracts

Pearl JR, Bergey DE, Funk CC, **Basu B**, Oshone R et. al. Genome-scale transcriptional regulatory network models of psychiatric and neurodegenerative disorders. *bioRxiv*. 2017.

Ament SA, Pearl JR, Funk CC, Bergey DE, Shannon P, **Basu B**, Hood L, Price ND. Genome-Scale Transcriptional Regulatory Network Models of Psychiatric Disorders. *European Neuropsychopharmacology*. 2017; 27(suppl): S417.

Poster Presentations

Basu B, McKinney R, Ben-Shahar Y. "Modeling 'addiction' from the perspective of neuronal homeostasis", St. Louis Area Undergraduate Research Symposium, St. Louis, MO (2018) (Poster presented by Basu B)

Basu B, McKinney R, Ben-Shahar Y. "Modeling 'addiction' from the perspective of neuronal homeostasis", Undergraduate Research Symposium hosted by Washington University, St. Louis, MO (2018) (Poster presented by Basu B)

Basu B, McKinney R, Ben-Shahar Y. "Modeling 'addiction' from the perspective of neuronal homeostasis", Undergraduate Research Symposium hosted by the Midstates Consortium for Math and Science, St. Louis, MO (2017) (Poster presented by Basu B)

Basu B, Pearl JR, Ament SA, "Mapping the Transcriptional Regulatory Network of Bipolar Disorder with Computational Modeling and CRISPR/Cas9" Undergraduate Research Symposium at Institute for Systems Biology (2015) (Poster presented by Basu B)

Submitted

Basu B, Jain M, Chopra AR. Caudamins, a new class of hormone proteins. *Nature Review Endocrinology*. 2020

TEACHING EXPERIENCE

2020

Anatomy Preceptor, Structure

Case Western Reserve University School of Medicine

Course Director: Susanne Wish-Baratz, PhD

- Facilitated small groups on anatomy topics for first year medical students

2015-2018

Small Group Facilitator, Peer Led Team Learning

Washington University in St. Louis

Course Director: Lisa Kuehne

- Facilitated small group problem-based learning for Calculus II students

Basu, B

4/5/2020

2

COMMUNITY SERVICE

- 2017-2018 Slaying Dragons, St. Louis, MO
- Board Member
 - Organization put on plays to increase awareness regarding mental illness
 - Worked to increase outreach to a younger and more diverse demographic
- 2015-2017 GlobeMed, Washington University in St. Louis, St. Louis, MO
- Active member, worked on fundraising
- Winter 2016 Global Brigades, Medical Brigade, Honduras
- Provided healthcare and distributed supplies to community
 - Conducted triage, filled out pharmacy orders, assisted physicians and dentists

LEADERSHIP

- 2018-Present No Longer Voiceless, 501(c)3 nonprofit
Founder, President
- Founded a nonprofit that focuses on the creation of legacy books for end-of-life and chronic disease patients
 - Provided a sense of closure and reflection for patients and provided a piece of remembrance for families
- 2020-Present Doctors for America
Steering Committee Co-Chair, Women's Health Workgroup
- Was appointed co-chair of the WHWG Steering Committee
 - Advocated for and worked towards optimizing health for those who identify as women

INSTITUTIONAL SERVICE

- 2020-present MSTP council, Cleveland, OH
Social media marketing for Case Western's MSTP
- Actively runs Instagram page @cwrumstp
 - Featured the program and student accomplishments
 - Used personal social media expertise to create a cohesive feed
 - Grew account to attract prospective students

MEMBERSHIPS

American Association for the Advancement of Science (AAAS)
Doctors for America (DFA)
American Medical Association (AMA)
American Academy of Family Physicians (AAFP)

Languages: Bengali (Fluent), Portuguese (Limited Working Proficiency), Latin

Interests: travel, painting, poetry, hiking, ice cream