

Alexander Anand Iyer

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Current

Fellow, National Institutes of Health, Department of Bioethics

Education

Brown University, Providence, RI **May 2019**

- Sc.B. Neuroscience; GPA: **4.0**, *magna cum laude*

Menlo-Atherton High School **June 2015**

- Unweighted GPA: **4.0**

Honors and Awards

Phi Beta Kappa **Spring 2019**

Sigma Xi **Spring 2019**

Zern Endowment for the Life and Physical Sciences Award **Summer 2018**

Grant awarded for the purpose of developing Neural Systems (NEUR1030), a core undergraduate neuroscience course at Brown

- Worked with Dr. Monica Linden to create a set of weekly exams designed to develop students' abilities to reason critically about scientific research in neuroscience
- Implemented these exams in the Neural Systems curriculum during the fall of 2018

Organic Chemistry Award **Spring 2017**

Awarded annually to the Brown University student with the highest cumulative score in Organic Chemistry II

Other Awards, Honors, and Recognitions

- National Merit Scholar (2015), Multidisciplinary Faculty Award (2015), National AP Scholar (2015), Bausch & Lomb Honorary Science Award (2014), MIT Book Award (2014)

Publications and Presentations

Third Author, Trusted Experts, Novel Treatments, and Real-Time Advice: The Use of Social Networks for Rare Disease

- American Society for Bioethics and Humanities, 2019 Conference

First Author, "It Helped Me See What I Would Be Going Through": Democratization of Medical Knowledge Through Social Media for Rare Genetic Disease

- American Society for Bioethics and Humanities, 2018 Conference

Research Experience

Stanford Center for Biomedical Ethics, Stanford University, CA **Jan 2018 – Sept 2019**

- Conducted interview-based medical ethics research, focusing on ways in which patients with rare genetic disease use social media to (i) improve their treatment experiences and outcomes, and (ii) develop networks of social, emotional, and informational support
- Examined the following ethical issues: the benefits and harms social media may hold for patients, the potential of social media to enhance or diminish patient autonomy, and the moral obligations of medical providers with respect to social media

Delaney Laboratory, Brown University, RI **Sept 2016 – May 2017**

- Synthesized protein-DNA complexes to examine the role of protein modifications in eukaryotic DNA repair
- Collaborated with postdoctoral fellows and graduate students on experimental design and data analysis

Clinical Experience

Emergency Medical Technician, Brown University Emergency Medical Services, RI **Sept 2016 – May 2019**

- Responded to on-campus medical emergencies as part of Brown University's volunteer, student-run EMS service that is certified at all levels of pre-hospital care

- Provided patient care (monitored and maintained airway, breathing, and circulation; administered medication/interventions per RI state protocol); transported patients to hospitals; transferred care of patients to ER medical staff

Emergency Department Volunteer, The Miriam Hospital, Providence, RI **Jan 2017 – May 2018**

- Assisted nurses in registering incoming patients and transporting patients to appropriate treatment areas
- Accompanied independent patients during treatment to foster a comforting and supportive hospital environment

Stanford Center for Biomedical Ethics, Stanford University, CA **Summer 2018**

- Attended meetings of the Lucile Packard Children's Hospital Ethics Committee, where physicians sought ethical consult in patient care
- Observed doctors, nurses, social workers, and ethical consultants as they developed treatment plans during ICU multidisciplinary rounds at Stanford Hospital

Intern, PSG Hospitals, Coimbatore, Tamil Nadu, India **Summer 2014**

- General surgery: helped prepare operating room and assisted the surgical team with equipment during three surgeries
- Emergency medicine: cleaned patient beds, collected and organized patient records
- Health screenings in economically disadvantaged rural areas: organized crowds, set up equipment, assisted in efficiency of screening processes

Teaching/Leadership Experience

Head Teaching Assistant: Organic Chemistry I & II, Brown University, RI **Jan 2017 – May 2019**

Organic Chemistry I and II (CHEM0350 and CHEM0360) are challenging, highly-enrolled (400+) mid-level chemistry courses that emphasize the ability to apply existing knowledge of chemistry to novel situations.

- Led weekly problem sessions for up to 150 students to reinforce key concepts and answer student questions
- Designed problem sets to facilitate student understanding of course material and encourage critical reasoning
- Managed 9-12 junior teaching assistants, providing weekly feedback on their teaching and problem sets to help them teach more effectively

Teaching Assistant: Neural Systems, Brown University, RI **Fall 2017, 2018**

Neural Systems (NEUR1030) is a highly-enrolled (100+) mid-level neuroscience course that explores the neural mechanisms underlying sensory perception and motor function. The course emphasizes critical thinking and interpretation of primary scientific literature, and it is widely regarded by students as the most challenging neuroscience course at Brown.

- Taught a weekly recitation section, held office hours, graded exams, and met individually with students to discuss course content and develop effective studying and stress-management strategies
- Delivered a 1.5-hour lecture on motor control in the professor's absence

Counselor-in-Training Program Coordinator, Mountain Camp, CA **Summer 2016, 2017**

- Coordinated and implemented a professional and emotional development program for ninety 15- to 17-year-olds in 2017
- Led leadership and problem-solving training, mediated conflict resolution, and performed individual counseling
- Taught campers ages 7-14 to waterski, windsurf, and sail, emphasizing controlled risk-taking and a growth mindset
- De-escalated conflicts, inspired personal growth, and supported campers with empathy through emotional challenges

Skills and Interests

Languages

- Spanish (proficient); Tamil (basic)

Technical Skills

- Qualitative data analysis (Dedoose); Statistical analysis (SPSS)

Other Activities

- Alto saxophone (jazz); tennis; skiing; hiking; traveling
- Certified black belt in karate