PATRICIA COONEY, Ph.D.

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PROFESSIONAL SUMMARY:

Neuroscientist and science communicator with extensive experience in analytical thinking, science communication, and project conceptualization. Expertise in quantitative and qualitative analysis of complex datasets, plus written and oral presentation of highly technical work. Adept at creative problem-solving, passionate about teaching and mentorship, and proficient in cross-functional, collaborative project management.

PROFESSIONAL EXPERIENCE:

RUSSO PARTNERS   December 2023—Present
Account Coordinator   New York, NY
- Collaboratively developing and editing communications including press releases, social media text and graphics, and corporate messaging documents for 8 biopharma and medtech companies
- Revising and tailoring news articles to accurately and persuasively depict client companies' clinical trial progress and technology to investors, stakeholders, and the public

CENTER FOR THEORETICAL NEURO, COLUMBIA UNIVERSITY   October 2022—September 2023
Postdoctoral Research Scientist   New York, NY
- Developed research project to link experimental findings to a predictive model of circuit function
- Analyzed biological datasets and built Python simulations to test neural circuit mechanisms
- Furthered skills in quantitative analysis, and acquired knowledge of physics, statistics, and theory
- Designed and taught lecture on mathematical models of movement for ~30 trainees

PROJECT ALS   September 2021—December 2022
Part-time Science Communicator, Research & News Writer   New York, NY
- Consulted with team of non-profit organizers and lead researchers from 7 labs studying Amyotrophic Lateral Sclerosis to synthesize strategic communications to stakeholders
- Authored 4 online articles highlighting ongoing and published research supported by Project ALS
- Organized internal documentation of research developments and cross-functional team progress
- Developed familiarity with multifaceted drug development and clinical diagnostics approaches

COLUMBIA UNIVERSITY   September 2017—October 2022
NSF Graduate Research Fellow   New York, NY
- Secured $138,000 in funding for 3 years of doctoral research through an independently designed research proposal including scientific outreach objectives through the National Science Foundation
- Managed, planned, and adapted 4-year thesis project with 5 senior academic collaborators across 3 disciplines and 2 engineering collaborators, culminating in peer-reviewed publication in PNAS
- Communicated results in 3 public seminars and spearheaded manuscript writing and revision
- Consulted with 3 engineers and experimentalists to redesign common lab tool, impacting at least 5 novel investigations of behavior by streamlining experiment speed and improving data accuracy
- Mentored undergraduate researcher for 2 years, designing and adapting an independent project for student, teaching experimental and analysis skills
- Developed custom-written MATLAB scripts for data processing and statistical testing
- Visually and verbally summarized results for peer-reviewed publication in *Development*
- Cultivated expertise in neuroscience, genetics, development, quantitative imaging and data analysis

MAX PLANCK INSTITUTE OF NEUROBIOLOGY   September 2016—July 2017
Fulbright Scholar   Martinsried, Germany
- Acquired <u>Fulbright Scholarship</u> (<u>$17,500 in funding</u>, <u>top 25% of ~350</u> U.S. research applicants to Germany) through original proposal to conduct independent research project
- <u>Collaborated with 3 graduate students</u>, conducting whole brain functional imaging and data analysis

COLLEGE OF CHARLESTON   May 2013—April 2016
Research Assistant   Charleston, SC
- Secured <u>$24,500 in funding</u> for research activities and presentations by <u>synthesizing state of research and writing competitive research proposals</u>
- Communicated independent research results by authoring [a peer-reviewed publication](#), <u>an awardee conference talk, and multiple conference presentations</u>
- Collaborated on developmental and morphological studies with 2 senior students, resulting in [peer-reviewed publication](#), <u>2 local poster presentations, and 1 national poster presentation</u>
- Planned and implemented longitudinal behavioral study involving <u>qualitative and quantitative analyses</u> of behavior, claw morphology, and biomechanics in snapping shrimp

LEADERSHIP and OUTREACH:
- **Seminar Leader**: <u>Led weekly seminars</u> on select scientific papers; <u>facilitated group discussions</u> with ~20 undergraduates; cowrote exams on course materials (2021)
- **[Sprechgesang Institute](#) Artist:** <u>Planned and delivered 3 collaborative public lectures</u> on intersection of neuroscience research with topics in math, journalism, and the arts; <u>developed multimedia content</u> on sensory integration, objective observation, and predictability and chaos in machine learning (2017-21)
- **Graduate Peer Mentor:** Mentored 2 first-year graduate students in transition to student life (2021)
- **Graduate Program Recruitment Organizer:** Led content and logistics planning on team of 6 graduate students and 3 professors for 2 annual graduate program recruitment events (2019-20)

EDUCATION:

COLUMBIA UNIVERSITY   2017—2022
PhD, Neurobiology and Behavior   New York, NY
- <u>National Science Foundation Graduate Research Fellow</u> (3-year award of full stipend and tuition, <u>top 16%</u> of Life Sciences graduate researchers nationwide)

HONORS COLLEGE AT THE COLLEGE OF CHARLESTON   2012—2016
BS, Biology, Minors: Neuroscience, Music   Charleston, SC
- <u>Alumnus Speaker for Charleston Fellows Interview Weekend in 2022</u> (keynote speaker for event)
- <u>Barry M. Goldwater Scholar</u> (1-year tuition, <u>top 30% of 1200</u> applicants nationwide)
- Bishop Robert Smith Awardee (Highest, <u>most selective honor</u> for individual in graduating class)
- Swanson Scholar, William Aiken Fellow (<u>1 of 11</u> Honors students <u>awarded ~$80,000</u> of tuition)

KEY SKILLS:
- Effective multidisciplinary communication, spanning life and quantitative sciences and arts
- Strategic written, verbal, and visual presentation of scientific concepts for diverse audiences
- Creative problem-solving, innovation, and cross-functional collaboration
- Quantitative and qualitative analysis of complex and varied datasets
- Project conceptualization and management using primary and secondary research approaches
- Data management and computer programming in Python & MATLAB

ADDITIONAL INFORMATION:
- **Proficient in** Python; MATLAB; Adobe Illustrator & Express; Canva; Wix; Microsoft Office
- **Scribe**: Compiled lecture notes in Overleaf LaTeX, Math Tools for Theoretical Neuroscience (2020)
- **Singer**, **Outdoor Enthusiast, Dog Mom**