Can Kam

Hanover, NH · (603) 443-2272 · can.kam.27@dartmouth.edu · www.linkedin.com/in/cankam · https://www.cankam.com

EDUCATION

Dartmouth College, Hanover, NH, USA

September 2023 - June 2027

Bachelor of Arts, Major in Biological Chemistry and Neuroscience, Minor in Music:

GPA: 3.58/4.00

Relevant Coursework: Calculus, General Chemistry, Organic Chemistry, Intro to Neuroscience, Statistics, Cellular Biology, Cellular & Molecular Neuroscience, Behavioral Neuroscience/Psychology, Neuromarketing, Biochemistry, Mechanics, Beginning Music Theory, and Music - Health Equity - Culture.

Uskudar American Academy High School, Istanbul, Turkey

September 2018 - June 2023

Turkish High School Diploma and International Baccalaureate Diploma:

GPA: 96.11/100, 42/45

Honors/Awards: International British Biology Olympiad (BBO): Silver Medal, George Ripley Tracey Academic Excellence Award

Activities: JHU - Neurobiology: Cellular and Behavioral (4.00/4.00), and Harvard College - The Nature of Illness in Humans and Other Animals (4.00/4.00), President of Music, Neuroscience, and Health and Medicine Clubs.

RESEARCH & WORK EXPERIENCE

Geisel School of Medicine at Dartmouth - Yeh Lab, Hanover, NH, USA

June 2025 - Current

- Testing if prenatal alcohol shifts APP protein's processing - presenilin- $1/\gamma$ -secretase cuts APP to make small amyloid peptides, but in excess/misfolded state forms clump - using mouse brains (WT + 3xTg-AD) with western blots and immunohistochemistry, flagging early Alzheimer-linked changes.

Dartmouth Climate Communications Strategy Collective (DIRECT) Lab, Hanover, NH, USA

March 2025 - Current

- Designing a 2×3×2 between-subjects study comparing warm-glow induction, neutral control, and cold-prickle induction groups; capturing real-time neural, attentional, and physiological responses (EEG, eye-tracking, GSR, layered voice and sentiment analysis) to sustainability messages; and building a Hidden Markov Model via Python, integrating message framing, political ideology, and warm-glow intensity predicting shifts toward high-effort eco-behaviors.

Dartmouth Social Identity and Dialogue (SID) Lab, Hanover, NH, USA

September 2024 - September 2025

- Analyzed and edited video, audio, and physiological data for a project about the role of anxiety in race talk and interracial relationship: edited vide/audio recordings for clarity, refined BIOPAC data to ensure accuracy, and identified patterns revealing emotional and/or cognitive responses, supporting research on effective, empathetic race-related mentoring conversations.

Dartmouth Contextual Dynamics Lab, Hanover, NH, USA

August 2024 - June 2025

- Worked on a directed-forgetting project, preprocessing and analyzing fMRI/behavioral data in Python (parcellation, network modeling, HTFA) to make it research-ready and support context and episodic-memory analyses.

Florence Nightingale Hospital, Istanbul, Turkey

August 2024 - September 2024

- Learned taking medical history, conducting neurological physical examination, examining CT, MRI, EEG, ECG, and X-RAY scans, and prescribing drugs to patients with neurodegenerative diseases, spinal cord injuries, and epileptic problems.
- Conducted post and pre-op neurological consultations, enhancing patient recovery and care through thorough assessments and follow-ups.

Acibadem University Hospital and Engineering Faculty, Istanbul, Turkey

August 2021 - September 2022

- Supported Alzheimer's differential diagnosis in clinic by assisting post-visit exams and running eye-movement assessments using MATLAB to probe aphasia/lexico-semantic deficits, which improved diagnostic accuracy. Prepared targeted literature briefs informing cases, enhancing the patient care quality.
- Analyzed fNIRS/fMRI datasets using Python and ran cognitive tasks (n-back) on decision-making/emotion, leading to new insights into cognitive processes. Synthesized findings and contributed to manuscripts on Alzheimer's diagnosis, supporting advancements in research.

LEADERSHIP & SERVICE

American Lung Cancer Screening Initiative (ALCSI), Hanover, NH, USA

May 2025 - Current

- Chapter President and founding leader of the American Lung Cancer Screening Initiative (ALCSI) at Dartmouth College, directing campus efforts to expand community outreach, awareness, and access to lung cancer screening, partnering with Dartmouth Hitchcock Medical Center.
- Leading initiatives in advocacy and education in partnership with a national organization dedicated to early detection and cancer prevention programs.

PUBLICATIONS

Neuroscience Handbook - Neuroscience 101, Author, Caretta Books, 1st ed., Istanbul, Turkey

November, 2022

- Wrote and structured an accessible, illustrated primer on human neuroscience covering neural circuits, major brain systems, plasticity & memory, language
 & dyslexia, sleep/circadian rhythms, stress, attention, and decision-making for a general audience.
- To access the PDF version of this publication, visit: https://www.cankam.com/research-and-publications.

SKILLS & CERTIFICATIONS

- Computer/Quant: Python, MATLAB, R, Stata; Microsoft Excel, PowerPoint, Word; data visualization (Matplotlib, ggplot2, Plotly); Git/GitHub; Jupyter/RMarkdown.
- Spectroscopy/Separations: UV/Vis, fluorescence, IR; 2D/3D NMR (prep/basic interp); TLC/column; HPLC; GC–MS (prep).
- Molecular/Biochem: SDS-PAGE, agarose gel, Western blot, immunohistochemistry—fluorescent & DAB (antigen retrieval), enzyme kinetics, PCR/qPCR.
- Structural/Imaging: Cryo-EM exposure; X-ray crystallography exposure; brightfield/confocal microscopy.
- Classical Prep/Operations: Titration, buffer formulation, rotary evaporation, vacuum filtration, recrystallization; SOP/QA documentation; safe lab practice; literature review/scientific writing.
- Languages: Turkish, English, and German.
- Certifications: CITI Program Group 2: Social/Behavioral Research (Aug 2024 Aug 2027; ID 64434490).