# AYAN S. MANDAL, MD PHD

## Neurology Resident Physician

ayanmandal.mdphd@gmail.com

Boston, MA, USA

## TRAINING

Mass General Brigham Neurology Residency Boston, MA (current)

**Perelman School of Medicine at the University of Pennsylvania** Philadelphia, PA 05/2025 **MD**: Medicine (AOA honors)

University of Cambridge Cambridge, UK 07/2021

PhD: Psychiatry

**Thesis**: On the origins of glioma: insights from brain network mapping

Nominated for *Milo Keynes Prize for Outstanding Dissertation* in the School of Clinical Medicine

**Georgetown University** Washington DC 05/2018

**BS**: Neurobiology, Physics

## **MAJOR HONORS**

Gates Cambridge Scholarship (2018-2021)

Senior Class Marshal (2018)

**Barry Goldwater Scholarship** (2017)



# **RESEARCH EXPERIENCE**

**Research** Associate, *Center for Neurotechnology and Neurorecovery* (2025 – current) Angelique Paulk PhD, Neurology, Harvard University

**Research** Associate, *Brain-Gene Development Lab* (2020 – 2025) Aaron Alexander-Bloch MD PhD, Psychiatry, University of Pennsylvania

**PhD Researcher**, *Brain Mapping Unit* (2018 – 2021) John Suckling PhD, Psychiatry, University of Cambridge

**Research Assistant**, *Cognitive Recovery Lab* (2015 – 2018) Peter Turkeltaub MD PhD, Neurology, Georgetown University

**Research Assistant**, *Dzakpasu Lab* (2017 – 2018) Rhonda Dzakpasu PhD, Physics & Pharmacology, Georgetown University

## SELECTED SCHOLARLY WRITING

**Mandal, AS**, Romero-Garcia, R, Hart, MG, Suckling, J (2020). Genetic, cellular, and connectomic characterization of the brain regions commonly plagued by glioma. *Brain*.

**Mandal, AS**, Wiener, C, Assem, M, Romero-Garcia, R, Coelho, P, McDonald, A, Woodberry, E, Morris, RC, Price, SJ, Duncan, J, Santarius, T, Suckling, J, Hart, MG, & Erez, Y (2024). Tumour-infiltrated cortex participates in large-scale cognitive circuits. *Cortex*.

**Mandal, AS**, Gandal, MJ, Seidlitz, J, Alexander-Bloch, AF (2022). A critical appraisal of imaging transcriptomics. *Biological Psychiatry: Global Open Science*.

**Mandal, AS**, Romero-Garcia, R, Seidlitz, J, Hart, MG, Alexander-Bloch, AF, Suckling J (2021). Lesion covariance networks reveal proposed origins and pathways of diffuse gliomas. *Brain Communications*.

Romero-Garcia, R, **Mandal, AS**, Bethlehem, RAI, Crespo-Facorro, B, Hart, MG, Suckling, J (2022). Transcriptomic and connectomic correlates of differential spatial patterning among gliomas. *Brain*.

**Mandal, AS**, Fama, ME, Skipper-Kallal, LM, DeMarco, AT, Lacey, EH Turkeltaub, PE (2020). Brain structures and cognitive abilities important for the self-monitoring of speech errors. *Neurobiology of Language*.

### SELECTED POPULAR WRITING

A Stethoscope for the Brain: Preventive Approaches to Protect the Mind. Ayan S. Mandal. *New Degree Press*. 2022. (book)

**"Nothing but Science and Its Academic Delights"** Ayan S. Mandal. *The Scholar*. 2020. (article)

#### **RESEARCH FUNDING**

Medical Student Pediatric Research Prize (2025)

Value: \$500

**American Neurological Association Travel Award** (2024)

Value: \$500

**President Gutmann Leadership Award** (2024)

Value: \$1777

**Clinical Neuroscience Training Program Fellowship** (2022)

Value: \$2400

**Gates Cambridge Scholarship** (2018-2021)

Value: ~\$100,000

**Barry Goldwater Scholarship** (2017)

Value: \$7500

Lisa J. Raines Fellowship (2017)

Value: \$5000

**Neale-Oppenheimer Fellowship** (2016)

Value: \$4000

Howard Hughes Medical Institute Scholarship (2015)

Value: \$5000

# AD HOC REVIEWER

Brain, Brain Communications, Nature Communications, Scientific Reports

# **TEACHING EXPERIENCE**

Perelman School of Medicine

Doctoring 1 (2024)

Introduction to Clinical Medicine (2025)

University of Cambridge

Mathematical Biology (2019-2021)

Evolution & Behavior (2020-2021)

Experimental Psychology & Cognitive Psychology (2019-2020)

## INVITED TALKS AND PODCASTS

A Stethoscope for the Brain: Preventive Approaches to Protect the Mind New Books in Neuroscience Podcast (2022) New Books Network

Proposed origins and pathways of diffuse gliomas revealed by lesion covariance networks Neuro-oncology Programme Conference (2021) Cancer Research United Kingdom (CRUK)

On the origins of glioma: insights from brain network mapping Basic Research Seminar Series (2021) Northwestern University Department of Neurosurgery

Genetic, cellular, and connectomics characterization of the brain regions commonly plague by glioma Michaelmas Journal Club (2020) Cambridge Neuroscience Society

# **CONFERENCE TALKS**

**Mandal, AS**, Assem, M... & Suckling, J, Erez, Y (2022). Tumour-infiltrated cortex participates in large-scale cognitive circuits. Oral presentation at the Society for Neuro-oncology Meeting. Tampa Bay, FL.

**Mandal, AS**, Romero-Garcia, R, Hart, MG, Suckling, J (2020). Genetic, cellular, and connectomic characterization of the brain regions commonly plagued by glioma. Oral presentation at the Society for Neuro-oncology Meeting. Online.

**Mandal, AS**, Skipper-Kallal, LM...& Turkeltaub, PE (2017). Successful Self-Monitoring of Speech Errors Depends on Frontal White Matter Tracts. Platform Talk at the Academy of Aphasia. Baltimore, MD.

**Mandal, AS**, Skipper-Kallal, LM...& Turkeltaub, P.E. (2016). Successful Self-Monitoring of Speech Errors Depends on Frontal White Matter Tracts. Platform Talk at American Society for Neurorehabilitation. San Diego, CA.

# SELECTED POSTERS

**Mandal, AS**, Chaiyachati, BH, ...& Alexander-Bloch, AF, Seidlitz, J (2024). Identifying a common cause of macrocephaly using brain growth charts. American Neurological Association, Orlando, FL. *Abstract of Distinction*.

**Mandal, AS**, Romero-Garcia, R... & Alexander-Bloch, AF, & Suckling J (2021). Lesion covariance networks reveal proposed origins and pathways of glioma tumors. Organization for Human Brain Mapping, Online. *Merit abstract award.* 

**Mandal, AS**, Romero-Garcia, R... & Alexander-Bloch, AF, Suckling J (2021). Cortical vulnerability to neuropathologies predicted by genetic similarity to subcortical modules. Organization for Human Brain Mapping. Online. *Special selection for "Genetics" category.*