

This summer, Illinois undergraduates spent 10 weeks working alongside Mayo Clinic researchers and clinical teams through the **Summer Undergraduate Research Fellowship** (SURF), **Health Equity Research Experience** (HERE), and **Clinical Research Internship Study Program** (CRISP). Today, they share their research and insights from their time at Mayo Clinic.

SURF

- 01 **Karen Ann Subin**, Molecular & Cellular Biology, Psychology
Investigating the Role of RAB27B in Early Lung Adenocarcinoma Progression
- 02 **Aarushi Bafna**, Neuroscience, Marketing
Investigating the Role of Cux2 in Mediating Tumor in Neuron Interactions in Astrocytoma
- 03 **Cindy Chen**, Neural Engineering
Bipolar Disorder Associated Gene THSD7A Affects Functional Activity in Neural Organoids
- 04 **Mark Dai**, Neural Engineering
Intracranial Evidence for Social and Action Selectivity in the Human Lateral Visual Stream
- 05 **Lisari Edirisinghe**, Computer Science
Graph-Enhanced Large Language Models for Anemia-Related Clinical Itinerary Planning: An Exploratory Analysis
- 06 **Nadav Efrat**, Computer Science, Bioengineering
Plasma Nanoplastics and Their Associations with Clinical Characteristics, the Gut Microbiome, and Diet in Healthy Individuals and Cancer Patients
- 07 **Sarah Guo**, Bioengineering
Determining the Effect of Age on Antigen Presenting Cell Populations and Localization in the Colon and Small Intestine
- 08 **Amartya Palamadai Jayakumar**, MatSE, Biochemistry
Optimization of Expression and Purification of CRBN Constructs for Biophysical and Structural Studies of Endoxifen-PROTAC Ternary Complexes
- 09 **Calla Litteken**, Neural Engineering
Toward a Digital Twin Model of Excitation and Inhibition in Human Neural Aggregates

- 10 **Ariana Nielsen**, Biochemistry
Development of Measles Gene Editing Vectors with a miRNA-controlled Cas9
- 11 **Isabella Rivera**, Neuroscience
Evaluating Wave_Clus Parameters for Spike Sorting in Interoperative Microelectrode Recordings
- 12 **Stephen Thomas**, Bioengineering
Increasing Spinal Cord Stimulation Study Access for Patients with Lower Spinal Cord Injuries By Assessing Physiological Markers

Neuroscience Internship

- 13 **Ananya Nayak**, Bioengineering
The Impact of Mozart's K.448 on IED Severity as a Non-Invasive Therapeutic Cure for Epilepsy Patients

HERE

- 14 **Ashwitha Sankar**, Interdisciplinary Health Sciences, Molecular & Cellular Biology
Beyond Translation: What Makes Spanish-Language Extreme Heat Messages Actionable?
- 15 **Claire Skowron**, Chemistry, Statistics
Measuring and Addressing Housing-Related Influenza Hospitalization Inequities Through Epidemiologic Analysis and Community Partnership
- 16 **Anahí Tenorio**, Molecular & Cellular Biology
Developing the ACCESS Study: A Community-Engaged Approach to Designing a Qualitative Study on Healthcare Communication-Related Stress Among Spanish-Speaking Adults

CRISP

- 17 **Adeline Gilmore**, Interdisciplinary Health Sciences
Comparing the HOUSES Index with Traditional Socioeconomic Measures as Predictors of Venous Thromboembolism Following Trauma
- 18 **Cozette Thatcher Merza**, Psychology
Brains Beyond the Cut: Does Neuromodulation Improve Seizure Control in Lennox-Gastaut Syndrome after Corpus Callostomy and Lesionectomy