



Penn CURF
CENTER *for* UNDERGRADUATE RESEARCH & FELLOWSHIPS

FALL RESEARCH EXPO

Monday, September 16, 2024
5:00 – 6:30 pm
Houston Hall

The University of Pennsylvania's Center for Undergraduate Research and Fellowships is the University's hub for undergraduate student research, as well as the launch pad for Penn students seeking to apply for nationally competitive scholarships and fellowships

Welcome to CURF's Research Expo!

Over 350 undergraduate researchers are eager to share their research with you. We hope you enjoy learning about the array of opportunities embraced by undergraduates at one of the world's leading research universities.

***Interested in getting involved in
research and/or fellowships at Penn?***

***Visit us at curf.upenn.edu for more
information about individual advising
and peer support opportunities***

Information Sessions and Workshops

Getting Started in Research

“How to” for specific fields of research

Getting to Know Faculty

Research Skills Series

Social Impact Research

Fellowships 101 Information Sessions

Fellowships 201 Information Sessions

Fulbright Scholarship Information Sessions

Graduate Study in the United Kingdom

*Pursuing International Summer Fellowship
Opportunities*

CURF Programs and Academic Initiatives

The President's Engagement Prize (PEP) supports students with financial support for both living and project expenses to develop and implement a promising local, national, or global initiative

The President's Innovation Prize (PIP) provides living and project expenses to envision and implement an innovative commercial venture to make a positive difference in the world

The Penn Undergraduate Research Mentoring Program (PURM) matches students with faculty researchers from across all twelve schools

The Summer Humanities Internship Program (SHIP) provides students with apprentice positions in a cultural, historical, or archival setting

Jumpstart for Juniors provides students the opportunity to gain invaluable investigative skills in the summer after their junior year

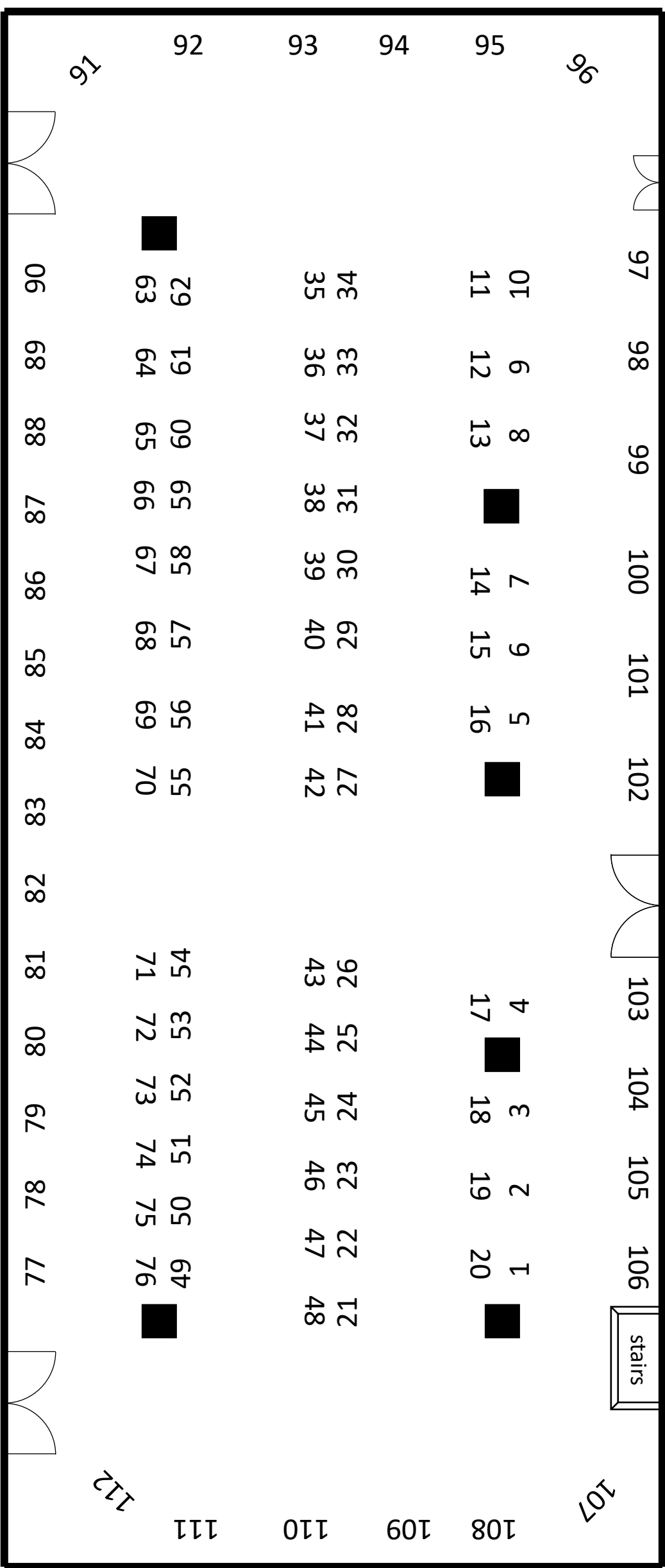
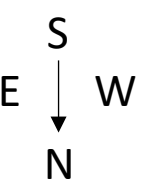
The University Scholars Program provides support for in-depth research during their undergraduate career

The Benjamin Franklin Scholars Program offers intellectually stimulating small seminars

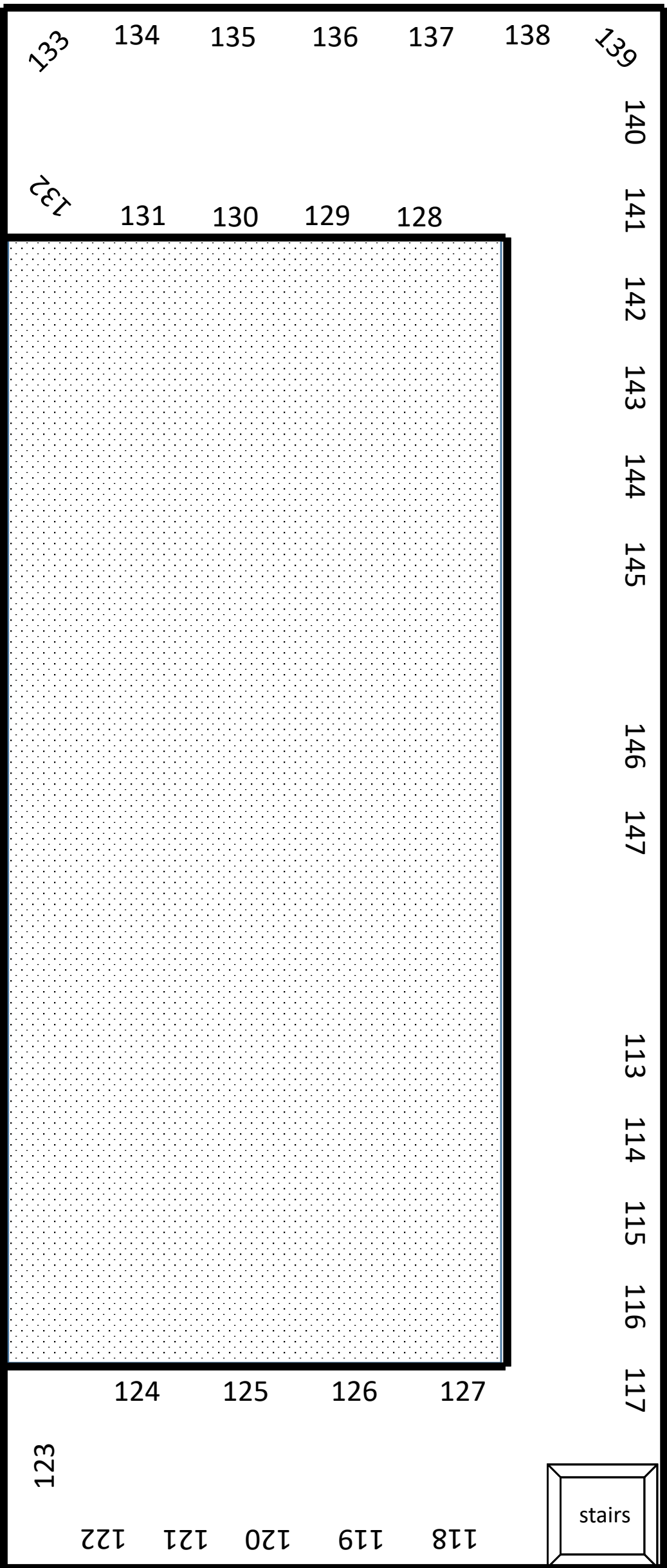
and many more!

Houston Hall
Marketplace

Welcome table



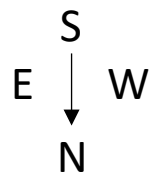
Hall of Flags
1st floor



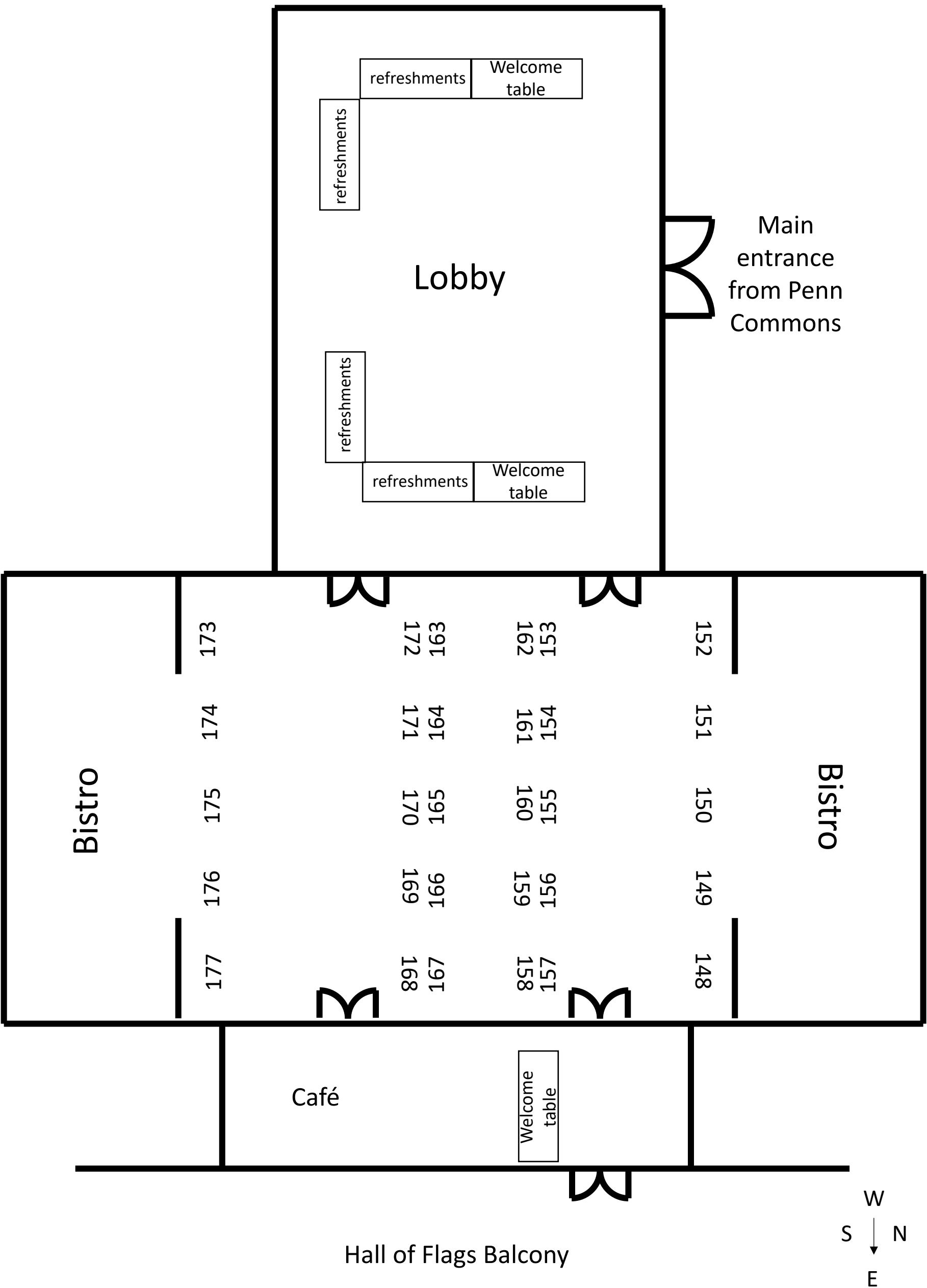
Café

Welcome table

stairs



Hall of Flags
2nd floor/balcony



Lobby

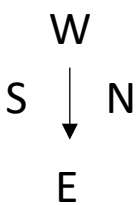
Main entrance from Penn Commons

Bistro

Bistro

Café

Hall of Flags Balcony



refreshments Welcome table

refreshments

refreshments

refreshments Welcome table

173

174

175

176

177

172 163 162

171 161 160

170 169 168

168 158

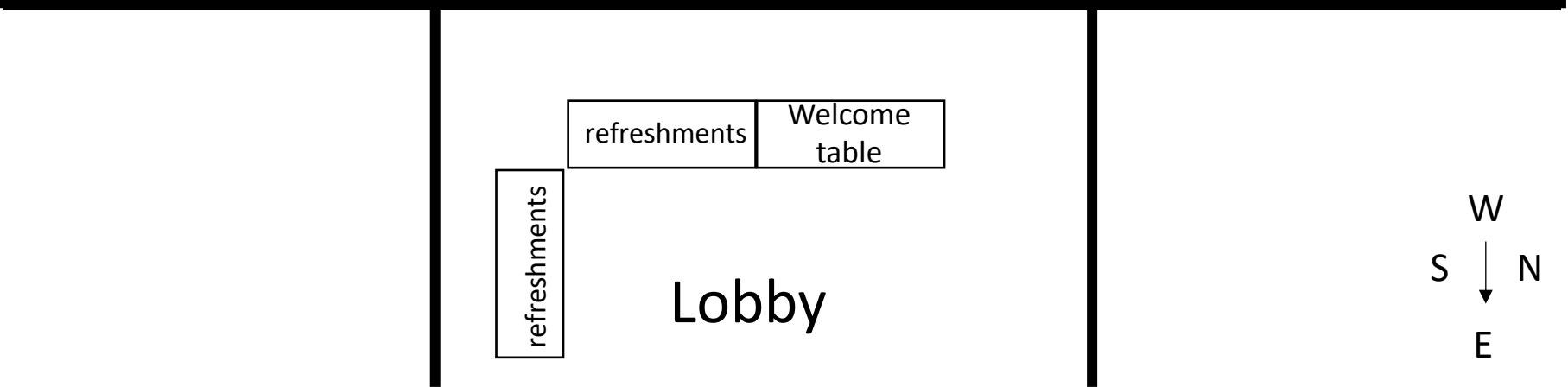
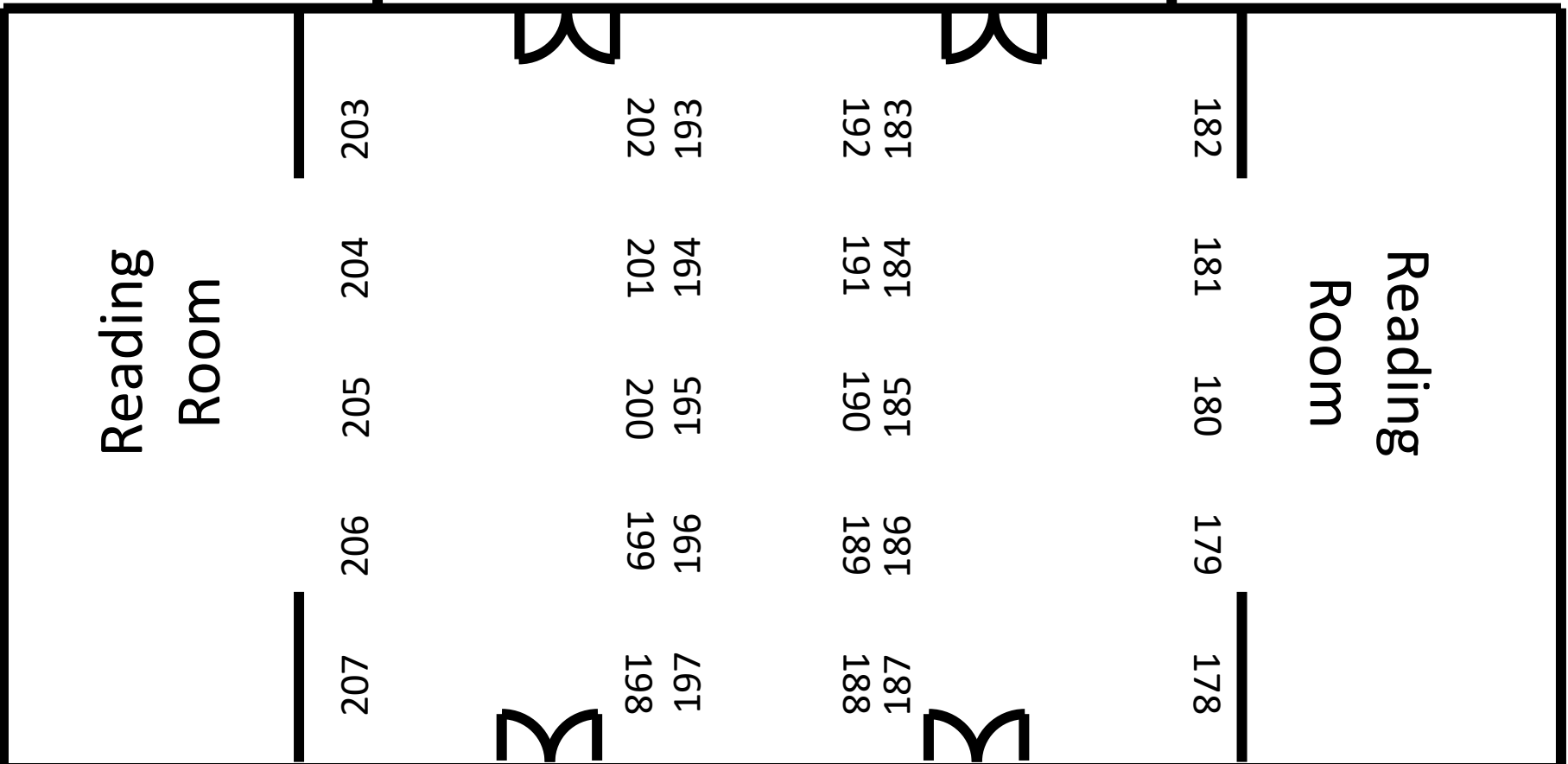
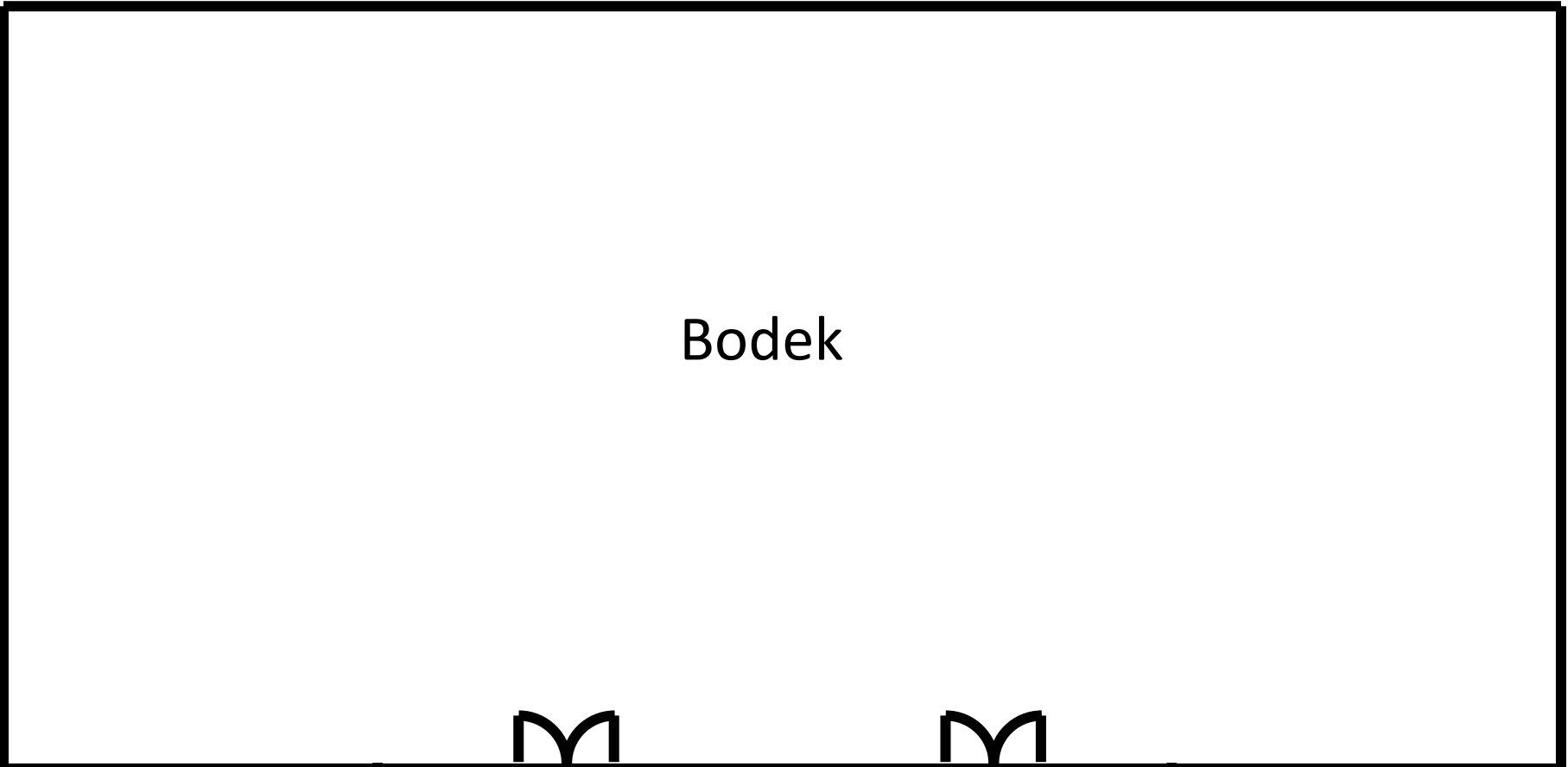
153 152

151 150

149 148

157 156

Welcome table



Bodek

Bodek Ante-Room

Reading Room

Reading Room

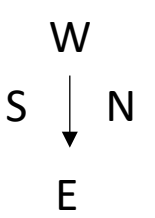
Lobby

Welcome table

refreshments

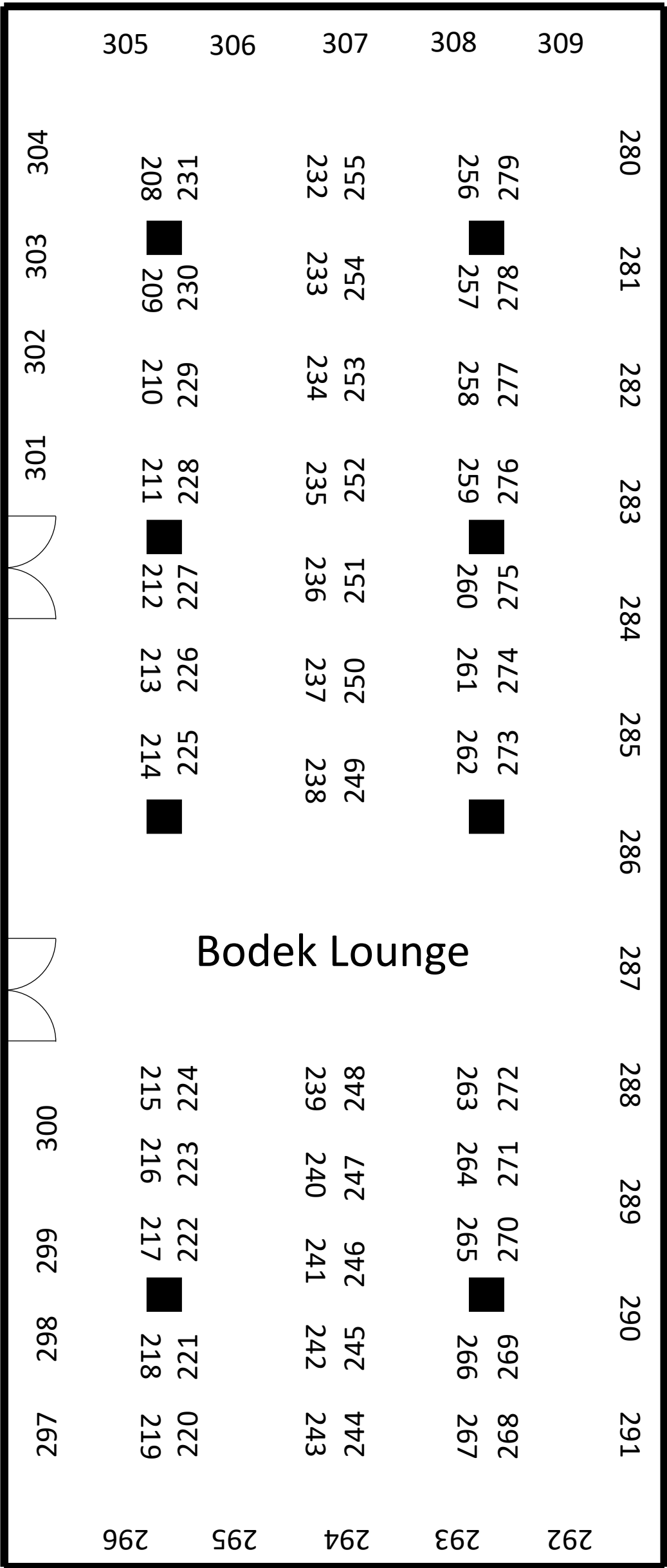
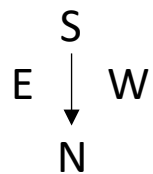
refreshments

Welcome table



Spruce Street

Penn Commons



Bodek Lounge

Bodek Ante-Room

Welcome table

Class of '49

Brachfeld Room

Golkin Room

Ben Franklin Room

324

325

326

327

328

329

330

Welcome table

HH 2nd floor lobby

323

322

321

320

319

318

317

310

311

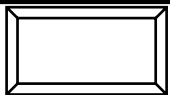
312

313

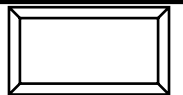
314

315

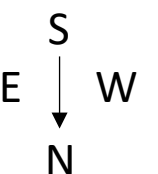
316



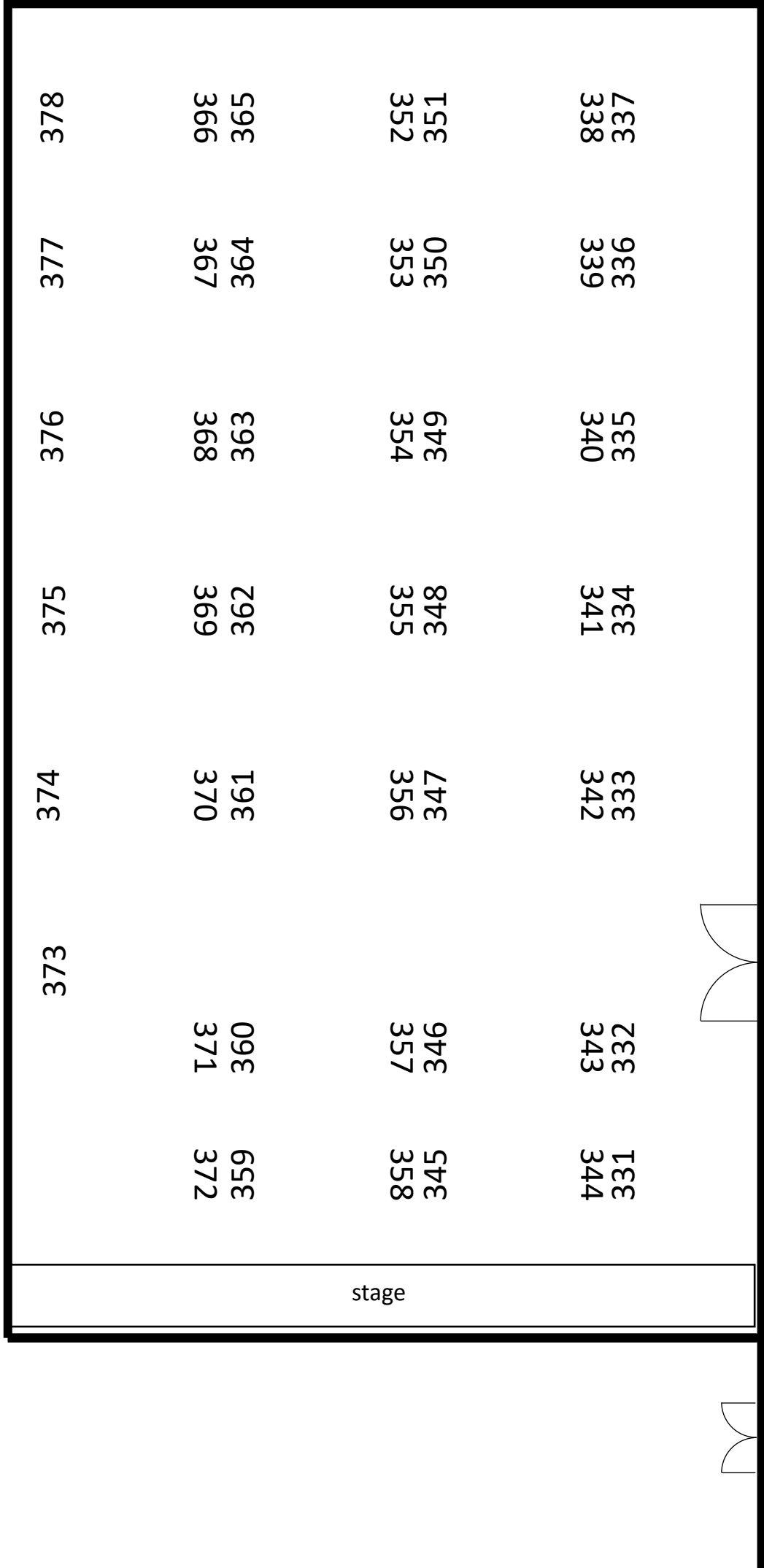
stairs



stairs

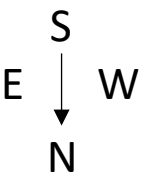
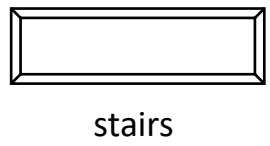


Class of '49 on 2nd floor of Houston Hall



HH 2nd floor lobby

Welcome table



Poster Locations by Room

Hall of Flags, First Floor (Posters 1-112)	11
Hall of Flags, 2 nd Floor (Posters 113-147).....	17
Bistro (Posters 148-177)	19
Reading Room (Posters 178-207)	21
Bodek Lounge (Posters 208-309)	23
Houston Hall 2 nd floor Lobby (Posters 310-330)	29
Class of '49 (Posters 331-378).....	31

Hall of Flags, First Floor (Posters 1-112)

1. **Taiwo Adeaga (COL 2026)**
Ziana Sundrani (COL 2027)
Advisor: Daniel Swingley
A Simple Model of Infant Word Finding Using Computational Phonetics Embeddings
2. **Hemanta Adhikari (COL 2027)**
Advisor: Crystal Conn
Understanding the Activation of the Integrated Stress Response in Prostate Cancer Cells
3. **Hannah Agarwal (COL 2026)**
Clever Earth (COL 2026)
Raunak Mandal (WH 2026)
Corey Rudman (COL 2026)
Advisor: Paul Robinson
Experiments in Criminal Justice Reform
4. **Alvin Agbenyegah (COL 2027)**
Angele Diamacoune (COL 2026)
Ava Mir (COL 2027)
Lindsay Muneton (COL 2027)
Hannah Sung (COL 2026)
Advisor: Wendy Roth
Cracking the Code: Studying the Social Impact of DNA Testing Through Qualitative Interview Coding
5. **Marbella Aguilar (COL 2026)**
Advisor: Joseph A Janicki
Bone Health in Pediatric Patients: A Multicenter Study of Bisphosphonate Utilization
6. **Fareeha Alam (COL 2027)**
Advisor: J. Nicholas Betley
Investigating the Non-Motor Functions of the Cerebellum: Social Behavior, Aggression & Feeding
7. **Emily Alchaer (COL 2025)**
Advisor: Matthew Weitzman
Expanding Roles of DNA Repair Protein Rad51 in Transcription
8. **Iman Ali (SEAS 2027)**
Advisor: Michael Mann
Connection Between Heatwaves and Planetary Waves: A Tale of Ten US Cities
9. **Ayman Alwaqzah (COL 2026)**
Advisor: Maria Basil
Assessing the Impact of NOTCH Signaling on RAS Cell Progenitor Function: Implications for Pathophysiology
10. **Melinda Amorosi (COL 2027)**
Cole Bruen (WH 2027)
Advisor: Gene Buckley
Preserving a Critically Endangered Language: Optimizing the Kashaya Linguistic Database
11. **Sophia Ampgkarian (COL 2025)**
Advisor: Siarhei Biareishyk
Frozen Russian Assets and What to Do with Them: Geoeconomics and U.S. Policy
12. **Andrea An (SEAS 2025)**
Advisor: Katherine Uyhazi
Developing an In-vitro Model of Gyrate Atrophy for Gene Therapy
13. **Naseeb(ullah) Andar (COL 2026)**
Advisor: Kiran Musunuru
A Genetic Solution to Marfan Syndrome
14. **Arjun Arasappan (SEAS 2026)**
Advisor: Nat Trask
Augmenting the Forward Process of Variational Diffusion Models with Reversible Dynamics
15. **Arush Arora (SEAS 2027)**
Advisor: Bomyi Lim
Automation of mRNA-Transcript Measurement Algorithms for Embryonic Biomedical Imaging
16. **Jada Asamoah (COL 2027)**
Advisor: Arnold Mathijssen
Bacterial Motility in Flow Networks
17. **Allison August (COL 2025)**
Advisor: Douglas Frye
Exploring the Development of Theory of Mind: The Role of Parenting
18. **Alicia Augustin (COL 2026)**
Vikram Sundaram (COL 2027)
Advisor: Rand Quinn
An Ecosystems Approach to Youth Community Involvement: Understanding Motivations, Opportunities, and Processes

- 19. Victoria Avanesov (COL 2026)**
 Advisor: Jed Esty
The 39 Steps and the Cross-Atlantic Evolution of the British Thriller: Studying John Buchan and Alfred Hitchcock
- 20. Maria Awadalla (COL 2026)**
 Advisor: Kendall Lawrence
Can Aortic Strain be used to Predict Future Risk of Aortic Dissection?
- 21. Ernesto Baci (COL 2026)**
 Advisor: Kelly Jordan-Scuitto
Investigating Intercellular Interactions between Astrocytes and Microglia During HIV Infections
- 22. Salimatou Bah (COL 2027)**
 Advisor: Jun (Jay) Zhu
Analyzing Streptococcus infantarius Impact on Vibrio cholerae Gene Expression via Transposon Mutagenesis
- 23. Misha Bankulla (COL 2026)**
 Advisor: Damaris Lorenzo
Effects of SPTBN1 Variants on Corpus Callosum Morphology
- 24. Pedram Bayat (SEAS 2027)**
 Advisor: Marco Ruella
Enhancing Transduction Efficiency of Chimeric Antigen Receptor T Cells With RetroNectin and Poloxamer 407
- 25. Keagan Beeravolu (COL 2027)**
 Advisor: Michael Lampson
Paradoxical Rapid Evolution of Centromeric DNA: The Role of DNA Shape and Architectural Proteins
- 26. Jasmeiry Bello (COL 2025)**
 Advisor: Emily F. Gregory
Providing Comprehensive Care to Pregnant Teenagers
- 27. Brittney Benjamin (COL 2025)**
 Advisor: Samantha Winter
Social Cohesion and Mental Wellbeing in Kenyan Informal Settlements
- 28. Sydney Bergstrom (COL 2026)**
 Advisor: Timothy Machado
Using Deep Learning to Quantify Mouse Behavior
- 29. Nishanth Bhargava (COL 2027)**
 Advisor: Siarhei Biareishyk
Building a Revolutionary Movement in Paris, 1968
- 30. Sangeetha Bhuyan (COL 2026)**
 Advisor: Rebecca Ahrens-Nicklas
Optimizing Gene Therapy for CLN3 Disease
- 31. Leo Biehl (COL 2025)**
 Advisor: Stephen Fried
Community Land Trusts: A Comparative Analysis of Organizing Efforts
- 32. Uzair Bilal (COL 2027)**
 Advisor: Lewis Chodosh
JAK1 and JAK2 Specific Inhibitors in Breast Cancer Dormancy
- 33. Fatimah Bisiriyu (COL 2027)**
 Advisor: Yun Ding
Temperature Effect on Transgene Drosophila Melanogaster Females' Likelihood to Perform Wingspread During Courtship
- 34. Daniel Boyko (COL 2026)**
 Advisor: Erik Wibbels
Migration in Ghana: Advising Policy from a Data Perspective
- 35. William Brandes (COL 2025)**
 Advisor: William Sturkey
The Beatles and the Sixties
- 36. Matthew Breier (COL 2026)**
 Advisor: David Barnes
The 1918 Influenza Pandemic in Philadelphia's African-American and Immigrant Neighborhoods
- 37. Corey Brooks (COL 2026)**
 Advisor: Sadé Richardson
Sharing Is Not Caring: How Harm Reduction Strategies Promote HIV Health
- 38. Dillon Brown (COL, WH 2025)**
 Advisor: Alexander Fanaroff
Increasing Physical Activity to Improve Cardiovascular Health in Racially Diverse Cancer Survivor Communities
- 39. Alex Bui (COL 2025)**
 Advisor: Rebecca Waller
Identifying Callous-Unemotional Behaviors in Early Childhood: Leveraging Observational Methods to Evaluate Positive Affect Within Dyadic Interaction

- 40. Corrine Cai (COL 2027)**
Alia Goldstein (COL 2027)
 Advisor: Sarah Bush
Non-Governmental Organizations at a Global Crossroad
- 41. Randy Cai (COL 2026)**
 Advisor: Alice Chen-Plotkin
MIA Risk SNP 2233154 Alters Amyloid-Beta Pathology in Alzheimer's Disease Individuals
- 42. Alecia Cameron (COL 2027)**
 Advisor: Shaon Sengupta
Effect of Environmental Light Disruption on Circadian Gated Lung Injury
- 43. Angie Cao (SEAS 2026)**
Dan Kim (SEAS 2026)
 Advisor: Duncan Watts
Quantifying Common Sense: A Framework for Individual and Collective Assessment
- 44. Jacob Cao (COL 2026)**
 Advisor: Gary Wu
The Role of Dietary Carbohydrates in Bacterial Permease Physiology and Antibiotic Persistence
- 45. Anna Carroll (COL 2027)**
Kevin Shen (COL 2027)
Nathan Wu (COL 2027)
 Advisor: Wenqin Luo
Development of a Pipeline for Accurate Cell Segmentation
- 46. Devin Casano (COL 2026)**
 Advisor: Parrish Bergquist
Community Engagement on Clean Energy Siting
- 47. Emmie Chacker (COL 2025)**
 Advisor: Sydney Shaffer
Investigating Non-Genetic Mechanisms of Melanoma CD8+ T Cell Evasion
- 48. Cedric Chan (COL 2026)**
Andrew Chang (COL 2027)
Ani Petrosyan (SEAS 2026)
Annabella Tian (SEAS 2026)
 Advisor: Mayur Naik
CLAM: Unifying Finetuning, Quantization, & Pruning by Chaining LLM Adapter Modules
- 49. Aarav Chandra (COL 2026)**
 Advisor: Marc Fuccillo
Revealing Neurogenetic Signatures: Machine Learning Uncovers Repetitive Behaviors in ASD and OCD Knockout Mice
- 50. Krishna Chandrasekhara (COL 2025)**
 Advisor: John Kanbayashi
Rainwater Harvesting and its Impacts on Public and Community Health in Mexico City
- 51. Tiffany Chang (COL 2027)**
 Advisor: Andrew Santiago-Frangos
De Novo Identification of Conserved DNA Sequence Motifs that Regulate RNA-Targeting CRISPR Immune Systems
- 52. Brendan Chapko (COL, WH 2025)**
 Advisor: Michael Mann
Understanding the Damage Potential of Extratropical Winter Storms in the American Northeast
- 53. Amanda Chen (COL 2027)**
 Advisor: Ahmed Diab
Exploiting DNA Repair Mechanisms in HPV Associated Oropharyngeal Cancers
- 54. Bingling Chen (COL 2025)**
 Advisor: Kyle Vining
Investigating the Stiffness Response of Mesenchymal Stromal Cells Using Artificial Extracellular Matrix
- 55. Caitlyn Chen (COL 2026)**
 Advisor: Mark Allen
Needle-Injectable Oxygen Microsensors for Diagnosis of Mitochondrial Myopathies
- 56. Guyin Chen (COL 2025)**
 Advisor: Virginia Lee
Evaluate the Efficacy of AXL Inhibitor Bemcentinib in 5xFAD Mouse Model for Alzheimer's Disease
- 57. Ian Chen (COL 2026)**
 Advisor: Douglas Wallace
African and European Cybrids Display Significant Transcriptional Differences at Basal Conditions
- 58. Leon Chen (COL 2027)**
 Advisor: Vishnu Potluri
Outcomes Following D+/R- Kidney Transplantation: A Retrospective Cohort Study

- 59. Richard Chen (COL 2025)**
 Advisor: Hong Xu
Optimizing Ultrasensitive RT-QuiC Assay on AD tau Seed-Monomer Reactions
- 60. Makayla Cheng (SEAS 2027)**
 Advisor: Jina Ko
Diagnosis of Major Depressive Disorder in Adolescents through Analysis of Oral Microbiome Compositions
- 61. Melody Cheng (COL 2025)**
 Advisor: Ethan Goldberg
Age-Dependent Impairment of Synaptic Transmission in a Mouse Model of KCNC1 Epilepsy
- 62. Siddharth Chitta (COL, SEAS 2026)**
 Advisor: Alfredo Quinones-Hinojosa
Investigating the Role of the SPAK/OSR1 Kinases on Chemotherapeutic Resistance and NF- κ B Signaling in Glioblastoma
- 63. Erin Choi (COL 2027)**
 Advisor: Erica L. Carpenter
Developing ddPCR Assays for the Detection of Glioblastoma Tumor DNA in CSF
- 64. Kaynath Chowdhury (COL 2026)**
Christina O'Farrell (COL 2026)
 Advisor: Claire Finkelstein
Responding to Human Shielding Under the Department of Defense Civilian Harm Mitigation and Response Action Plan (CHMR-AP)
- 65. Lumi Christensen (COL 2027)**
 Advisor: Sarah-Marie Belcastro
Degrees of Vertices in the Origami Flip Graph of the 2 by n Miura-ori
- 66. Seyoon Chun (COL 2026)**
 Advisor: Andy Tan
"Are you just going to throw us away?": A Scoping Review of Culturally Tailored Tobacco Interventions of Religious LGBT+ Groups
- 67. Emily Chung (COL 2027)**
 Advisor: Lewis Chodosh
Identifying Gene Candidates Regulating Residual Tumor Cell Behavior in Breast Cancer Dormancy
- 68. Nicole Chung (COL 2027)**
 Advisor: Matthew Hayes
The Physiological Effects and Neuronal Activity of Rats Treated with GLP-1 and Ex-4: A Novel Treatment for Obesity
- 69. Jeremy Cimino (NUR 2026)**
Sahar Maleki (COL 2027)
 Advisor: Lorraine Levitt Katz
Polygenic Risk for Type 2 Diabetes in Children and Adults
- 70. Maria Cline (SEAS 2026)**
 Advisor: Andrew Tsourkas
Antibody Mediated Degradation of Intracellular Protein Targets
- 71. Miranda Cochran (COL 2025)**
 Advisor: Rebecca Waller
Are Adverse Childhood Experiences Related to Emotion Recognition in 3 - 4 Year Old Children?
- 72. Tyler Coyne (COL 2026)**
 Advisor: Rebecca Ganetzky
Mitochondrial Complex II Abnormalities in Response to Complex V Deficient Cells
- 73. Caleb Crain (COL 2025)**
 Advisor: Anne Berg
The Game Lasts more than 90 Minutes: Soccer in Nazi and Postwar Germany
- 74. August Crane (COL 2026)**
Ria Rege (COL 2026)
 Advisor: Guy Grossman
Climate Politics and Policy: Effect on Political Attitudes and Behavior
- 75. Heaven Cross (COL 2026)**
 Advisor: Andrew Edmondson
Glycoproteomic Insights into GALNT2-CDG Pathology
- 76. Alana Cyril (COL 2027)**
 Advisor: Jeffrey Field
Biodiversity Within the Soil Microbiome in Response to Zinc Contamination
- 77. Daniel Dai (COL 2025)**
 Advisor: Virginia Lee
Investigating Granulovacuolar Degeneration in Alzheimer's Disease and Other Tauopathy Models

- 78. Derene Darkwah (COL 2027)**
 Advisor: Mustafa Mir
Drosophila Kinetics with the Use of the Suntag System
- 79. Assata Dawson (COL 2027)**
 Advisor: Jeet Patel
Ectopic Acvr2 Regulates Mesoderm Induction and Patterning via TGF- β Signaling Pathways
- 80. David Deng (COL 2025)**
 Advisor: Hardeep Dhillon
Examining the History, Resistance to, and Legacy of Anti-Asian Segregation in Philadelphia, 1920-1940
- 81. Madison Dengel (COL 2027)**
Amber He (SEAS 2027)
 Advisor: Ayelet Ruscio
The Temporal Relationship Between Sleep Quality and Affect: A Multimodal Approach
- 82. Karina Devas (COL 2026)**
 Advisor: David Reibstein
Green Branding Project for the Khánh Hòa Province
- 83. Coumba Diagne (COL 2027)**
 Advisor: Corlett Wood
Investigating Plant-Symbiont Relationships: Nodulation, Rhizobia Strains, and Nematode Infection
- 84. Cristina Diaz (COL 2026)**
Tasmiah Haque (COL 2027)
 Advisor: Gareth Roberts
The Impact of Framing on Endangered Language Learning
- 85. Nina Dilworth (COL 2026)**
 Advisor: Holger Sieg
How Affordable is Housing in NYC? An Empirical Analysis of Housing Expenditure Shares in 2021
- 86. Matilda Dingemans (SEAS 2027)**
 Advisor: Marc Miskin
Propulsion of AC-Driven Microrobots
- 87. Ivesavega Djianto (SEAS 2026)**
Justin Duong (COL 2027)
Jisun Hwang (COL 2027)
Maria-Christina Nicolaidis (SEAS 2027)
Luke Stoner-Eby (SEAS 2027)
Christian Stuit (SEAS 2027)
 Advisor: John Spiesberger
Whale Location: Stopping the Speed of Sound
- 88. Ethan Dong (SEAS 2027)**
 Advisor: Martha Lester
Atmospheric Implications of Modern Day Refrigerants
- 89. Lola Dong (SEAS 2027)**
Allen Yan (COL 2027)
 Advisor: Huafeng Wei
Therapeutic Effect of Intranasal Dantrolene on Symptoms and Pathological Pathways of Major Depressive Disorder
- 90. Vinny Dong (COL 2027)**
 Advisor: Crystal Conn
Effects of Integrated Stress Response on Gene Regulation in LNCaP Cells
- 91. Iman Dorman (COL 2026)**
 Advisor: Rebecca Simmons
Analyzing mtDNA in Plasma-Derived Extracellular Vesicles from Pregnant Black Women to Predict Adverse Outcomes
- 92. Phillip Duarte (SEAS 2027)**
Andrew Wang (COL 2026)
 Advisor: Ali Nabavizadeh
Using Pathomic Imaging Data to Predict Histological Classifications of Pediatric Medulloblastoma
- 93. Lila Dubois (COL 2025)**
 Advisor: Samuel Martin
Representations of the Caretaker and the Cared For: Women and Dementia in Annie Ernaux
- 94. Agnes Duch (NUR 2027)**
 Advisor: Afrin Sagir
Impact of Psychometric Factors on the Efficacy of Interlaminar Epidural Steroid Injections
- 95. Chimere Egesi (COL 2026)**
 Advisor: Daniel Mindiola
The Synthesis and Reactivity of a 4-coordinate Bis-Tellurido Titanium Complex
- 96. Chigozie Ekeabu (COL 2027)**
 Advisor: Michael Lamson
Using Chemical Pharmacology to Gain Spatio-Temporal Control over Anaphase in Cells
- 97. Raphael Englander (COL 2027)**
 Advisor: Anjan Chatterjee
Assessment of Aesthetic Participation (AAP)

- 98. Lily Erdogan (COL 2027)**
 Advisor: Roy Hamilton
Comparing Phonemic Features and Production Processes in PPA Subtypes
- 99. Lucía Espina Vázquez (COL 2026)**
 Advisor: Amelia Eisch
Is space radiation a risk to social processing on a crewed mission to Mars? The effects of whole-body ⁵⁶Fe on cFos+ cell number and stress-mediated social conflict brain networks in mice
- 100. Maha Essaidi (SEAS 2025)**
 Advisor: Joel Boerckel
Postnatal Development of the Goat Phalanges and Metacarpal Trabecular Architecture
- 101. Mmachi Ezigbo (COL 2027)**
 Advisor: Sarah Tishkoff
Characterizing Sickle Cell Disease Variants in a Sub-Saharan African Cohort of 6,000 Whole Genome Sequences
- 102. Antwan Ezimora (COL 2027)**
 Advisor: Elliot Lipeles
Particle Physics and the Comparison of The Tracks vs. The Calorimeter
- 103. Katie Fang (WH 2027)**
 Advisor: Brian Feinstein
Small Business Favoritism: Assessing Impacts of Exemptions in U.S. Federal Law
- 104. Carson Fisher (COL 2026)**
 Advisor: Farah Jan
Tracking Changes in International AI Policy
- 105. Miguel Francisco Mercado (COL 2027)**
Trent Leung (COL 2027)
Laissa Senatus (NUR 2027)
 Advisor: Harald Schmidt
Utilization and Access Outcomes of the Area Deprivation Index (ADI): A Scoping Review
- 106. Nia Frederick (COL 2027)**
 Advisor: Emily Gregory
Primary Care Interventions to Support Breastfeeding and Newborn Care
- 107. Michael Fuentes (COL 2026)**
 Advisor: Sade Bonilla
Navigating Choices: An Analysis of Factors Influencing Community College Students' Program of Study
- 108. Lily Futeran (COL 2026)**
 Advisor: Melanie Pellecchia
Breaking It Down: An Example of Effective Information Dissemination
- 109. Om Gandhi (COL, SEAS 2025)**
 Advisor: Michael Hogarty
Elucidating Primary Anti-Tumor Mechanism of Dual Polyamine Synthesis Inhibition and Proline-Arginine Depletion Therapy in Mice with Neuroblastoma
- 110. Tanvi Garneni (COL 2027)**
 Advisor: Allyson Mackey
Associations between Attention Problems and Intensity of Movement in Adolescence
- 111. Shambhabi Gautam (SEAS 2027)**
 Advisor: Zhaolan Zhou
CDKL5 Gene Knock-Out Effect on Interneurons In Vivo in Mice
- 112. Angela Ge (COL 2027)**
 Advisor: Derek Oldridge
AI-Driven Image Analysis for Improved Cancer Classification from Clinical Pathology Images

Hall of Flags, 2nd Floor (Posters 113-147)

113. Carol Ge (COL 2026)

Advisor: Paula Oliver
Cul5 Controls Megakaryocyte vs Erythroid Bias

114. Isabella Goosen (COL 2026)

Sebastian Rodriguez (SEAS 2027)
Diego Tirado (SEAS 2026)
Advisor: Christopher Mauger
Electronics Research and Development for Cutting-edge Neutrino Experiments

115. Devin Gottlieb (SEAS 2026)

Advisor: Joel Boerckel
Effects of Maternal Exercise on Embryonic Bone Development

116. Nikhil Grobes (COL 2026)

Advisor: Lisa Schwartz
Prompting for Precision: The Role of the Patient Voice in Developing a Measure of Transition Readiness for Adolescents and Young Adults with Sickle Cell Disease

117. Sanan Gueyikian (COL 2024)

Advisor: Dana Graves
Histological Evaluation of Enhanced Wound Healing in STZ-Induced Diabetic Mice Following S100A11 Neutralization

118. Jaskeerat Gujral (COL 2025)

Advisor: William Welch
Intersection of Artificial Intelligence and Neurosurgery to Optimize Adolescent Idiopathic Scoliosis Treatment

119. Yashna Gupta (SEAS 2027)

Advisor: Riccardo Gottardi
Profiling the Immune Response in Vocal Fold Scarring

120. Akhila Guttikonda (COL 2026)

Advisor: Sarah Kagan
Gamifying Age Friendly Healthcare Competency for Continuing Education

121. Sreehita Hajeebu (COL 2027)

Advisor: Jessica Foster
Development of Murine mRNA CAR T Cells for Pediatric CNS Tumors

122. Bilkiss Haman (COL 2026)

Advisor: Erik Wibbels
Dual Pathways to Sustainability in West Africa: Promoting Worker Rights, Ethical Practices and Environmental Responsibility in Cocoa Agriculture and Artisanal Diamond Mining

123. Lauren Hamlette (COL 2027)

Advisor: Ahmed Moustafa
Testing PCR-Based Method For Identifying Staph. Aureus Clonal Variants

124. Maya Hardy (COL 2025)

Advisor: Katherine Cotter
Music Making and Social Connection: A Daily Diary Study of Musical Experiences

125. Siming He (SEAS 2025)

Advisor: Pratik Chaudhari
From NeRFs to Gaussian Splats, and Back

126. Daphne Hicyilmaz (COL 2027)

Advisor: Katherine France
Perceptions of Dentist Roles in Vaccination

127. Jory Hirshman (COL 2025)

Advisor: Kate Townsend Creasy
Metabolic Impacts of Ketogenic Diet on PPP1R3B-mediated Liver Disease

128. Kamara Holmes (COL 2025)

Advisor: Elizabeth Heller
Synthesis and Characterization of Cytosporone B derivatives: Small Molecule Activation of Nr4a1, a Potential Target for Treating Cocaine Use Disorder

129. Jonathan Hong (SEAS 2026)

Kevin Yao (SEAS 2027)
Advisor: Gushu Li
HATT: Hamiltonian-Aware Ternary Tree Algorithm for Fermion-to-Qubit Encoding

130. Leah Hopf (COL 2025)

Advisor: Jon Hawkings
Manganese Concentrations and Composition in Glacial Environments

131. Baron Ping-Yeh Hsieh (SEAS 2027)

Yiguo (Echo) Yuan (COL 2027)
Advisor: Maurice Schweitzer
Running AI Chatbot Negotiations: Testing the Effect of Humor and Concession Patterns on Negotiation Outcomes

- 132. Jilly Huang (COL 2027)**
 Advisor: Sade Bonilla
The Distribution and Allocation of Teachers in an Urban School District
- 133. Zimo Huang (COL 2026)**
 Advisor: Sebastian Angel
Integrating MuCache into Dapr Distributed Application Runtime
- 134. Miguel Huerta (COL 2027)**
 Advisor: Natali Chanaday
Sub-cellular Distribution of Voltage-Gated Ion Channels in Breast Cancer Cells
- 135. Raina Hutchinson (COL 2027)**
 Advisor: Michael Granato
CRISPR Knockout Screen in Zebrafish Uncovers the Role of Huntingtin Interacting Proteins in Axon Regeneration
- 136. Iman Ilias (WH 2026)**
 Advisor: Peter Conti-Brown
The Life and Times of Credit Unions
- 137. Jacob Isaac (COL 2025)**
 Advisor: Kushol Gupta
X-Ray Crystallography of gDNAzymes
- 138. Szirina Ismail (COL 2026)**
 Advisor: Julia Lynch
Why have the US, Canada, and Sweden Recently Taken Steps Towards Indigenous Health Data Sovereignty?
- 139. Michael Jacob (COL 2026)**
 Advisor: Bhuvnesh Jain
Generative AI for Weak Lensing Reconstruction
- 140. Hanan Jannoud (COL 2027)**
Katrina Korendiy (COL 2026)
Yuzhou Li (SEAS 2027)
Amelie Zhang (WH 2027)
 Advisor: Julia Gray
International Organizations from the Ground Up: Understanding Global Cooperation Through Data
- 141. Anya Jayanthi (COL 2025)**
 Advisor: Sarah Tishkoff
Identifying and Characterizing Causal Genetic Variants for Lactose Tolerance in African Populations
- 142. Gabriella Jean (COL 2027)**
 Advisor: David Lydon-Staley
The Effects of Daily Stressors on Withdrawal and Smoking Lapses during a Cessation Attempt in Daily Cigarette Smokers
- 143. Elizabeth Jiang (SEAS 2027)**
 Advisor: Kevin Johnson
Automating Social Signal Processing between Patient-Provider Interactions
- 144. Charles Jin (SEAS 2027)**
Leah Ning (SEAS 2027)
 Advisor: Rich Tsui
Extracting Social Determinants of Health from Clinical Notes Using LLMs
- 145. Jean Jin (COL 2026)**
 Advisor: Marisa Bartolomei
Investigating Non-catalytic Activity of Ten-eleven Translocation Enzyme 1 in the Mammalian Germline
- 146. Yoojin Jo (COL 2027)**
Garv Mehdiratta (COL 2027)
 Advisor: Tiffany Hwa
Bedside Evaluation of Conductive Hearing Loss with the Hum Test
- 147. Violet Johnson (COL 2024)**
 Advisor: Mark Goulian
The Phosphorylation State of the PTS-Ntr Affects E. coli Fitness Under EDTA Stress

Bistro (Posters 148-177)

148. Caleb Joo (COL 2027)

Advisor: Matthew Hayes
Utilizing Viral Vectors to Map Neural Signaling to and from the Locus Coeruleus to Understand Brain Regions Implicated in GLP-1 Agonist Activity

149. Oliver Joseph (COL 2027)

Advisor: Gregory Corder
Unveiling the Brain's Highways: Automated Quantification of Axonal Density

150. Sophie Kadan (COL 2025)

Advisor: Sisi Zhou
Achieving Fault-Tolerant Quantum Error Correction (QEC) with Minimum Weight Perfect Matching (MWPM)

151. Petros Karamanides (COL 2026)

Advisor: Amelia Eisch
Is a Cortical-Hippocampal Circuit Necessary for Encoding Similar Episodic Memories?

152. Cypress Kaulbach (COL 2026)

Advisor: Alain Plante
Biological Analysis of Dark Earths

153. Navjeet Kaur (NUR 2027)

Advisor: Surbhi Grover
Cervical Cancer Among Botswana Women: Palliative Care and Patient Impact

154. Vincent Kerler (COL 2027)

Advisor: Charlie Johnson
Investigation of Tapered Phononic Crystal Structures in Thin-Film AlN

155. Amina Khasanova (COL 2026)

Advisor: Shelley Berger
Exploring Nuclear Organization Around Speckles

156. Finn Kiely (WH 2026)

Advisor: Peter Conti-Brown
Where Do Banks Get Bank Accounts

157. Hannah Kim (COL 2026)

Advisor: Sunday Akintoye
Responsiveness of Ameloblastoma Cells to Autophagic Stress

158. Hayle Kim (COL 2025)

Advisor: Matthew Kayser
A Reverse Genetic Approach to Identify the Molecular Mediators of Sleep Maturation

159. John Kim (SEAS 2026)

Advisor: Noor Momin
Engineering RELM γ as Therapeutic Target for Arrhythmia Post-Myocardial Infarction

160. Matthew Kim (COL 2026)

Advisor: Franz Weber
Effect of Memory Consolidation on REM P-wave Frequency

161. Natey Kim (SEAS 2026)

Michael North (SEAS 2026)
Advisor: Nadia Figueroa
From Muscle Signals to Motion: A Deep Learning Approach to Human Movement Prediction

162. Su Ah Kim (WH 2026)

Advisor: MIn Liu
The Role of AKT1 Deletion in Dendritic Cells on Bone Loss in Animal Model of Diabetic Periodontitis

163. Sunhee Kim (COL 2027)

Advisor: Amy Stornaiuolo
Activism in the Digital Age: Understanding Youth Advocacy Across Online Platforms

164. Julia Kincaid (COL 2027)

Advisor: Daniel Powell Jr.
Comparison of Electroporation and Peptide-Mediated Engineering of Human Lymphocytes

165. Matthew Klausner (COL 2026)

Olivia Reynolds (COL 2026)
Allyson Ye (COL 2026)
Advisor: Cary Coglianesi
Regulatory Processes

166. Oliver Kleinman (COL 2027)

Advisor: Daniel Hopkins
Mapping Local and Federal Electoral Data in Ireland for a Comparative Analysis of Political Nationalization

167. Sanjit Kobla (COL 2026)

Advisor: Bhuvnesh Jain
Modified Power Spectrum Tests of Cosmological Theories

- 168. Luka Koll (SEAS 2027)**
Advisor: Kevin Johnson
Gait Parameter Extraction and Analysis from Angled Clinical Footage
- 169. Bailey Koo (SEAS 2027)**
Advisor: Hersh Sagreiya
Developing Multimodal AI for Organ Segmentation from CT to PET-CT
- 170. Athena Krikorian (COL 2027)**
Advisor: Anne Marie McCarthy
Examining the Impact of New Pennsylvania Laws on Breast MRI Utilization
- 171. Lucia Kulzer (COL 2026)**
Evelyn Yu (SEAS 2027)
Advisor: Yasmin Kafai
Revising Design Conjectures About Algorithm Auditing Practices Inside Learning Environments
- 172. Arjun Kumar (COL 2027)**
Advisor: Kara Bernstein
Analyzing the Sensitivity of Homologous Recombination-Deficient RAD51D Mutants to Treatment with a Novel PARP1 Inhibitor, Saruparib
- 173. Shruthi Kunjur (SEAS 2026)**
Katherine Yue (SEAS 2026)
Advisor: Ryan Marcus
Benchmarking Ticketing in Vectorized Cuckoo Hash Table for Database Systems
- 174. Yvonne Kuo (COL 2026)**
Advisor: Christoph Ellebrecht
Investigating Chimeric Antigen Receptor (CAR) T Cell Nonspecific Killing via CRISPR KO Screen
- 175. Rohan Kurup (COL 2027)**
Advisor: Yvette Sheline
Efficacy of Accelerated-Intermittent Theta Burst Stimulation in Treating Symptoms of Bipolar Depression
- 176. Eric Kuznetsov (COL 2027)**
Advisor: Todd Ridky
Unveiling Sex-Based Disparities in Skin Cancer
- 177. Gauri Lahoti (COL 2025)**
Isabella Pytel (COL 2025)
Advisor: Michael Cancro
Defining the Metabolic Pathways Required to Adopt and Maintain the Tbet+ Age-Associated B Cell Fate

Reading Room (Posters 178-207)

178. Raju Lakhani (COL 2026)

Advisor: Kushol Gupta
Expression, Purification, and Biophysical Characterization of Monkeypox Virus Protein I1

179. Sophie Lammers (COL 2026)

Advisor: Joel Karp
Development of a Flow Phantom for Quantification of Dynamic PET/CT Imaging

180. Blake Landow (COL 2026)

Advisor: Tejvir Khurana
Myostatin Gene Editing

181. Nhi Lang (COL 2027)

Advisor: Barbara Chaiyachati
Evaluating Psychosocial Health in Late Childhood: PSC-17 Trends and Demographic Insights from Primary Care

182. Jonathan Largoza (SEAS 2027)

Advisor: Riccardo Gottardi
Understanding Signaling Pathways and Inflammation Challenge of Cartilage Progenitor Cell Chondrogenesis

183. Eleftherios Lazarinis (SEAS 2026)

Advisor: Bingxin Zhao
Cloud Computing-based Platform for Online Disease-protein Mapping

184. Tony Le (COL 2027)

Advisor: Doris Wagner
Affecting Inflorescence Determinacy via Modifying Cis-regulatory Regions

185. Albertina Lee (SEAS 2025)

Advisor: Krithika Lingappan
Neonatal Hyperoxia Exposure Impacts the Atria More Than Ventricles: Implications for Prematurity Related Cardiac Disease

186. Eric Lee (COL 2026)

Advisor: William Peranteau
Gene Editing Toolbox for Rare Muscular Diseases: Two Strategies for Treating X-Linked Myotubular Myopathy Using Base Editing and Epigenetic Silencing

187. Joyce Lee (COL 2026)

Advisor: Isaac Chen
Using an Anterograde Polysynaptic Tracer to Assess Transplanted Cortical Organoid Connectivity with Native Motor Cortex

188. Nayoon Lee (COL 2026)

Advisor: Piotr Zygmanski
Simulation of Radiation Effects and Characterizing Tumor Motion

189. Stella Lee (COL 2027)

Advisor: Tim Machado
Recording Cortical Activity During Different Types of Movement

190. Sage Leland (SEAS 2026)

Advisor: Amelia Eisch
Psychosocial Stress Induces Cognitive Inflexibility and Social Avoidance in Male Mice

191. Josh Leshinskie (SEAS 2026)

Advisor: Kevin Turner
Targeted Dispersal of Plant Sensors via Sticky Drops

192. Aiwen Li (WH 2027)

Advisor: Yuhan Ding
Analysis of Kernel Density Estimation Accuracy using Quasi-Monte Carlo Methods

193. Antony Li (COL 2027)

Advisor: Ziyang Zhang
TRIM Proteins Modulate Amyloid Precursor Protein Levels in N2a Cells

194. Sophie Li (SEAS 2027)

Advisor: Ottman Tertuliano
Characterizing SiO₂-Si Substrate Strain Energy using Nanoindentation and Nanoscale Contact Mechanics

195. Vivian Li (WH 2026)

Advisor: David Reibstein
Enhancing Colombia's Global Competitiveness: Strategic Recommendations for Tourism, FDI, Renewable Energy, and Peace Promotion

196. Celina Liang (COL 2026)

Advisor: Cynthia Otto
Usage of Emotional Reactivity Tests as a Puppy Assessment Method to Predict Working Dog Success

197. Stacy Liang (COL 2025)

Advisor: Juan Alvarez
Verification of β -cell Specific Tamoxifen-Induced Dec1 Knockout in Mice

- 198. Forrest Lin (SEAS 2027)**
Brandon O'Neill (SEAS 2027)
Advisor: Timothy Markman
Optimizing the Intraoperative Indocyanine Green (ICG) Imaging System
- 199. Ivan Lin (COL 2027)**
Advisor: Christopher Long
Complications of Proximal Hypospadias Surgery
- 200. Brian Ling (SEAS 2027)**
Advisor: Malek Kamoun
FIBERS: Enhancing Kidney Transplant Success with a Novel Evolutionary Machine-learning Algorithm Capable of Identifying Significant Risk Associated HLA Amino Acid Mismatches
- 201. David Liu (COL 2027)**
Advisor: Zarina Ali
GREEN OR: Guiding Reductions in Excess and Expenses in the Neurosurgery Operating Room
- 202. Freddy Liu (SEAS 2025)**
Advisor: Mingmin Zhao
Enabling Visual Recognition with Radio Frequency
- 203. Grace Liu (SEAS 2027)**
Mariam Rizvi (COL 2026)
Advisor: James Gee
Lung-SARG: An Open Data Platform for Sustainable, Accessible, Lung Radio Genomics in Nigeria
- 204. Ivy Liu (COL 2026)**
Suya Que (SEAS 2026)
Advisor: Arnold Mathijssen
Living Systems: Movement of Organisms in Porous Matrices
- 205. Jerry Liu (COL 2027)**
Advisor: Delphine Dahan
Face Threat and Miscommunication: Evidence from a Referential Communication Task
- 206. Toni Lobaccaro (COL 2027)**
Advisor: Dylan Rankin
Analyzing Various Machine Learning Models for Use in the Large Hadron Collider ATLAS Detector
- 207. Avi Loren (COL 2025)**
Advisor: Kai Tan
Chimeric Antigen Receptor T-Cell Integration Site Analysis in Patients with B-cell Acute Lymphoblastic Leukemia

208. Khloe Lubin (NUR 2027)

William McGlynn (NUR 2026)

Advisor: Charlene Compher

PLATE: Perceptions and Learning About PhD Tool for Evaluation

209. Anna Lugovskoy (COL 2027)

Advisor: Michael Arcaro

Bimodal Approach to Assessing Higher-Level Visual Processes in Tree Shrews

210. Amy Luo (SEAS 2027)

Advisor: Yuanwen Jiang

Fabrication & Optimization of a Wearable Microneedle Patch Sensor for Cardiac Biomarker Detection

211. Monica Madya (COL 2025)

Advisor: Rebecca Ganetzky

Biochemical Diagnosis of Fumarate Hydratase (FH) Deficiency Disease

212. Amishi Mahajan (COL 2025)

Advisor: Amelia Eisch

Investigating the Role of Fan Cells in Hippocampal-Based Memory Encoding

213. Anand Majmudar (SEAS 2026)

Matthew Tsui (COL 2026)

Advisor: Erik Waingarten

Kernel Density Estimation for t-stochastic Neighbor Embeddings

214. Natalie Mamaril (COL 2027)

Advisor: Jessica Foster

Characterization of Matrix Metalloproteinase 16 (MMP16) as a Potential Target for CAR T-Cell Therapy in Pediatric Brain Tumors

215. Ngaatendwe Manyika (SEAS 2027)

Advisor: Marija Drndić

Fabrication of Solid-State Silicon Nitride Membranes for Nanopore Devices

216. Philipp Markopulos (WH 2027)

Advisor: Daniel Taylor

The Impact of SEC Rule Changes on Insider Trading Dynamics

217. Loza Markos (COL 2027)

Jayden Shin (COL 2027)

Advisor: Geelsu Hwang

Comparative Analysis of Sucrose and Glucose-Fructose on Mixed-Species Biofilm of Candida Albicans, Streptococcus Oralis, and S. Mutans

218. Maya Mathur (COL 2026)

Advisor: Daniel Beiting

Detection of Human and Animal Fecal Contamination and Antimicrobial Resistance in Water around San Cristóbal Island, Galápagos, Ecuador

219. Grace Matwijec (COL 2025)

Advisor: Nancy Spinner

Resolving Uncertainty in the Mechanism of Disease for NOTCH2 Variants in Alagille Syndrome

220. Khady Mbodj (COL 2026)

Advisor: Wanjiku Njoroge

Breastfeeding in Black Women: Reviewing Racial and Socioeconomic Differences in Breastfeeding and the Impact on Bonding, Breastfeeding Rates, and COVID-19 Pandemic Worries

221. Melanie Mejia (WH 2026)

Advisor: Pinar Yildirim

Greenbooks and the Impact of the African American Businesses on Business Climate

222. Oscar Mendez (COL 2027)

Advisor: Ronen Marmorstein

Structural Elucidation: Understanding MEK and ERK Interactions in the MAPK Pathway

223. Chekayli Meyer (SEAS, WH 2027)

Advisor: Maurice Schweitzer

Development of an Artificial Intelligence Chatbot for Negotiations

224. Justin Miller (COL 2026)

Advisor: Talya Fishman

Christ, Spinoza's Progenitor Of National Religion

225. Lily Min (SEAS 2025)

Advisor: Mark Sellmyer

Development of Assays to Evaluate PROTAC Permeability, Binding, and Function

226. Saania Mirpuri (COL 2026)

Advisor: Oluwadamilola Fayanju

Sociodemographic Variation in Completion of SBDOH Screening Tools in the Breast SBDOH Study

- 227. Sandro Mocchiolo (COL 2027)**
 Advisor: Justin Mullikin
Nature in Transcendentalism: A Counternarrative to the Global Thought Binary
- 228. Mapalo Mulwe (COL 2027)**
 Advisor: Pavan Atluri
Investigating Therapeutic Potential of Exosomes from TNF Preconditioned Mesenchymal Stem Cells
- 229. Kshama Mumbai (COL 2026)**
 Advisor: Alessandro Dovis
Impact of Dissent in Monetary Policy: Insights from India's MPC
- 230. Jake Murphy (COL 2025)**
 Advisor: Scott Weinstein
Randomness, Unpredictability, and Indeterminism
- 231. Sofia Murra Vicario (COL 2026)**
 Advisor: Patrick Walsh
Synthesis of Organic Compounds as Stable Glass Materials
- 232. Ben Nachod (SEAS 2026)**
 Advisor: Michael Mitchell
mRNA Lipid Nanoparticles for ex vivo Engineering of Primary T cells for Autoimmunity Applications
- 233. Maya Narang (COL 2026)**
 Advisor: Kim Sharp
Interaction of Benzodiazepine Drugs Flunitrazepam and Clonazepam with Aldoketoreductase
- 234. Shivek Narang (COL 2025)**
 Advisor: Akkayasamy Kowsalya
Follow-up Care at the Neuro-ophthalmological Clinic at the Aravind Eye Hospital
- 235. Suraj Neelamagam (COL 2026)**
 Advisor: Heath Schmidt
Systemic GLP-1R Activation Produces Anxiolytic Effects During Abstinence in Cocaine-experienced Rats
- 236. Amber Nguyen (COL 2025)**
 Advisor: Kyle Vining
Oral Cancer Cells form Spheroids in Floating and Hydrogel Culture Conditions
- 237. Cat Nguyen (COL 2026)**
 Advisor: Andrew Santiago-Frangos
Using One's Enemies: Identifying Histone-Binding Sites Needed for Archaeal Adaptive Immunity
- 238. Cody Nguyen (COL 2025)**
 Advisor: Paul Lieberman
Regulation of Hypermethylation in EBV-Associated Gastric Carcinoma Through EBNA1 and DNMT1
- 239. Connie Ni (COL 2026)**
 Advisor: John Maris
Cross-Reactivity Testing of PHOX2B-Directed Peptide-Centric CAR-T Immunotherapy in Neuroblastoma
- 240. Asmus Nielsen (COL 2027)**
 Advisor: Arjun Raj
Characterization of Signal Spread for CellSlime to Enable Fixed Cell Trajectory Visualization
- 241. Chimere Nnadi (COL 2026)**
 Advisor: Ivan Dmochowski
Designing a Xenon-129 NMR Contrast Agent for Cellular Glucose Detection
- 242. Max Nothacker (COL 2027)**
 Advisor: Heather Huntington
Improvement of Land Governance in Uganda: Endline Impact Evaluation
- 243. Jaden Oates (COL 2026)**
 Advisor: Jennifer Ponce de León
Critical Theory Workshop
- 244. Yochi Odlum-Hobson (WH 2027)**
Grace Djoko (WH 2027)
 Advisor: Sarah Light
An Assessment of Isla Urbana's Rainwater Harvesting Systems in Mexico City and Their Applicability in the United States
- 245. Nneamaka Okolo (COL 2027)**
 Advisor: Mia Levine
Investigating Diversity of DNA Elements that Threaten and Preserve Genome Integrity
- 246. Dominic Olaguera-Delogu (SEAS 2026)**
 Advisor: Liang Feng
Applying Deep Learning to Phase Recovery in Optical Systems
- 247. Mayokun Omitogun (COL 2027)**
 Advisor: Wanjikū Njoroge
The Impact of Maternal Parenting Style and Methods of Support/Positive Disciplining on Child Well-Being and Irritability at 12 Months: A Comparison Between Black and Non-Latino/a/e/x White (NLW) Children

- 248. Reagan O'Neil (COL 2027)**
Chris Tyburski (COL 2027)
 Advisor: Elliot Lipeles
Particle Physics with the Large Hadron Collider
- 249. Abieyuwa Osunde (COL 2027)**
 Advisor: Katie Barott
Insight into the Impacts of Bleaching Tolerance Phenotypes on Coral Growth Metrics
- 250. Rachel Ou (COL 2026)**
 Advisor: Michael Mitchell
Optimizing and Characterizing EGFR Targeted Protein-Conjugated LNPs
- 251. Neel Pandula (COL 2027)**
 Advisor: Marie Guerraty
The Role of FOG2S657G-mediated β 1 Adrenergic Receptor Expression in Coronary Microvascular Disease
- 252. Jiayi Pang (COL 2026)**
 Advisor: Thomas Leung
Rosemary Extract Induces Rapid Wound Healing in Mice
- 253. Manav Parikh (COL 2026)**
 Advisor: Steven Menez
Relationship of Urine Uromodulin to Interstitial Fibrosis and Tubular Atrophy in the Setting of Native Kidney Biopsy
- 254. Youbin Park (COL 2026)**
 Advisor: Jarod Zepp
Modeling Macrophage-Fibroblast Interactions in Lung Regeneration
- 255. Malena Parrado (COL 2026)**
 Advisor: Michael Lampson
Causes and Consequences of Variation in PRC1 Mediated Heterochromatin Across Mus Species
- 256. Prithvi Parthasarathy (COL 2026)**
 Advisor: Pavan Atluri
Development of Exosomes to Overexpress CD47 to Treat Acute Heart Injury
- 257. Mimi Pastore (COL 2027)**
Anjali Reddy (COL 2027)
 Advisor: Katy Milkman
Using a Behavioral Science Intervention to Encourage Student Retention
- 258. Riya Patel (COL 2027)**
 Advisor: Vishnu Potluri
Impact of CMV D+/R- Status on Outcomes after Kidney-Pancreas Transplantation
- 259. Akhil Peddikuppa (COL 2027)**
 Advisor: Jeffrey Field
Mapping 8-oxo-dG in Telomeres with Oxford Nanopore Technology
- 260. Ian Peng (SEAS 2027)**
 Advisor: Yuanwen Jiang
Comparative Study of Fetal Bovine Serum and Bovine Platelet Lysate for Cell Culture
- 261. Griffin Pitt (COL 2026)**
 Advisor: Howard Neukrug
Catawba-Wateree Water Management Group Preliminary Case Studies
- 262. Sebastian Pizarro (COL 2026)**
 Advisor: Kristoffel Dumon
Development of a Low-Cost Suture Pad Solution for Use in Augmented Reality Training
- 263. Alex Platon (SEAS 2027)**
 Advisor: Cherie Kagan
Optical Leaf Moisture Sensors: Metasurface Fabrication and Deployment
- 264. Austin Pothikamjorn (COL 2025)**
 Advisor: Heath Schmidt
Unraveling the Role of Interpeduncular Nucleus GLP-1R Agonism in Fentanyl-Induced Striatal Dopamine Signaling
- 265. Saket Ram (SEAS 2027)**
 Advisor: Lukasz Bugaj
Using BcLOV as a Model to Engineer Temperature-Sensitive Protein Variants
- 266. Norah Rami (COL 2026)**
 Advisor: David Eng
The View from College Street: Kolkata's Literary Market as a Microcosm of Political and Social Change
- 267. Rithika Ramkumar (SEAS 2027)**
 Advisor: Jennifer Wilcox
Sourcing Critical Elements from Mine Tailings: Analyzing the Impact of Magnetic Separation on Critical Element Extraction

- 268. Elizabeth Ramos (COL 2025)**
 Advisor: Kellie Ann Jurado
Defining Active Transcription in the Multinuclear Layer of Early Pregnancy
- 269. Hudah Rana (COL 2026)**
 Advisor: Bonnie Ky
3D Echocardiographic Quantification of Cardiac Function to Understand the Cardiotoxic Effects of Radiation Therapy
- 270. Karen Raphael (COL 2025)**
 Advisor: Michael Shashaty
Plasma Levels of Angiopoietin-2 and Soluble Thrombomodulin, but Not Mitochondrial or Nuclear DNA, are Associated with Acute Kidney Injury After Lung Transplantation
- 271. Meera Ratnagiri (SEAS 2027)**
 Advisor: Lou Soslowsky
Collagens V and XI Regulate Fibril Size and Shape during Postnatal Tendon Growth
- 272. Carol Rau (COL 2027)**
 Advisor: Nicholas Betley
Exercise Modulates Diet and Body Composition
- 273. Jean Reyes (COL 2026)**
 Advisor: Amelia Eisch
How does Fentanyl-Associated Context Affect Neuronal Activity in the Memory-Linked Brain Region, the Dentate Gyrus? Using Basic Neuroscience to Inform Addiction Treatment
- 274. Charity Robbins (COL 2027)**
 Advisor: Erika Holzbaur
Investigating Autophagy Receptor Colocalization with Mitochondria in PINK1/Parkin Mitophagy
- 275. Jorge Rodriguez (COL 2026)**
 Advisor: Nicole Marino
Exploring the Mechanism of Translation-Dependent Downregulation of Cas12a mRNA
- 276. Olivia Rosenfeld (COL 2025)**
 Advisor: Warren Breckman
The Childhood and Cultural Forces Influencing President Woodrow Wilson's Performance at the Paris Peace Conference: An Investigation
- 277. Sophia Rosser (COL 2025)**
 Advisor: Brent Cebul
Is There Still Power in the Union?
- 278. Elan Roth (COL 2025)**
 Advisor: Steve Zdancewic
Developing a Mechanized Denotational Semantics for IMP
- 279. Raquel Russek (COL 2026)**
 Advisor: Colbey Freeman
Assessing Demographic Disparities and Institutional Performance in Inpatient Geriatric Consultations: A Retrospective Study of Timing, Follow-Up, and Sex Bias
- 280. Anila Russell-Hall (COL 2026)**
 Advisor: Melanie Pellecchia
Expanding Access of Applied Behavior Analysis Services for Autistic Children From Low Income Families
- 281. Robert Ruth (COL 2025)**
 Advisor: Guillermo Ordonez
Medals, Money and Legacy- Economic Analysis of the Olympics
- 282. Alyssa Saito (COL 2026)**
 Advisor: Andrew Modzelewski
Role of Retrotransposon Reactivation in Embryonic Development
- 283. Jon-Gabriel Salguero (COL 2027)**
 Advisor: Andrew Edmondson
Evidence of Hypoglycosylation in PMM2-CDG
- 284. Alexandria Sambrano (COL 2025)**
 Advisor: Myra Laird
Covariation between Skull Shape and Jaw Leverage in Six Dietarily Distinct Primate Genera
- 285. Denise Sanchez (COL 2027)**
 Advisor: Allyson Mackey
Examining How Children's Contexts May Impact Day-To-Day Variability in Persistence
- 286. Luna Sato (COL 2025)**
 Advisor: Anna Schapiro
Effect of Targeted Memory Reactivation (TMR) on Arousal and Distress to Real-Life Memories
- 287. Maddie Scott (COL 2026)**
 Advisor: Millan AbiNader
The Ethics of Research: How Penn Professors Support Student Researchers Navigating Work on Potentially Traumatic Topics

- 288. Anthony Senouillet (SEAS 2026)**
 Advisor: Karen Winey
Effects of Aggregate Morphology on Ion Transport in Solvent-Swollen Sulfonated Polystyrene Copolymers
- 289. Nitin Seshadri (COL 2025)**
 Advisor: Isaac Chen
Comparing the Effect of TBI on Horizontal vs. Vertical Random Dot Kinematogram Performance in a Rodent Visual Discrimination Task
- 290. Justin Seward (COL 2025)**
 Advisor: Donovan Schaefer
"False Image of History" Perspectives on Confederate Commemoration from the Black Press
- 291. Shri Shakhamoori (COL 2026)**
 Advisor: Kelly Jordan-Scuitto
Analysis of Microglia-Integrated Cortical Forebrain Organoids Infected with Human Immunodeficiency Virus
- 292. Madison Shelton (COL 2026)**
 Advisor: Audrey John
Does HAD3 Regulate the Metabolism of Malaria?
- 293. Claire Shepley (COL 2026)**
 Advisor: Xiaolu Yang
The MAGE Family: A Potential Mechanism for Protein Degradation
- 294. Annika Sheridan (COL 2026)**
 Advisor: Michael Mann
Location Analysis of Climate Change Discourse on Twitter
- 295. Heejoon Shin (COL 2026)**
 Advisor: Laurence Eisenlohr
Understanding VACV A35R Functions in MHC Class I and II Antigen Presentation
- 296. Jessey Shin (COL 2027)**
 Advisor: Amy Stornaiuolo
User Experience (UX) Design as an Inclusion Practice in Discord Communities
- 297. Sneha Shirhattikar (COL 2027)**
 Advisor: Jianxin You
Characterizing the Interacting Regions of Merkel Cell Polyomavirus Protein ALTO
- 298. Kethan Shirodkar (COL 2027)**
 Advisor: Lisa Schwartz
Physical Activity and Sleep in Adolescent and Young Adult (AYA) Cancer Patients
- 299. Samar Shroff (COL 2027)**
 Advisor: Amelia Eisch
Fentanyl Conditioned Place Preference (CPP) in Adult Male Mice: The Relationship between Dentate Gyrus Activity and Drug-Context Memory
- 300. Gladys Smith (COL 2027)**
 Advisor: Beth Pineles
Differential Agreement and Adherence to Healthcare Provider-Recommended Bedrest and Activity Restriction in Pregnancy by Race
- 301. Samantha Smith (COL 2026)**
 Advisor: Amelia Eisch
Psychosocial Stress-Response in Somatostatin (SST) Positive Long-Range Inhibitory Projections (LRIP) During Social Avoidance
- 302. Yuliya Solyanyk (COL 2027)**
 Advisor: Daniel Hopkins
Symbolic Politics in the U.S. and Abroad: Investigating Media's Political Influence, the Malleability of Identity Self-Identification, and More
- 303. Emily Song (COL 2026)**
 Advisor: Nicholas Betley
Effect of Lesioning of the Insular Cortex on Taste and Feeding Behaviors
- 304. Jackson Soohoo (COL 2026)**
 Advisor: Henry Kranzler
Childhood Adversity and Polygenic Scores Interact to Predict Substance Use Disorder Criteria
- 305. Sebastian Sookram (COL 2026)**
 Advisor: Damaris Lorenzo
Cytoskeletal Regulation of Muscle Bioenergetics
- 306. Catherine Sorrentino (COL 2025)**
 Advisor: Kathleen Brown
The Resurrectionists and the Origins of Racialized Medical
- 307. Matthew Spivey (WH 2027)**
 Advisor: Dylan Small
Making the Most of Large Datasets: Meaningful Exploratory Analysis in Observational Studies
- 308. Hannah Srey (COL 2027)**
 Advisor: Joseph Zackular
Clostridioides Difficile Enhances Enterococcus Protease Activity, Leading to Cross Feeding of Essential Nutrients

309. Steven Su (COL 2026)

Advisor: Erica Korb

*Autism Spectrum Disorder (ASD): Interaction
Between Sex and Epigenetic Factors on the Neuronal
Transcriptome*

310. Amanda Suh (COL 2027)

Advisor: Kang Ko
IL33+ Fibroblasts Activate Regulatory T Cells to Facilitate Rapid Wound Healing in Oral Cavity

311. Lisa Sun (SEAS 2027)

Advisor: Noor Momin
Engineering Human IL-4 Immunocytokine to Prevent Post-Myocardial Infarction Heart Failure

312. Rishi Suresh (SEAS 2027)

Advisor: John Wherry
Characterizing the Immune Landscape of Blood and Skin in Hidradenitis Suppurativa

313. Alyssa Tang (COL 2027)

Advisor: Rebecca Ganetzky
Elucidating Nutrient-mediated mTORC1 Dysregulation in Mitochondrial Complex V (CV) Deficiency

314. Raven Tang (SEAS 2027)

Advisor: Ian Campbell
How to Teach a Large Language Model to Tell Us About Childhood Development

315. Sophia Tang (SEAS, WH 2027)

Advisor: Michael Mitchell
Evaluation of Concentrated and Dual-Peptide Conjugated Lipid Nanoparticles for Targeted mRNA Delivery to Brain Endothelial and Neuronal Cells

316. Tara Tarawneh (COL 2025)

Advisor: Siarhei Biareishyk
Delving Into Liminality: An Exploratory Visual Translation of Issam Hajali's Music Through Movement and Affect

317. Nishat Tasnin (COL 2026)

Advisor: Sunday Akintoye
Responsiveness of Jaw Mesenchymal Stem Cells to Hypoxic Stress

318. Emma Tasso (COL 2025)

Advisor: Madeline Lucey
Dynamics of the Oldest Stars in FIRE-2 Simulations

319. Ethan Thway (COL 2027)

Advisor: Kristoffel Dumon
Low Cost Surgical Models for Appendectomy Training

320. Sanya Tinaikar (COL 2027)

Advisor: Sarah Schrauben
Functional Status: Remote versus In-person Assessments of Physical Function

321. Mar Tran (NUR 2026)

Claire Zhou (NUR 2027)
Advisor: Hyejeong Hong
Role of BMP6 in IFNB Expression as Potential Target for Host-directed Therapy against Mycobacteria Tuberculosis

322. Ariana Treat (COL 2027)

Advisor: Andrew Santiago-Frangos
Histone-mediated Archaeal Adaptive Immunity

323. Aaron Tsui (SEAS 2026)

Advisor: Claire Finkelstein
Report and Advocacy on the Ethical and Legal Dilemmas of Autonomous Weapons Systems in War

324. Tyler Turek (COL, WH 2026)

Advisor: Mathew Madhavacheril
Utilizing Wavelet Transforms to Locate Anomalies in Time-Series Data

325. Henessis Umacata (COL 2027)

Advisor: Jacqueline Corcoran
Treatment Preferences for Depression for Low-Income Women

326. Emily Valerio (SEAS 2027)

Advisor: Milan Mrksich
Comparing Protease-Labile Peptide Linkers in Megamolecule-Drug Conjugates

327. Lauren Van (SEAS 2027)

Advisor: Dohyung Kim
A Systematic Study on the Translation of N-Functionalities in Pyrolytically Synthesized Nitrogenated Carbons

328. Diego Varela Lugardo (COL 2026)

Advisor: Jon Hawkings
Evolution of Dissolved Silicon (DSi) content in the Schuylkill River

329. Praneel Varshney (SEAS 2027)

Advisor: Malek Kamoun
Expanding FIBERS Evolutionary Feature Binning to Automatically Optimize Number of Risk Groups in Biomedical Survival Analysis

330. Jelena Vázquez (SEAS 2027)

Advisor: Jacob Dubroff

*Plausibility of Using [18F]NOS as a PET Radiotracer
for Imaging Smoking-Induced Inflammation in the
Aorta*

Class of '49 (Posters 331-378)

331. Maria Villarreal Simon (COL 2026)

Advisor: Michael E. Mann
*Synchronous Pakistan Flooding and China Heatwave
Linked to Planetary Wave Resonance*

332. Vicky Vo (NUR, WH 2027)

Advisor: Jianghou Liu
*Mind-Body Intervention Exercises for Older Adults
with Chronic Health Impairments: A Comprehensive
Review of Tai Chi's Health Benefits*

333. Poppy Wagner (COL 2027)

Advisor: Monica McCallum
Exploring the Marine Sponge Microbiome

334. Clara Xi Wang (COL 2025)

Advisor: Ethan Goldberg
*Dysregulation of Inhibitory-Serotonergic Pathways in
the Dorsal Raphe-Prefrontal Cortex Circuit in an
Animal Model of Dravet Syndrome*

335. Collin Wang (COL 2025)

Advisor: Mariella De Biasi
*Cannabidiol as a Prevention and Cessation Agent of
Morphine Consumption in Mice*

336. Elizabeth Wang (COL 2026)

Advisor: Ronen Marmorstein
*Quantifying Tetrasome Assembly: Investigating the
Role of Histone Chaperones CAF-1 and Asf1 in
Tetrasome Formation*

337. Eric Wang (COL 2026)

Advisor: Chloe Estep
*New Shijing: Poetic Classicism and the Making of
Modern China*

338. Justin Wang (COL 2026)

Advisor: Peter Klein
*Enhancing Sensitivity of Leukemia Cells to Venetoclax
Through PINK1 Alternative Splicing*

339. Oscar Wang (COL 2026)

Advisor: David Merrick
*Exploring the Molecular Interaction Between Lyve1+
Macrophages and Dpp4+ Cells*

340. Zach Wang (COL 2026)

Advisor: Emma Hart
*The World of Tobias Smollett: A Scottish Surgeon,
Novelist, and Historian in the Young British Empire*

341. Brooke Weller (COL 2027)

Advisor: Nick Betley
*Effect of Activity-Based-Anorexia on Feeding
Behavior in Mouse Models*

342. Dominic Willadsen (COL 2026)

Advisor: Andrew Rappe
Bending MXenes for H₂ Electrocatalysis

343. Khayla Williams (COL 2026)

Advisor: Sarah Schrauben
*Evaluating Remote and In-Person Physical Function
Assessments in Chronic Kidney Disease Patients*

344. Ryan Wolff (COL 2026)

Advisor: Melissa Teixeira
*La Década Perdida (The Lost Decade). Brazil in the
1980s: Attempts to Tame an Economic Crisis Fall Flat*

345. Andrew Wong (COL, SEAS 2027)

Advisor: Anna Schapiro
*Memory Consolidation of Novel Structured
Information During Sleep: A Study Utilizing TMR Cue-
Induced EEG Analysis and Neural Networks*

346. Derek Wong (COL 2025)

Advisor: Akiva Cohen
*Using Actigraphy to Assess Sleep Deficits Caused by
Mild Traumatic Brain Injury*

347. Sidney Wong (COL 2027)

Advisor: Kyla Ortved
*Comparing the Protective Effects of BM-MSCs
Cultured in FBS and Equine Serum Media in an OA
Model*

348. Irene Woo (COL 2026)

Advisor: Blanca Himes
*The Effects of Poor Air Quality on Asthma
Exacerbations in Philadelphia*

349. Mariah Wright-Moses (COL 2026)

Advisor: Nicholas Betley
*Targeting Dopamine to Reduce Compulsive Eating: A
Novel Approach to Treating Binge Eating Disorder*

350. Kevin Wu (COL 2027)

Advisor: Matthew Kayser
*Linking Sensory Processing and Sleep in
Neurodevelopmental Disorders*

- 351. Richard Xiong (COL 2026)**
 Advisor: Amita Sehgal
Investigation of the Role of Serine Endopeptidases and the Effects of Dietary Modulation on Sleep in Drosophila
- 352. Kevin Xu (COL 2025)**
 Advisor: Elizabeth White
Analysis of High and Low-risk HPV E7 Proteins on PTPN14 Activity in Human Cell Types
- 353. Carly Yang (COL 2026)**
 Advisor: Olumide Akinture
Piloting a Social Determinants of Health Screener at Tisch Hospital
- 354. Isaac Yang (SEAS 2027)**
 Advisor: Dohyung Kim
Carbon Dioxide Reduction on Silver Catalyst Using a Gas Diffusion Electrolyzer
- 355. Jikai Yang (COL 2027)**
 Advisor: Santiago Gallino
Retail Renaissance: Analyzing Trends and Transformations in the Retailing Inventory Management
- 356. Emma Yao (COL 2027)**
 Advisor: Mathew Madhavercil
Constraining Dark Energy Models Using Pantheon+ Supernovae
- 357. Armaan Yarlagadda (COL 2027)**
 Advisor: Peter Klein
Glycogen Synthase Kinase-3 and the Mechanism of Lithium Sensitivity
- 358. Maxwell Ye (SEAS 2027)**
 Advisor: Bonnie Ky
Deriving the Social Determinants of Health from Electronic Medical Records to Define Risk of Cardiovascular Disease in Cancer Patients
- 359. Yutong Yi (COL 2026)**
 Advisor: Huafeng Wei
Lithium Inhibits Inflammatory Pyroptosis in Human Cortical NPC Derived Neurons and Astrocytes
- 360. Alex Yim (COL 2025)**
 Advisor: Paul Saint-Amour
Does a Cliff Have a Face?
- 361. Victoria Yim (COL 2027)**
 Advisor: Matthew Kayser
Investigating the Role of the Blood Brain Barrier in Drosophila Sleep during Early Development
- 362. Joshua Yoon (COL 2026)**
 Advisor: Renyu Liu
Stroke Awareness and Use of National Emergency Number in Nigeria
- 363. Nora Youn (COL 2025)**
 Advisor: Anjan Chatterjee
Take it Slowly: The Impact of Slow-Looking on Aesthetic Engagement in a Museum
- 364. Hannah Youssef (SEAS 2026)**
 Advisor: Igor Bargatin
Impact of Geometric Variations on the Young's Modulus of Kapton Films
- 365. Evelyn Yu (SEAS 2027)**
 Advisor: Yasmin Kafai
Developing the Five Steps of Algorithm Auditing for K-12 Artificial Intelligence Education
- 366. Sunny Yu (SEAS 2026)**
 Advisor: Nat Trask
Leveraging Bernstein Polynomial Bases in the Finite Element Method for Machine Learning Applications
- 367. Shirley Yuan (COL 2027)**
 Advisor: Andrew Santiago-Frangos
Discovery of Eukaryotic Homologs of the Bacterial Immune Defense Protein Tiamat
- 368. Dawit Zewdie (COL 2026)**
 Advisor: Katherine Uyhazi
Leber Congenital Amaurosis-5 Mutations Associated With Photoreceptor Protein Loss
- 369. Allan Zhang (WH 2027)**
 Advisor: Dylan Small
Effects of ADHD in Youth on Physical Activity and Sports Participation: An Observational Study
- 370. Emily Zhang (SEAS 2026)**
 Advisor: Alison Pouch
Surface-based CT-TEE Image Registration for Bicuspid Aortic Valve Repair
- 371. May Zhang (WH 2027)**
 Advisor: Xu (Henry) Han
Cross Border E-Commerce Growth in China's Weifang Pilot Free Trade Zone

372. Nathan Zhang (COL 2025)

Advisor: Marc Fuccillo

Exploring Corticostriatal Dynamics Associated with Auditory Driven Action Impairments in Neurexin1 Alpha Mutant Mice

373. Denise Zheng (COL 2025)

Advisor: Celeste Simon

The Role of Citramalyl-CoA Lyase (CLYBL) in Glyoxylate Metabolism and Cell Migration in Clear Cell Renal Cell Carcinoma (ccRCC)

374. Helen Zheng (WH 2027)

Advisor: Colbey Freeman

The Golden Years: Effects of a Geriatric Consult Service on Inpatient Admissions

375. Angela Zhu (COL 2027)

Advisor: Mary Mullins

Characterizing Maternal Mutant Phenotypes in Cathepsin B Zebrafish Mutant Lines

376. Linda Zhu (COL 2027)

Advisor: Bryson Katona

Helicobacter Pylori Prevalence and Risk Factors Among BRCA1 and BRCA2 Carriers

377. Linna Zhu (COL 2026)

Advisor: Katherine Uyhazi

Ascl1 Drives Müller Glia Dedifferentiation to Retinal Progenitor-like Cells

378. Richard Zhuang (COL 2027)

Advisor: Hersh Sagreiya

Analysis of CT-Imaging Derived Phenotypes to Determine Risk Factors Associated with Sarcopenia