



**Penn CURF**  
CENTER *for* UNDERGRADUATE RESEARCH & FELLOWSHIPS

# FALL RESEARCH EXPO

Monday, September 18, 2023  
5:00 – 8:00 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 400 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](http://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

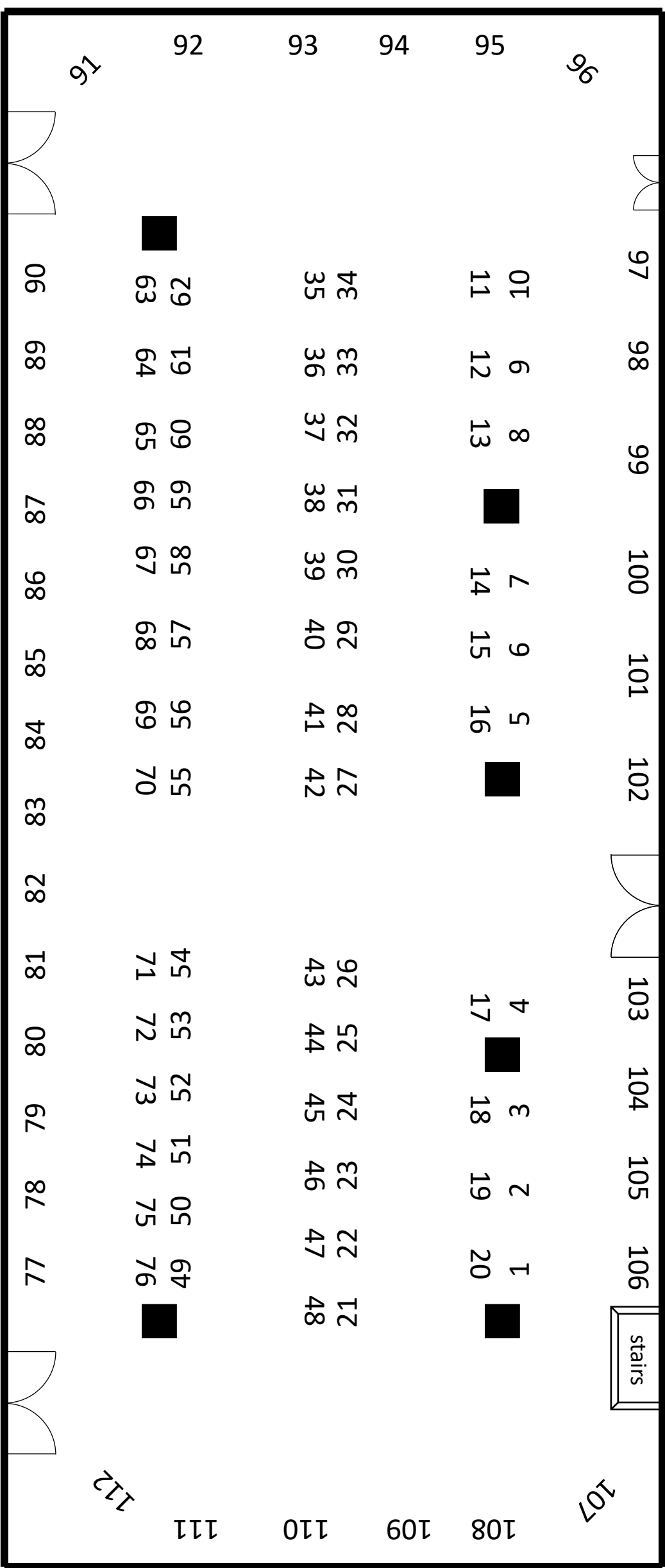
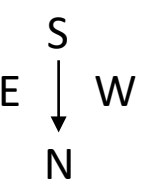
***The University Scholars Program*** provides support for in-depth research during their undergraduate career

***The Benjamin Franklin Scholars Program*** offers intellectually stimulating small seminars

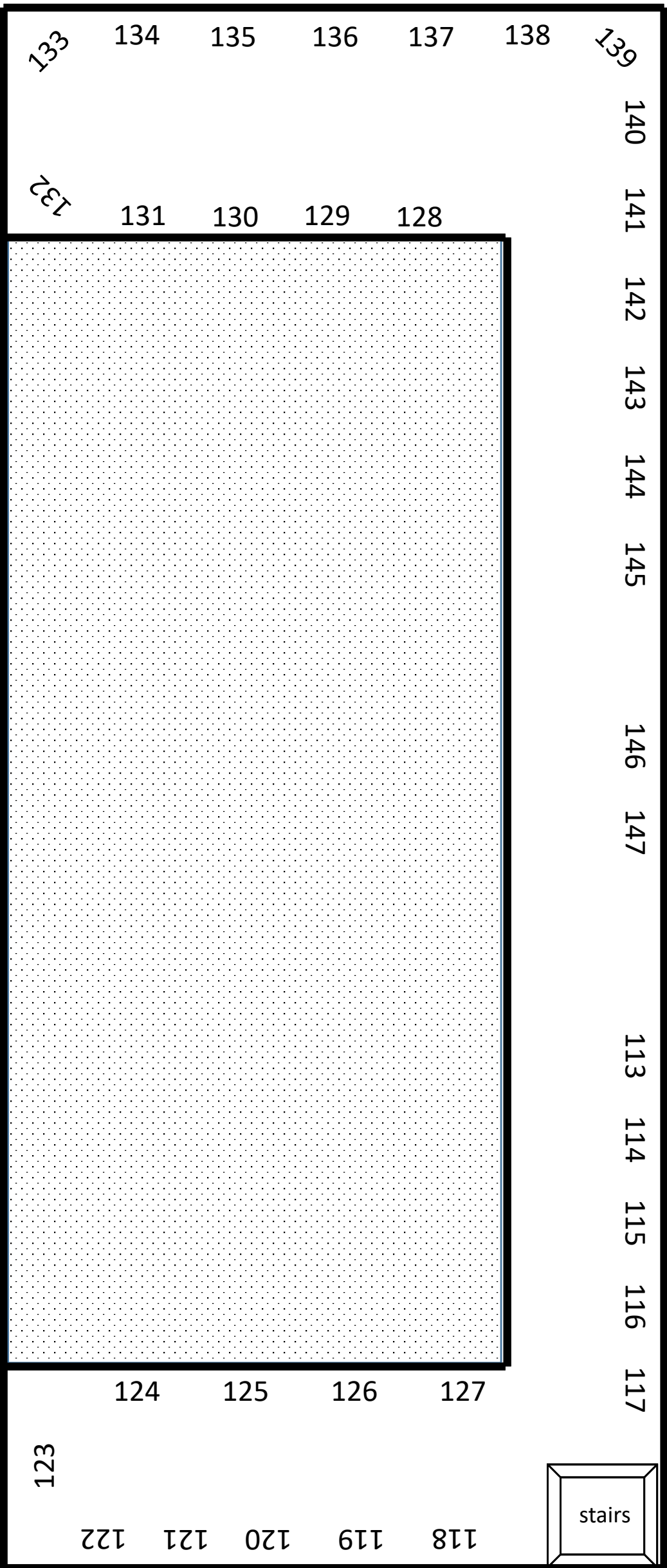
*and many more!*

Houston Hall  
Marketplace

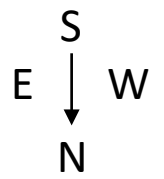
Welcome table



Hall of Flags  
1<sup>st</sup> floor



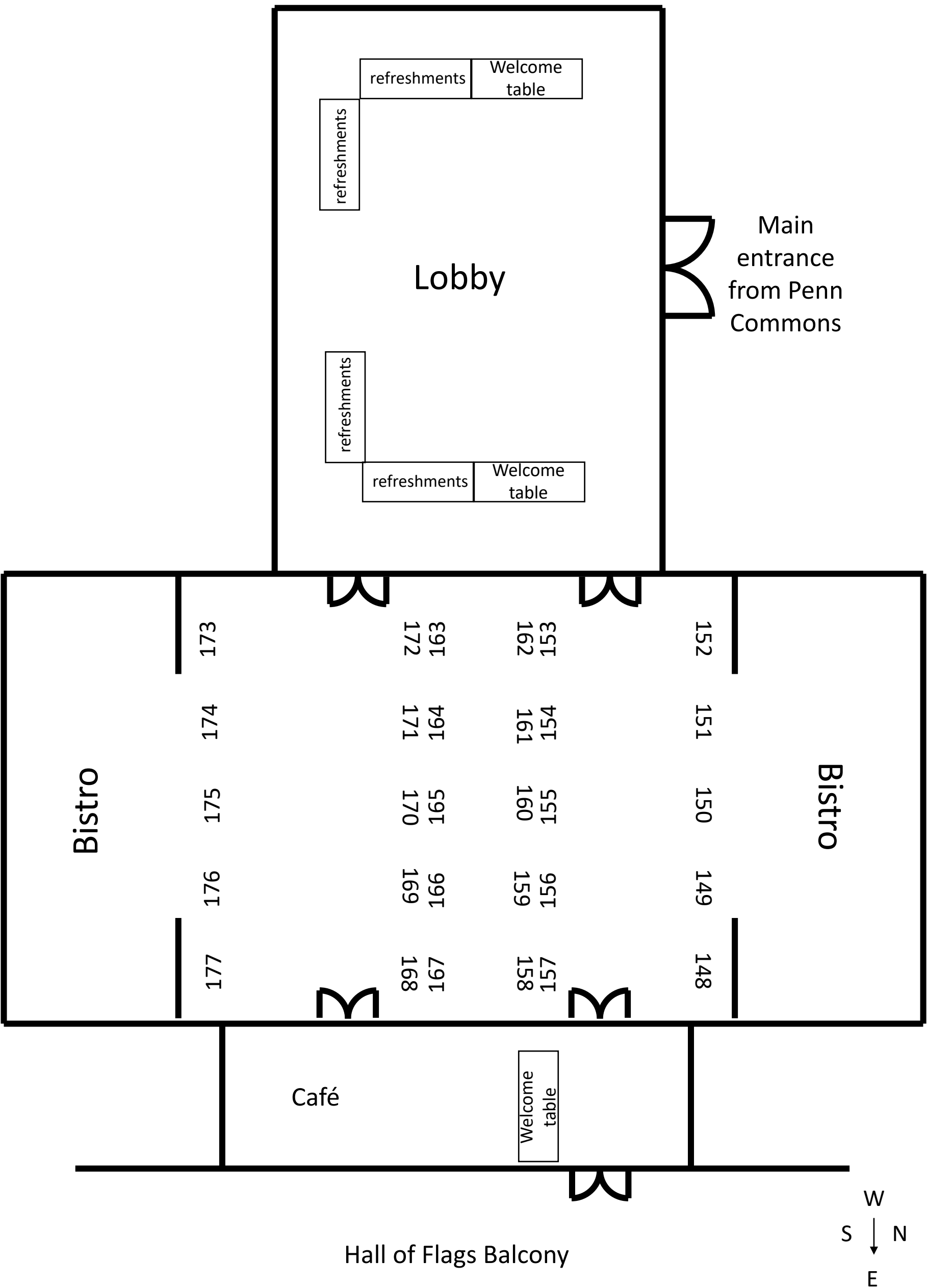
Hall of Flags  
2<sup>nd</sup> floor/balcony

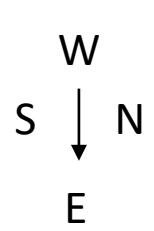
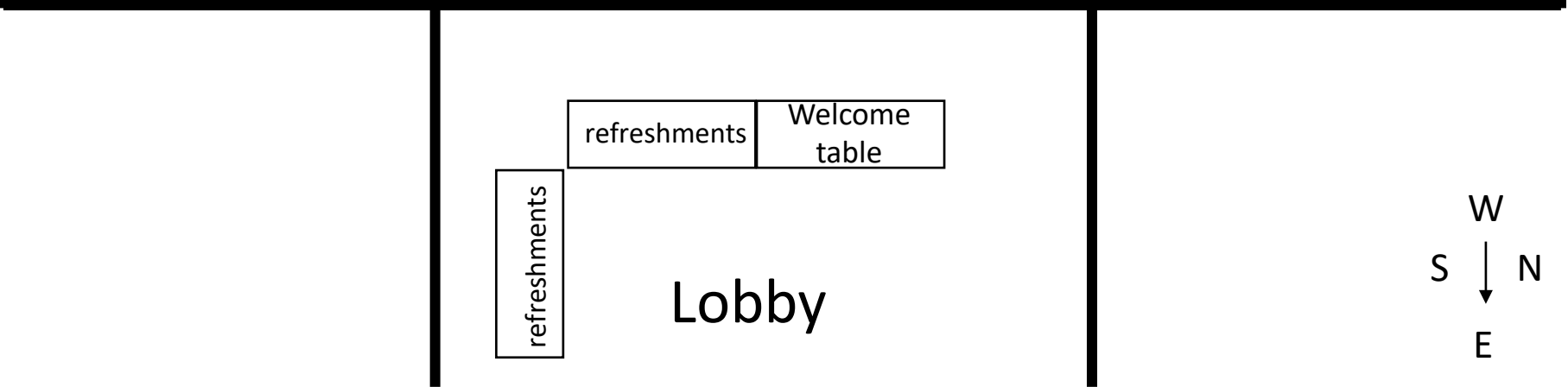
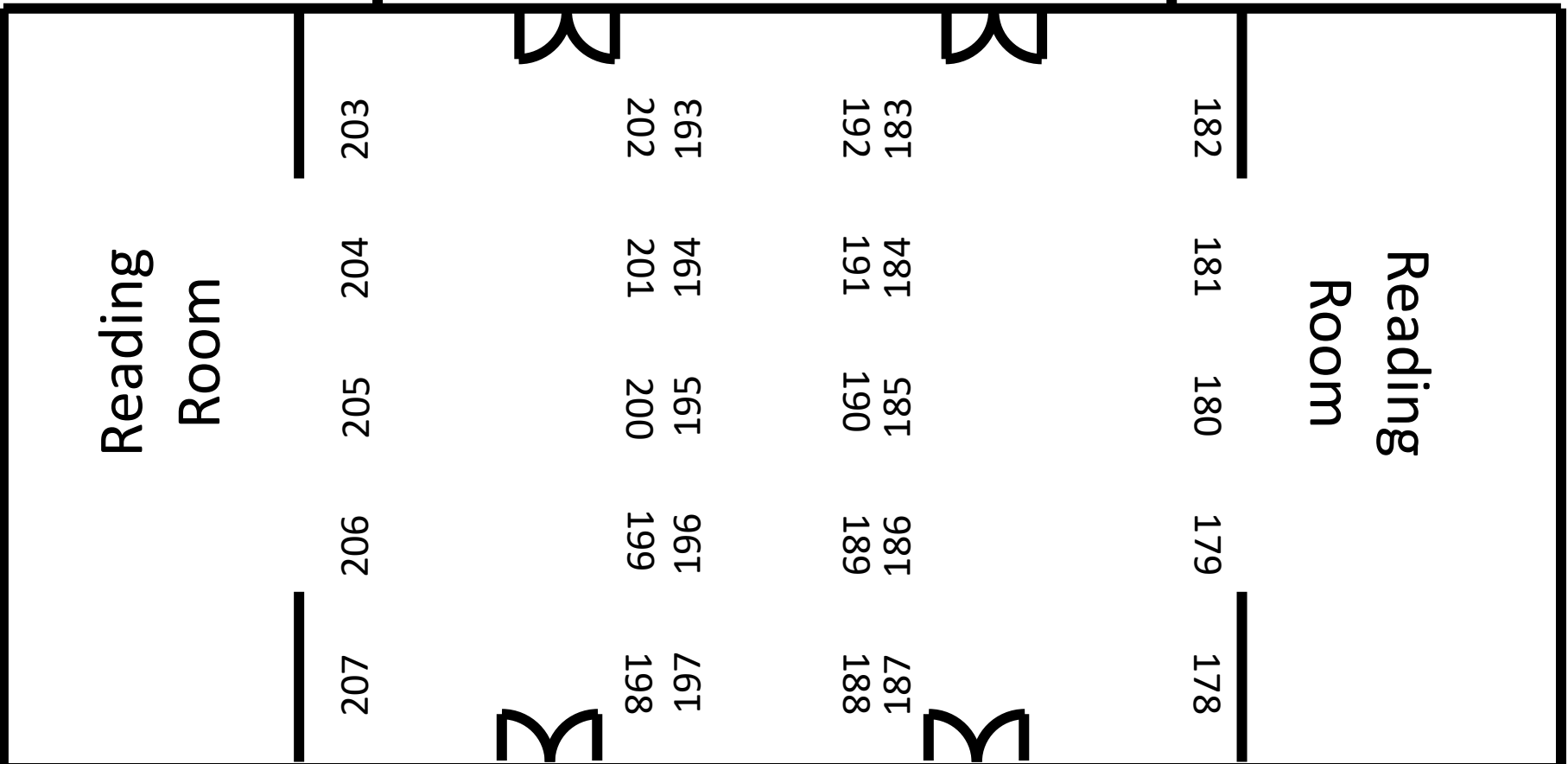
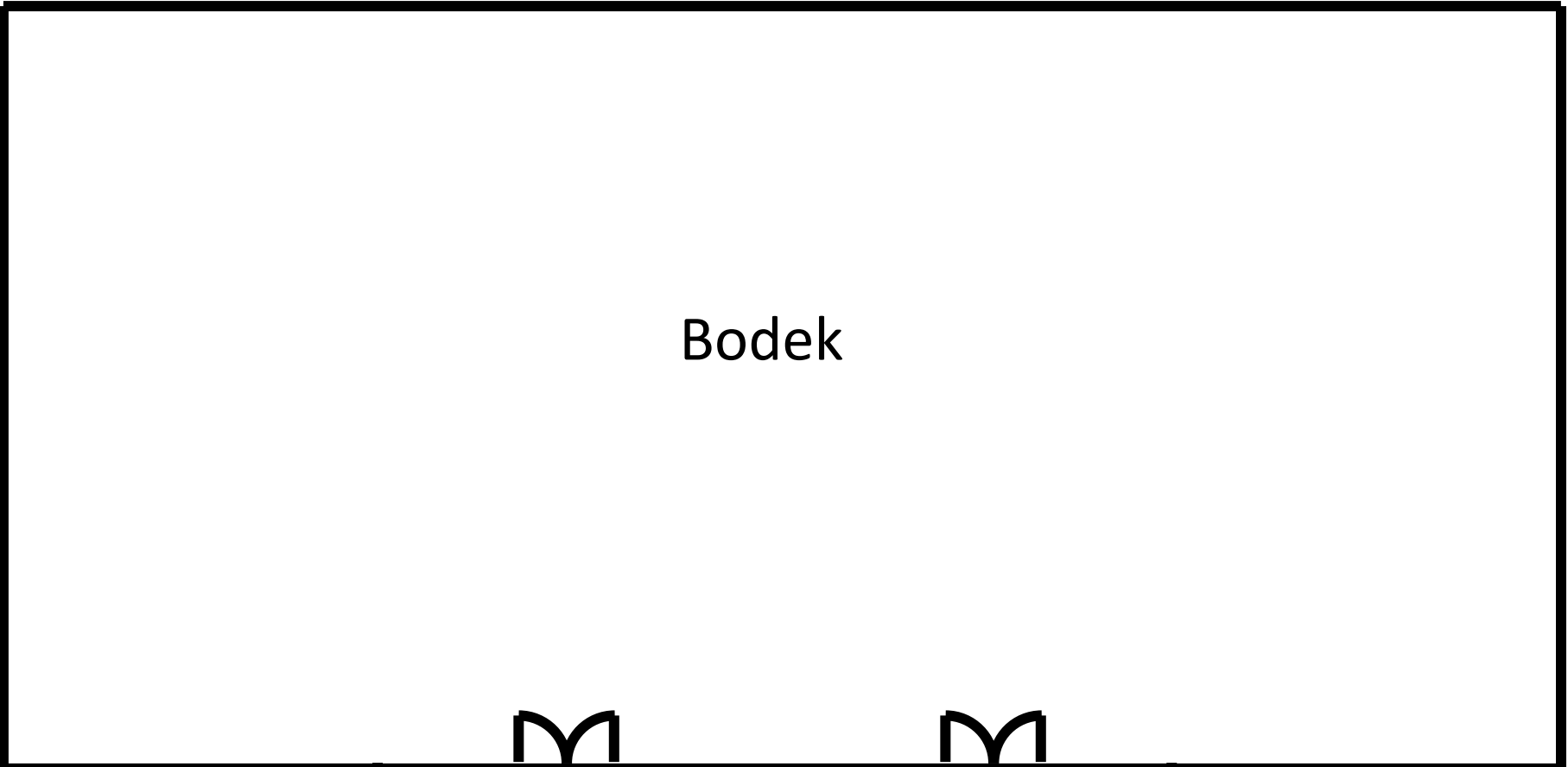


Welcome table

Café

stairs

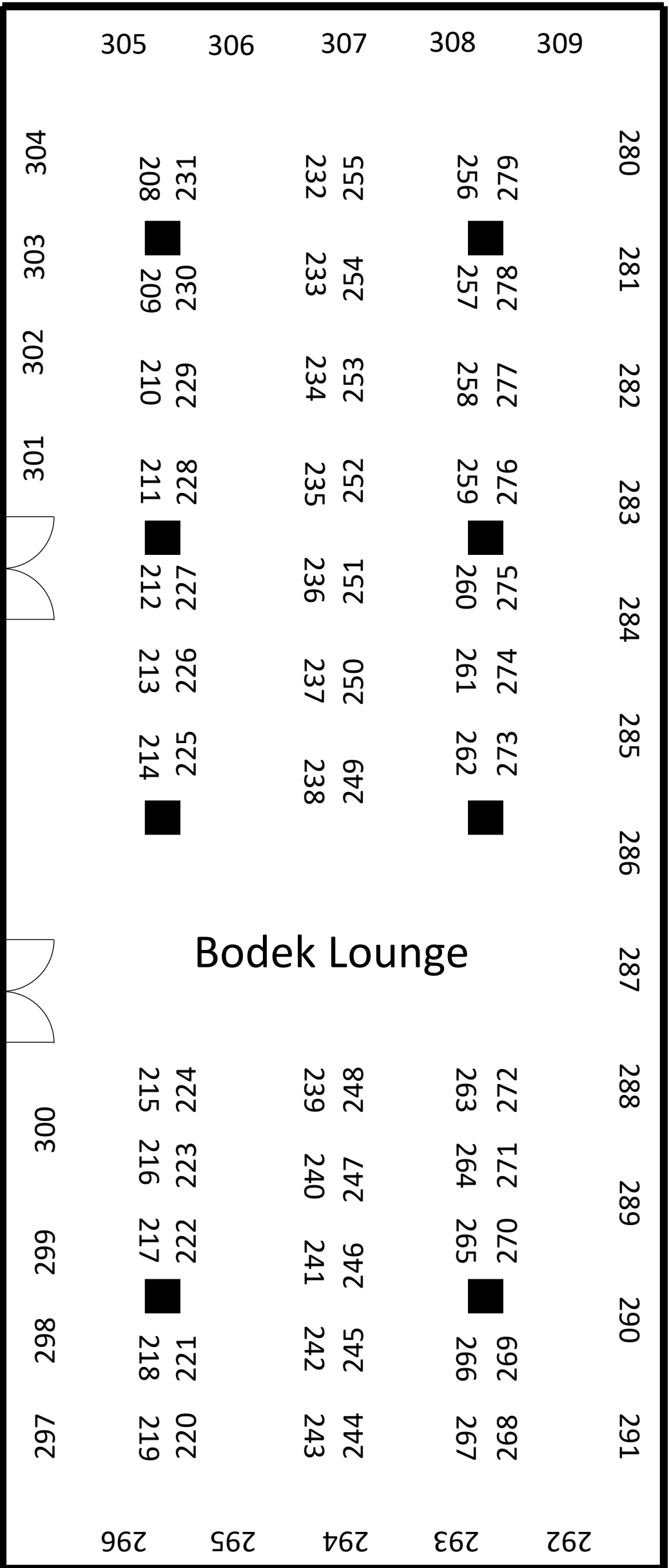
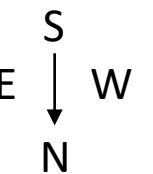






Spruce Street

Penn Commons



Bodek Ante-Room

Welcome table

Class of '49

Brachfeld Room

Golkin Room

Ben Franklin Room

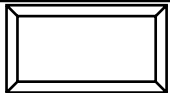
326 327 328 329 330 331 332 333

# HH 2<sup>nd</sup> floor lobby

325 324 323 322 321 320 319 318

310 311 312 313 314 315 316 317

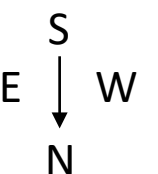
Welcome table



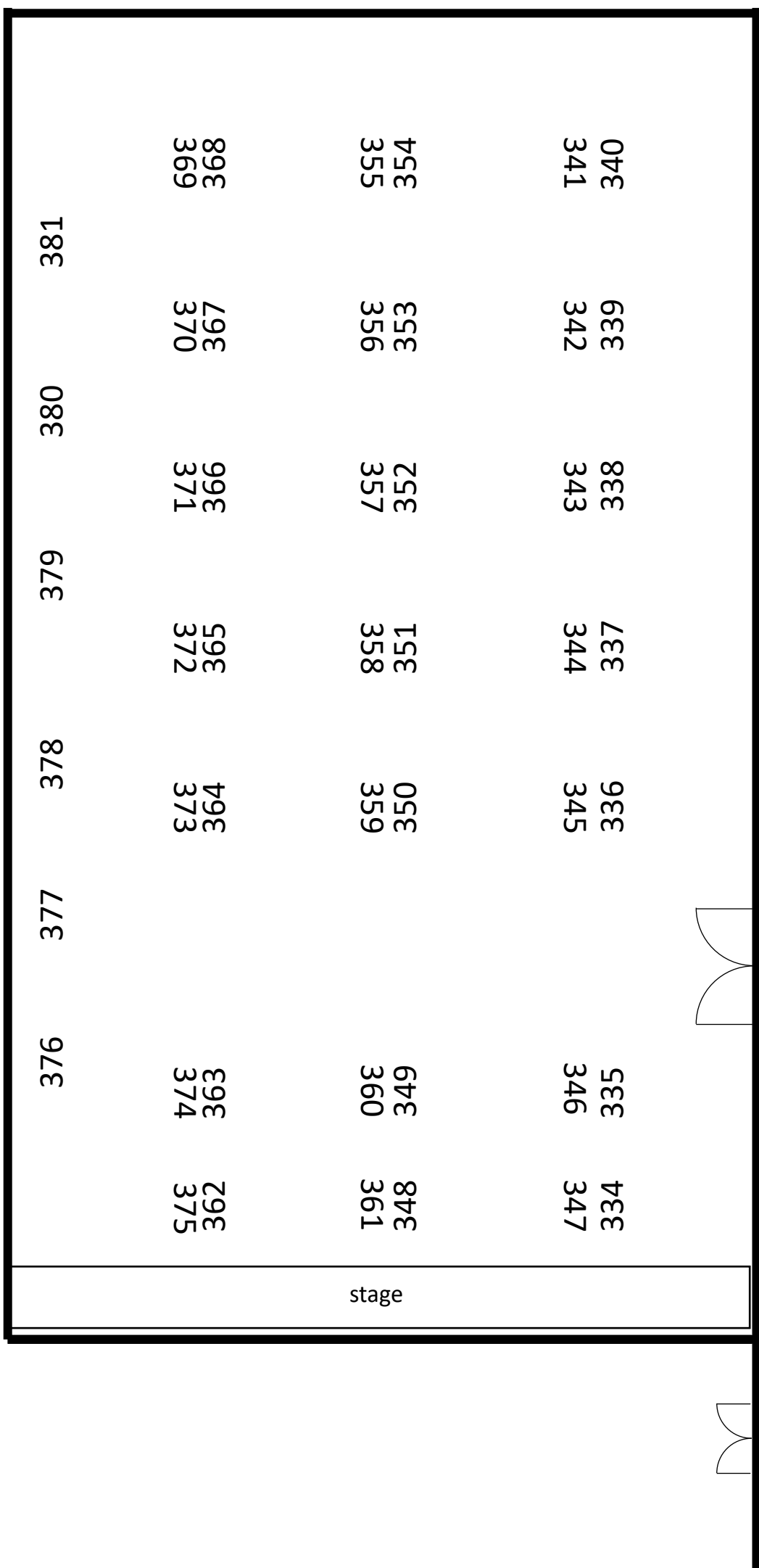
stairs



stairs



# Class of '49 on 2<sup>nd</sup> floor of Houston Hall



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575 375 493 372 773 371 073 369  
 362 374 364 372 993 371 273 368  
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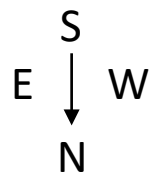
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733 347 933 345 733 343 633 342 043 341  
 335 346 335 345 833 343 633 342 341 341  
 335 346 335 345 833 343 633 342 341 341

Welcome table



HH 2<sup>nd</sup> floor lobby



## Poster Locations by Room

Hall of Flags, First Floor (Posters 1-112) .....	11
Hall of Flags, 2 <sup>nd</sup> 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 <sup>nd</sup> floor Lobby (Posters 310-333) .....	28
Class of '49 (Posters 334-381).....	30

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

1. **Amara Abdoukarim (COL 2026)**  
**Charissa Howard (COL 2026)**  
Advisor: Dorothy Roberts  
*The Social Experience and Science of Interracial Marriage in Chicago, 1937 - 1967*
2. **Zion Abebe (COL 2026)**  
**Amelia Becerra (COL 2026)**  
Advisor: Harald Schmidt  
*The Uses and Applications of the Area Deprivation Index*
3. **Ethan Abraham (COL 2024)**  
Advisor: Abraham Nitzan  
*Enrichment of Chiral Vibrational Modes in Chiral Structures*
4. **Kehinde Adeaga (COL 2026)**  
Advisor: Maria Geffen  
*Understanding Adaptation to Single-Sided Hearing Loss*
5. **Ololade Adebayo (COL 2025)**  
Advisor: Adeyinka Dayo  
*Trends Between Medial Arterial Calcification and Hypercholesterolemia*
6. **Olakanmi Adio (COL 2026)**  
Advisor: Victoria Vetter  
*Relationship Between Economic Disparities and Schools AED Availability in the Most Populated Cities of the Six Regions of PA*
7. **Celine Adomakoh (COL 2026)**  
Advisor: Daniel Beiting  
*Identification of Metagenomic Determinants of Disease Severity in Children from the Pneumonia Etiology Research for Child Health(PERCH) Study*
8. **Hannah Agarwal (COL 2026)**  
**Krishna Khawani (COL 2026)**  
Advisor: Paul Robinson  
*Red Code, Blue Code: The Impact of a State's Political Orientation on its Criminal Law*
9. **Aleena Alex (COL 2024)**  
Advisor: Vikram Paralkar  
*Investigating PHF6-ePHD2 Missense Mutations in THP1 Leukemia Cell Line*
10. **Andrea An (SEAS 2025)**  
Advisor: Katherine Uyhazi  
*Developing an in-vitro Model of Gyrate Atrophy for Gene Therapy*
11. **Riya Anand (COL 2026)**  
Advisor: Steven Kimbrough  
*Public Deliberation on Climate Transitions & Well-Being: Climate Action & Social Resilience*
12. **Nicholas Angellino (COL 2025)**  
**Raj Logue (COL 2025)**  
**Yamin Phyu Phyu (COL 2025)**  
Advisor: Marc Flandreau  
*Broker Bankruptcies in the London Stock Exchange during the 1820s*
13. **Zida Anyachebelu (COL 2025)**  
**Cassandra Owei (COL 2025)**  
Advisor: Renyu Liu  
*Stroke Health Care Assessment Nigeria*
14. **Paavani Arora (COL 2026)**  
Advisor: Erik Wibbels  
*Advancing Land and Conservation: Evaluations and Impacts across Zambia, Uganda, and Burkina Faso*
15. **Laura Baeyens (COL 2024)**  
Advisor: Tobias Baumgart  
*The Role of Protein Condensates in Actin Polymerization During Lamellipodia & Creating a Novel Protein Construct for Improved In Vitro Study*
16. **Rhea Bakshi (COL 2024)**  
Advisor: Ellen Pure  
*Impact of Targeted Inhibition of TGF $\beta$  Receptor on TGF $\beta$ -induced Fibroblast Differentiation and Matrix Remodeling*
17. **Rokibat Bamidele (COL 2025)**  
Advisor: Matthew Kayser  
*Using Drosophila to Study Alcohol Use Disorder (AUD) from Human GWAS*
18. **Khushal Bantu (COL 2026)**  
Advisor: Jianghong Liu  
*A Prenatal Study Across 3 Cohorts*
19. **Harish Bayana (COL 2024)**  
Advisor: Christopher Lengner  
*CRISPR-Based Lineage Tracing Reveals Dependence of Tumor Metastatic Potential on Epithelial-Mesenchymal Transition*

- 20. Claudia Bellacosa (COL 2025)**  
**Tyler Trang (COL 2026)**  
 Advisor: Paula Fomby  
*Where Does the Time Go? Trends in Working Mothers' Time with Children, 1965-2019*
- 21. Alondra Betancourt (COL 2026)**  
 Advisor: Emily Severance  
*Investigating Biomarkers of the Gut-Brain Axis and Children's Mental Health in a Post-COVID-19 Urban Clinic*
- 22. Anirudh Bharadwaj (SEAS 2026)**  
 Advisor: Dylan Rankin  
*A Machine Learning-Based Approach to Anomaly Detection in pp Collisions at the LHC*
- 23. Trisha Bheemanathini (COL 2026)**  
 Advisor: Christopher Forrest  
*Functional Outcomes of Children After SARS-CoV-2 Infection*
- 24. Glynn Boltman (COL 2026)**  
 Advisor: Brendan O'Leary  
*Divisions and Decisions: The Democratic Unionist Party*
- 25. Inthat Boonpongmanee (COL 2023)**  
 Advisor: Florian Schwarz  
*Verbal and Non-verbal Dual Task Interference Effect on Some Scalar Implicatures*
- 26. Graham Branscom (COL 2024)**  
 Advisor: Sharlene Day  
*HSP70 Co-Chaperones Modulate Sarcomeric Proteostasis in Hypertrophic Cardiomyopathy*
- 27. Lily Brenner (SEAS 2026)**  
 Advisor: Cynthia Sung  
*Developing a Simulation for Re-Programmable Magnetically Self-Folding Origami Structures*
- 28. Jake Brewington (COL 2026)**  
 Advisor: Frank Lee  
*Morphological Alterations in Placentas with HIF Activation*
- 29. Maxfield Brody (COL 2026)**  
 Advisor: Harald Schmidt  
*Potential Uses of the Social Vulnerability Index*
- 30. Pierce Bruner (COL 2026)**  
 Advisor: Paul Schmidt  
*Fecundity and Population as Measures of Fitness in *D. melanogaster**
- 31. Kevin Bryan (COL 2024)**  
 Advisor: Jang Yoon  
*Large Language Model-Based Neurosurgical Evaluation Matrix: A Novel Scoring Criteria to Assess the Efficacy of ChatGPT as an Educational Tool in Neurosurgical Education*
- 32. Alexander Budko (SEAS 2026)**  
**Katrina Liu (SEAS 2025)**  
 Advisor: Kevin Johnson  
*GPT-4 Prompt Engineering For Automated Patient Response Generation*
- 33. Noah Budnitz (WH 2026)**  
**Rishabh Mandayam (COL 2025)**  
 Advisor: David Abrams  
*Law and Large Language Models*
- 34. Camellia Bui (COL 2025)**  
 Advisor: Emily Becker-Haimes  
*Integrating Exposure Therapy into Training to Reduce Clinician Anxiety in Implementing Evidence-based Suicide Prevention Practices*
- 35. Grace Busser (COL 2025)**  
**Ivanna Dudych (COL 2026)**  
**Anna Metzger (COL 2025)**  
 Advisor: Franca Trubiano  
*Building at Risk*
- 36. Charles Cameron (COL 2024)**  
 Advisor: Amos Smith III  
*Synthesis of Modified CD4 Mimetic Compounds*
- 37. Trenton Campos (SEAS 2026)**  
**Greggory Datto (SEAS 2026)**  
**Andy Liu (SEAS 2026)**  
 Advisor: Chamith Rajapakse  
*Polycaprolactone and Hydroxyapatite Bioprinting without Using Solvents and its Applications*
- 38. Sergio Emilio Carballido (COL 2026)**  
**Erika Kishino (COL 2026)**  
 Advisor: Jolyon Thomas  
*Religion and the Politics of Public Education in Japan and the U.S.*

- 39. Natalie Chang (COL 2026)**  
 Advisor: Kate Creasy  
*Effect of PPP1R3B Deletion on Circadian Gene Expression in Microglia and Neurons*
- 40. Sam Charney (COL 2024)**  
 Advisor: Bhuvnesh Jain  
*An Analytic Model for Galaxy Cluster Shocks*
- 41. Caroline Chen (SEAS 2026)**  
 Advisor: Lu Lu  
*Physics-informed Machine Learning for Solving Differential Equations*
- 42. Jason Chen (COL 2024)**  
 Advisor: David Raizen  
*Analysis of Two Neurons Underlying Sick Sleep Behavior in C. Elegans*
- 43. Mengxiang Chen (COL 2024)**  
 Advisor: Katherine Theken  
*Effect of Adipokines on Post-Dental Implant Inflammation Levels*
- 44. Michael Chen (WH 2026)**  
**Evelyn Huang (WH 2026)**  
 Advisor: Maurice Schweitzer  
*Communication: Mechanics of Conversation*
- 45. Stephanie Chen (COL 2024)**  
 Advisor: Thomas Tropea  
*Predicting Impulsivity in Parkinson's Disease: A Descriptive Analysis*
- 46. Winston Chen (COL 2026)**  
 Advisor: Irina Marinov  
*Variations in Susceptibility of Lakes to Climate Change Analyzed through the SimStrat Model*
- 47. Melody Cheng (COL 2025)**  
 Advisor: Ethan Goldberg  
*Temperature-Dependent Impairment of Interneuron Physiology in a Mouse Model of Febrile Seizures*
- 48. Monica Cho (SEAS 2026)**  
 Advisor: Juan Alvarez  
*Effect of Clock Gene Knockout on the Differentiation and Maturation of Human Pluripotent Stem Cells into Pancreatic Islets*
- 49. Angela Chow (NUR 2024)**  
 Advisor: Tito Borner  
*Examination of the Emetogenic Properties of Tirzepatide and the Therapeutic Potential of GIPR/GLP-1R Co-Agonism*
- 50. Jinny Chung (COL 2026)**  
 Advisor: Sigrid Veasey  
*Effects of Chronic Sleep Disruption on Hippocampal Tau and Locus Coeruleus Projections*
- 51. Megan Chung (COL 2024)**  
 Advisor: Michael Lampson  
*Determining if MCAK Activation by UMK57 Depolymerizes Kinetochore-Microtubules*
- 52. Makayla Clark (COL 2025)**  
 Advisor: Chamith Rajapakse  
*Quantification of MRI Images for Patients with HEPATITIS C*
- 53. Benjamin Cohen (COL 2025)**  
**Meredith Devine (COL 2025)**  
 Advisor: Claire Finkelstein  
*Beyond Guantánamo: Restoring the Rule of Law to the Law of War*
- 54. Meheer Commuri (COL 2025)**  
 Advisor: Ramya Sreenivasan  
*Mapping Early Modern India*
- 55. Moira Connell (COL 2026)**  
**Vishal Krishnaiah (COL 2026)**  
 Advisor: Melissa Lee  
*International State-Building in Post-WWII Japan*
- 56. Isabela Contreras (COL 2026)**  
 Advisor: Kara Bernstein  
*A Novel Interaction Between the Shu Complex and the MCM Complex Mediates DNA Lesion Bypass During DNA Replication*
- 57. Haley Creighton (COL 2026)**  
 Advisor: Amy Stornaiuolo  
*How Does Queerness Intersect with Fandom Bonding in a Discord Youth Writing Community?*
- 58. Siri Dandu (SEAS 2026)**  
**Prishna Martinez (COL 2025)**  
 Advisor: Erica Carpenter  
*Cross-Validation of 2022 and 2023 Cohorts of Cell-free DNA Methylation as a Biomarker of Malignant vs. Benign Lung Nodules*
- 59. Caroline Dannacher (COL 2025)**  
 Advisor: Ana Cristancho  
*Effects of Prenatal Hypoxia on Neuronal Migration*

- 60. Anmol Dash (COL 2026)**  
Advisor: Andrew Modzelewski  
*Role of the IAP Gag Retrotransposon in Mouse Embryonic Development*
- 61. Roshni Datta (COL 2026)**  
Advisor: Victoria Bedell  
*Effects of Anesthetics on Mitochondrial Delocalization in Zebrafish Neurons*
- 62. Parth Dedhiya (COL 2026)**  
Advisor: Kate Townsend Creasy  
*Effects of PPP1R3B on Hepatocytic Circadian Gene Expression*
- 63. Klarissa Diaz (COL 2026)**  
Advisor: Sunny Shin  
*Comparing Non-Canonical Inflammasome Activation between Humans and Mice: Exploring the Differences*
- 64. Amy Dinh (COL 2025)**  
Advisor: Mantha Zarmakoupi  
*Understanding Geometry in the Construction of the Bouleuterion*
- 65. Cynthia Dong (SEAS 2026)**  
**Tony Le (COL 2025)**  
Advisor: Anh Le  
*Inhibition of Axonal Degeneration Using SARM-1 siRNA Loaded Lipid Nanoparticles*
- 66. Anya Draves (COL 2026)**  
Advisor: Elliot Lipeles  
*Search Into Dark Matter by Investigating Jets Produced in Proton Collisions*
- 67. Arda Enfiyeci (SEAS 2025)**  
Advisor: Erik Wibbels  
*Using Data Analysis and Machine Learning for Political Science Research*
- 68. Aylin Ergin (COL 2025)**  
Advisor: David Raizen  
*Mutations in *ceh-17* and Its Effect on Sickness Induced Sleep in *C. elegans**
- 69. Jake Fanale (SEAS 2026)**  
Advisor: Wanding Zhou  
*Developing a Comprehensive R/Bioconductor Package for DNA Methylation-based Human Cancer Classification and Phenotyping*
- 70. Lucy Fekade (COL 2025)**  
**Logan Fleming (COL 2025)**  
Advisor: Daniel Swingley  
*Onset Coda Judgements of African American Mothers in Infant Directed Speech*
- 71. Felipe Flores Cruz (COL 2026)**  
**Eric Ryu (COL 2026)**  
Advisor: William Ewald  
*Justice James Wilson Biography*
- 72. Xianli Fu (COL, WH 2026)**  
Advisor: Cary Coglianesi  
*Regulation and Regulatory Processes: Cataloging the Use of AI/ML Tools in the Federal Government*
- 73. Rohan Gala (WH 2026)**  
**Adam Gorka (SEAS 2025)**  
Advisor: Sandhitsu Das  
*Quality Control and Topological Analysis of MRI Segmentation Data*
- 74. Om Gandhi (COL, SEAS 2025)**  
Advisor: Michael Hogarty  
*Investigating Dual Polyamine Synthesis Inhibition and Proline-Arginine Depletion Therapy in TH-MYCN+/+ Mice with Neuroblastoma*
- 75. Phillip Gao (SEAS 2026)**  
Advisor: Yasmin Kafai  
*Exploring Youth's Everyday Perception of Chat GPT*
- 76. Nahu Gebregiorgis (SEAS 2026)**  
Advisor: Joel Stein  
*Epilepsy Quantitative Imaging and Electrophysiology Lab*
- 77. Joshua George (COL 2025)**  
Advisor: Evelyn Thomson  
*Chargino Pair RPV Decay to Higgs Boson and Leptonic Tau*
- 78. Miraya Gesheva (COL 2026)**  
**Teia Hudson (COL 2026)**  
Advisor: Juan Llamas-Rodriguez  
*Netflix in Mexico: A 10-year Assessment*
- 79. Katie Gilbert (COL 2024)**  
**Naomi Phemister-Jimenez (COL 2024)**  
Advisor: Daniel Beiting  
*Presence of Bacteria and Antibiotic Resistance in Water Sites on San Cristóbal Island*



- 80. Jasleen Gill (COL 2024)**  
 Advisor: Rahul Kohli  
*Interrogating Mechanism to Design Efficient CRISPR-Cas12a Editors*
- 81. Jacob Goell (SEAS 2025)**  
 Advisor: Robert Carpick  
*Graphene Auto-Kirigami: Forming 3D Structures Through Atomic Force Cutting*
- 82. Iris Gong (COL 2026)**  
 Advisor: Foteini Mourkioti  
*Inhibition of NF- $\kappa$ B Pathway in MuSCs Impairs Muscle Regeneration*
- 83. Joy Gong (COL 2025)**  
 Advisor: Anna Schapiro  
*A Meta-Learned Neural Network Model of the Hippocampus with Brain-like Hierarchically-Structured Sparsity and Learning Rate Patterns*
- 84. Michelle Gong (COL 2025)**  
 Advisor: Alexander Proekt  
*Subanesthetic Ketamine and Propofol Reduce Amplitude of Auditory-evoked ERPs in Humans*
- 85. Eva Gonzalez-Whitehouse (COL 2026)**  
 Advisor: Chamith Rajapakse  
*Automated 3D Segmentation for Lumbar Spines and Femurs for Augmented Reality*
- 86. Luke Gooding (COL 2024)**  
 Advisor: Eric Grimes  
*Transition between Primary and Secondary Education in Trinidad and Tobago: The Concordat and The Privilege Problem*
- 87. Miette Gourlay (COL 2025)**  
**Dara Jih-Cook (COL 2026)**  
 Advisor: Jacqueline Corcoran  
*Depression Prevalence Among US Women on Welfare: A Systematic Review & Meta-Analysis*
- 88. Aditya Gowd (SEAS 2025)**  
 Advisor: Kathryn Davis  
*Analyzing Harmonization Strategies for Functional Connectivity Data*
- 89. Evan Grove (SEAS 2026)**  
**Cassidy Schuman (SEAS 2026)**  
 Advisor: Ali Nabavizadeh  
*Pediatric Automatic Defacing*
- 90. Isabelle Gu (WH 2026)**  
 Advisor: Yasmin Kafai  
*Investigating Youth's Understanding of ML/AI Using Cultural Probes*
- 91. Millie Gu (WH 2026)**  
 Advisor: Duncan Watts  
*Optimizing Tools to Facilitate Deliberation Research*
- 92. Rohana Gullapalli (COL, WH 2025)**  
 Advisor: Yijing Su  
*Hippocampal Aging Clock*
- 93. Sagar Gupta (COL 2023)**  
 Advisor: Nikolaos Sgourakis  
*Structural Principles of Peptide-Centric Chimeric Antigen Receptor Recognition Guide Therapeutic Expansion*
- 94. Shikhar Gupta (COL 2026)**  
 Advisor: Ana Cristancho  
*Regulation of Lactate and Protein Lactylation by Prenatal Hypoxia*
- 95. Dedeepya Guthikonda (COL, WH 2026)**  
 Advisor: Sade Bonilla  
*How Effective are Last-Dollar Scholarship Programs in Providing Aid to Qualifying Students?*
- 96. Maricela Guzman (COL 2026)**  
 Advisor: George Burslem  
*Towards in vitro, Site Specific Polyubiquitinated Proteins*
- 97. Yixin Gwee (WH 2025)**  
 Advisor: Daniel Garrett  
*Investigating the Green and Social Premium in the Pricing of Bonds Issued by Multilateral Development Banks (MDBs)*
- 98. Ahmad Hammo (SEAS 2025)**  
 Advisor: Joseph Cichon  
*Exploring the Therapeutic Potential of Psilocybin in a Mouse Model of Neuropathic Pain with Comorbid Depression-like State*
- 99. Alan Han (COL 2026)**  
 Advisor: Gregory Corder  
*Mapping Brain Circuitry For Pain's Affective Component: Projection from Basolateral Amygdala to Nucleus Accumbens*

**100. Beatrice Han (COL 2025)**

Advisor: Juan Alvarez

*Optimizing Cytokine Cocktails in Pancreatic Islet Organoids to Investigate Maturation-Related Vulnerability to Demise from Pancreatic Islet-Directed Autoimmunity*

**101. Joy Han (COL 2026)**

Advisor: Andrew Edmondson

*Glycosylation Characterization of SLC35A2-CDG & SLC39A8-CDG Patient Fibroblast Cells Utilizing Lectins*

**102. Stephanie Hanchak (COL 2025)**

Advisor: Edward Brodtkin

*Reciprocal Relation Between Social Anxiety and Social Functioning in Autistic Adults*

**103. Leilei Hao (COL 2024)**

Advisor: Franz Weber

*BiLSTM-FC: A Deep Learning Model for Automatic Sleep Stage Classification in Mice*

**104. Jordyn Harris (SEAS 2025)**

Advisor: Michelle Johnson

*Machine Learning Analyzations of Infant Limb Motion Using the PANDA Gym*

**105. Stefan Hatch (COL 2026)**

Advisor: Sara Jaffee

*Qualitative Interviews for Participants in the PHL Housing+ Project*

**106. Madeline Hatola (COL 2026)**

Advisor: Victoria Vetter

*Assessing AED Presence Across PA School Districts: A Senate Bill No. 375 Cost Analysis*

**107. Olivia Haynie (COL 2024)**

**Liv McClary (COL 2024)**

**Justin Seward (COL 2025)**

Advisor: Donovan Schaefer

*Historic Black Perspectives on Confederate Monuments*

**108. Yitong He (WH 2026)**

Advisor: Jianghong Liu

*Study on the Effect of Finger Exercises in Elderly Patients with MCI (Mild Cognitive Impairment)*

**109. Brian Herman (COL 2026)**

Advisor: Foteini Mourkioti

*TRF2 Function in Cardiomyocytes during Embryonic Heart Development*

**110. Yerahm Hong (SEAS 2026)**

Advisor: Ethan Goldberg

*Investigating Pattern Separation Ability in an Epileptic Mouse Model of Dravet Syndrome*

**111. Leah Hopf (COL 2025)**

Advisor: Jon Hawkings

*Quantification & Classification of Particulate Manganese in a Glacial Environment*

**112. Iris Horng (COL 2024)**

Advisor: Cory Johnson

*Algorithmic Generation of DNA Self-Assembly Graphs*

- 113. Lauren Howie (COL 2026)**  
Advisor: Sigrid Veasey  
*MAO-A Inhibitor Clorgyline Administered in Chronically Sleep Deprived Mice Fails to Protect Neuronal Health and Slow Alzheimer's Pathology Progression*
- 114. Michael Hu (COL 2026)**  
Advisor: Klaus Kaestner  
*Shortened Telomeres Impact Liver Regeneration in Mice*
- 115. James Huang (COL 2026)**  
**Margot Schneider (COL 2026)**  
Advisor: Jianjing Kuang  
*Music, Language, & Phonetic Cognition in Children*
- 116. Leo Huang (COL 2025)**  
**Tommy Zeng (COL 2025)**  
Advisor: Jacques deLisle  
*China's Law at Home and Abroad*
- 117. Melissa Huerta (COL 2025)**  
Advisor: Daniel Hopkins  
*Philadelphia Mayoral Primary Polling*
- 118. Daniel Hwang (COL 2025)**  
**Megan Yang (SEAS 2026)**  
Advisor: Danielle Mowery  
*Identifying Medication Needs from Patients' Chatbot Messages Using Natural Language Processing and Machine Learning*
- 119. Rahmat Ifaz (COL 2025)**  
Advisor: Andrew Edmondson  
*Identifying Roles of Abnormal Protein Expression in GALNT2-CDG Phenotypes*
- 120. Szirina Ismail (COL 2026)**  
Advisor: Joseph St. Geme III  
*Phenotypic Characterization of *Kingella kingae* Isolates Recovered from Patients with Endocarditis*
- 121. Jo Iyasele (COL 2025)**  
Advisor: Mariella De Biasi  
*CBD Exposure in Adolescence Decreases Future Morphine Consumption in Mice*
- 122. Alex Iyer (COL 2025)**  
Advisor: Katherine Uyhazi  
*Inner Retinal Changes in Mouse Model of LCA5 Retinal Degeneration*
- 123. Michael Jacob (COL 2026)**  
**Sanjit Kobla (COL 2026)**  
Advisor: Bhuvnesh Jain  
*3D Anisotropic Scattering Transformation*
- 124. JoAnna James (COL 2026)**  
Advisor: Kelly Jordan-Sciutto  
*Insights Into Potential Production of PERK Protein Isoforms Resulting from EIF2AK3 Alternative Splicing*
- 125. Hiba Jamil (COL 2025)**  
Advisor: Nosheen Reza  
*Optimal Management of Background Therapy in Patients with Symptomatic Obstructive Hypertrophic Cardiomyopathy Initiated on Mavacamten*
- 126. Terrance Ji (COL 2026)**  
Advisor: Dylan Small  
*Matching for Evaluating Dynamic Treatment Regimes*
- 127. Annabelle Jin (COL 2025)**  
Advisor: David Frank  
*Mesenchymal Brd4 is Required for Lung Morphogenesis*
- 128. Hannah Jin (COL 2024)**  
Advisor: Dylan Small  
*Development of Quadruple Crossmatch Test*
- 129. Joey Jung (COL 2024)**  
Advisor: Elaine Simon  
*Game-Changing Solutions: Community Benefits Agreements and the Quest for Equitable Urban Redevelopment*
- 130. Sam Jung (COL 2026)**  
Advisor: Danaë Metaxa  
*TikTok, What's on the Clock?*
- 131. Ioannis Kalaitzidis (COL 2025)**  
Advisor: Masao Sako  
*Navigating Uncharted Skies: Investigating Template Subtraction for Type Ia Supernovae Detection*
- 132. Madison Kang (COL 2026)**  
Advisor: Blanca Himes  
*Mapping TRI Releases in Pennsylvania and Philadelphia Census Tracts*

- 133. Deepika Kannan (COL 2026)**  
 Advisor: Steven Kimbrough  
*Optimizing Sustainable Transportation Policies with Agent-Based Modeling*
- 134. Sofia Kaparis (COL 2026)**  
 Advisor: Danielle Cullen  
*Socially Equitable Care by Understanding Resource Engagement (SECURE)*
- 135. Prabh Kaur (COL 2026)**  
 Advisor: Doris Wagner  
*Investigating LFY K80R in Arabidopsis: Functionality and Phenotypic Effects*
- 136. David Kedeme (COL 2025)**  
 Advisor: Minghong Ma  
*Olfactory System Overview: Organization, Processes, Roles, & Disorders*
- 137. Destynn Keuchel (SEAS 2026)**  
**Na Lee (COL 2025)**  
 Advisor: Laia Mogas-Soldevila  
 TERRENE
- 138. Nayab Khurshaidi (COL 2025)**  
**Emily Roberts (COL 2026)**  
 Advisor: Emily Hannum  
*Climate Risk, Pollution, and Childhood Inequalities in Low- and Middle-income Countries*
- 139. Brian Kim (COL 2026)**  
 Advisor: Kang Ko  
*Investigation of Novel Cell Death Mechanism for Periodontal Inflammation in Humans*
- 140. Bryan Kim (COL 2025)**  
 Advisor: Matthew Good  
*Regulating JAK-STAT Pathway via Thermo Controlled Condensates*
- 141. Enne Kim (COL 2026)**  
 Advisor: Heather Huntington  
*Land and Conservation Efforts in Zambia: Zambia Eastern Kafue Nature Alliance (EKNA) Baseline Data Analytics*
- 142. Hannah Kim (COL 2026)**  
 Advisor: Zhaolan Zhou  
*Induction of Cre Recombinase Activity In Vivo in Mice*
- 143. Hayle Kim (COL 2025)**  
 Advisor: Matthew Kayser  
*A Candidate-based Screen to Identify Genes Involved in Sleep Maturation*
- 144. Kyulee Kim (SEAS 2026)**  
**Luna Sato (COL 2026)**  
**Yutong Yi (COL 2026)**  
 Advisor: Huafeng Wei  
*Intranasal Administration of Dantrolene Nanoparticles as Neuroprotection for Alzheimer's Disease*
- 145. Minnie Kim (COL 2025)**  
**Allison Mi (SEAS 2026)**  
**Simon Roling (SEAS 2026)**  
 Advisor: Christopher Yoo  
*Assessing Smartphone and Internet Penetration in Ghana*
- 146. Olivia Kim (COL 2025)**  
 Advisor: Anjan Chatterjee  
*Penn Center for Neuroaesthetics: Engagement with Artwork*
- 147. Rebecca Kim (COL 2024)**  
 Advisor: Wenqin Luo  
*Single Soma Dissection of Human DRG Neurons by Laser Capture Microdissection*

Bistro (Posters 148-177)

**148. Sophie Klessel (SEAS 2025)**

Advisor: Riccardo Gottardi  
*An in vitro Study of Scaffolds for Cartilage Repair*

**149. Victor Kogo (WH 2026)**

Advisor: Samir Nurmohamed  
*Being an Alternate Choice and Feedback Seeking in Organizations*

**150. Daniella Kohn (COL 2026)**

Advisor: Edward Brodtkin  
*Effects of Concurrent ADHD and Anxiety on Self and Informant Report Discrepancies in Autistic Adults*

**151. Christine Kong (COL 2024)**

Advisor: Rebecca Ganetzky  
*Utilizing Stable Isotopes to Develop a Fully Quantitative Mitochondrial Translation Assay*

**152. Maya Kreger (COL 2025)**

Advisor: Ileana Pérez-Rodríguez  
*Microbiology of Metal-reducing Isolate *Thermaerobacter* sp. Strain 36 from the Subseafloor Ocean Crust*

**153. Aravind Krishnan (COL, WH 2025)**

Advisor: Roger Greenberg  
*The BLM Helicase Enables Cancer Cells to Achieve Telomerase-Independent Immortality through Alternative Lengthening of Telomeres (ALT)*

**154. Jun Kwon (SEAS 2026)**

Advisor: Cynthia Sung  
*Design and Characterization of a Tunable-Stiffness Pneumatic Legged Hopping Robot*

**155. Andrew Lee (COL 2026)**

Advisor: Kenneth Zaret  
*Kdm4 H3K9me3 Demethylases Maintain Cellular Identity of Adult Mouse Hepatocytes*

**156. Gavin Lee (COL 2025)**

Advisor: Frederick Bennett  
*Utilizing Lyso-IP for Lipidomics in an in vitro Model of Krabbe Disease*

**157. Hannah Lee (COL 2025)**

Advisor: Martin Seligman  
*Theory and Research in Positive Psychology*

**158. Joyce Lee (COL 2026)**

Advisor: Leo Cheng  
*Retrospective Analysis of Serum Indicators for COVID-19 Severity*

**159. William Lee (COL 2024)**

Advisor: David Raizen  
*The Discovery of Drugs Reducing Stress-Induced-Sleep Using High-Throughput Screening*

**160. Sage Leland (COL 2026)**

Advisor: Dhivya Ramasamy  
*A Study of Patient Digital Usage Habits, Access, and Attitudes at an Eye Hospital in Southern India*

**161. Josh Leshinskie (SEAS 2026)**

Advisor: Igor Bargatin  
*Achieving Near-Atmospheric Levitation of Micron-Thick Materials*

**162. Sophie Levin (COL 2026)**

Advisor: Kelly Jordan-Sciutto  
*Antiretroviral Activation of the PERK Pathway Leads to Stress Granule Formation in Differentiating Oligodendrocytes*

**163. Jenny Li (COL 2026)**

Advisor: Wanding Zhou  
*Exploration of Feature Selection Strategies in DNA Methylation-based Cancer Classification*

**164. Jiayi Li (COL 2025)**

Advisor: Ramya Sreenivasan  
*Military Campaigns in Early Modern South Asia: What Digital Mapping Can Tell Us*

**165. Katherine Li (SEAS 2026)**

**Annabel Sumardi (COL 2025)**  
Advisor: Joshua Mosley  
*Animating Sustainability: Unveiling Professor Poldergeist's Research on Dutch Water Management*

**166. Lilian Li (COL 2024)**

Advisor: Chamith Rajapakse  
*Utilizing AI-based 2D Segmentation for 3D Medical Imaging Analysis*

**167. Michael Li (COL, SEAS 2025)**

Advisor: Duncan Watts  
*High-Throughput Experiments on Group Dynamics: Deliberation*

- 168. Sunnie Li (SEAS 2026)**  
Advisor: Lukasz Bugaj  
*Using Optogenetics to Explore RTKs' Role in Persistence of EML4-ALK Cancer Cells*
- 169. Thomas Li (COL, SEAS 2025)**  
Advisor: Juan Londono  
*The Economic Significance of Rising Inflation Uncertainty*
- 170. Yijia (Laura) Li (COL, SEAS 2026)**  
Advisor: Lu Lu  
*Machine Learning Guided Rhodopsin Engineering for Voltage Imaging*
- 171. Cheryl Lim (SEAS 2025)**  
Advisor: Deep Jariwala  
*Enhancement of Charge Transport by Exciton Polaritons in Tungsten Disulfide Photovoltaic Devices*
- 172. Ryan Lim (SEAS 2024)**  
Advisor: James Riley  
*Investigating RASA2 Overexpression to Reduce CAR T Cell On-Target Off-Tumor Toxicity*
- 173. Jessica Lin (COL 2026)**  
Advisor: Courtney Wolk  
*Barriers and Facilitators of Implementing Teamwork Training for School Mental Health Teams*
- 174. Linda Lin (SEAS 2024)**  
Advisor: Deep Jariwala  
*Broadband Solar Light Harvesting from Ultrathin Two-Dimensional Semiconductor Heterostructures*
- 175. Po-Ting Lin (COL 2026)**  
**Tammy Nguyen (SEAS 2026)**  
Advisor: Chinedum Osuji  
*Using Self-Assembling Surfactants to Form Water Filtration Membranes*
- 176. Alyssia Liu (COL 2024)**  
Advisor: Dana Graves  
*The Oral Mucosa is Enriched with Inflammatory Fibroblasts in Diabetic Mice*
- 177. Danju Liu (COL 2026)**  
**Alana Newberger (COL 2025)**  
**Rahan Siddiqi (COL 2024)**  
Advisor: James Pawelski  
*Music and Human Flourishing*

**178. Hannah Liu (COL 2025)**

Advisor: Philip Tetlock  
*Utilizing Correlational Analysis to Identify Traits of Successful Forecasters*

**179. Ivy Liu (COL 2026)**

Advisor: Arnold Mathijssen  
*Cargo Transport by Schooling Micro-organisms*

**180. Jason Liu (SEAS 2026)**

**William Dodds (COL 2025)**  
**Eric Zhao (SEAS 2025)**  
Advisor: Mayur Naik  
*Relational Programming with Foundation Models*

**181. Kevin Liu (SEAS 2026)**

Advisor: Brian Litt  
*Task Aware Representations of Sentences Improves Seizure Freedom Classification in Data-Limited Settings*

**182. Ryan Liu (COL 2026)**

Advisor: Qi Long  
*Using Tissue-specific Genetic Variation in Mendelian Randomization to Map the Influence of Education and Intelligence on the Risk of Alzheimer's Disease*

**183. Sophia Liu (COL 2026)**

Advisor: David Reibstein  
*Perception Can Be Reality: How Nation Branding and a Country's Brand Impacts Openness To Immigration*

**184. Sydney Liu (COL 2026)**

**Veronica Marlotte (COL 2025)**  
Advisor: Delphine Dahan  
*Cards and Conversation: Social Reasoning in Dialogues*

**185. Winson Liu (COL 2025)**

Advisor: Paul Schmidt  
*Experimental Evolution of Malathion Resistance in *Drosophila melanogaster**

**186. Yuhan Liu (SEAS 2025)**

Advisor: Jordan Raney  
*Improving the Precision of Direct-Write 3D Printing via Computer Vision and Machine Learning*

**187. Edward Lopez Velazquez (COL 2024)**

Advisor: Shardha Jogee  
*Characterizing The Accretion Behavior Of AB Aurigae, A Potential Young Planet Host Star*

**188. Luiza Louback Fontes (COL 2026)**

Advisor: Amy Stornaiuolo  
*Fostering Belonging and Inclusivity through Multilingual and Multimodal Practices: An Exploration within an International Context*

**189. Cindy Lu (COL 2026)**

Advisor: David Merrick  
*Understanding How Fibro-Adipogenic Progenitor Cells React to Obesity/Injury and Its Effects on Muscle Health*

**190. Kira Lu (SEAS 2024)**

Advisor: Xiaowei Liu  
*Geographical Specificity of Osteocyte Function within the Cortical Bone Matrix under a Variety of Estrogen Level and Reproductive Conditions*

**191. Tianhao Luo (COL, WH 2025)**

Advisor: Peter Koo  
*Deciphering the Genetic Code behind Single-Cell Chromatin Accessibility: Interpreting a Sequence-based Convolutional Neural Network*

**192. Tristan Ly (COL 2024)**

Advisor: Annette Lareau  
*Differences in Navigation of Elite Institutions by Social Class*

**193. Katherine Lynch (COL 2024)**

Advisor: Erica Korb  
*Investigating the role of Histone Methylation in Neurodevelopmental Disorders*

**194. Hannah Macdonald (COL 2026)**

Advisor: Chamith Rajapakse  
*Backend Development for Electronic Medical Record System*

**195. Jan Magielski (COL 2024)**

Advisor: Ingo Helbig  
*Delineating the Clinical and Genetic Spectrum of Speech Disorders in 52,143 Individuals*

**196. Sanya Malhotra (COL 2024)**

Advisor: Ramya Sreenivasan  
*Workers, Farmers, and Social Philosophers: The Rise of Communism in Punjab, 1913-1929*

**197. Saurabh Mallela (SEAS 2025)**

Advisor: Erin Conrad  
*Towards Automated Epilepsy Diagnosis*

- 198. Akshatha Manjunatha (COL 2025)**  
Advisor: Tobias Baumgart  
*Studying the Role of Lamellipodin in Suppressing Endophilin's Curvature Generation*
- 199. Audrey Mann (SEAS 2025)**  
Advisor: Igor Bargatin  
*Photophoretic Thruster for Trajectory Control of Large, High-altitude Balloons*
- 200. Daniel Markman (COL 2024)**  
Advisor: Joseph Cichon  
*Comparing the Molecularly Distinct Psychedelic Antidepressants in a Novel Mouse Model of Chronic Stress*
- 201. Crystal Marshall (COL 2024)**  
Advisor: Perry Johnson  
*Towards Transformation: A Call for the Reimagination of the Film Canon*
- 202. Hana Matsuda (SEAS 2025)**  
Advisor: Daniel Hammer  
*Functional Use of RGG condensates to Control Motility of HL 60 cells*
- 203. Benjamin McAvoy-Bickford (COL 2026)**  
**Shaurya Singhi (SEAS 2026)**  
**Nina Wang (COL 2026)**  
Advisor: Eugene Buckley  
*Kashaya Language Resources*
- 204. Mia McElhatton (COL 2026)**  
Advisor: Kok-Chor Tan  
*Tiger Widows in the Soundarbans: Gender, Conservation, and Culture*
- 205. Zarah Meek (SEAS 2025)**  
Advisor: Irma Elo  
*Cognitive Aging in Chile and the Context of Chile's Indigenous Populations*
- 206. Arianna Mejia (COL 2025)**  
Advisor: Vivek Bhalla  
*Generation of an Endogenous Mutation in CIC-Kb Using Prime Editing*
- 207. Miranda Meng (COL 2025)**  
Advisor: Ahmara Ross  
*Evaluating the Reliability of Brn3a and RBPMS as Retinal Ganglion Cells Markers with Age and Ocular Hypertension-induced Disease*



## Bodek Lounge (Posters 208-309)

### 208. Francesco Milano (COL 2024)

Advisor: Tobias Baumgart  
*Purification of VASP Constructs and Liquid-liquid Phase Separation with Lamellipodin and Endophilin*

### 209. Madeeha Mirza (COL 2024)

Advisor: Ayelet Ruscio  
*GAD, MDD, and COM: Threat and Reward Response in Daily Life*

### 210. Kai Mitsuishi (COL 2026)

Advisor: Arnold Mathijssen  
*E. coli Motility in Microchannels - Experimental and Theoretical Insights*

### 211. Anthony Montes de Oca (COL 2025)

Advisor: Stacey Bevan  
*Autism Diagnosis and Service Navigation of Hispanic Immigrant Families*

### 212. Kayleigh Mooney (COL 2025)

Advisor: Loretta Flanagan-Cato  
*Community Engagement Neuroscience*

### 213. George Morcos (COL 2024)

Advisor: Costas Koumenis  
*FLASH Proton Irradiation Prevents Salivary Gland Dysfunction and Restores Aquaporin-5 Expression in Mice*

### 214. Jonibek Muhsinov (COL 2026)

Advisor: Thomas Mallouk  
*Synthesis of Photocatalysts*

### 215. Eric Muthersbaugh (COL 2025)

Advisor: Suradip Das  
*Piezoelectric Electrospun Cardiac Patch for Heart Tissue Repair: A Tissue Engineering Approach to Healing Damaged Cardiac Tissue Post Myocardial Infarction*

### 216. Sophie Mwaisela (COL 2024)

Advisor: Lee Cassanelli  
*L'Évolution d'un État Philanthropique: Colonial Switzerland and Its Voices of Dissent*

### 217. Eric Myzelev (COL 2025)

Advisor: Lu Lu  
*Physics-Informed Neural Networks for Tracking the Hemodynamics of Dissected Aorta*

### 218. Alena Nag (COL 2025)

Advisor: Ahmed Moustafa  
*Phylogenomic Analysis of Pseudomonas aeruginosa Isolates from Bacteremia Cases at CHOP*

### 219. Gautham Nair (SEAS 2024)

Advisor: Riccardo Gottardi  
*Decellularized Cartilage for Pediatric Tympanoplasty in an in vivo Rat Model*

### 220. Negin Najafi (COL 2026)

Advisor: Gary Bernstein  
*Determining the Uncertainty of Different Cosmological Parameters Using the Distribution of Dark-matter Density*

### 221. Connor Nakamura (COL 2025)

Advisor: Eiichiro Azuma  
*From Camps to Consumer Society: The Decline of Japanese American Radical Labor from 1942 to 1960*

### 222. Arav Nangia (COL 2026)

Advisor: Michael Lampson  
*Mechanisms of Equalization Between Maternal and Paternal Telomeres in Embryonic Cells*

### 223. Shivek Narang (COL 2025)

Advisor: James Gugger  
*Correlating the Effect of the Size and Location of TBI Induced Lesions on the Likelihood of Developing Epilepsy through Functional Connectivity Mapping*

### 224. Siena Nason (COL 2025)

Advisor: Marco Ruella  
*Modulation of the Epigenome of Tumor and Immune Cells to Enhance CAR-T Therapy against Non-Hodgkin Lymphoma*

### 225. Roene Nasr (COL 2024)

Advisor: Kyle Vining  
*Regulation of Dental Pulp Stem Cells in Fibrotic Hydrogels*

### 226. Jerayla Navarro (COL 2025)

Advisor: John Seykora  
*Biomarkers of Early UV-induced Skin Cancer*

### 227. Lisel Ndrecka (COL 2026)

Advisor: Cary Coglianesi  
*Economic, Financial, and AI Regulation*

- 228. Suraj Neelamagam (COL 2026)**  
 Advisor: Heath Schmidt  
*Activation of Endogenous CeA -> NAc Projections Attenuates Cocaine Reinstatement*
- 229. Andrew Ng (SEAS 2025)**  
 Advisor: Hersh Sagreiya  
*Report Generation for X-Ray Images*
- 230. Hung Nguyen (COL 2024)**  
 Advisor: Rachel Kuske  
*Anharmonic Forcing of a Vibro-Impact Energy-Harvester*
- 231. Thu Nguyen (COL 2026)**  
**Layla Sayed (COL 2026)**  
 Advisor: Julia Gray  
*International Organizations from the Inside Out*
- 232. Tommy Nguyen (COL 2024)**  
 Advisor: Mark Sellmyer  
*Regulation of eDHFR-tagged Proteins with Trimethoprim PROTACs*
- 233. Elizabeth Ni (COL 2026)**  
 Advisor: Wanjiku Njoroge  
*Racialized Perceptions of Motherhood: the Pervasiveness of Implicit Biases in Race-Conscious Biomedical Research*
- 234. Sarah O'Konski (COL 2025)**  
 Advisor: Ivan Dmochowski  
*Synthesis of a Novel Chelating Hemicryptophane for Stabilization of Cu(I)*
- 235. Dominic Olaguera-Delogu (WH 2026)**  
 Advisor: Santosh Anagol  
*Household Finance in Emerging Markets*
- 236. Eda Orakci (SEAS 2026)**  
**Anna Vazhaeparambil (COL 2025)**  
 Advisor: Duncan J. Watts  
*Teamwork Decoded: Developing Virtual Experiments to Analyze Group Dynamics*
- 237. Samantha Ouyang (SEAS, WH 2026)**  
 Advisor: Jordan Raney  
*Multifunctional Modular Pneumatic Gripper*
- 238. Daniella Oyenuga (COL 2026)**  
 Advisor: Seema Bhatnagar  
*Neurobiology of Stress Resilience*
- 239. Nikhita Pabbaraju (COL 2026)**  
 Advisor: Levon Utidjian  
*Clinical Characteristics and Outcomes in Pediatric Hypertension Using EHR Data*
- 240. Yash Pahwa (COL 2025)**  
**Johannah Iyasele (COL 2025)**  
 Advisor: Mariella De Biasi  
*The Effect of Chronic Cannabidiol Administration on Anxiety-Like Behavior in Adolescent Mice*
- 241. Pranav Palleti (SEAS 2026)**  
 Advisor: Elizabeth McDonald  
*Machine Learning Approach for Enhancing Cancer Cell Classification in Breast Tissue IHC Slides*
- 242. Suraj Panara (COL 2025)**  
 Advisor: Neil Sheth  
*Source of Research Funding for Studies on TKA or THA May Predict Citations or Online Popularity and Correlate with Lower Study Quality*
- 243. Rohan Panday (SEAS 2026)**  
 Advisor: Joseph Kroll  
*Characterizing the Behavior of HVSS for EOS*
- 244. Camila Castillo Paranhos (COL 2025)**  
 Advisor: Julia Gray  
*Evolution of International Organizations*
- 245. April Park (COL 2026)**  
 Advisor: Gary Freedman  
*Prevalence of Sleep & Fatigue in Cancer Pre-Post Radiation Treatment*
- 246. Jun Hyun Park (SEAS 2026)**  
 Advisor: Chamith Rajapakse  
*Web Development and Machine Learning for Orthopedics*
- 247. Malena Parrado (COL 2026)**  
 Advisor: Michael Lampson  
*Variation Among Mus Species in de novo Paternal Pericentromeric Heterochromatin Formation*
- 248. Ronit Patel (COL 2024)**  
 Advisor: Kacy Cullen  
*Development of a 3-D Microtissue Model to Study Neuroinflammatory Responses*
- 249. Kamelija Patoska (COL 2026)**  
 Advisor: Seema Bhatnagar  
*Habituation to Stressors in Animals with Dysregulation of Sphingosine-1-phosphate Receptor 3 (S1PR3)*

- 250. Danielle Peck (COL 2026)**  
 Advisor: Joseph Rossano  
*Ventricular Decompression Outcomes and Complications*
- 251. Beijia Peng (COL 2024)**  
 Advisor: Dolores Albarracin  
*Processes and Consequences of Direct and Indirect Persuasive Messages on Recipients from Western and Eastern Cultural Backgrounds*
- 252. Sofia Perdomo (COL 2024)**  
**Ashil Srivastava (COL 2025)**  
 Advisor: Roy Hamilton  
*Modulating Working Memory with Transcranial Alternating Current Stimulation (tACS): Pilot Study for tACS as a Treatment for Neurodegenerative Memory Disorders*
- 253. Ysabella Perez (COL 2026)**  
 Advisor: Adriana Perez  
*Stress, Trust, and Health Care Among Older Latinos*
- 254. Yoni Perla (COL 2024)**  
 Advisor: Maayan Levy  
*AhR Ligands Modulate Gasdermin C In Vitro*
- 255. Sarah Pham (COL 2024)**  
 Advisor: Ethan Goldberg  
*Assessing Mechanisms of Brain Malformation in SCN3A Encephalopathy Using a Stem Cell-derived Model*
- 256. Liam Phillips (COL 2024)**  
 Advisor: Brian Kim  
*In Search of a New Russian Readership: Communal Experience and Literary Form in Mikhail Kuzmin's Wings*
- 257. Talyah Pierce (COL 2026)**  
 Advisor: John MacDonald  
*Beyond the Clean-Up: An Analysis of the Relationship Between Litter and Gun Violence in Philadelphia*
- 258. Alex Piven (COL 2026)**  
 Advisor: Katie Barott  
*The Impact of Heat Stress on Temperate Coral *Astrangia poculata**
- 259. Tanay Poddar (COL 2024)**  
 Advisor: Hao Huang  
*Revealing the Language and Auditory Localization of White Matter Microstructures of the Preterm Human Brain through Diffusion Tensor Imaging*
- 260. Vidhur Polam (COL 2025)**  
 Advisor: Frederick Bennett  
*Lipid Accumulation Leads to Reactive Macrophage Pathology in Settings of GALC Dysfunction*
- 261. Austin Pothikamjorn (COL 2025)**  
 Advisor: Heath Schmidt  
*Characterizing the Efficacy of a GLP-1R Agonist to Reduce Cocaine Seeking in Female Rats*
- 262. Jackson Powell (COL 2024)**  
 Advisor: Yuanquan Song  
*The Mechanosensitive Ion Channel Piezo's Role in the Growth Cone*
- 263. John Purple (COL 2025)**  
 Advisor: Bhuvnesh Jain  
*Intrinsic Alignment and Cosmic Shear*
- 264. Elizabeth Qian (SEAS 2026)**  
 Advisor: Ahmed Moustafa  
*CURED: Classification Using Restriction Enzyme Diagnostics*
- 265. Suyu Que (SEAS 2026)**  
 Advisor: Arnold Mathijssen  
*Behavior of Upstream Swimming *E. Coli* Bacteria in a Microfluidic Environment*
- 266. Rawan Rabayah (COL 2024)**  
 Advisor: Marsha Lester  
*Volatile Organic Compounds in the Atmosphere*
- 267. Maliha Rahman (COL 2025)**  
 Advisor: Victoria Vetter  
*An Assessment of Need for Automatic External Defibrillators by Race, Socioeconomic Status, and Region in Pennsylvania Public Schools*
- 268. Simran Rajpal (COL 2024)**  
 Advisor: Robert Aronowitz  
*"Log Kya Kahenge": Understanding Perceptions of Risk, Genetic Testing, and Breast Cancer within the South Asian Diaspora*
- 269. Rajat Ramesh (COL 2024)**  
 Advisor: George Burslem  
*A Modular Tool for Targeted Editing of Post-Translational Modifications*
- 270. Shruti Ramkumar (SEAS, WH 2026)**  
 Advisor: David Hsu  
*Investigating University Spinoffs and Startup Success through Patent Reassignments*

- 271. Pallavi Rao (COL 2024)**  
 Advisor: Amy Lutz  
*Reconstructing the Ab/Normal: The Cross-Cultural Validity of Autism Diagnostic Tools*
- 272. Ashley Ray (COL 2024)**  
 Advisor: Katherine Moore  
*Mortuary Archaeology on the Northern Coast of Peru*
- 273. Isha Reddy (WH 2025)**  
 Advisor: Samir Nurmohamed  
*The Impact of Being an Alternate Choice on Feedback Seeking in Organizations*
- 274. Reagan Reese (COL 2026)**  
 Advisor: Katherine Theken  
*Effect of Ibuprofen on Interleukin Protein Levels Following Third Molar Extraction*
- 275. Aryan Roy (SEAS 2026)**  
 Advisor: Ryan Urbanowicz  
*Using Residuals to Improve the FIBERS Algorithm*
- 276. Sphia Sadek (COL 2025)**  
 Advisor: Malek Kamoun  
*Developing Machine Learning Algorithm to Improve Kidney Transplantation Matching*
- 277. Ben Sailors (SEAS 2025)**  
 Advisor: Yu Jun Tan  
*3D Printable and Self-Healing Green Hydrogel for Devices*
- 278. Alyssa Saito (COL 2026)**  
 Advisor: Andrew Modzelewski  
*Role of Retrotransposon Reactivation in Hematopoietic Development*
- 279. Hina Sako (COL 2026)**  
 Advisor: David Raizen  
*Finding Genes Required for Sick Sleep in *C. elegans**
- 280. Samantha Salcedo Martinez (COL 2025)**  
 Advisor: Sade Bonilla  
*Uplifting Historically Marginalized Adults under G3's Financial Aid Program*
- 281. Xoshill Saldana Gamez (COL 2026)**  
 Advisor: Mechthild Pohlschroder  
*Is IRF3 inside the nucleus in LACV infected 3D In Vitro Cerebral Organoids?*
- 282. Myka Salvacion (COL 2025)**  
 Advisor: John Maris  
*Identifying the Effect of MYCN Downregulation on Chemokine Expression & PHOX2B CAR-T Cell Efficacy*
- 283. Alex Savage (COL 2026)**  
 Advisor: Marisa Bartolomei  
*Epigenetic and Physiological Outcomes in a Mouse Model of Assisted Reproductive Technologies*
- 284. Helena Saven (COL 2026)**  
**Lulia Tesfamariam (COL 2026)**  
 Advisor: Rebecca Waller  
*Seeing Eye to Eye: The Relationship between Reciprocal Eye Gaze and Callous-Unemotional Traits in Young Children*
- 285. Shand Seiffert (COL 2026)**  
 Advisor: Elliot Lipeles  
*Using Rest Frame Discriminants to Identify Z Boson Jets*
- 286. Fatima Seisay (COL 2026)**  
 Advisor: Elizabeth White  
*Screening of Simple Hydrocarbons as Anesthetic Antagonist*
- 287. Anthony Senouillet (SEAS 2026)**  
 Advisor: Bomyi Lim  
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