49th Undergraduate Research Conference
May 5, 2023

Poster Winners

GROUP 1
Nicolas Oltean, Biochemistry
Crystallographic approaches for understanding the tumor intrinsic and extrinsic factors mediating T-cell activation

Tricia Wang, Biology
P2Y12 Inhibition Suppresses Proinflammatory Platelet-Monocyte Interactions

GROUP 2
Elizabeth Abraham, Biology, Art History
Decoding the Role of HIF-1α in Staphylococcus Aureus Skin Infection

GROUP 3
Karlee Rowland-Paz, Biology
Uncovering the spatial and temporal role of Innexins in the development of the visual system of Drosophila

GROUP 4
Angela Talusan, Biology
Leukocyte telomere length significantly reduced in women after ovarian stimulation during their first IVF treatment

GROUP 5
Nayeli Moronta, Global Public Health, Sociology
Medical Mistrust in Reproductive Health: Comparing the Experiences between Black, White, and Latinx Women

GROUP 6
Merritt McDowell, Chemistry, English and American Literature
Characterization of Photoresponsive 1,2-Bis(2-methyl-5-phenyl-3-thienyl) perfluorocyclopentene Twisted Crystalline Films
GROUP 7
Selin Hekimgil, Computer Science
A Recommendation System to Overcome Filter Bubbles and Intellectual Isolation

GROUP 8
Angel Wu, Computer Science, Economics and Mathematics
A study of the isoperimetric problem on graphs

GROUP 9
Renee Wang, Economics
Proposer Uncertainty and Competition in Ultimatum Bargaining: an Experimental Study

GROUP 10
Fabiola Sanabria Chaverri, Economics
Recycling Behaviors in New York City

GROUP 11
Zihan Zhang, Mathematics, Computer Science
Laboratory Icebergs Melt Down and Flip Over—Shape and Capsize Dynamics of Free-floating Melting Ice

GROUP 12
Nishika Navrange, Neural Science
Investigating the Interaction Between GADD34 and eIF2a In Hippocampal Memory Consolidation of Mice

GROUP 13
Astra Yu, Neural Science
The effect of modulating the integrated stress response on tau phosphorylation and aggregation in vitro

GROUP 14
Teagan Daly, Biology
Estimating the Number of Functional Units Within Dendritic Arbors

Carrie Chen, Biochemistry
Single Residue Mutations of CTCF Affect CTCF Structure and Its binding to DNA in Cancer Patients
GROUP 15
Cassidy Kohler, Neural Science
Optogenetic manipulation of dentate inhibitory phase locking in a mouse model of temporal lobe epilepsy

GROUP 16
Angie Galas, Neural Science
Desynchronization of Entorhinal-Hippocampal Theta in a Mouse Model of Alzheimer’s Disease Pathology

GROUP 17
Sophia Cordeiro, Psychology
The Role of Parent Beliefs About Science in Shaping Their Child’s Science Outcomes Through Parent Use of Subtle Linguistic Cues

Lisa Zhu, Psychology
6 to 20-month-olds’ Visual Preferences for Own-race or Other-race Faces as Influenced by Social Environment Diversity

GROUP 18
Yibo Hu, Economics, Psychology
The Effect of Paradoxical Knowing in the Context of Stock Market Trading

Anastasiia Korolevskaia, Psychology
Trait Dependency and Narcissism in the Iterated Prisoner’s Dilemma

GROUP 19
Whitney Hughes, Journalism, Psychology
Social Dominance Orientation and Political Ideology shape mental representations of inequality

Maya Kreitman, Psychology
Gender-Marked Messages Effect Beliefs About Who Does and Who is Good at an Activity

GROUP 20
Zoey Meng, Anthropology, Psychology
Pragmatic Categorization of Homophones in Chinese Cyberspace

GROUP 21
Emily Lu, Neural Science
A novel pathway to regulate protein synthesis during synaptic and memory consolidation
GROUP 22
Niouma Semega, Global Public Health, Sociology
An Immersive Pollutant Filter for Bodies of Water

GROUP 23
Caroline Goetz, Economics
Measuring the Executive Branch’s Influence on the Allocation of Federal Dollars with a Continuous Independent Variable.

GROUP 24
Katerina Petroff, Biochemistry
Contribution of Mesenchymal Stromal Cells to Adipose Tissue

Panel Winners

ACCESS TO THE ARTS: DISPLAYING, PRESERVING, PERFORMING, AND INTERPRETING I
Dustin Chen, Art History, Classics
Local Agency at Crossroads: Yingpan Man as a Unique Case

ACCESS TO THE ARTS: DISPLAYING, PRESERVING, PERFORMING, AND INTERPRETING II
Aradhana Sai Prabhala, History, Politics
Reframing Art as Labor: The Aesthetic, Political, and Economic Ideology of the Art Front

BACTERIA, VIRUSES, AND IMMUNITY
Ari Davydov, Biology
Visualizing Energetics and Dynamics of Microsporidian Infection

CULTURE AND SOCIETY I
Aidan Taylor, Journalism, Anthropology
Busing for Desegregation on its Last Fumes
CULTURE AND SOCIETY II
Aurora Ghorab, Journalism, Anthropology
A Critical Analysis of Strategic Racialization, Identity Construction, and Dispossession of Afro-Indigenous Melungeons through Hiawatha Goins and Family

GENDER STUDIES: A GLOBAL VIEW I
Chaoting Tang, Sociology
Transactional Desire: Exploring Male Student Sex Workers in China

GENDER STUDIES: A GLOBAL VIEW II
Sydney Green, Dramatic Literature, Anthropology
Unearthing Nonconformity: Applying the Queer Lens to Prehistoric Europe Through Sexing Practices

GENES, GROWTH, AND DEVELOPMENT I
Maya Navarro, Global Public Health, Biology
Elucidating the pro-metastatic mechanisms of CNDP1 protein in melanoma brain metastases

GENES, GROWTH, AND DEVELOPMENT II
Nathalie Shoji, Global Public Health, Biology
Identification of novel neuronal cell-types through single-cell RNAsequencing-guided split-GAL4 lines in Drosophila visual system

GLOBAL ISSUES PAST AND PRESENT
Samaa Khullar, Journalism, Middle Eastern Studies
Culture of Shame: How Stigma Keeps Jordanians from the Mental Health Help They Need

HEALTH AND DEVELOPMENT: SCIENCE AT THE CROSSROADS
Daelah Nicholas, Neural Science
Infant Temperament: Exploring The Potential Role of Maternal Dietary Choline and Folate Consumption During Pregnancy in a Michigan Pregnancy Cohort
INTERPERSONAL RELATIONSHIPS
Zoe Makler, Sociology, Public Policy
Passion vs. Practicality—How NYU Students Choose Their Major

ISSUES IN LAW, JUSTICE, AND GOVERNMENT I
Fiyin Okeremi, Africana Studies, Psychology
Criminalization of Rap/Hip-hop in the United States

ISSUES IN LAW, JUSTICE, AND GOVERNMENT II
Daria Kowalski, Politics, Psychology
A Global Fight: Drawing Comparisons Between the Use of Social Media and Protest Between Black Lives Matter and Women, Life, Freedom

Brandon Wilky, Environmental Studies
Removing Equity Barriers to the Electric Vehicle Transition

ISSUES IN LINGUISTICS
Marion Kalina Heinrich, Linguistics
The Syntax and Pragmatics of Question-Response Pairs Between Caregivers and Children with Autism

MATHEMATICS AND MODELING IN UNDERSTANDING OF THE PHYSICAL WORLD I
Maosen Tang, Mathematics
Efficient Algorithm or Stylized Animation using Freeform Vector Graphics with Controlled Non-Uniform Rational B-Spline Curves

MATHEMATICS AND MODELING IN UNDERSTANDING OF THE PHYSICAL WORLD II
Mengzhe Yan, Mathematics, Economics
Settlement of Buoyant Structure within a density varying profile

MOLECULES AND MATERIALS
Aashay Pai, Physics
Spectral Holography: Imaging Complex Systems with Broadband Sound
NEURAL SCIENCE
Yilun Kuang, Mathematics
Self-Supervised Learning of Maximum Manifold Capacity Representations

Angelina Xu, Neural Science
Identifying how synaptic partners of “Drosophila” circadian pacemaker neurons change during plasticity

NEW YORK CITY: LONGSTANDING CHALLENGES AND DYNAMIC CHANGE
Leila Winn, Environmental Studies
Integrating Community Science and Passive Acoustic Monitoring to investigate the Impact of Helicopter Noise Pollution on Bird Populations of Governors Island, NYC

PHILOSOPHICAL THOUGHT
Leila Sandlin, Linguistics
Modal Horizon Sees Free Choice

PSYCHOLOGY: HUMAN BEHAVIOR AND PERCEPTION I
Kathryn Jano, Psychology
Comparison of Child and Adult Importance Ratings of 20 Individual Social Status Dimensions

PSYCHOLOGY: HUMAN BEHAVIOR AND PERCEPTION II
Violet Brede, Psychology
Children’s understanding of the role of economic disadvantage in academic and professional success

Maddy Dupee, Psychology
The ideological differences in assessing merit: Disentangling the role of effort vs. output in judgments within educational contexts

SOCIAL CONCERNS IN HEALTHCARE
Lolayemi Charles, Global Public Health, Sociology
Black Maternal Health: Beyond The Scope Of Interpersonal Racism
SPANISH AND LATIN AMERICAN LITERATURE AND CULTURE
  Matías Gallegos Ruiz, Spanish
  Resonances in Medieval Islamic and Jewish mystical and philosophical texts produced in Al Andalus

Carlos Hernandez, Photography & Imagine, Social & Cultural Analysis
  Perxnx Rares Modernes (Modern Queer Bitchxs): Transing Queer Dominicaneity Through a Critique of Queer Alienism

THE ECONOMIC MARKER: PRODUCTIVITY, PRICES, AND PROFITS I
  Kyle Whitt, Economics, Mathematics
  New York City Mobility Index and the Relationship with Economic Activity

THE ECONOMIC MARKER: PRODUCTIVITY, PRICES, AND PROFITS II
  Andy Fan, History, Economics
  Money and Power: The Interrelation between Finance and Politics through the Hongkong and Shanghai Bank’s China Loans, 1875-1914