



NYU

**COLLEGE OF
ARTS & SCIENCE**

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-1 α 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*

Perrxs Rares Modernes (Modern Queer Bitchxs): Transing Queer
Domincaneity 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