

**ILLINOIS
SUMMER
RESEARCH
SYMPOSIUM**

I ILLINOIS



JULY 21-22, 2022

I-HOTEL AND CONFERENCE CENTER

PARTICIPATING PROGRAMS

FoDoMMaT

The Future of Discovery: Training Students to Build and Apply Open Source Machine Learning Models and Tools

IRIP

International Research Internship Program

MCNAIR AT ILLINOIS

TRiO Ronald E. McNair Postbaccalaureate Achievement Program

POETS

Power Optimization of Electro-Thermal Systems

PRECS

Phenotypic Plasticity Research Experience for Community College Students

REACH PROGRAM

Research & Education for the Advancement of Compassionate Healthcare

SPI

Summer Predoctoral Institute

SPIN

Students Pushing Innovation Internship Program

SROP AT ILLINOIS

Summer Research Opportunities Program for Undergraduates at the University of Illinois at Urbana-Champaign

SROP AT UIC

Summer Research Opportunities Program for Undergraduates at the University of Illinois at Chicago

SURE TOX

Summer Undergraduate Research Experience in Toxicology at the University of Illinois

DEAN'S WELCOME



Welcome to the 2022 Summer Research Symposium. The Graduate College at Illinois is very proud to sponsor this annual symposium, which showcases our equity and diversity programs along with the exceptional research talents of the next generation of scholars.

This year's conference is the culmination of two longstanding Graduate College programs, SPI and SROP at Illinois, and nine partner programs—each of which is dedicated to broadening participation in graduate education.

The success of these programs depends on the boundless energy and aspiration of the participating students as well as the dedication of the team leaders, program directors, and staff who help those students thrive. It is also the result of the commitment and inspiration of faculty who serve as mentors. Their passion and generosity make achievement possible and we are deeply appreciative of their time and effort.

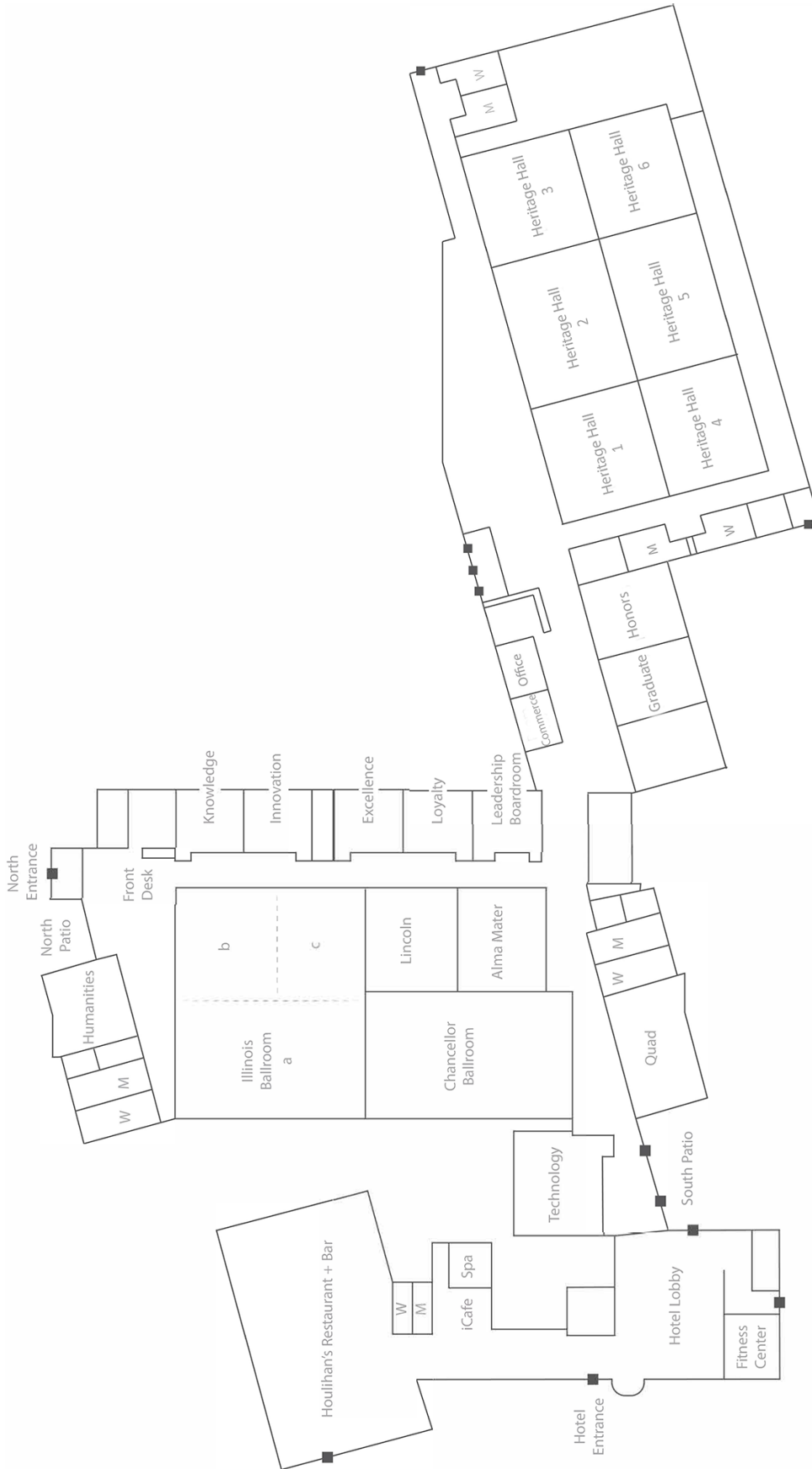
On behalf of the Graduate College, I'd like to thank you for joining us for the 2022 Illinois Summer Research Symposium. Your participation is truly appreciated.

Sincerely,

A handwritten signature in black ink, consisting of several loops and a long horizontal stroke at the end.

Wojtek Chodzko-Zajko
Dean of the Graduate College

I HOTEL



SCHEDULE OF EVENTS

THURSDAY, JULY 21

- 12:00 – 1:30** **Check-in** – Chancellor Ballroom
- 12:00 – 1:30** **Lunch for Registered Attendees** – Chancellor Ballroom
- 1:15 – 1:30** **Welcome** – Chancellor Ballroom
- 1:45 – 2:45** **Session 1: Poster Presentations** – Illinois Ballroom B&C
- 3:00 – 4:00** **Session 2: Poster Presentations** – Illinois Ballroom B&C
- 4:15 – 5:15** **Session 3: Poster Presentations** – Illinois Ballroom B&C
- 5:30 – 6:15** **Dinner for Registered Attendees** – Chancellor Ballroom
- 6:30 – 8:00** **Dessert & Talent Show** – Heritage Room 1&4

FRIDAY, JULY 22

- 9:30 – 10:30** **Session 1: Oral Presentations** – Various
- 10:45 – 11:45** **Session 2: Oral Presentations** – Various
- 12:00 – 12:50** **Faculty Appreciation Lunch** – Illinois Ballroom
- 1:00 – 2:00** **Session 3: Roundtable Presentations** – Chancellor Ballroom
- 2:15 – 3:15** **Session 4: Roundtable Presentations** – Chancellor Ballroom
- 3:15 – 3:40** **Coffee & Cookie Break**
- 3:45 – 4:45** **Session 5: Oral Presentations** – Various
- 5:00 – 6:00** **Session 6: Oral Presentations** – Various
- 6:15 – 7:00** **Dinner for Registered Attendees** – Illinois Ballroom
- 7:00 – 7:30** **Award Presentations** – Illinois Ballroom

POSTER PRESENTATION SCHEDULE - SESSION I

1. *Phthalates*
Leanigha Coppage | SROP-Illinois, SURE Tox
2. *Cytotoxicity of Gold Nanoparticles on Female vs Male Human Lung Fibroblasts*
Bella Guardado | SROP-Illinois, SURE Tox
3. *The Effects of Propylparaben On The Oviductal Epithelial Lining in Female mice.*
Sharina Inniss | SROP-Illinois, SURE Tox
4. *The Cytotoxicity and Epigenetic Changes of Testicular Germline Cell Tumors in Response to Per- and Polyfluoroalkyl Substances*
Moudy Salem | SROP-Illinois, SURE Tox
5. *Influence of the gut microbiome and diisononyl phthalate (DiNP) on uterine development in mice*
Vanessa Salgado | SROP-Illinois, SURE Tox
6. *Exploring Conformationally Gated Artificial Metalloproteins*
Elia Manzo | SPI
7. *Chronic exposure to imidacloprid and its influence on cognitive functions in mice*
Souzane Ntamubano | SROP-Illinois, SURE Tox
8. *Ligand-Based Imaging Agents for Early Diagnosis of Alzheimer's Disease and Prevention of Copper Toxicity*
Alexis Duncan | SROP-Illinois, SEB Scholars
9. *Dust Polarization of the Young Protostar IRAS 16293-2422 B With ALMA*
Penelope Riley | SPI
10. *GHZ-State Tomography with Classical Shadows*
Samihr Hermes | SPI
11. *Uranium Emission Spectroscopy from Welding Arcs*
Skyler Hausback | SPI
12. *Simulating Strong-Field Quantum Electrodynamics in Near-Term Quantum Computers*
Luis Hidalgo | SPI
13. *Utilization of Signal Detection and Motivation Theories To Effect Reduction Of Replicated Defects in the Automated Stamping Industry*
Melissa Chio-salinas | SROP-UIC
14. *Spatial Analysis of Tumor Heterogeneity Using Machine Learning Techniques*
Chancharik Mitra | FoDOMMat
15. *Ultrasonic Metal Welding Project*
Seenara Khan | FoDOMMat
16. *Reversible Electrochemical Capture and Release of CO₂ Through Functionnal Interfaces*
Kristin Martin | SPI
17. *Investigating the Occurrence of Blizzard Events over the Contiguous United States Using Observation and Climate Projections*
Ahmani Browne | SROP-Illinois, PRI
18. *An Integrated Sensing Machine Learning and High-performance Computing Framework for Real-time Decision-making in Smart Manufacturing*
Abdullah Alfaraj | IRIP
19. *Using machine learning methods to predict quality of supersonic welds*
Abdulrahman Alshareef | IRIP

THURSDAY 1:45 - 2:45 PM

POSTER PRESENTATION SCHEDULE - SESSION I

20. *An Integrated Sensing Machine Learning and High-Performance Computing Framework for Real-time Decision-making in Smart Manufacturing*
Osama Azhar | IRIP
21. *Optical Character Recognition Post-Correction on Astrophysics Text with Machine Learning*
Morgan Gabriella Cosillo | FoDOMMat
22. *Comparing Deep Learning and Expert Knowledge for Sequential Pattern Mining*
Natalie Foss | FoDOMMat
23. *Dealing with Uncertainty in Motion Planning*
Simon Kato | SPI
24. *Reliability Testing of Container Runtimes*
Gerard Matthew | SPI
25. *How and When to Apply a Design Research Methodology*
Bruno Nagel | SPI
26. *Graphine Resq*
James Serrano | FoDOMMat
27. *Thermal PID Controller for Air Taxi EVTOL Reliability Testing*
Jeremiah Viera | SROP-Illinois, POETS
28. *Detecting Rice Flooding Patterns Using Sentinel-1 Satellite Data*
Isabelle Wagenvoord | FoDOMMat
29. *Design of New Materials Through Machine Learning*
Jeffrey Zhou | FoDOMMat
30. *Implied Volatility for Option Pricing*
Joshua Kendrick | SPI
31. *Manifold Geometric Optimization for Flow Cooling of Electronics with Monolithically Integrated Copper Heat Spreaders*
Chukwuma Alilonu | SROP-Illinois, POETS
32. *High Throughput Toxicity Measurements of Quantum Dots and Drugs Targeting Peroxisome Proliferator-Activated Receptors*
Kobe Graham | SROP-Illinois, SURE Tox
33. *Investigation of the role of roughness on the surface properties of cerium oxide thin films grown by pulsed laser deposition*
Rebeca Ramirez | SROP-UIC

POSTER PRESENTATION SCHEDULE - SESSION II

37. *Sense of University Belonging Fluctuations Within College Students of Diverse Racial Ethnic Cultural Identities*
Jennifer Hernandez | SROP-Illinois
38. *Cognitive Dissonance: A study of Executive Function Through Digital Environments*
Mark Pelmore | SPI
39. *Meeting Motivational Needs: Perspective from Students of Immigrant and Non-Immigrant Backgrounds Attending a Research University*
Niomi M. Roberts | SROP-UIC
40. *Cha Cha Changes: Transitions and Navigation in Current Society with a Shrinking Middle-Class and Growing Population of First-Generation College Students*
Sabrina Strong-Nasabal | SPI
41. *The Intersectionality of Race and Gender: How Gender Violence Impacts the Mental Wellbeing and Academic Achievement of Black Girls in K-12 Schools*
Jerny Walls | SPI
42. *Undergraduates Depicting their Intentions to Participate in Society Using Deductive and Inductive Reasoning*
Jed Estilo | SROP-UIC
43. *Autobiography as Aesthetic: Narrative Power in the Works of Ernest Gaines and Gertrude Stein.*
Cezar Castaneda | SPI
44. *The Extensive Effects of Socioeconomic Status: Stark Differences in Community Violence and Student Achievement Rates in Danville Mahomet Champaign and Urbana.*
Chance Flemming | SROP-Illinois
45. *Developing Spelling Skills in the Spanish Heritage Classroom*
Araceli Pantoja | SPI
46. *Heritage/Second Language Acquisition of Korean Anaphora: A Review*
Isela Silvera | SPI
47. *Health Information on TikTok, Exploring What's Good #ForYou*
David Eby | SPI
48. *The Reading Time Machine: Transforming Astrophysical Literature into Actionable Data*
Kiara Balleza | SPIN
49. *It affected everything: The financial and daily work hassles of families who's child has been expelled from preschool*
Dani Cervantes | SROP-UIC
50. *A Critical Analysis of Latto's Identity Negotiation*
Oxala Da Silva | SPI
51. *How Black Americans Use Religious Coping to Combat Anxiety and Depression*
Keyana Diaz | McNair
52. *Conceptualizations of Childhood Trauma: The Pitfalls and Promise of Multiple Frameworks*
Nicole Espinosa Zaldivar | McNair
53. *Using the Implicit Association Test in Spanish: The next step in bilingual language biases*
Luis Gaytan | SPI
54. *Racial Trauma As A Catalyst for Civic Engagement in Black Communities*
Alesha Lewis | SPI

THURSDAY 3:00 - 4:00 PM

POSTER PRESENTATION SCHEDULE - SESSION II

55. *#languagerights are #humanrights: An Exploratory Analysis of Digital Ethnographic Methods & Indigenous Digital Activism*
Nathalie Martinez | SPI
56. *Exploring the Relation of Masculinity Ideology to Psychological Adjustment in Response to Community Violence Exposure among Black Male Youth*
Ravon Preston Pittman | SPI
57. *How Collegiate Athletics Culture Perpetuates the Eating Disorder Syndemic in Student-Athletes*
Eva Rubin | SPI
58. *Popular Education as a form of Cultural Adaptation: Rethinking positive aging among Latino Older Adults*
Karla Sanabria-Veaz | SPI
59. *Program-Level Responses to Challenging Behavior: The Difference Between Early Childhood Exclusion or Retainment*
Josselyn Telule | SROP-UIC
60. *Adverse Birth Outcomes and Perinatal Mental Health*
Gloria Arroyo Sugg | SPI

THURSDAY 3:00 - 4:00 PM

POSTER PRESENTATION SCHEDULE - SESSION III

73. *Promyelination Drug Clemastine Fumarate's Effect on Sickness Behavioral Deficits in Influenza Infected Mice*
Richard Carr | PRECS
74. *Underpinnings of Racial Health Disparities*
Haihley Connors | FoDOMMat
75. *Evaluation of Nascent Transcripts across the Escherichia Coli Genome to Reveal Sites of Rho-Dependent Transcription Termination*
Elizabeth Daniels | SROP-Illinois, FUTURE MINDS QB
76. *Optimizing Conditions for Spheroid Formation of MCF7 Cells in Cell Culture*
Imani Douglas | SROP-Illinois, FUTURE MINDS QB
77. *The Role of Myosin 1e (MYO1E) in the Cell Signaling Pathways of Non-Small Cell Lung Cancer (NSCLC)*
Arnaldo García | SROP-UIC
78. *Facilitating Cancer Biomarker Discovery Through Extracellular Matrix Data Accessibility in MatrisomeDB*
Clarissa Gomez | SROP-UIC
79. *Epigenetics and Racial Disparities in Lung Cancer Incidence: Using CUT & RUN Analysis to Identify PRMT6 Targets in Black Male Lung Cancer Patients*
Hannah Heath | SPI
80. *Examining the Distribution of Endo-lysosomal Proteins in Pathogenic Variants of JIP3/MAPK8IP3*
Hannah Kim | SROP-UIC
81. *Enlarged Perivascular Spaces in Patients with Mild Traumatic Brain Injury: Characterization with 7T MRI and Relationship with Neurobehavioral Outcome*
Pedro Martinez Jr | SROP-Illinois, REACH
82. *A New Image Analysis Method for Quantitative Assessment of Morphological Differences Between Osteopetrotic and Healthy Bone*
Youssef Messeh | SROP-Illinois, REACH
83. *The Correlation of Glutathione to Photodynamic Therapy Resistance Mechanisms*
Kaya Moody | SROP-Illinois, SEB Scholars
84. *The Mediterranean and Mediterranean-DASH Intervention for Neurodegenerative Delay (MIND) Diets: Associations with Cognition and Psychological Distress Among Latinos*
Diana Morales | SPI
85. *Self-Immolating Linker Based Prodrugs for Delivery of HDAC Inhibitors*
Ian Morales | SROP-UIC
86. *The Toxic Influence of Bisphenol A on the Mouse Gut Brain Axis*
Tay Porro | SROP-Illinois, SURE Tox
87. *Increased VEGF-C promotes fatty liver disease and liver cancer via changes in endothelial behavior*
Adriana Rodriguez | SROP-UIC
88. *Automating the Retrieval of Dosage to Consolidate Conflicting Evidence from Genistein Literature and Implications for Breast Cancer*
Melissa Seecharan | SROP-Illinois, REACH
89. *Neural Signature of Predictive Coding in Older Adults with Cognitive Impairment*
Teresa Warren | SPI
90. *Comparative Transcriptomics of Unassociated Rhizobia*
Abigail Finn | SPI

POSTER PRESENTATION SCHEDULE - SESSION III

91. *Tumor microenvironment pressures on Hyaluronic acid biosynthesis in glioblastoma*
Audi Hicks | SROP-Illinois, REACH
92. *The Effects of Temperature Changes on Bioluminescent Dinoflagellates (How Climate Change May Affect Our Oceans Raves)*
Kayleigh Ambrose | PRECS
93. *Assessing the Effect of Endothelial Notch Inhibition on Microglial Engulfment of Amyloid Beta in an Alzheimer's Disease Mouse Model*
Jumobi Arowolo | SROP-UIC
94. *Exploration of Squash Plant Floral Volatiles Influencing Pest Attraction*
Olivia Barrett | PRECS
95. *Concentrating on Carbon Concentration in Algae*
Chandra Davies | PRECS
96. *Modifying non-model organisms: Using CRISPR-Cas9 in honey bees (*Apis mellifera*) to explore sociability*
Melissa Flores | SPI
97. *Female Mate Preference in Threespine Stickleback (*Gasterosteus aculeatus*)*
Kaithren Garcia | PRECS
98. *Pollinators in Peril - Are Illinois Native Bees Getting Smaller?*
Anthony Lamb | PRECS
99. *Stressed Out: Why Does Ancient Maize Thrive in High-Stress Conditions?*
Alexander Lozano | PRECS
100. *Intra- and Interspecific Variation in Tadpole Lateral Line Cells*
Sarah Porth | PRECS
101. *Description of the Genotypes in the PRNP gene in Southern Illinois White-Tailed Deer Populations*
Miriam Schlessinger | SROP-Illinois, PRI
102. *Bacterial Metabolism of Glucosinolates from Brassica: Association with Isothiocyanate Production*
Stephanie Thomas | PRECS
103. *Does It Matter Which Stress Comes First? Differential Gene Expression in Soybean When Ozone and Drought Stress Are Additively Imposed*
Michelle Zambrano | SPI
104. *Exploring the Color Palette of Amaranths; Links Between Phenotype Pigments Plant Adaptation and Human Health*
Sarah Redman | PRECS
105. *Advancing a Genetic Control for Dioecious Amaranths*
Alexander Lopez | SPI
106. *Comparison of Protocols for Measuring Soil Nitrate Leaching*
Natalie Belloso | SPI
107. *The development of yeast platforms to study West Nile virus methyltransferase*
Kyla Duke | SROP-Illinois, SEB Scholars

ORAL PRESENTATIONS - SESSION I

Alma Mater

The humanitarian crisis that is thousands of deaths and disappearances along the U.S.-Mexico Border
Jocelyn Rubi | McNair

Popular Education as a form of Cultural Adaptation: Rethinking positive aging among Latino Older Adults
Karla Sanabria-Veaz | SPI

50 Years of the Border: Comparing Border Crossing Experiences Across Time
Genesis Del Real | McNair

Decolonizing Intergenerational Traumas and Healing in Latinx Families
Sofia Rivera | McNair

Excellence

Plant Conservatism and the Global Conservation Status of Species
Eduardo Tovar | McNair

Investigating the Occurrence of Blizzard Events over the Contiguous United States Using Observation and Climate Projections
Ahmani Browne | SROP-Illinois, PRI

Chronic exposure to imidacloprid and its influence on cognitive functions in mice
Souzane Ntamubano | SROP-Illinois, SURE Tox

Advancing a Genetic Control for Dioecious Amaranths
Alexander Lopez | SPI

Innovation

Ligand-Based Imaging Agents for Early Diagnosis of Alzheimer's Disease and Prevention of Copper Toxicity
Alexis Duncan | SROP-Illinois, SEB Scholars

Exploring Conformationally Gated Artificial Metalloproteins
Elia Manzo | SPI

High Throughput Toxicity Measurements of Quantum Dots and Drugs Targeting Peroxisome Proliferator-Activated Receptors
Kobe Graham | SROP-Illinois, SURE Tox

Investigation of the role of roughness on the surface properties of cerium oxide thin films grown by pulsed laser deposition
Rebeca Ramirez | SROP-UIC

Knowledge

Evaluation of Nascent Transcripts across the Escherichia Coli Genome to Reveal Sites of Rho-Dependent Transcription Termination
Elizabeth Daniels | SROP-Illinois, FUTURE MINDS QB

Exploring the Color Palette of Amaranths; Links Between Phenotype Pigments Plant Adaptation and Human Health
Sarah Redman | PRECS

Comparing BCoV Recovery Yields in Different RNA Extractions Kits and Their Sensitivity and Efficiency in Detecting SARS-CoV-2
Charity Robinson | SROP-UIC

The development of yeast platforms to study West Nile virus methyltransferase
Kyla Duke | SROP-Illinois, SEB Scholars

ORAL PRESENTATIONS - SESSION I

Lincoln

First-Generation/Minorities in Higher Education

Kevin Gonzalez | McNair

Cultivating Digital Roots: The Effects of Digital Environments on Executive Function

Mark Pelmore | SPI

Multilingual World

Lithzuly Pizano | McNair

Sense of University Belonging Fluctuations Within College Students of Diverse Racial Ethnic Cultural Identities

Jennifer Hernandez | SROP-Illinois

Loyalty

Fluid Flow Past Deformable Objects

Omar Elhayes | McNair

How and When to Apply a Design Research Methodology

Bruno Nagel | SPI

Detecting Rice Flooding Patterns Using Sentinel-1 Satellite Data

Isabelle Wagenvoord | FoDOMMat

Motion Planning Uncertainty and Applications

Simon Kato | SPI

ORAL PRESENTATIONS - SESSION II

Alma Mater

Hidden Curriculum in Academic Medicine
Ishaan Patel | SROP-UIC

But he hit me first!: How Violence Towards Black Girls Impact their Mental Health and Academic Achievement in Public Schools
Jerny Walls | SPI

The Role of Racial Contact with People of Color and the Unawareness of Racial Privilege and Social Justice Interests Among Case Managers
Bethany Garcia | SROP-UIC

Excellence

Concentrating on Carbon: Carbon Concentrating Mechanisms in Algae
Chandra Davies | PRECS

Influence of the gut microbiome and diisononyl phthalate (DiNP) on uterine development in mice
Vanessa Salgado | SROP-Illinois, SURE Tox

Description of the Genotypes in the PRNP gene in Southern Illinois White-Tailed Deer Populations
Miriam Schlessinger | SROP-Illinois, PRI

Bacterial Metabolism of Glucosinolates from Brassica: Association with Isothiocyanate Production
Stephanie Thomas | PRECS

Innovation

Self-Immolating Linker Based Prodrugs for Delivery of HDAC Inhibitors
Ian Morales | SROP-UIC

Promyelination Drug Clemastine Fumarate's Effect on Sickness Behavioral Deficits in Influenza Infected Mice
Richard Carr | PRECS

The Mediterranean and Mediterranean-DASH Intervention for Neurodegenerative Delay (MIND) Diets: Associations with Cognition and Psychological Distress Among Latinos
Diana Morales | SPI

The Correlation of Glutathione to Photodynamic Therapy Resistance Mechanisms
Kaya Moody | SROP-Illinois, SEB Scholars

Lincoln

Program-Level Responses to Challenging Behavior: The Difference Between Early Childhood Exclusion or Retainment
Josselyn Telule | SROP-UIC

Underpinnings of Racial Health Disparities
Haihley Connors | FoDOMMat

Legal Stakeholder Perspectives on High Conflict Family Law Cases
Gabriela Castillo | SROP-UIC

ORAL PRESENTATIONS - SESSION II

Loyalty

Exploration of Squash Plant Floral Volatiles Influencing Pest Attraction
Olivia Barrett | PRECS

*Female Mate Preference in Threespine Stickleback (*Gasterosteus aculeatus*)*
Kaithren Garcia | PRECS

Does It Matter Which Stress Comes First? Differential Gene Expression in Soybean When Ozone and Drought Stress Are Additively Imposed
Michelle Zambrano | SPI

*Sociability in honey bees (*Apis mellifera*)—could neuropeptides be involved?*
Melissa Flores | SPI

FRIDAY 10:45 - 11:45 AM

ROUNDTABLES - SESSION III

Table 1

Exploring the Color Palette of Amaranths; Links Between Phenotype Pigments Plant Adaptation and Human Health

Sarah Redman | PRECS

Bacterial Metabolism of Glucosinolates from Brassica: Association with Isothiocyanate Production

Stephanie Thomas | PRECS

Table 2

Exploration of Squash Plant Floral Volatiles Influencing Pest Attraction

Olivia Barrett | PRECS

Stressed Out: Why Does Ancient Maize Thrive in High-Stress Conditions?

Alexander Lozano | PRECS

Table 3

Pollinators in Peril - Are Illinois Native Bees Getting Smaller?

Anthony Lamb | PRECS

Intra- and Interspecific Variation in Tadpole Lateral Line Cells

Sarah Porth | PRECS

Table 4

*Female Mate Preference in Threespine Stickleback (*Gasterosteus aculeatus*)*

Kaithren Garcia | PRECS

*Bioluminescent Dinoflagellates (*Pyrocystis fusiformis*) In Response to The Effects of Temperature Changes*

Kayleigh Ambrose | PRECS

Table 5

Detecting Rice Flooding Patterns Using Sentinel-1 Satellite Data

Isabelle Wagenvoord | FoDOMMat

Dust Polarization of the Young Protostar IRAS 16293-2422 B With ALMA

Penelope Riley | SPI

Uranium Emission Spectroscopy from Welding Arcs

Skyler Hausback | SPI

Table 6

Carbon Concentrating Mechanisms in Algae

Chandra Davies | PRECS

Comparison of Protocols for Measuring Soil Nitrate Leaching

Natalie Belloso | SPI

Table 7

Continuous Integration Testing for the Einstein Toolkit

Hrishikesh Kalyanaraman | SPIN

Reliability Testing of Container Runtimes

Gerard Matthew | SPI

FRIDAY 1:00 - 2:00 PM

ROUNDTABLES - SESSION III

Table 8

Thermal PID Controller for Air Taxi EVTOL Reliability Testing
Jeremiah Viera | SROP-Illinois, POETS

Implied Volatility for Option Pricing
Joshua Kendrick | SPI

Table 9

Promyelination Drug Clemastine Fumarate's Effect on Sickness Behavioral Deficits in Influenza Infected Mice
Richard Carr | PRECS

Spatial Analysis of Tumor Heterogeneity Using Machine Learning Techniques
Chancharik Mitra | FoDOMMat

Racial Disparities in Lung Cancer Incidence: Using CUT & RUN Analysis to Understand a Novel Epigenetic Regulator in Black Male Lung Cancer Patients
Hannah Heath | SPI

FRIDAY 1:00 - 2:00 PM

ROUNDTABLES - SESSION IV

Table 1

Autobiography as Aesthetic: Narrative Power in the Works of Ernest Gaines and Gertrude Stein
Ceazar Castaneda | SPI

The Negro Artist and the Valley of Protest: A Critical Analysis of the African American "Protest Novel" Literary Aesthetic Spanning from 1940-1970
Keith Hicks | SROP-Illinois

Table 2

First-Generation/Minorities in Higher Education
Kevin Gonzalez | McNair

Cha Cha Changes: Transitions and Navigation in Current Society with a Shrinking Middle-Class and Growing Population of First-Generation College Students
Sabrina Strong-Nasabal | SPI

Table 3

The Influence of Major Selection on Sense of Belonging among College Students
Maha Syed | McNair

Popular Education as a form of Cultural Adaptation: Rethinking positive aging among Latino Older Adults
Karla Sanabria-Veaz | SPI

Table 4

A Critical Analysis of Latto's Identity Negotiation
Oxala Da Silva | SPI

Defining a #fieldsite on Language Activism: A Pilot Analysis of Digital Ethnographic Methods & Indigenous Digital Activism
Nathalie Martinez | SPI

Exploring the Relation of Masculinity Ideology to Psychological Adjustment in Response to Community Violence Exposure among Black Male Youth
Ravon Preston Pittman | SPI

Table 5

A Discussion of Racial Trauma Among Blacks and Civic Engagement
Alesha Lewis | SPI

How Black Americans Use Religious Coping to Combat Anxiety and Depression
Keyana Diaz | McNair

Table 6

50 Years of the Border: Comparing Border Crossing Experiences Across Time
Genesis Del Real | McNair

The humanitarian crisis that is thousands of deaths and disappearances along the U.S.-Mexico Border and the factors that drive it
Jocelyn Rubi | McNair

ROUNDTABLES - SESSION IV

Table 7

Attentional Factors Involved in the Effects of Bystander Intoxication in Sexual Violence Bystander Intervention
Laurie Avila | SROP-Illinois

REBOOT Recovery and Repair: a survey into first-responder survivor-based trauma services
Robert Walker Jr | McNair

Table 8

Heritage/Second Language Acquisition of Korean Anaphora: A Review
Isela Silvera | SPI

Using the Implicit Association Test in Spanish: The next step in bilingual language biases
Luis Gaytan | SPI

Table 9

Multilingual World
Lithzuly Pizano | McNair

Community-Engaged Research with Black Churches in the Urbana-Champaign Area: Culturally Responsive Approaches to Addressing Health Disparities during COVID-19
Bridget Horta | SROP-Illinois

Table 10

Adverse Birth Outcomes and Perinatal Mental Health: Supporting Mothers and Infants by Identifying Outcomes
Gloria Arroyo Sugg | SPI

How Collegiate Athletics Culture Perpetuates the Eating Disorder Syndemic in Student-Athletes
Eva Rubin | SPI

ORAL PRESENTATIONS - SESSION V

Alma Mater

The Effects of Social Support on Heart Rate Variability in Individuals with Cocaine Use Disorder
Ta'Sharick Johnson | SROP-UIC

Attentional Factors Involved in the Effects of Bystander Intoxication in Sexual Violence Bystander Intervention
Laurie Avila | SROP-Illinois

How Collegiate Athletics Culture Perpetuates the Eating Disorder Syndemic in Student-Athletes
Eva Rubin | SPI

Breaking The Culture of Silence: Promoting Positive Sexual Health in Black Girls
Latrice Yates | SROP-UIC

Excellence

Combinatorial Stress Response of Ancient and Modern Maize Varieties
Alexander Lozano | PRECS

Intra- and Interspecific Variation in Tadpole Lateral Line Cells
Sarah Porth | PRECS

The Effects of Propylparaben On The Oviductal Epithelial Lining in Female mice.
Sharina Inniss | SROP-Illinois, SURE Tox

Cytotoxicity of Gold Nanoparticles on Female vs Male Human Lung Fibroblasts
Bella Guardado | SROP-Illinois, SURE Tox

Innovation

Phthalates
Leanigha Coppage | SROP-Illinois, SURE Tox

Bioluminescent Dinoflagellates (Pyrocystis fusiformis) In Response to The Effects of Temperature Changes
Kayleigh Ambrose | PRECS

The Cytotoxicity and Epigenetic Changes of Testicular Germline Cell Tumors in Response to Per- and Polyfluoroalkyl Substances
Moudy Salem | SROP-Illinois, SURE Tox

Assessing the Effect of Endothelial Notch Inhibition on Microglial Engulfment of Amyloid Beta in an Alzheimer's Disease Mouse Model
Jumobi Arowolo | SROP-UIC

Knowledge

REBOOT Recovery and Repair: a survey into first-responder survivor-based trauma services
Robert Walker Jr | McNair

A New Image Analysis Method for Quantitative Assessment of Morphological Differences Between Osteopetrotic and Healthy Bone
Youssef Messeh | SROP-Illinois, REACH

Automating the Retrieval of Dosage to Consolidate Conflicting Evidence from Genistein Literature and Implications for Breast Cancer
Melissa Seecharan | SROP-Illinois, REACH

Increased VEGF-C promotes fatty liver disease and liver cancer via changes in endothelial behavior
Adriana Rodriguez | SROP-UIC

ORAL PRESENTATIONS - SESSION V

Lincoln

Feminism in Spanish Literature 1889-1936

Montserrat Gonzalez-Gutierrez | McNair

The Negro Artist and the Valley of Protest: A Critical Analysis of the African American "Protest Novel" Literary Aesthetic Spanning from 1940-1970

Keith Hicks | SROP-Illinois

The Effects of Explicit Instruction and Input Enhancement on the Development of Heritage Speakers' Spelling Skills

Araceli Pantoja | SPI

The Extensive Effects of Socioeconomic Status: Stark Differences in Community Violence and Student Achievement Rates in Danville Mahomet Champaign and Urbana.

Chance Flemming | SROP-Illinois

Loyalty

GHZ-State Tomography with Classical Shadows

Samihr Hermes | SPI

Rule Learning from Sign-Like Gestures: Examining the Potential for Sign Language Learning in Adults

Elizabeth Sodimu | SROP-UIC

Comparative Transcriptomics of Unassociated Rhizobia

Abigail Finn | SPI

Supply Chain Evaluation and Optimization On Critical Infrastructure Essential Businesses

Maria Alejandra Velasquez | SROP-UIC

FRIDAY 3:45 - 4:45 PM

ORAL PRESENTATIONS - SESSION VI

Alma Mater

The Influence of Major Selection on Sense of Belonging among College Students
Maha Syed | McNair

Community-Engaged Research with Black Churches in the Urbana-Champaign Area: Culturally Responsive Approaches to Addressing Health Disparities during COVID-19
Bridget Horta | SROP-Illinois

Neural Signature of Predictive Coding in Older Adults with Cognitive Impairment
Teresa Warren | SPI

Development of a Self-Management Intervention for Cancer Survivors with Disabilities
Beija Teolis | SROP-UIC

Excellence

Development of Electrochemical Interface for Carbon Dioxide Capture and Release
Kristin Martin | SPI

Facilitating Cancer Biomarker Discovery Through Extracellular Matrix Data Accessibility in MatrisomeDB
Clarissa Gomez | SROP-UIC

Rapid Patient Specific Plate Fixation For Facial Trauma
Jose Rodriguez | SROP-UIC

Innovation

Thermal PID Controller for Air Taxi EVTOL Reliability Testing
Jeremiah Viera | SROP-Illinois, POETS

Utilization of Signal Detection and Motivation Theories To Effect Reduction Of Replicated Defects in the Automated Stamping Industry
Melissa Chio-salinas | SROP-UIC

Simulating Strong-Field Quantum Electrodynamics in Near-Term Quantum Computers
Luis Hidalgo | SPI

Manifold Geometric Optimization for Flow Cooling of Electronics with Monolithically Integrated Copper Heat Spreaders
Chukwuma Alilonu | SROP-Illinois, POETS

Knowledge

Health Information on TikTok, Exploring What's Good #ForYou
David Eby | SPI

DeepBrick
Hao Bai | SPIN

Continuous Integration Testing for the Einstein Toolkit
Hrishikesh Kalyanaraman | SPIN

Spatial Analysis of Tumor Heterogeneity Using Machine Learning Techniques
Chancharik Mitra | FoDOMMat

ORAL PRESENTATIONS - SESSION VI

Lincoln

The Toxic Influence of Bisphenol A on the Mouse Gut Brain Axis
Tay Porro | SROP-Illinois, SURE Tox

Optimizing Conditions for Spheroid Formation of MCF7 Cells in Cell Culture
Imani Douglas | SROP-Illinois, FUTURE MINDS QB

Examining the Distribution of Endo-lysosomal Proteins in Pathogenic Variants of JIP3/MAPK8IP3
Hannah Kim | SROP-UIC

Loyalty

Undergraduates Depicting their Intentions to Participate in Society Using Deductive and Inductive Reasoning
Jed Estilo | SROP-UIC

Meeting Motivational Needs: Perspective from Students of Immigrant and Non-Immigrant Backgrounds Attending a Research University
Niomi M. Roberts | SROP-UIC

It affected everything: The financial and daily work hassles of families who's child has been expelled from preschool
Dani Cervantes | SROP-UIC

Quad

Tumor microenvironment pressures on Hyaluronic acid biosynthesis in glioblastoma
Audi Hicks | SROP-Illinois, REACH

The Role of Myosin 1e (MYO1E) in the Cell Signaling Pathways of Non-Small Cell Lung Cancer (NSCLC)
Arnaldo García | SROP-UIC

Enlarged Perivascular Spaces in Patients with Mild Traumatic Brain Injury: Characterization with 7T MRI and Relationship with Neurobehavioral Outcome
Pedro Martinez Jr | SROP-Illinois, REACH

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Name	Thursday POSTER TIME (POSTER #)	Friday ORAL PRESENTATION TIME (ROOM)	Friday ROUNDTABLE TIME (TABLE #)
Abdullah Alfaraj	1:45-2:45 (18)		
Chukwuma Alilonu	1:45-2:45 (31)	5:00-6:00 (Innovation)	
Abdulrahman Alshareef	1:45-2:45 (19)		
Kayleigh Ambrose	4:15-5:15 (92)	3:45-4:45 (Innovation)	1:00-2:00 (4)
Jumobi Arowolo	4:15-5:15 (93)	3:45-4:45 (Innovation)	
Gloria Arroyo Sugg	3:00-4:00 (60)		2:15-3:15 (10)
Laurie Avila		3:45-4:45 (Alma)	2:15-3:15 (7)
Osama Azhar	1:45-2:45 (20)		
Hao Bai		5:00-6:00 (Knowledge)	
Kiara Balleza	3:00-4:00 (48)		
Olivia Barrett	4:15-5:15 (94)	10:45-11:45 (Loyalty)	1:00-2:00 (2)
Natalie Beloso	4:15-5:15 (106)		1:00-2:00 (6)
Ahmani Browne	1:45-2:45 (17)	9:30-10:30 (Excellence)	
Richard Carr	4:15-5:15 (73)	10:45-11:45 (Innovation)	1:00-2:00 (9)
Ceazar Castaneda	3:00-4:00 (43)		2:15-3:15 (1)
Gabriela Castillo		10:45-11:45 (Lincoln)	
Dani Cervantes	3:00-4:00 (49)	5:00-6:00 (Loyalty)	
Melissa Chio-salinas	1:45-2:45 (13)	5:00-6:00 (Innovation)	
Haihley Connors	4:15-5:15 (74)	10:45-11:45 (Lincoln)	
Leanigha Coppage	1:45-2:45 (1)	3:45-4:45 (Innovation)	
Morgan Gabriella Cosillo	1:45-2:45 (21)		
Oxala Da Silva	3:00-4:00 (50)		2:15-3:15 (4)
Elizabeth Daniels	4:15-5:15 (75)	9:30-10:30 (Knowledge)	
Chandra Davies	4:15-5:15 (95)	10:45-11:45 (Excellence)	1:00-2:00 (6)
Genesis Del Real		9:30-10:30 (Alma)	2:15-3:15 (6)
Keyana Diaz	3:00-4:00 (51)		2:15-3:15 (5)
Imani Douglas	4:15-5:15 (76)	5:00-6:00 (Lincoln)	
Kyla Duke	4:15-5:15 (107)	9:30-10:30 (Knowledge)	
Alexis Duncan	1:45-2:45 (8)	9:30-10:30 (Innovation)	
David Eby	3:00-4:00 (47)	5:00-6:00 (Knowledge)	
Omar Elhayes		9:30-10:30 (Loyalty)	
Nicole Espinosa Zaldivar	3:00-4:00 (52)		
Jed Estilo	3:00-4:00 (42)	5:00-6:00 (Loyalty)	
Abigail Finn	4:15-5:15 (90)	3:45-4:45 (Loyalty)	
Chance Flemming	3:00-4:00 (44)	3:45-4:45 (Lincoln)	
Melissa Flores	4:15-5:15 (96)	10:45-11:45 (Loyalty)	
Natalie Foss	1:45-2:45 (22)		
Bethany Garcia		10:45-11:45 (Alma)	
Kaithren Garcia	4:15-5:15 (97)	10:45-11:45 (Loyalty)	1:00-2:00 (4)
Arnaldo García	4:15-5:15 (77)	5:00-6:00 (Quad)	
Luis Gaytan	3:00-4:00 (53)		2:15-3:15 (8)

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Clarissa Gomez	4:15-5:15 (78)	5:00-6:00 (Excellence)	
Kevin Gonzalez		9:30-10:30 (Lincoln)	2:15-3:15 (2)
Monserrat Gonzalez-Gutierrez		3:45-4:45 (Lincoln)	
Kobe Graham	1:45-2:45 (32)	9:30-10:30 (Innovation)	
Bella Guardado	1:45-2:45 (2)	3:45-4:45 (Excellence)	
Skyler Hausback	1:45-2:45 (11)		1:00-2:00 (5)
Hannah Heath	4:15-5:15 (79)		1:00-2:00 (9)
Samihr Hermes	1:45-2:45 (10)	3:45-4:45 (Loyalty)	
Jennifer Hernandez	3:00-4:00 (37)	9:30-10:30 (Lincoln)	
Audi Hicks	4:15-5:15 (91)	5:00-6:00 (Quad)	
Keith Hicks		3:45-4:45 (Lincoln)	2:15-3:15 (1)
Luis Hidalgo	1:45-2:45 (12)	5:00-6:00 (Innovation)	
Bridget Horta		5:00-6:00 (Alma)	2:15-3:15 (9)
Sharina Inniss	1:45-2:45 (3)	3:45-4:45 (Excellence)	
Ta'Sharick Johnson		3:45-4:45 (Alma)	
Hrishikesh Kalyanaraman		5:00-6:00 (Knowledge)	1:00-2:00 (7)
Simon Kato	1:45-2:45 (23)	9:30-10:30 (Loyalty)	
Joshua Kendrick	1:45-2:45 (30)		1:00-2:00 (8)
Seenara Khan	1:45-2:45 (15)		
Hannah Kim	4:15-5:15 (80)	5:00-6:00 (Lincoln)	
Anthony Lamb	4:15-5:15 (98)		1:00-2:00 (3)
Alesha Lewis	3:00-4:00 (54)		2:15-3:15 (5)
Alexander Lopez	4:15-5:15 (105)	9:30-10:30 (Excellence)	
Alexander Lozano	4:15-5:15 (99)	3:45-4:45 (Excellence)	1:00-2:00 (2)
Elia Manzo	1:45-2:45 (6)	9:30-10:30 (Innovation)	
Kristin Martin	1:45-2:45 (16)	5:00-6:00 (Excellence)	
Nathalie Martinez	3:00-4:00 (55)		2:15-3:15 (4)
Pedro Martinez Jr	4:15-5:15 (81)	5:00-6:00 (Quad)	
Gerard Matthew	1:45-2:45 (24)		1:00-2:00 (7)
Youssef Messeh	4:15-5:15 (82)	3:45-4:45 (Knowledge)	
Chancharik Mitra	1:45-2:45 (14)	5:00-6:00 (Knowledge)	1:00-2:00 (9)
Kaya Moody	4:15-5:15 (83)	10:45-11:45 (Innovation)	
Diana Morales	4:15-5:15 (84)	10:45-11:45 (Innovation)	
Ian Morales	4:15-5:15 (85)	10:45-11:45 (Innovation)	
Bruno Nagel	1:45-2:45 (25)	9:30-10:30 (Loyalty)	
Souzane Ntamubano	1:45-2:45 (7)	9:30-10:30 (Excellence)	
Araceli Pantoja	3:00-4:00 (45)	3:45-4:45 (Lincoln)	
Ishaan Patel		10:45-11:45 (Alma)	
Mark Pelmore	3:00-4:00 (38)	9:30-10:30 (Lincoln)	
Ravon Preston Pittman	3:00-4:00 (56)		2:15-3:15 (4)
Lithzuly Pizano		9:30-10:30 (Lincoln)	2:15-3:15 (9)

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Tay Porro	4:15-5:15 (86)	5:00-6:00 (Lincoln)	
Sarah Porth	4:15-5:15 (100)	3:45-4:45 (Excellence)	1:00-2:00 (3)
Rebeca Ramirez	1:45-2:45 (33)	9:30-10:30 (Innovation)	
Sarah Redman	4:15-5:15 (104)	9:30-10:30 (Knowledge)	1:00-2:00 (1)
Penelope Riley	1:45-2:45 (9)		1:00-2:00 (5)
Sofia Rivera		9:30-10:30 (Alma)	
Niomi M. Roberts	3:00-4:00 (39)	5:00-6:00 (Loyalty)	
Charity Robinson		9:30-10:30 (Knowledge)	
Adriana Rodriguez	4:15-5:15 (87)	3:45-4:45 (Knowledge)	
Jose Rodriguez		5:00-6:00 (Excellence)	
Jocelyn Rubi		9:30-10:30 (Alma)	2:15-3:15 (6)
Eva Rubin	3:00-4:00 (57)	3:45-4:45 (Alma)	2:15-3:15 (10)
Moudy Salem	1:45-2:45 (4)	3:45-4:45 (Innovation)	
Vanessa Salgado	1:45-2:45 (5)	10:45-11:45 (Excellence)	
Karla Sanabria-Veaz	3:00-4:00 (58)	9:30-10:30 (Alma)	2:15-3:15 (3)
Miriam Schlessinger	4:15-5:15 (101)	10:45-11:45 (Excellence)	
Melissa Seecharan	4:15-5:15 (88)	3:45-4:45 (Knowledge)	
James Serrano	1:45-2:45 (26)		
Isela Silvera	3:00-4:00 (46)		2:15-3:15 (8)
Elizabeth Sodimu		3:45-4:45 (Loyalty)	
Sabrina Strong-Nasabal	3:00-4:00 (40)		2:15-3:15 (2)
Maha Syed		5:00-6:00 (Alma)	2:15-3:15 (3)
Josselyn Telule	3:00-4:00 (59)	10:45-11:45 (Lincoln)	
Beija Teolis		5:00-6:00 (Alma)	
Stephanie Thomas	4:15-5:15 (102)	10:45-11:45 (Excellence)	1:00-2:00 (1)
Eduardo Tovar		9:30-10:30 (Excellence)	
Maria Alejandra Velasquez		3:45-4:45 (Loyalty)	
Jeremiah Viera	1:45-2:45 (27)	5:00-6:00 (Innovation)	1:00-2:00 (8)
Isabelle Wagenvoord	1:45-2:45 (28)	9:30-10:30 (Loyalty)	1:00-2:00 (5)
Robert Walker Jr		3:45-4:45 (Knowledge)	2:15-3:15 (7)
Jerny Walls	3:00-4:00 (41)	10:45-11:45 (Alma)	
Teresa Warren	4:15-5:15 (89)	5:00-6:00 (Alma)	
Latrice Yates		3:45-4:45 (Alma)	
Michelle Zambrano	4:15-5:15 (103)	10:45-11:45 (Loyalty)	
Jeffrey Zhou	1:45-2:45 (29)		

Thank you!

For attending the 2022 Illinois Summer Research Symposium.



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