10TH ANNIVERSARY NYU SHANGHAI POST-DOCTORAL AND DOCTORAL RESEARCH ASSEMBLY

April 21st, 2023

Event Program
Organized by the Office of Graduate and Advanced Education
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The 10th Anniversary NYU Shanghai Post-Doctoral and Doctoral Research Assembly is a full-day celebration of research that showcases the achievements and contributions of post-doctoral fellows and PhD students spanning Biology, Chemistry, Computer Science, Global Health, International Relations, Mathematics, Neural Science, Physics, Psychology, Urban Studies, Medical Anthropology, and Transportation Engineering.

This event consists of a poster exhibition in a convention hall format and plenary sessions of oral presentations with awards for Best Poster and Best Oral Presentation.

We invite public viewers to cast a vote for the posters that most impress them, and panels of NYU Shanghai faculty will select the winning oral presentations.
## 2. Schedule at a Glance

<table>
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<th>Time</th>
<th>Session</th>
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| 9:30 a.m. - 8:00 p.m. | Public Viewing of Posters (4F East Hall)  
Nominations for Best Poster Awards close after the Poster Exhibition at 5:00 p.m. |
| 1:45 p.m. - 3:00 p.m. | Plenary Session for Doctoral Student Oral Presentations  
(Classroom E403)  
10 presentations of 5-minutes each, followed by private deliberation among judges over award winners (announcement of 3 award winners to be made at reception). Introduction by Dean of Graduate and Advanced Education Eric H. Mao.  
*Open to the entire school community.* |
| 3:00 p.m. - 5:00 p.m. | Poster Exhibition and Public Voting (4F East Hall)  
Refreshments served throughout the exhibition. Gift pick up for poster voters.  
*Open to the entire school community.* |
| 5:00 p.m. - 6:00 p.m. | Plenary Session for Post-Doc Oral Presentations  
(Classroom E403)  
8 presentations of 5-minutes each, followed by private deliberation among judges over award winners (announcement of 3 award winners to be made at reception). Introduction by Associate Provost for Research Anqi Qian.  
*Open to the entire school community.* |
| 6:00 p.m. - 7:30 p.m. | Announcement of Winners and Alumni Reception Dinner (4F East Hall)  
Greeting from Provost Joanna Waley-Cohen, messages from Alumni Representatives, comments from Oral Presentation Plenary Session Judges, followed by announcement of Winners and reception dinner.  
(Restaurant dinner limited to post-doctoral and PhD alumni, Research Assembly participants, and faculty advisors) |
## 3. Presentation Index

### Doctoral Student Oral Presentations

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<th>Presenter</th>
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<tr>
<td>1</td>
<td>Computer Science</td>
<td>Tianyao Chen</td>
<td>Logic-Neural Sequence Modeling</td>
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<td>2</td>
<td>Chemistry</td>
<td>Xingpin Li</td>
<td>Excited-state Many-Body Expansion: formalism and application to the solvatochromism of Brooker's Merocyanine Dye</td>
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<td>Shiyu Hu</td>
<td>A computational method for stability change prediction of proteins upon mutations</td>
</tr>
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<td>9</td>
<td>Chemistry</td>
<td>Zengkui Liu</td>
<td>Imaginary-time open-chain path-integral approach for Fermi's golden rule rate constant</td>
</tr>
<tr>
<td>10</td>
<td>Biology</td>
<td>Xiaoai Lyu</td>
<td>Identification of Aneuploidy Sensing Genes in Cells</td>
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### Postdoc Oral Presentations

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<td>Yizhao Zhang</td>
<td>How surface roughness reduces heat transport for small roughness heights in turbulent Rayleigh-Bénard convection</td>
</tr>
<tr>
<td>2</td>
<td>Medical Anthropology</td>
<td>Andrew Wortham</td>
<td>Collusive infrapolitics: The hidden gay worlds of HIV community based organizations in Kunming, China</td>
</tr>
<tr>
<td>3</td>
<td>International Relations</td>
<td>Bhagya Senaratne</td>
<td>Wedging during Crisis: Great Power and Multilateral Institution Competition during the Sri Lankan crisis</td>
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<td>Manuel Rissel</td>
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<td>Mathematics</td>
<td>Álvaro Mateos González</td>
<td>Odysseus and the Non-Smooth Stochastic Filtering Problem</td>
</tr>
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<tr>
<td>Biology</td>
<td>Xiaoai Lyu</td>
<td>D-1</td>
<td>Identification of Aneuploidy Sensing Genes in Cells</td>
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<td>Biology</td>
<td>Mahmuda Akter</td>
<td>P-1</td>
<td>Role of H2A.Z histone variant in chromosome segregation regulation and function of MPS1 kinase in H2A.Z histone phosphorylation during mitosis</td>
</tr>
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<td>Shiyu Hu</td>
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<td>Zengkui Liu</td>
<td>D-4</td>
<td>Imaginary-time open-chain path-integral approach for Fermi's golden rule rate constant</td>
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<tr>
<td>Chemistry</td>
<td>Yuquan Cao</td>
<td>D-5</td>
<td>Role of electronic polarization in the primary charge-transfer states of the purple bacteria reaction center: A polarizable QM/MM study with the integral-exact direct reaction field method</td>
</tr>
<tr>
<td>Computer Science</td>
<td>Tianyao Chen</td>
<td>D-6</td>
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## Poster Presentations (10-18)

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<td>Yuhua Lu</td>
<td>D-7</td>
<td>How the brain processes auditory and visual temporal structures of the world</td>
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<tr>
<td>Neural Science</td>
<td>Jintao Gu</td>
<td>D-8</td>
<td>Maintenance and transformation of working memory</td>
</tr>
<tr>
<td>Neural Science</td>
<td>Vince Sun</td>
<td>D-9</td>
<td>Hearing your voice before you speak</td>
</tr>
<tr>
<td>Physics</td>
<td>Junjun Chu</td>
<td>D-10</td>
<td>Dynamical states of a sector plate on a thermally convecting fluid</td>
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<td>Physics</td>
<td>Manish Chaudhary</td>
<td>D-11</td>
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### Poster Presentations (19-26)

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---|---|---|---  
Urban Studies | Meizi You | D-12 | Does self-containment of urban function and urban scale promote sustainable development in new towns? Lessons from the urban heat island dynamics in Shanghai  
Urban Studies | Tong Cheng | D-13 | Megacity Growth or Urban Sprawl? Simulating Planning Policies of Turkey’s Marmara Region  
Urban Studies | Yichun Zhou | D-14 | Can peri-urban parks mitigate environment and social equity? A case study of Tokyo using mobile phone data  
Urban Studies | Yue Xiong | D-15 | Toward a more healthy and equal city: how a vector-control project promotes SDGs in China  
Transportation Management | Yuhao Liu | D-16 | Modeling temporal variation of driver supply in an electrified ride-sourcing market considering drivers' charging and resting behavior  
Transportation Management | Yanling Deng | D-17 | Optimal design of a battery swapping and charging management system for electric trucks considering battery degradation  
Transportation Management | Yilang Hao | D-18 | Semi-autonomous Truck Platooning: A futuristic transportation mode  
Transportation Management | Zhi Li | D-19 | Empirical analysis of electric vehicles’ charging patterns: Case study from Shanghai
During each of the post-doctoral and doctoral oral presentation plenary sessions, a panel of 6 faculty judges will determine the three presentations that will earn the “Best Oral Presentation” awards.

Judging criteria:

Comprehension and Content
- Did the presentation provide a clear background and significance of the research question?
- Did the presentation clearly describe the research strategy/design and the results/findings of the research?
- Did the presentation clearly describe the conclusions, outcomes, and impact of the research?

Engagement and Communication
- Was the oration delivered clearly, and in language appropriate for a non-specialist audience?
- Were the PowerPoint slides clear and did they enhance the presentation?
- Did the presenter convey enthusiasm for their research, and capture and maintain the audience’s attention?

Overall Impression
What was your overall impression of the rigor of the presenter's research, the diligence of the presenter's commitment to his/her work, and the potential for the research project to be taken in interesting future directions?

Judging criteria were adapted from Cornell Graduate School. Each has equal weight and all emphasize the audience.
5. Judges for Oral Presentation

Plenary Session for Doctoral Student Oral Presentations

Guyue (Grace) Liu, Assistant Professor of Computer Science, NYU Shanghai
Jungseog Kan, Assistant Professor of Biology, NYU Shanghai
Shuyang Ling, Assistant Professor of Data Science, NYU Shanghai
William Glover, Assistant Professor of Chemistry at NYU Shanghai
Xiang Sun, Assistant Professor of Chemistry, NYU Shanghai
Zhibin Chen, Assistant Professor of Engineering, NYU Shanghai

Plenary Session for Post-Doc Oral Presentations

Joanna Waley-Cohen, Provost and Affiliated Professor of History, NYU Shanghai
Jia Miao, Assistant Professor of Sociology, NYU Shanghai
Lixian Cui, Assistant Professor of Psychology, NYU Shanghai
Mathieu Laurière, Assistant Professor of Mathematics and Data Science, NYU Shanghai
Roberto Fernandez, Professor of Practice in Mathematics, NYU Shanghai
Xing Tian, Associate Professor of Neural and Cognitive Sciences, NYU Shanghai
6. Poster Exhibition Map

4th Floor East Hall

Chemistry  Chemistry  Physics  Physics
Chemistry  Chemistry  Physics  Physics
Urban Studies  Urban Studies  Urban Studies  Urban Studies

Global Health  Computer Science  Math  International Relations
Biology  Biology  Neural Science  Neural Science
Transportation Management  Transportation Management  Transportation Management  Transportation Management
Psychology

Classroom E402
7. Poster Voting Policies and Recommendations

Any poster viewer throughout the day can nominate posters for the “Best Poster” award. Poster viewers can nominate an unlimited number of posters, but they may only submit one nomination per poster. The three doctoral and three post-doctoral posters with the highest number of nominations will earn the “Best Poster” awards.

Things to consider when voting for your favorite posters:

(1) Overall Visual:
- Do you like the general looking of a poster?
- Are the components of the poster well designed and balanced across the space?

(2) Overall Content:
- Are the components of the poster organized in a logical flow?
- Can you understand the contents on the poster?

(3) Overall Oral:
- Did the presenter sufficiently explain the poster and answer questions?
- Did the presenter speak clearly and distinctly?
- Did the presenter show enthusiasm about their topic?

Please scan this QR code to vote
8. Awards

Post-doctoral Fellow

- Best Oral Presentation
- Best Poster

Doctoral Student

- Best Oral Presentation
- Best Poster