



30th Anniversary Midwest Stress Response and Molecular Chaperone Conference

Saturday, January 18, 2025
Northwestern University
Pancoe Abbott Auditorium & Cafe
2200 Campus Drive
Evanston, Illinois 60208

Program Chairs

Jeff Brodsky, Department of Biological Sciences
University of Pittsburgh

Meeting Organizer

Rebecca Phend, Department of Molecular
Biosciences, Northwestern University

Sue Fox, Department of Molecular Biosciences
Northwestern University

Rick Morimoto, Department of Molecular Biosciences,
Northwestern University

PROGRAM

8:00 - 8:55 AM **Continental Breakfast**

8:55 - 9:00 AM **Opening remarks**
Rick Morimoto, Northwestern University, Evanston, IL

9:00 – 10:00 AM **~50 years of Hsp70s and J-domain proteins**
Betty Craig, University of Wisconsin-Madison, Madison, WI

Session I

Co-Chairs: **Marc Mendillo**, Northwestern University, Feinberg School of Medicine, Chicago, IL
Patricija van Oosten-Hawle, University of North Carolina, Charlotte, NC

10:00 - 10:20 AM ***Mining the Hsp90 interactomes for functional roles***
Brian Freeman, University of Illinois Urbana-Champaign, Urbana, IL

10:20 - 10:40 AM ***Transcriptome-wide mRNA condensation in unstressed cells***
D. Allan Drummond, The University of Chicago, Chicago, IL

10:40 - 11:00 AM ***Off to a great start: New tools to study the earliest steps of protein folding***
Patricia Clark, Notre Dame, South Bend, IN

11:00 - 11:25 AM **Coffee Break**

Session II

Co-Chairs: **Liming Li**, Northwestern University, Feinberg School of Medicine, Chicago, IL
Andrew Truman, University of North Carolina, Charlotte, NC

11:25 - 11:45 AM ***Role of polyphosphate in amyloidogenic processes***
Ursula Jakob, University of Michigan, Ann Arbor, MI



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- 11:45 – 12:05 AM** ***Redox modulation of proteostasis***
Kevin Morano, University of Texas Health Science Center, Houston, TX
- 12:05 – 12:25 AM** ***A cache of endo-siRNAs regulate the C. elegans heat shock response***
Veena Prahlad, Roswell Park, Buffalo, NY
- 12:25 – 12:30 PM** **Group picture**
- 12:30 – 1:30 PM** **Lunch** in the Pancoe Cafe

Session III- Flash Talks

Co-Chairs: **Tali Gidalevitz**, Drexel University, Philadelphia, PA
 Anat Ben Zvi, Ben-Gurion University of the Negev, Be'er Sheva, Israel

1:30–1:55 PM

Protein engineering approach towards controlling tau aggregation
Chad Dashnaw, UT Southwestern Medical Center, Dallas, TX

Class-specific chaperone behavior in biomolecular condensate dispersal
Kyle Lin, The University of Chicago, Chicago, IL

Mistranslation impairs distinct branches of proteostasis
Donovan McDonald, Western University, London, Ontario, Canada

Activation of the integrated stress response by loss of proteasome activity
Arya Menon, University of Michigan, Ann Arbor, MI

Almost FAIMous: Mechanistic insights into the aggregation inhibition and disaggregation activity of FAIM
Joshua Mitchell, Western Michigan University Homer Stryker M.D. School of Medicine, Kalamazoo, MI

A novel role for ER stress sensor, PERK, in axonal-dendritic targeting of neuronal growth factors
Julia Perhacs, Drexel University, Philadelphia, PA

Targeting FKBP51 with antisense oligonucleotides: A therapeutic approach for tauopathies
Ahmed Ramadan, University of South Florida, Tampa, FL

Characterization of a new Hsp110 inhibitor as a potential antifungal
Cancan Sun, Virginia Commonwealth University, Richmond, VA

E3 ligase recruitment by UBQLN2 protects substrates from proteasomal degradation
Sachini Thanthirige, University of Pittsburgh, Pittsburgh, PA

Hsp90-induced metabolic rewiring in the intestine regulates neuronal health and longevity
Valeria Uvarova, University of North Carolina, Charlotte, NC

Session IV- Poster Session Pancoe Café

1:55 – 3:10 PM



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Session V

Co-Chairs:

James West, The College of Wooster, Wooster, OH
Elise Kikis, The University of the South, Sewanee, TN

3:10 - 3:30 PM

Identifying rare variants linked to ERAD and protein conformational disease
Jeff Brodsky, University of Pittsburgh, Pittsburgh, PA

3:30 – 3:50 PM

Critical beginnings: Tuning protein folding and aggregation pathways at birth
Silvia Cavagnero, University of Wisconsin, Madison, WI

3:50 – 4:10 PM

Roles of RNA quadruplexes and SERF proteins in folding
Jim Bardwell, University of Michigan, Ann Arbor, MI

Session VI

Co-Chairs:

Daniel Czyz, University of Florida, Gainesville, FL
Cindy Voisine, Northeastern Illinois University, Chicago, IL

4:10 - 4:30 PM

Identification of yeast Hsp90 mutants with differing effects on client proteins
Jill Johnson, University of Idaho, Moscow, ID

4:30 - 4:50 PM

Organismal proteostasis
Rick Morimoto, Northwestern University, Evanston, IL

Closing Remarks and Reception

4:50 - 5:00 PM

Closing Remarks

5:00 – 6:15 PM

Reception w/appetizers & beverages in the Pancoe Café

This annual meeting is generously supported by The Daniel F. and Ada L. Rice Institute for Biomedical Research.