



SYMPOSIUM PROGRAM

October 13-14, 2023

Iowa State University

Friday, October 13, 2023

1:00 – 1:30	Registration	BBMB Atrium
1:30 – 1:35	Opening remarks	BBMB Auditorium
	<i>Session Chair: Vincenzo Venditti</i>	
1:35 – 2:05	Paul D. Adams (University of Arkansas) <i>Biochemical and Biophysical Approaches to Characterize the Molecular Basis of Abnormal Cell Signaling Function Involving Ras-Related Proteins</i>	
2:15 – 2:45	Catherine Eichhorn (University of Nebraska) <i>Structural heterogeneity in a central domain of the transcription-regulating 7SK RNA</i>	
2:55 – 3:10	Aayushi Singh (Venditti Lab. – Iowa State University) <i>Novel Class of specific FTO inhibitors that binds to transient allosteric pockets</i>	
3:15 – 3:30	Riley Petersen (Butcher Lab – University of Wisconsin) <i>Solution structure of poly(UG) RNA</i>	
3:35 – 3:50	Break	BBMB Atrium
	<i>Session Chair: Julien Roche</i>	
3:50 – 4:35	Plenary Lecture Ad Bax (National Institutes of Health) <i>A look at the past and a glimpse at the future of biological NMR</i>	
4:45 – 5:00	Shreya Ghosh (Clore Lab. – National Institutes of Health) <i>Quantitative NMR analysis of the mechanism and kinetics of chaperone Hsp104 action on amyloid-β42 aggregation and fibril formation</i>	
5:05 – 5:20	Dan Burns (Venditti Lab – Iowa State University) <i>Conformational Dynamics and the Substrate Selectivity Mechanism of hFTO</i>	

5:25 – 5:40	Joseph Bequette (Rossini lab – Iowa State University) <i>Structure Determination of Stannous Fluoride Solutions Used as Components of Commercial Toothpaste Products</i>	
5:45 – 6:00	Manu Veliparambil Subrahmanian (Veglia Lab) – University of Minnesota <i>AI-designed RF Pulses and Pulse Sequences for NMR experiments at High- and Ultra-High Magnetic Fields</i>	
6:05 – 8:30	Banquet and poster session	BBMB Atrium
6:05 – 7:15	Banquet	
7:20 – 8:30	Poster session	

Saturday, October 14, 2023

7:35 – 8:35	Coffee and light breakfast	BBMB Atrium
	<i>Session Chair: Roberto De Guzman</i>	BBMB Auditorium
8:45 – 9:00	Liping Yu (University of Iowa) <i>Lessons Learned From Metabolomics Studies of Mitochondrial Metabolism and Function</i>	
9:05 – 9:20	Morkos Henen (University of Colorado) <i>NMR as a tool to decipher the mechanistic links between aging-associated Pigmentation Phenotypes</i>	
9:25-9:40	Steve Van Doren (University of Missouri) <i>Fusion Peptide Sculpting of a Membrane with Insertion of Charged and Polar Groups</i>	
9:45-10:05	Break	BBMB Atrium
	<i>Session Chair: Vincenzo Venditti</i>	BBMB Auditorium
10:05-10:35	Emma Morrison (Medical College of Wisconsin) <i>H3 tail dynamics in the histone language</i>	
10:45-11:15	Michael Latham (University of Minnesota) <i>Structure and dynamics of the CSTF2 RNA recognition motif drive mRNA cleavage and polyadenylation</i>	
11:20-11:55	Break to assist to partial solar eclipse https://www.timeanddate.com/eclipse/in/usa/ames	
12:00-12:15	Nicholas Reiter (Marquette University) <i>Merging NMR, biochemistry, and cell biology tools to explore the penumbra of dynamic ncRNA-protein interactions</i>	
12:20 – 12:30	Award Ceremony	BBMB Auditorium
12:30	Adjournment	
12:45 – 1:55	Box Lunch	BBMB Atrium
2:00-3:30	High Pressure NMR workshop	BBMB Auditorium