

2018 Genetic Code Expansion Conference Schedule

Subject to Change

Thursday, August 9, 2018

- 6:00 pm Dinner
- 7:00 pm Welcome from the Chairs and conference logistics
- 7:40 pm **Session 1: Foundational Technology** Changes to essential translational components, such as the ribosome and tRNAs, expand the horizon for how broadly one can consider using GCE to study biology and to synthesize non-biological materials
- 9:00 pm Reception and Poster Setup

Friday, August 10, 2018

- 7:30 am Breakfast
- 9:00 am **Session 2a: New Functional Probes** Genetically-encodable probes that can report on or control specific phenomena in living cells can have extremely broad impacts on the types of questions asked in biological studies
- 10:20 am Coffee Break/Conference Photo
- 11:00 am **Session 2b: New Bioorthogonal Chemistries** Selective reactions are an essential partner of GCE technology, enabling attachment of diverse functionality that is not compatible with ribosomal incorporation
- 12:40 pm Lunch
- 1:30 pm Free Time and/or Additional Session
- 4:00 pm Poster Session 1
- 6:00 pm Dinner
- 7:30 pm **Session 3: From Site-specificity to Broad Genetic Recoding** Recent *in vitro* protein synthesis developments enable incorporation of large numbers of ncAAs and non-amino acids to synthesize therapeutic peptidomimetics and non-biological polymers
- 9:30 pm Reception/Poster Session 2

Saturday, August 11, 2018

- 7:30 am Breakfast
- 9:00 am **Session 4a: Proteins as Materials** Manipulating the global properties or crosslinking of proteins to make novel materials for controlling cell growth and drug delivery
- 10:20 am Coffee Break

- 10:50 am **Session 4b: Making Intractable Protein Targets Tractable** Using ncAAs enables study of protein structure and function in cells or complex systems at a level of detail usually reserved for purified proteins, providing entry to previously intractable systems
- 12:30 pm Lunch
- 1:30 pm Free Time
- 4:00 pm Poster Session 3
- 6:00 pm Dinner
- 7:15 pm GCE Future Planning Session
- 8:00 pm **Session 5: Enabling *In Vivo* Membrane Protein Studies** Signaling pathways underlying hormonal regulation and neuronal excitability can be studied in biophysical detail in living systems providing insight into disease mechanisms
- 9:30 pm Reception/Poster Session 4

Sunday, August 12, 2018

Departure