



ICBS2014 Examples of Conference Topic Areas

The following topics are examples with a focus on Driving Biology with Chemistry, however all areas of chemical biology will be considered:

Chemical Biology Approaches to Amyloids and Neurobiology

New Chemical Tools for Imaging

Controlling Cell Interactions and Fate with Chemistry

- Chemistry to Explore Epigenetics and Stem Cell Biology
- Pluripotency

Chemical Tools for Protein Homeostasis, Chaperones, and Ubiquitin Proteasome System

Synthetic and Unnatural Proteins for Engineering Biology

Chemical Biology for Targeting Rare and Neglected Diseases

Polypharmacology - Challenges and Opportunities in Drug Discovery

- Drug Repurposing in Academia
- Challenges in Large Scale Pharmacogenomics Studies

Targeting Allosteric Sites

Compound Target Engagement and ID Methods

Drug TARGET ID Methods

Innovative Approaches in Natural Product and Synthetic Biology

Chemical Libraries and Molecule Types (e.g. PPI's, miRNA, other RNA targets)

Computational Approaches in Chemical Biology

Academic-industry Partnership in Drug Discovery

Accelerate Chemical Biology with Synthetic Biology



Combinatorial Chemical Libraries

Chemical Space Explorations

Cheminformatics

Disease Target Biology and Validation

Global Collaboration Models in Chemical Biology and Drug Discovery

High Throughput Chemistry

High Throughput Screening Technologies for Novel Chemical Tool and Drug Discovery

High Content Screening Technologies for Novel Chemical Tool and Drug Discovery

Novel Bioassay Development

New Frontiers in Medicinal Chemistry - Chemistry Revisited

New Probe Discovery at the Interface of Synthetic and Systems Biology

Mice Models as Predictors of Human Disease Biology – positive and negative

Phenotypic screening and De-convoluting Target Sites

Research Data Quality and Integrity

Statistical Models and How They Help in Finding Needles in a Haystack