Invited plenary lectures on disease modeling, organ dysfunction, chemical biology, drug discovery and precision medicine

- **Randall Peterson**, Dean, College of Pharmacy, University of Utah, USA
  "Modeling human CNS disorders in the zebrafish."

- **Stephen Ekker**, PhD, Mayo Clinic at Rochester, USA
  "Engineering the power house of the cell"

- **Charles Hong**, MD, PhD, Pharmacology, Cell and Developmental Biology, Vanderbilt University, USA
  "Chemical genetics of zebrafish embryonic development to drive therapeutic target discovery in man"

- **Pierre Drapeau**, PhD, University of Montreal, Canada
  "Neuroleptics for ALS: small compound screen and small clinical trial"

- **Catarina Henriques**, University of Sheffield, UK
  "Telomeres, telomerase and inflammation in zebrafish ageing"

- **Erica Davis**, Center for Human Disease Modeling, Duke University, USA
  "Functional dissection of pediatric genetic disease"

- **Jeff Essner**, PhD, Iowa State University, USA
  "Enhanced efficiencies using short regions of homology for precise DNA integration in zebrafish"

- **Ori Rotstein**, Director, Keenan Research Centre for Biomedical Science, St. Michael’s Hospital, Canada
  "Using zebrafish models to understand the anti-inflammatory effects of remote ischemic conditioning in mammals"

- **Clara van Karnebeek**, MD, PhD. University of Amsterdam, The Netherlands
  "Zebrafish modelling for neurometabolic diseases: Identification of disease mechanisms & treatment targets"

- **Edward Burton**, MD, Neurology, University of Pittsburgh, USA
  "Unbiased phenotype-based chemical modifier screens in zebrafish models of neurodegenerative movement disorders"

- **Lila Solnica-Krezel**, PhD, Washington University School of Medicine in St. Louis, USA
  "Forward and reverse genetic approaches to scoliosis in zebrafish"

- **Marie-Andrée Akimenko**, PhD, University of Ottawa, Canada
  "Gene regulation of joint formation in regenerating fins"

- **Karl Clark**, PhD, Mayo Clinic at Rochester, Minnesota, USA
  "Targeted mutagenesis and analysis of the vertebrate stress response in Danio rerio"

- **Michael Wilson**, PhD, The Hospital for Sick Children & University of Toronto, Canada
  "From mammals to fish and back again: using comparative epigenomics to discover ancient enhancers active in early heart development"

- **Anne Dekeyne**, Institute of Research Servier, Paris, France
  "Zebrafish as a tool for target validation and drug discovery in proteinopathies of the CNS"

- **Peter Liu**, Director, University of Ottawa Heart Institute, Canada
  "Search for novel biomarkers and biotargets for precision medicine in heart disease"

- **Alexander Jodey Parker**, PhD, University of Montreal, Canada
  "Early drug discovery and development for neurological disorders using C. elegans"

- **Yibin Feng**, Associate Director, School of Chinese Medicine, The University of Hong Kong, China
  "Drug discovery from Chinese medicines: the past, present and future"