Proposal for Asilomar Conference

Title: **Novel instrumentation in mass spectrometry and Ion mobility spectrometry**

Organizers: **Daniel Austin**, Brigham Young University, and **Zheng Ouyang**, Purdue University

Focus: All experiments in mass spectrometry and ion mobility spectrometry begin with an instrument. New or modified instrument components or designs are often driven by, but ultimately enable new applications and lead to new science. This conference brings together those who build and develop instrumentation, primarily in an academic setting, to share ideas and facilitate cross-fertilization among different areas of work.

Plenary Speaker with broad appeal and perspective on instrumentation – Scott McLuckey or Jack Beauchamp

Sessions/topics

Session 1. Mass analyzers and detectors

Zheng Ouyang (Mini MS), Ryan Danell (MOMA), Martin Jarrold (CD-MS), Gotfried Kibelka (ion CCD), Pete Reilly (macro-ion MS), Brain Chait (electrode shapes and ESI interfaces), Winston Chen (particle traps, biomolecule experiments), Gary Glish (ion traps)

Session 2. Ion sources, sampling and imaging

Jack Beauchamp (droplet ionization), Graham Cooks (ions in air), Julie Laskin (imaging, surfaces), Zoltan Takats (surgical), Sarah Trimpin (laserspray and variants), Yu Xia (P-B reaction source), Akos Vertes (LEISI)

Session 3. Ion guides and ion mobility

Gary Eiceman (mini IMS), Richard Smith or Keqi Tang (SLIM), Dave Clemmer (IMS), David Russell (IMS)

Session 4. FT instruments

Li Ding (static FT), Wei Xu (FT mobility), Evgeniy Nicolaev (FTICR cell), Scott McLuckey (FFTOF), Alan Marshall (FTICR), Alexander Makarov (Orbitrap advances)

Session 5. Miniaturized MS

Guido Verbeck (micro CIT), Mike Ramsey (micro CIT), ChanfanDing (parallel arrays), Richard Syms (Microsaic), Jorge Diaz (mini B), Tim Short (micro CIT)

Session 6. Instrumentation to study ion activation

Vicky Wysocki (SID), Daniel Austin (neutral activation), Glenn Jackson (He metastable), Nick Polfer (ion activation), Ryan Julian (ion activation), Gavin Reid (protein activation), Rebecca Jockush (activation in traps), Jennifer Broadbelt (activation)