

## 2017 Advanced AUC Workshop Symposium

Theme: "The questions of the students are often the source of new research. They often ask profound questions that I've thought about at times and then given up on, so to speak, for a while." (Richard Feynman, *The Dignified Professor* in the book *Surely You are Joking, Mr. Feynman*)

### Embassy Suites Newark Wilmington South

654 South College Avenue

Newark, DE 19713

Parking: FREE

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### November 8, 2017

8:15–8:30 Arrival & Sign In

8:20–8:30 Welcome: David Hayes

#### **Session 1: AUC Applications - David Bain Session Chair**

8:30–9:00 Aaron Lucius: *The Energetics of the Binding and Assembly Reactions of Motor Proteins*

9:00–9:10 Questions and Answers

9:10–9:40 Andy Herr: *AUC Studies of a Biofilm Adhesion Protein: From Thermodynamics to Therapeutics*

9:40–9:50 Questions and Answers

9:50–10:20 Rob Fairman: *AUC with Fluorescence Detection for the Study of Neurodegeneration in Worms and Flies*

10:20–10:30 Questions and Answers

10:30–11:00 Break -- Posters are available for viewing

11:00–11:30 Kelly Arthur: *Applications of SV-AUC for the Characterization of Biologics, an Industry Perspective*

11:30–11:40 Questions and Answers

11:40–12:10 Borries Demeler: *Spectral and Hydrodynamic Analysis of West Nile Virus RNA-protein Interactions by Multi-wavelength Sedimentation Velocity*

12:10–12:20 Questions and Answers

12:30–1:30 Lunch & Learn provided by Beckman Coulter

#### **Session 2: Beyond Discrete Parameters - Matrix Models**

1:30–2:00 Walter Stafford: *Multi-Wavelength Analysis of Complex Interacting Systems with SEDANAL*

2:00–2:10 Questions and Answers

2:10–3:00 Jim Swan: *Coarse-grained Modeling of mAb Hydrodynamics and the Settling Rate of Sticky Particles*

3:00–3:10 Questions and Answers

3:10–3:40 Jack Correia: *Sedimentation Velocity, Equilibrium, Synthetic Boundary and Band Sedimentation Studies on High Concentration Serum Proteins*

3:40–3:50 Questions and Answers

3:50–4:20 Break -- Posters are available for viewing

#### **Session 3: Round Table Discussion**

4:30–5:30 *What software will we be using in 2028 to analyze AUC experiments?* Hosted by Michael Brenowitz

5:30 END of Symposium and Workshop

## SYMPOSIUM DAY SPEAKERS

### **Kelly Arthur**

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### **David Bain**

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### **Michael Brenowitz, Ph.D.**

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### **Dr. John J. "Jack" Correia**

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### **Borries Demeler, Ph.D.**

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### **A/Prof. Renwick Dobson**

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### **Robert Fairman**

Professor of Biology  
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### **David B. Hayes**

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### **Andrew B. Herr, Ph.D.**

Associate Professor in the Divisions of  
Immunobiology & Infectious Diseases  
Cincinnati Children's Hospital Medical  
Center

### **Aaron Lucius**

Professor and Graduate Program Director  
University of Alabama Birmingham  
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### **Walter Stafford**

Boston Biomedical Research Institute  
(retired)

### **James W. Swan**

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