Day 1 Chairs: Paul Carlier, Elizabeth Sharlow

11:00 am  Registration opens  
*Roanoke Foyer*

1:00 pm  Symposium Opens  
*Roanoke Ballroom (DGH)*

Welcome from the Honorable Sherman Lea, Mayor, City of Roanoke

Welcome from David G. I. Kingston (Virginia Tech), Meeting Chair

Welcome from Jeff Gallagher, CEO, Virginia Bio

1:15 pm  **Keynote 1:** Laura Bohn (Scripps Research Institute)  
“Harnessing opioid receptor function to improve physiological responses”

1:55 pm  Q & A

2:00 pm  **Keynote 2:** Judy Leopold (University of Michigan)  
“Precision Polypharmacology: A Rational Design Approach to Cancer Drug Resistance”

2:40 pm  Q & A

2:45 pm  **Invited Talk 1:** P. Read Montague (Fralin Biomedical Research Institute at VTC & Department of Physics, Virginia Tech) “Addiction is a Computational Disease”

3:00 pm  Q & A

3:05 pm  **Coffee break/Poster Session**  
*Roanoke Ballroom (AB)*

4:05 pm  **Keynote 3:** Craig Lindsley (Vanderbilt University)  
“CNS Drug Discovery in an Academic Environment”  
*Roanoke Ballroom (DGH)*
4:45 pm  Q & A

4:50 pm  **Invited Talk 2**: Phil Bourne (University of Virginia)
“Drug Discovery in the Age of Data Science”

5:05 pm  Q & A

5:10 pm  **Invited Talk 3**: Xiang-Yang Wang (Virginia Commonwealth University)
“Developing the Next Generation of Immune Modulator for Improved Cancer Immunotherapy”

5:25 pm  Q & A

5:30 pm  **Panel Discussion 1**: Big Data and Drug Discovery
Phil Bourne (University of Virginia, Chair), Aaron Black (INOVA), Francis X. Farrell (Carilion)

6:15 pm  Beer & Biotech Mixer
*Roanoke Ballroom (AB)*

7:30 pm  Dinner
*Crystal Ballroom*

8:30 pm  After-Dinner remarks by Mike Friedlander (Fralin Biomedical Research Institute at VTC)

**Day 2 Morning Chairs**: John Lazo, Umesh Desai

8:00 am  Continental Breakfast
*Roanoke Ballroom (AB)*

8:30 am  Welcome to Day 2
*Roanoke Ballroom (DGH)*

8:35 am  **Keynote 4**: Susan Band Horwitz (Albert Einstein College of Medicine)
“Taxol, Tubulin, and Tumors: a Story of Drug Development”

9:15 am  Q & A

9:20 am  **Keynote 5**: Susan Amara (National Institute of Mental Health, NIH)
“Dynamic Regulation of Signaling in Dopamine Neurons: New Pathways for Neuropsychiatric Drug Discovery”
10:00 am  Q & A

10:05 am  **Coffee break/Poster Session**
*Roanoke Ballroom (AB)*

11:00 am  **Panel Discussion 2:** “Key success factors for early stage companies”
Jim Powers (Hemoshear, Chair), Jeff Conroy (Embody), Robert Lloyd (BrightSpec), Webster Santos (Continuum Bio & Flux Therapeutics), Guy Yachin (Serpin Pharma)
*Roanoke Ballroom (DGH)*

12:00 pm  **Lunch and Sponsor Presentations** (Advion, VCU Innovation Gateway)
*Roanoke Ballroom (CEF), Elizabeth Sharlow, Moderator.*

**Day 2 Afternoon Chairs:** Ali Andalibi, David Kingston

1:15 pm  **Invited Speaker 4:** O. John Semmes (Eastern Virginia Medical School)
“Building Multi-Omic Disease Models of Cancer to Drive Personalized Medicine”

1:30 pm  Q & A

1:35 pm  **Invited Speaker 5:** Saleet Jafri (George Mason University)
“Translational Applications of Protein Structure Simulation: Predicting Phenotype of Missense Variants”
*Roanoke Ballroom (DGH)*

1:50 pm  Q & A

1:55 pm  **Invited Speaker 6:** Warren Bickel (Fralin Biomedical Research Institute at Virginia Tech Carilion) “Addiction: Identifying a Novel Determinant of Drug Valuation”

2:10 pm  Q & A

2:15 pm  **Keynote 6:** Donna Huryn (University of Pittsburgh)
“Development of Novel Inhibitors of the AAA ATPase p97 to Interrogate Novel Biology and Fuel Drug Discovery”

2:55 pm  Q & A

3:00 pm  **Keynote 7:** B. Frank Gupton (Virginia Commonwealth University)
“Third World Health Care Issues within the United States”
3:40 pm  Keynote Q & A
3:45 pm  Symposium Wrap-up
3:50 pm  Meeting close