

3rd Annual Data and Life Science Collaboration & Symposium
CWRU Tinkham Veale University Center
August 3—4, 2017

THURSDAY, AUGUST 3RD

7:30AM Registration and Breakfast
8:45AM Welcome Remarks
9:00AM Keynote Lecture
“Value Based Leadership”
Stephen McHale—Managing Director, 23Bell, LLC;
Founder, CEO and Chairman , Explorys

MORNING SESSIONS

SESSION 1A

10:00—11:20AM

Materials Data Science

Venue: TVUC Senior Classroom (1st Flr)

10:00AM Atsushi Muramatsu (Tohoku Univ)

Title: Recent Studies on Preparation & Application of Uniform Nanoparticles

10:20AM Jennifer Carter (CWRU)

Title: Understanding of Materials Performance through Data Analytics

10:40AM John Lewandoski (CWRU)

Title: Metal Additive Manufacturing: A Review of Techniques and Mechanical Properties

11:00AM Laura Bruckman (CWRU)

Title: Data Science Approach for PV Module Degradation in Real-World and Accelerated Exposures

11:30AM Poster Preview @ TVUC Ballroom B

12:00 Lunch and Poster Session @ TVUC Ballroom B & C

SESSION 1B

10:00—11:20AM

Big Data and Biological Complexities

Venue: TVUC Ballroom A

10:00AM Vinay Varadan (CWRU)

Title: Multi-Scale Integrative Analytics to Decode Complex Disease Mechanism

10:20AM Hafumi Nishi (Tohoku Univ)

Title: Protein Structural Perspective of Single Nucleotide Variants in Human Genes

10:40AM Ewy Mathe (OSU)

Title: IntLiM: Integrating Metabolomics and Gene Expression Data using Linear Models

11:00AM Takuro Nakayama (Tohoku Univ)

Title: Non-photosynthetic Evolution of Photosynthetic Bacteria Inside a Cell

AFTERNOON SESSIONS

SESSION 1A

2:00—3:20PM

Engineering Data Science and Analytics

Venue: TVUC Senior Classroom (1st Flr)

2:00PM Naho Orita (Tohoku Univ)

Title: Natural Language Processing

2:20PM Kiju Lee (CWRU)

Title: SIG-Blocks: Tangible Game Technology for Cognitive Assessment

2:40PM Jenny Brynjarsdottir (CWRU)

Title: Learning about Physical Parameters—the Importance of Accounting for Model Error

SESSION 1B

2:00—3:20PM

Big Data and Healthcare

Venue: TVUC Ballroom A

2:00PM Anant Madabhushi (CWRU)

Title: Computational Imaging and Precision Medicine: It's not just about Genes and Proteins

2:20PM William Bush (CWRU)

Title: An Atlas of Clinical Traits within Three-Dimensional Protein Structures

2:40PM Rong Xu (CWRU)

Title: Data-Driven Approaches to Disease Understanding and Drug Discovery

3:00PM Ming Chun Huang (CWRU)

Title: Building Data-Driven Occupational Safety and Health Libraries over the Cloud, the Edge and End Devices

FRIDAY, AUGUST 4TH

7:30AM

Registration and Breakfast

8:15AM—9:50AM

Entrepreneur Workshop

Speakers:

Overview of CWRU Innovation Programs—Mark Chance (CWRU)

Data Use Agreements and Software Licenses—Stacy Fening (CWRU)

Nanotechnology & Cancer—Nicole Steinmetz (CWRU)

Imaging Technology in Brain Tumor Diagnosis—Pallavi Tiwari (CWRU)

Huntington's Disease: Target Identification and Drug Discovery —Xin Qi (CWRU)

9:50—11:10AM

Student Oral Presentations

11:15—11:45AM

Awarding Ceremony and Closing Remarks

11:45AM—1:00PM

Lunch and Poster Session @ TVUC Ground Floor Lobby