

2017 CWRU ICB ANNUAL SYMPOSIUM

AKA

THE NORTH COAST CONFERENCE ON PRECISION MEDICINE



INSTITUTE FOR
COMPUTATIONAL
BIOLOGY

September 28, 2017

Dana C. Crawford, PhD
Associate Professor
Population and Quantitative Health Sciences
Institute for Computational Biology

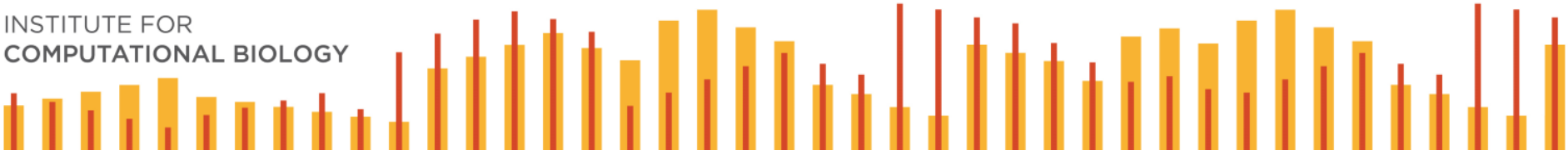
PRECISION MEDICINE

THE CONCEPT



*Lancet*385:2448-2449 (2015)

- **Launched January 20, 2015**
- **2016 budget of \$215M**



PRECISION MEDICINE THE CONCEPT



RELAX
AND BE
PATIENT

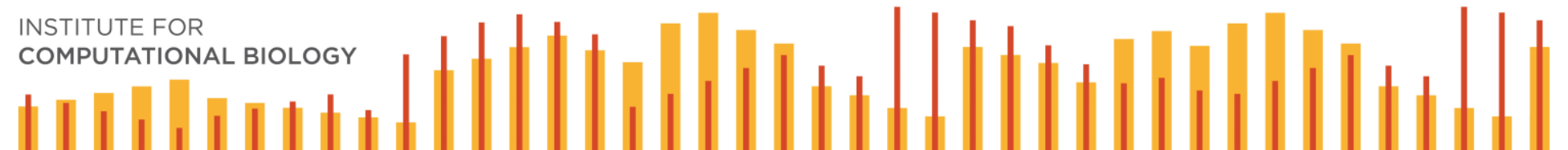
Right Patient

Right Drug



Right Dose

First Time



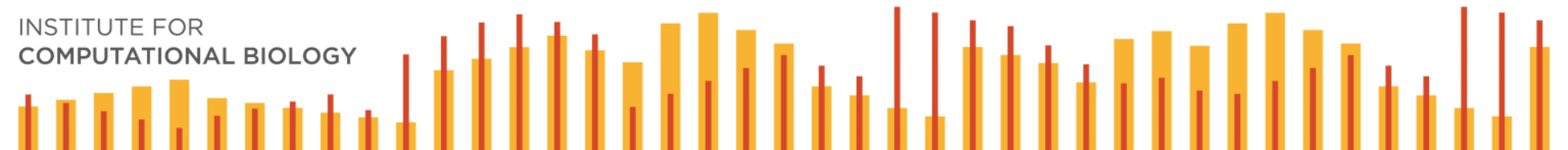


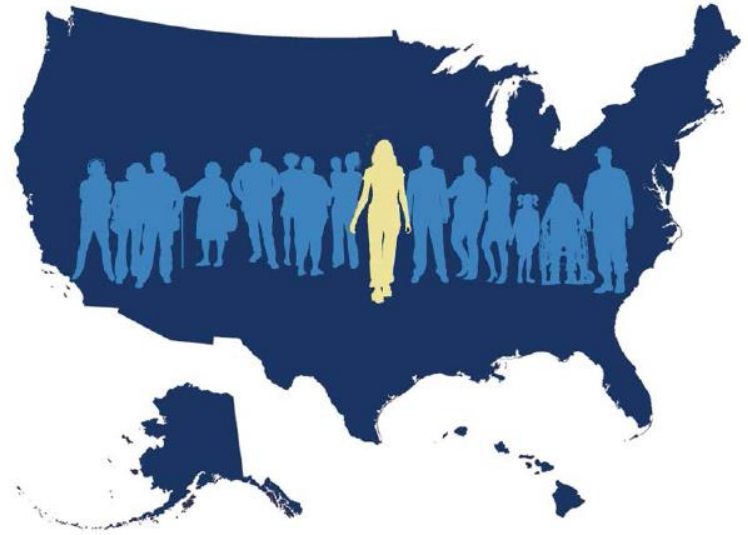
<https://www.nhlbi.nih.gov/research/resources/nhlbi-precision-medicine-initiative>



<http://www.ourhealthycommunity.com/Our-Campaigns/Precision-Medicine-Initiative-Center>

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The Precision Medicine Initiative Cohort Program – Building a Research Foundation for 21st Century Medicine

Precision Medicine Initiative (PMI) Working Group Report to the Advisory Committee to the Director, NIH

September 17, 2015

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(Photo credit: Dr. Janina Jeff at the 2017 New Balance Bronx 10 Mile)



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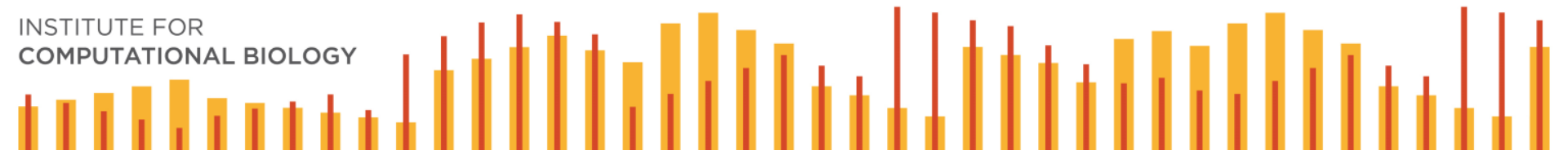
Precision Medicine Potential in CLE



Cleveland Clinic



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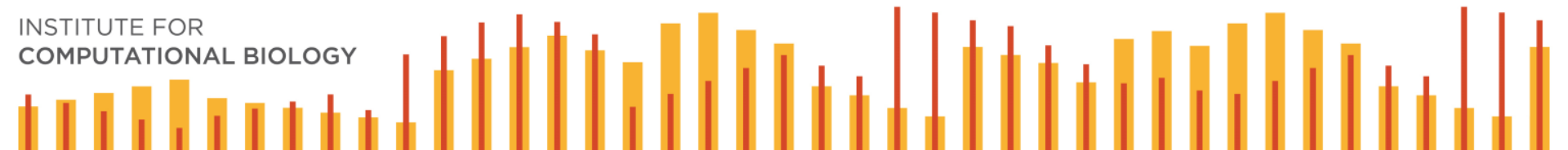
PRESENT-DAY PROBLEMS AND POTENTIALS FOR PRECISION MEDICINE (2015)

AND WORKSHOP

PUTTING THE PIECES TOGETHER: PRECISION MEDICINE DISCOVERY FROM ELECTRONIC HEALTH RECORDS



- **EHRs and Genomics**
- **Precision Medicine in CLE**
- **Big Data, Big Problems, and Big Potential**
- **Genomic Clinical Decision Support**
- **Precision Medicine in Asthma**
- **Health Disparities**
- **Extracting Data from EHRs**



PRECISION MEDICINE FOR ALL

ENSURING DIVERSITY IN PARTICIPANTS AND IN PRACTICE (2016)



Darcy Freedman, PhD



David Kaelber, MD,
PhD, MPH



Timothy Thornton, PhD



Jacob McCauley, PhD



Minoli Perera,
PharmD, PhD

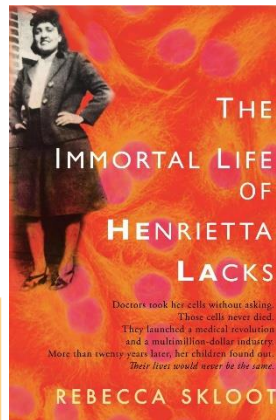


Esteban Burchard,
MD, MPH



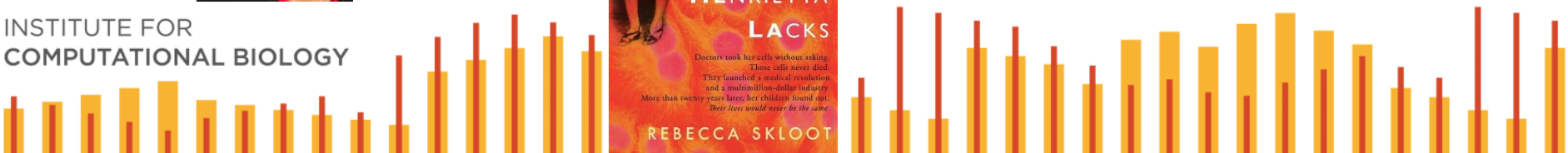
Aaron Goldenberg, PhD,
MPH

Our Symposium Speakers



- Diversity in Precision Medicine
- Genetics and Public Attitudes
- Outreach experiences in CLE
- EHRs
- Biorepositories in US Territories
- Statistical Approaches and Diversity
- Pharmacogenomics
- Participation in Biomedical Research

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BEING PRECISE IN PRECISION MEDICINE MEASURING EXPOSURES IN DIVERSE POPULATIONS (2017)

AND WORKSHOP

STRATEGIES FOR ENHANCING THE VALUE AND UTILITY OF RESEARCH THROUGH EHR'S

Erika Trapl, PhD



Stefanie Ebelt Sarnat, ScD, MSc



Erin Ramos, PhD, MPH



Jennifer Schrack, PhD



Monica Webb Hooper, PhD

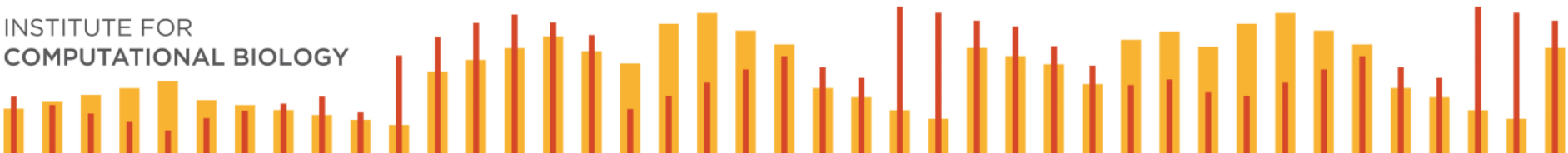


Misa Graff, PhD



Sarah Pendergrass, PhD

- **Air Pollution**
- **Physical Activity**
- **GxE Studies**
- **EHR Data Extraction**
- **Variable Harmonization**
- **Stress Exposure and Disparities**
- **CLE Cigar and Cigarillo Use**



BEING PRECISE IN PRECISION MEDICINE

MEASURING EXPOSURES IN DIVERSE POPULATIONS (2017)



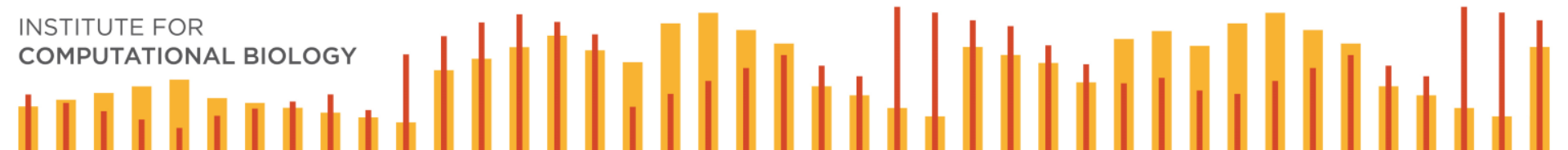
Poster and networking
Foyer
10:15 – 11:15 am



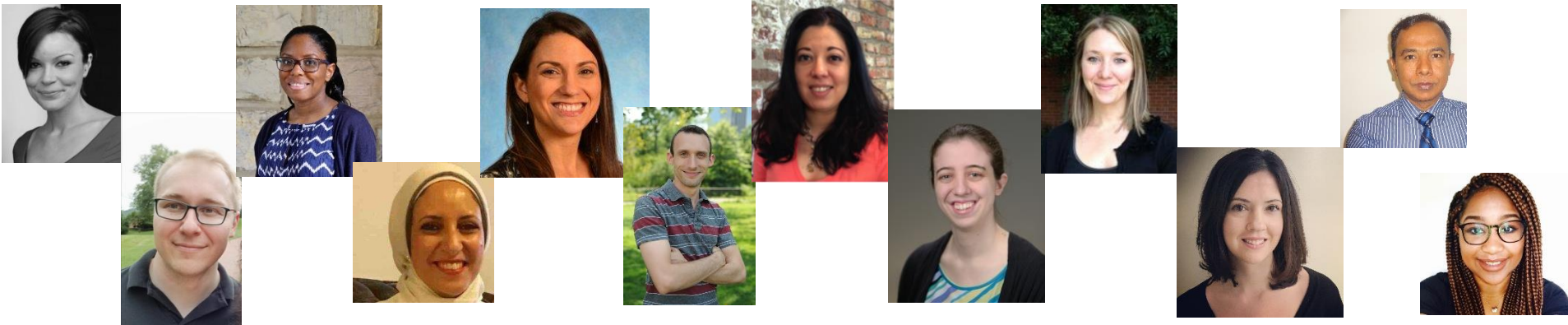
Lunch
Foyer and Ballroom A
Noon



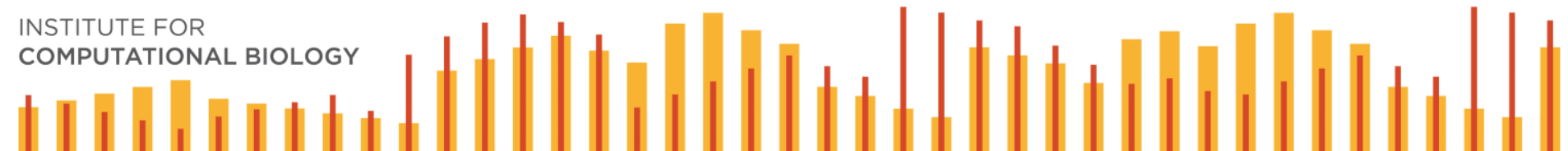
Workshop on EHRs
Ballroom A
12:30-2:30 pm



TRAVEL AWARDEES (NIH/NHGRI R13HG009481)



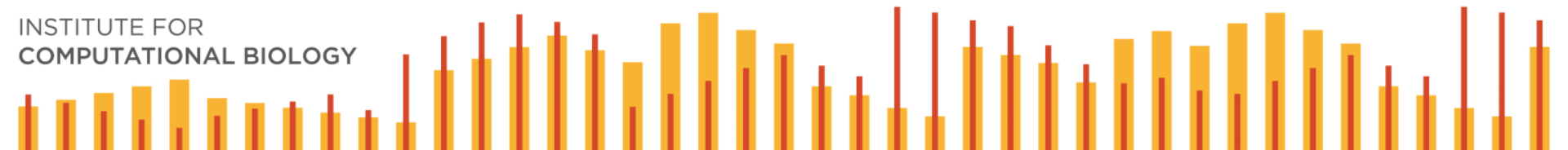
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SYMPOSIUM LOGISTICS



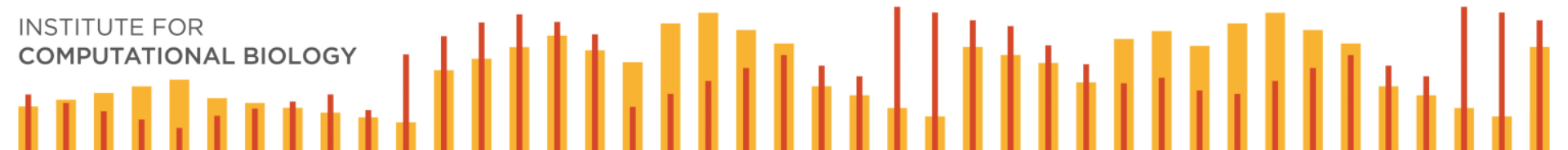
Reception
5:00 – 7:00 pm(ish)
Smith Commons Area
(downstairs)



SYMPOSIUM LOGISTICS



Parking vouchers available for Lot 29



SOCIAL MEDIA

#ICBSymposium

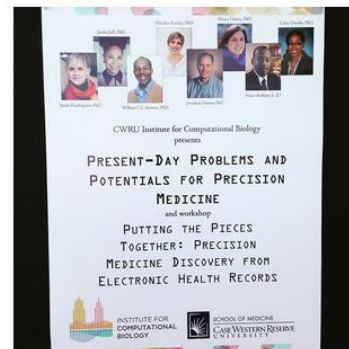
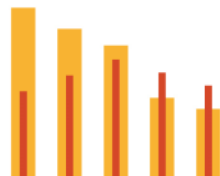


Venice Bonham from NHGRI talks to students about NIH and precision medicine. #icbsymposium

Institute for Comp Biology, Sep 22, 12:32 PM [Remove](#)



Dr. Casey Overby making the case for clinic workflows in precision medicine. #icbsymposium



A day well-spent! #icbsymposium

Jessica Cooke Bailey, Sep 22, 4:55 PM [Remove](#)



Getting instructions from Dr. Pendergrass on the e-phenotyping workshop. #icbsymposium



SOCIAL MEDIA

We're on Instagram!

#ICBSymposium



Instagram

Search



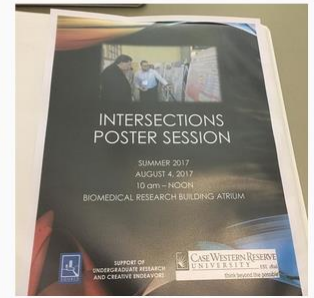
smartpeoplesciencing

Edit Profile



98 posts 23 followers 24 following

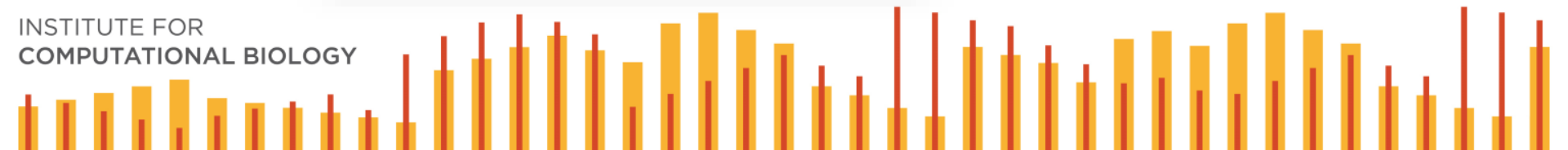
Institute for Comp Biology



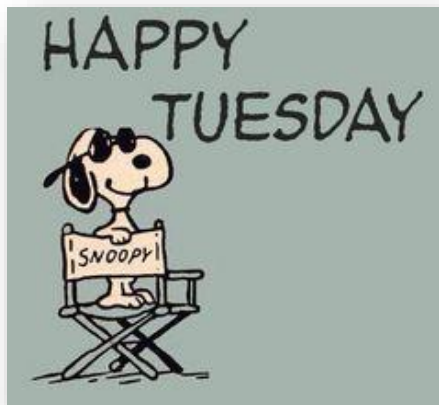
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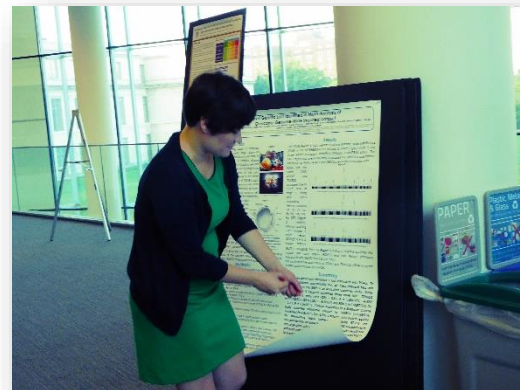
SPECIAL THANKS



Tuesday Gibson
Administrative Assistant



Will Bush, PhD, MS
Director of Visual Communications



Jessica Cooke Bailey
Assistant Professor

