Ohio Supercomputer Center

SUG

Statewide Users Group

Fall Conference
October 4th, 2018

Ohio Supercomputer Center
An **OH·TECH** Consortium Member

Agenda

Thursday, October 4th

9:00–10:00 am	Breakfast Assortment	BALE Area
	Hardware Committee	204 Conference Room
	Software Committee	350 Conference Room
10:00–11:00 am	Breakout Sessions:	
	Pitzer Information Session	204 Conference Room
	OSC Campus Champions	200 Conference Room
	Data Analytics	BALE Conference Room
	Client Portal	208 Conference Room
11:00–11:45 am	OSC: Welcome and Presentation	BALE Theater
11:45 am–12:00 pm	Lunch Pick-up	BALE Lobby
12:00–12:55 pm	Keynote Speaker: Russ Fromkin	BALE Theater
1:00–1:50 pm	Flash Talks Session 1	BALE Theater
2:00–2:50 pm	Flash Talks Session 2	BALE Theater
3:00–4:45 pm	Poster Session	
	Hors d'Oeuvres	BALE Lobby
	Networking	
4:45 pm	**Poster and Flash Talk Winner Announcement**	**BALE Theater**

Flash Talks

Session 1

1. Molecular model development with accurate charge distributions for gaseous adsorption in porous materials
   Eun Hyun Cho | The Ohio State University

2. Molecular Dynamics and Umbrella Sampling Simulations Elucidate Differences in Troponin C Isoform and Mutant Hydrophobic Patch Ex
   Jacob Bowman | The Ohio State University

3. Stellar explosions at OSC
   Shiv Subedi | Ohio University

4. Disentangling the process of speciation using machine learning
   Megan Smith | The Ohio State University

Session 2

5. Optimized Molecular Mechanics Protein Potential Improves Dynamics of Intrinsically Disordered Proteins
   Lei Yu | The Ohio State University

6. Modeling of Failure Mechanisms for Flood Control Systems in a Hydrodynamic Storm Surge Model
   Dylan Wood | The Ohio State University

7. Genomic signatures of convergent adaptation in semiaquatic mammals
   Drew Duckett | The Ohio State University

8. Computational Modeling of Cooldown of an Engine Mount
   Navni Verma | The Ohio State University

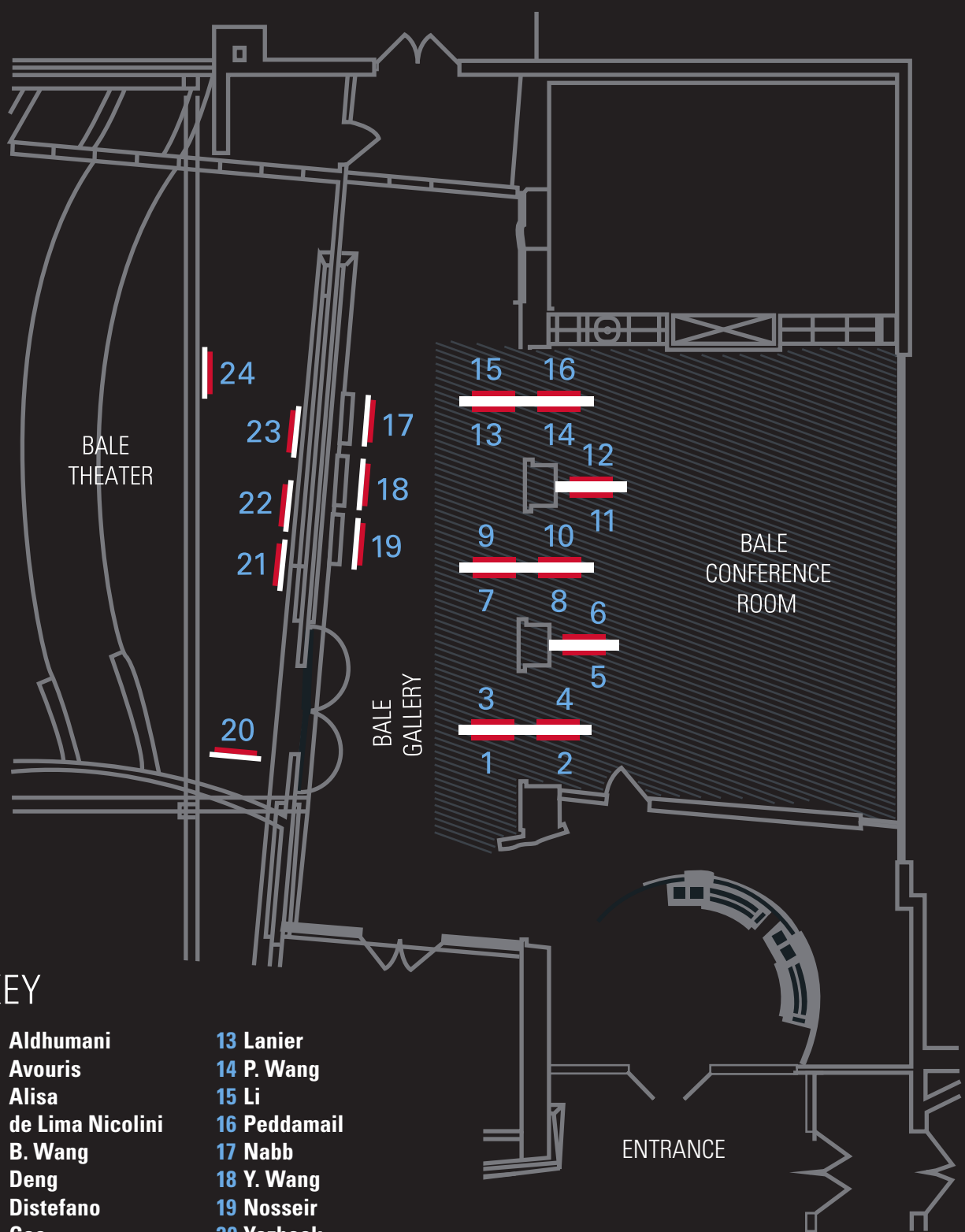# Keynote Address

Russ Fromkin

**Americas HPC and
HPDA Sales Director**

Intel Corporation

Russ Fromkin is the Americas HPC and HPDA Sales Director for the Intel Corporation. Russ and his team are responsible for helping technical computing and data analytics customers implement cutting edge technologies developed by Intel Corporation. Russ joined Intel Corporation in 1999 as part of an acquisition of Dialogic Corporation. Previous to his current role, Russ helped lead Information Assurance, HPC and Cloud Computing activities for the Intel Federal team. Prior to the acquisition, Russ developed and managed the ISV program for Dialogic. Russ holds a BA from The Johns Hopkins University.

Posters

1. Chemoinformatic Analysis of a Target RNA Element
   Ali Aldhumani | Ohio University

2. NASA Airborne Hyperspectral Image Analysis: the 2016 Lake Erie CyanoHAB
   Dulci Avouris | Kent State University

3. Convolutional Neural Networks and Deep Learning to Detect Mineral Crystal System
   Neeman Alisa | Muskingum University

4. Recent Results on Finite-Element-based Particle-in-Cell Methods for Kinetic Plasma Simulations
   Julio de Lima Nicolini | The Ohio State University

5. Deconvolution of Complex Scattering in Atomic Resolution Spectroscopic Images Using Multi-slice Simulations
   Binbin Wang | The Ohio State University

6. Molecular simulations of polymer membranes: effects of water
   Xuepeng Deng | The Ohio State University

7. Systematic analysis of function and regulation of microRNA isoforms in Cancer
   Rosario Distefano | The Ohio State University

8. Application of Finite Volume Method in simulating erythrocytes separation
   Xuyao Gao | The Ohio State University

9. Two photon absorbtion of bovine Rhodopsin
   Samira Gholami | Bowling Green State University

10. Using the Ohio Supercomputer cluster to measure developmental changes in connectivity between the amygdala subnuclei and occipit
    Heather Hansen | The Ohio State University

11. Phase Field Modelling of Transformation Pathway in HEA
    Kamalnath Kadirvel | The Ohio State University

12. Studying Infant Hippocampal Connectivity with the OSC
    Athena Howell | The Ohio State University

13. Early Results of Monte-Carlo Simulations for NaxCoO2
    Joseph Lanier | Xavier University

14. Filter-and-Convolve: A CNN Based Multichannel Complex Concatenation Acoustic Model
    Peidong Wang | The Ohio State University

15. Connectivity patterns between language and visual systems in neonatal and adults brain
    Jin Li | The Ohio State University

16. A comprehensive study of StaQC for Deep Code Summarization
    Jayavardhan Reddy Peddamail | The Ohio State University

17. Predicting reading ability based on anatomical and functional neural connectivity
    Carver Nabb | The Ohio State University

18. Goniopolarity: Axis-Dependent Conduction Polarity in Layered Materials
    Yaxian Wang | The Ohio State University

19. Quantum Mechanical Calculations Towards The Discovery Of Therapeutics For Organophosphorus Poisoning
    Ola Nosseir | The Ohio State University

20. Large Eddy Simulations of Sustainable Greenbelts in Industrial Complexes
    Theresia Yazbeck | The Ohio State University

21. Use of Computational Tools in the Search for the Next Generation of Materials for Regenerative Medicine Applications
    Felipe Fabricio Pacci Evaristo | The Ohio State University

22. Large-scale Computation for Plasma Opacities
    Lianshui Zhao | The Ohio State University

23. Exploring the development of high-level visual connectivity in infants on the Ohio Supercomputer Center cluster
    Micah Rhodes | The Ohio State University

24. Computational Studies of Zeolite Nanosheets as Pervaporation Membranes for Ethanol Extraction
    Changlong Zou | The Ohio State University

BALE
THEATER

BALE
CONFERENCE
ROOM

BALE
GALLERY

24

23   17

22   18

21   19

20

15   16
13   14   12
11
9   10
7   8   6
5
3   4
1   2

ENTRANCE

KEY

1	Aldhumani	13	Lanier
2	Avouris	14	P. Wang
3	Alisa	15	Li
4	de Lima Nicolini	16	Peddamail
5	B. Wang	17	Nabb
6	Deng	18	Y. Wang
7	Distefano	19	Nosseir
8	Gao	20	Yazbeck
9	Gholami	21	Pacci Evaristo
10	Hansen	22	Zhao
11	Kadirvel	23	Rhodes
12	Howell	24	Zou