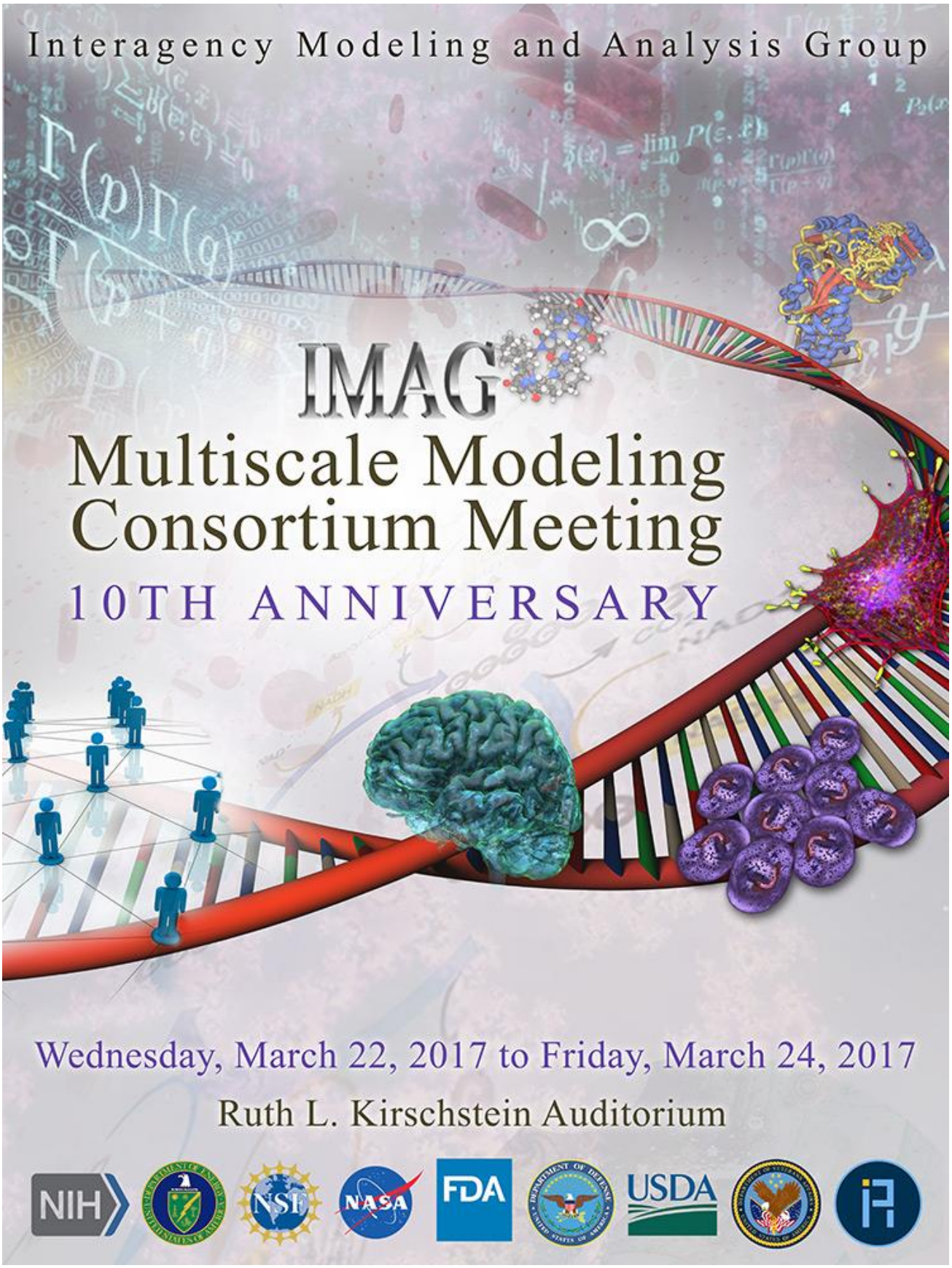

Interagency Modeling and Analysis Group
IMAG
Multiscale Modeling Consortium Meeting
10TH ANNIVERSARY
Wednesday, March 22, 2017 to Friday, March 24, 2017
Ruth L. Kirschstein Auditorium
NIH
NSF
NASA
FDA
USDA

Logistics

Welcome to the IMAG 10th Anniversary Multiscale Modeling Consortium Meeting!

We are excited to have you here to celebrate the 10th Anniversary of the IMAG Multiscale Modeling (MSM) Consortium. The agenda is filled with themes sessions and discussions to help us look toward our future. We look forward to everyone's interactive participation throughout these three days. Enjoy the meeting!

Check-In
Check-in will begin at 8:00 AM on all meeting days.

Meeting Themes
This year six session themes are dedicated to discussing topics of interest to the Consortium. Each theme will include speakers and discussion panels. Please use the interactive agenda on the IMAG wiki to follow along and add your comments and questions during each talk. Everyone is encouraged to contribute!

Working Groups
Working group breakouts will occur on Day 1 with summaries of the discussions presented on Day 2. WG scribes should post all WG notes on the wiki at the end of Day 1 to present on Day 2.

Posters
All posters should be displayed for the duration of the 3-day meeting. Please use the poster table in the interactive agenda to sort by scales, methods, authors to find your posters of interests. Presenters should stand by their posters during the dedicated poster presentation times for Group 1 or Group 2 on Day 1.

Wireless Access
Wireless internet is free and can be accessed using the network **NIH-Guest**.
We strongly encourage you to monitor the IMAG wiki (**SEARCH: imag wiki**), https://www.imagwiki.nibib.nih.gov/ during the meeting. To contribute your comments to the wiki please login using your **IMAG wiki username and password**. If you don't have an account or forgot your login, use the following: **Username: conference_guest; Password: IMAG10thMSM!**

Breaks and Lunch
The poster session and breaks will have refreshments sponsored by the IEEE Engineering in Medicine and Biology Society (EMBS), located on the Natcher Atrium level. Pre-ordered lunch boxes will be ready for pick-up outside the Natcher Auditorium.

Coffee and food items are also available for purchase on the ground level of Natcher Conference Center (Bldg 45). **Food and drinks cannot be brought into the auditorium.**

Dinner

Those who signed up for the dinner should plan to arrive at the **Shangri-La** restaurant in downtown Bethesda on Day 2, March 23, 2017 at 6:00pm. All dinner spots are currently filled. You are welcome check at the registration deck if there is availability. Location information can be found in your meeting packet.

Taxi information

Please allow 20-30 minutes for taxis / Uber to arrive!

The conference is located in Building 45 at the NIH. **Please ask to be picked up at** the NIH Security Gate called the **GATEWAY VISITORS CENTER** next to the MEDICAL CENTER METRO STATION or in front of the Natcher Building. Picking up in front of Natcher will take significantly longer as the cars must go through security.

Barwood Taxi	301-984-1900
Regency Cab	301-990-9000
Action Taxi	301-840-1000
Super Shuttle	1-800-BLUE-VAN
Royal Airport Shuttle	1-800-653-0888
Montgomery Taxi	301-936-9300

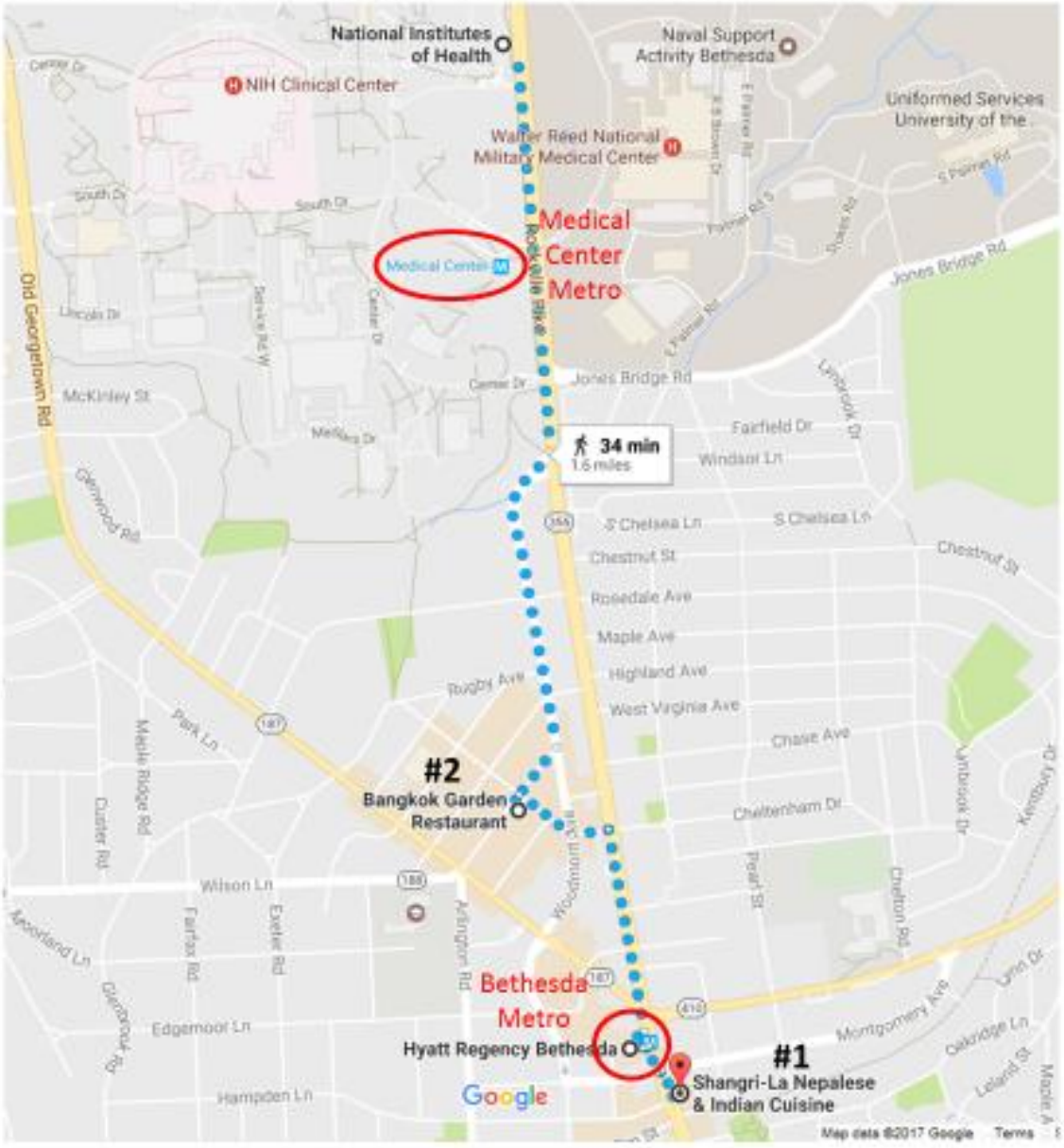
Special Thanks to:
The National Institute of Biomedical Imaging and Bioengineering (NIBIB)
The National Science Foundation (NSF)
and The IEEE EMBS for their support of this year's meeting

March 23, 2017 Group Dinner Restaurants (6-9pm)

#1: Seats 90 (All Dinner Registrants)
Shangri-La Nepalese and Indian Cuisine
7345-A Wisconsin Ave, Bethesda, MD 20814
Phone: 301-656-4444
http://www.shangrilaus.com/

#2: Seats 50 (All Waitlist Registrants)
Bangkok Garden
4906 Saint Elmo Avenue, Bethesda, MD 20814
Phone: (301) 951-0670
http://bangkokgarden.eat24hour.com/

$30 fixed price for each restaurant - (1 drink included in #1, no drinks included in #2)



Agenda

DAY 1: Wednesday March 22, 2017

8:00 - 8:15 am: Check-in, Set up posters

8:15 - 8:20 am: Welcome from IMAG

8:20 – 8:30am: Welcome - Dr. Roderic Pettigrew, Director, National Institute of Biomedical Imaging and Bioengineering (NIBIB)

8:30 - 9:40 am: THEME 1: Where have we been and Where are we going?

- 8:30 - 8:50 am: Andrew McCulloch
- 8:50 - 9:10 am: Ahmet Erdemir
- 9:10 - 9:30 am: Cecile Viboud
- 9:30 - 9:40 am: panel discussion

9:40 - 10:10 am: Refreshments and Poster viewing

10:10 - 11:30 am: THEME 2: Translating Models for Policy Change

- 10:10 - 10:30 am: Bruce Lee
- 10:30 - 10:50 am: Madhav Marathe
- 10:50 - 11:10 am: Ross Hammond
- 11:10 - 11:30 am: panel discussion

11:30 - 12:30 pm: Lunch

12:30 - 1:30 pm: Working Group Breakout Session (1) – see room maps

1:30 - 2:30 pm: Working Group Breakout Session (2) – see room maps

2:30 - 4:30 pm: Refreshments and Poster presentations

- **2:30 – 3:30 Group 1**
- **3:30 – 4:30 Group 2**

4:30 - 5:30 pm: New U01 Awardee Presentations

- 4:30 - 4:40 pm - Walter Boron / Erkki Somersalo / Emad Tajkhorshid; presenter: Rossana Occhipinti
- 4:40 - 4:50 pm - Colleen Clancy
- 4:50 - 5:00 pm - Jeffrey Holmes
- 5:00 - 5:10 pm - David Basanta / Conor Lynch
- 5:10 - 5:20 pm - Silvia Blemker / Shayn Peirce-Cottler
- 5:20 - 5:30 pm - Michael Henson / Erik Herzog / Yannis Kevrekidis

DAY 2: Thursday March 23, 2017

8:00 - 8:15 am: Check-in

8:15 - 8:20: Welcome back - plans for Day 2

8:20 - 9:40 am: THEME 3: MSM for Medical Devices

- 8:20 - 8:40 am: Eugene Civillico
- 8:40 - 9:00 am: Leonardo Angelone
- 9:00 - 9:20 am: Adam Himes
- 9:20 - 9:40 am: panel discussion

9:40 - 10:10 am: Refreshments and Poster viewing

10:10 - 12:10 pm: MSM Consortium Discussion

12:10 - 1:10 pm: Lunch

1:10 - 1:40 pm: Keynote Address: Dr. Subra Suresh, President, Carnegie Mellon University

1:40 - 3:00 pm: THEME 4: Stakeholder Perspectives - scientists, clinicians, industry

- 1:40 - 2:00 pm: Bridget Wilson - scientist
- 2:00 - 2:20 pm: Marvin Slepian - clinician
- 2:20 - 2:40 pm: Victor Oancea - industry R&D Technology Director
- 2:40 - 3:00 pm: panel discussion

3:00 - 3:30 pm: Refreshments and Poster viewing

3:30 - 4:00 pm: IMAG Representatives - Initiative Updates, Lightning Presentations

- 3:30 - 3:35 pm: NASA
- 3:35 - 3:40 pm: NSF
- 3:40 - 3:45 pm: FDA
- 3:45 - 4:00 pm: NIH

4:00 - 5:00 pm: Table Chats with IMAG Representatives – see room maps

6:00 - 9:00 pm: Group Dinner

DAY 3: Friday March 24, 2017

8:00 - 8:15am: Check-in

8:15 - 8:20am: Welcome back - plans for Day 3

8:20 – 8:30am: Welcome - Dr. Patti Brennan, Director, National Library of Medicine (NLM)

8:30 - 10:00 am: THEME 5: New Methodologies for Multiscale Modeling (1)

- 8:30 - 8:50 am: George Karniadakis - Historical overview from MSM experience and motivation for this session
- 8:50 - 9:10 am: Lawrence Carin - On connecting sparsity and deep learning

- 9:10 - 9:30 am: Elchanan Mossel - Complex networks and inference
- 9:30 - 10:00 am: panel discussion

10:00 - 10:30 am: Refreshments and Poster viewing

10:30 - 12:00 pm: THEME 5: New Methodologies for Multiscale Modeling (2)

- 10:30 - 10:50 am: David Dunson - Bayesian methods
- 10:50 - 11:10 am: Le Song - Time series analysis
- 11:10 - 11:30 am: Elizabeth Ogburn - Inferring causal relationships from observational data
- 11:30 - 12:00 pm: panel discussion

12:00 - 1:00 pm: Lunch

1:00 - 2:30pm: THEME 6: Model Credibility Plans - Consortium Review (1)

- 1:00 - 1:10 pm: David Basanta Gutierrez / Conor Lynch - Multiscale Modeling of Bone Environment Responses to Metastatic Prostate Cancer
- 1:10 - 1:20 pm: William Cannon / Jay Dunlap - Multiscale Modeling of Circadian Rhythms
- 1:20 - 1:30 pm: Xiaobo Zhou / Yunzhi Yang - Systems Modeling Guided Bone Regeneration
- 1:30 - 1:40 pm: Terence Sanger / Simon Giszter - Multiscale models of neural population control in spinal cord
- 1:40 - 1:50 pm: Michael Henson / Erik Herzog / Yannis Kevrekidis - Multiscale Modeling of the Mammalian Circadian Clock: The Role of GABA Signaling
- 1:50 - 2:00 pm: Denise Kirschner / Veronique Dartois / Joanne Flynn / Jennifer Linderman - A Multi-scale systems pharmacology approach to TB therapy
- 2:00 - 2:30 pm: panel discussion

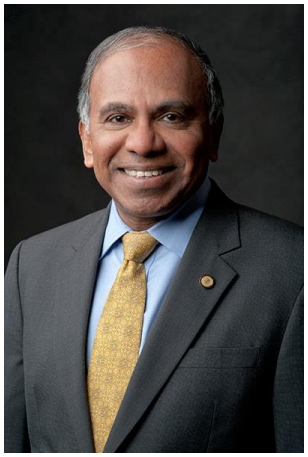
2:30 - 3:00pm: Refreshments and Poster viewing

3:00 - 4:15pm: THEME 6: Model Credibility Plans - Consortium Review (2)

- 3:00 - 3:10 pm: Scott Diamond - Multiscale Analysis of Trauma
- 3:10 - 3:20 pm: Timothy Corcoran / Robert Parker - Building Multilevel Models of Therapeutic Response in the Lungs
- 3:20 - 3:30 pm: Silvia Blemker / Shayn Peirce-Cottler - Multiscale Modeling for Treatment Discovery in Duchenne Muscular Dystrophy
- 3:30 - 3:40 pm: Bruce Lee - Virtual Population Obesity Prevention (VPOP) Labs: Computational, Multi-Scale Models for Obesity Solutions
- 3:40 - 3:50 pm: Danny Bluestein - Multiscale Modeling of Blood Flow and Platelet Mediated Thrombosis
- 3:50 - 4:20 pm: panel discussion

4:20 - 4:30pm: Final Thoughts, Adjourn

Keynote Speaker



Subra Suresh, Sc.D.
President, Carnegie Mellon University

Subra Suresh is the ninth president of Carnegie Mellon University, where he began his tenure on July 1, 2013. Prior to assuming this role, he served as director of the National Science Foundation (NSF). A distinguished engineer and scientist, Suresh is the first and only university president to be elected to all three National Academies — the National Academy of Medicine (2013), the National Academy of Sciences (2012) and the National Academy of Engineering (2002). He is one of only 19 Americans and the only Pennsylvanian to be elected to all three National Academies. He is also an elected member of the American Academy of Arts and Sciences and a fellow of the National Academy of Inventors.

Before joining the NSF in 2010, Suresh served as the dean of the School of Engineering and the Vannevar Bush Professor of Engineering at the Massachusetts Institute of Technology (MIT). His research at MIT, which continues at Carnegie Mellon, into the properties of engineered and biological materials, and their connections to human diseases, has been published in more than 300 research articles, 25 patent applications and three books.

His alma mater, IIT Madras, recognized him as a Distinguished Alumnus in 1997 and conferred an honorary doctorate degree at its 50th Convocation held in 2013, at which he was the Chief Guest of Honor and keynote speaker. In 2006, MIT's Technology Review magazine selected Suresh as a "Top 10" researcher whose work will "have a significant impact on business, medicine or culture."

Abstract:

How do physical and rheological properties of cells influence human diseases? Conversely, how do the onset and progression of human diseases alter the mechanical and physical properties of biological cells? These questions will be addressed in the context of the three broad categories of infectious diseases, hereditary blood disorders, and human cancers. Detailed experimental studies employing microfluidics, and other state-of-the-art biophysical tools will be coupled with computational simulations to develop mechanistic understanding and pathogenic bases of disease states and to explore novel pathways for diagnostics and therapeutics.

March 22: **Working Groups / MSM Steering Committee – Meeting Rooms**

Biomechanics Working Group: **Balcony C**

Cell-to-Macroscale Working Group: **Balcony B**

Clinical and Translational Issues Working Group: **C2**

Committee on Credible Practice of Modeling & Simulation in Healthcare: **C1**

Computational Neuroscience Working Group: **F1**

Dissemination (Model Sharing, Outreach, Education) (proposed WG): **F2**

High Performance Computing Working Group: **G1**

Integrated multiscale biomaterials experiment and modeling group (ImuBEAM): **G2**

Model and Data Sharing Working Group: **E1**

MSM for Medical Devices (proposed WG): **F2**

Multiscale Systems Biology: **Ruth Kirschstein Auditorium**

Population Modeling Working Group: **E2**

Theoretical and Computational Methods: **Balcony A**

MSM Steering Committee: **H**

March 23: **IMAG Agency Table Chats – Meeting Rooms**

NIH: **Balcony A/B**

NSF: **Balcony C**

NASA: **G1/G2**

DOE: **C1/C2**

FDA: **F1/F2**

ONR: **E1/E2**

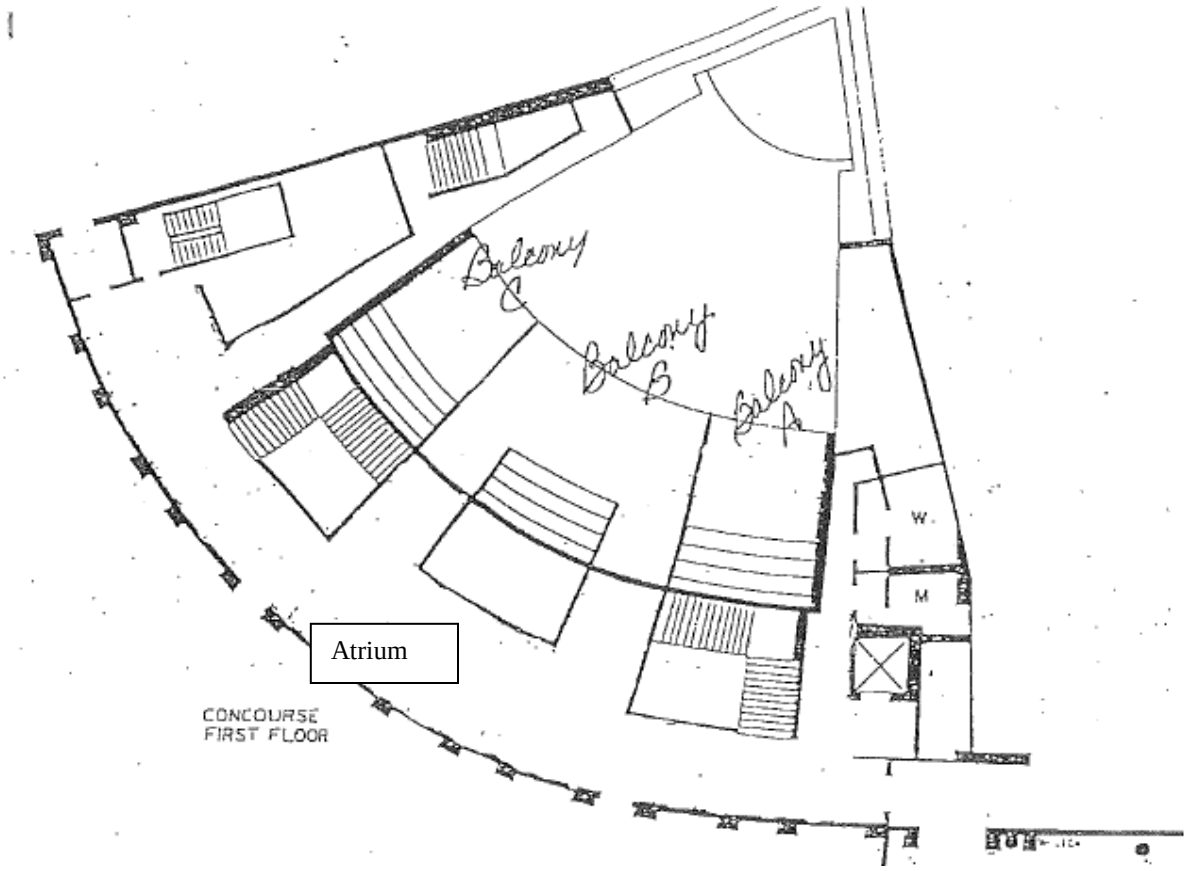
ARL: **E1/E2**

IARPA: **IARPA will meet in Room J on Wednesday March 22, 2017**

Natcher Building Meeting Rooms

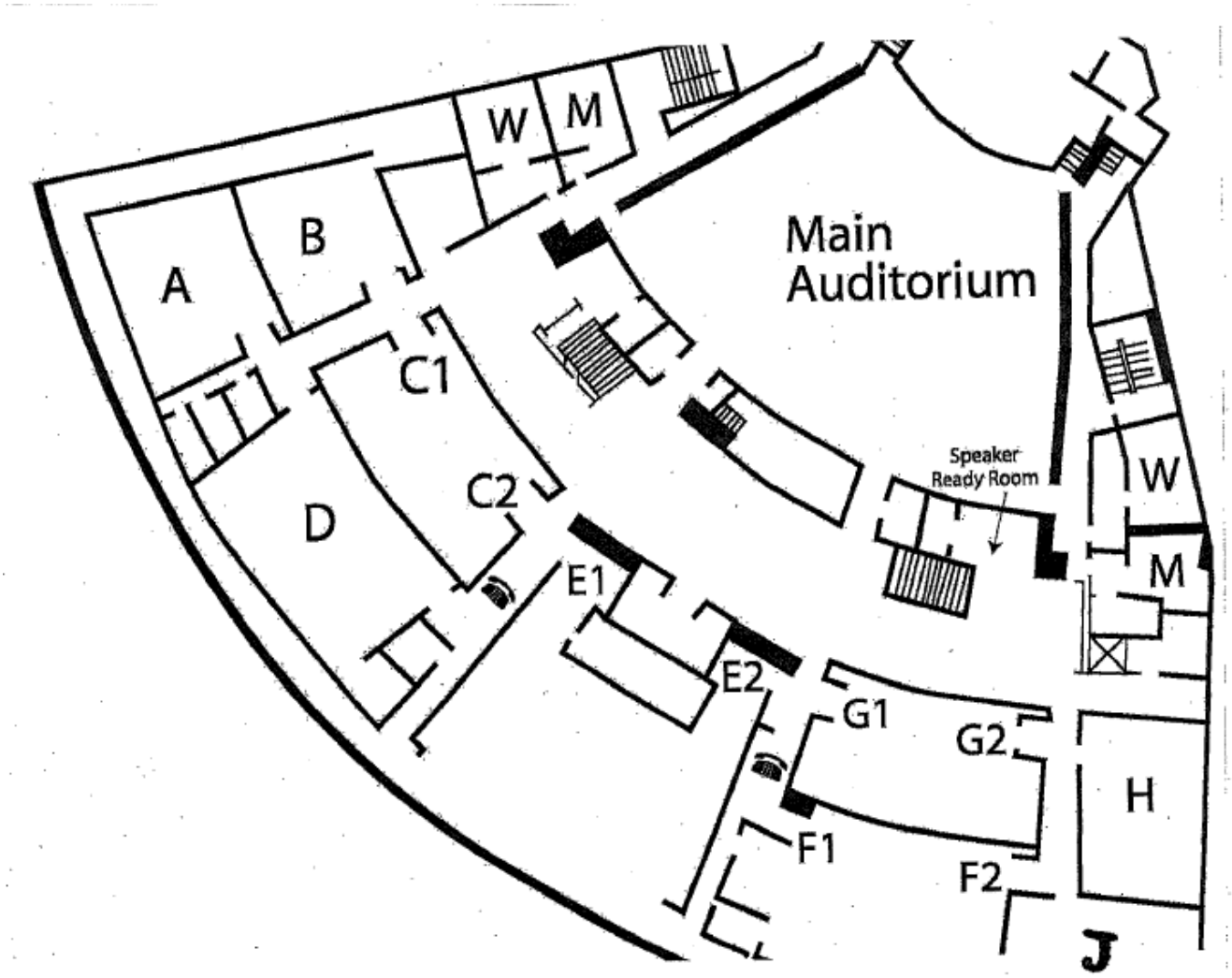
Ground Floor:

Balcony A / Balcony B / Balcony C / Atrium

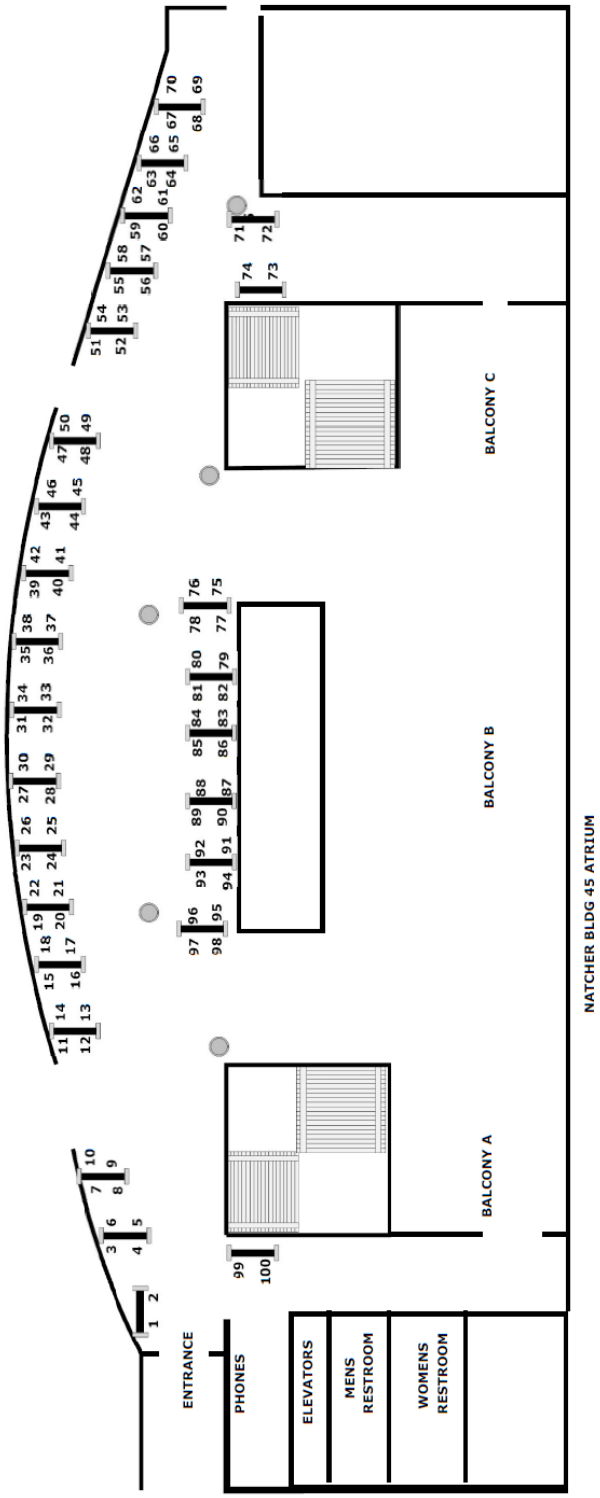


Basement Level:

Ruth Kirschstein Auditorium /
C1-C2 / E1-E2 / F1-F2 / G1-G2 / H / J / B



Poster Layout



Poster Numbers & Group Assignments

Group	Poster Number	Title	Last Name	First Name
2	66	Catch bonds at T cell interfaces	Abel	Steven
2	74	**Analysis of Multielectrode Data from CPG Networks Using a Stochastic Framework**	Abolfath-Beygi	Maryam
2	8	**Understanding the Role of Mitochondrial Cristae Structure on Energy Metabolism through Simulation**	Afzal	Nasrin
1	67	Cell Death as a Trigger for Morphogenesis of Bacterial Colonies	Aguilar	Boris
2	16	**Nonlinear mechanics of fibrin networks**	Alber	Mark
2	68	Really Big Data from HPC-enabled biomedical agent-based modeling: Pathways to Precision Medicine	An	Gary
2	26	**Modeling the ecosystem of bone metastases: insights from a multi scale, multi modeling approach**	Araujo	A
1	21	High-Fidelity Controlled-Resolution Atlas and Deformable Model-based Anatomical Modeling for Medical Simulation and Therapy Planning	Audette	Michel
2	62	**Motion of spheroidal nanoparticles in a cylindrical vessel flow: accurately resolving the hydrodynamic interactions and stochastic thermal motion**	Ayyaswamy	Portonovo
2	22	The Reference Model Interface with ClinicalTrials.Gov	Barhak	Jacob
2	96	**Multiscale Model of Facet Capsule Mechanobiology**	Barocas	Victor
1	47	**Modeling osmotic transients during exercise**	Bassingthwaite	James
1	85	A detailed rule-based computational model for the interaction of VEGF pathway with thrombospondin-1 integrating multiple signaling modules: Implications for pro-angiogenic therapeutic interventions	Bazzazi	Hojjat
1	49	**Autonomic, Metabolic, and Mechanical Control of Coronary Blood Flow**	Beard	Daniel
2	90	Parametric Anatomical CAD Model Generation with Silicone Phantom Fabrication Tools for Validation Studies	Bergeron	Clint

Group	Poster Number	Title	Last Name	First Name
1	23	**Improving Cortical Electrode Placement and Stimulation via Co-Simulation of Large-Scale Compartmental Neuronal and Multi-Resolution Admittance Method Models**	Bingham	Clayton
2	6	**Multiscale Modeling of Blood Flow and Platelet Mediated Thrombosis**	Bluestein	Danny
2	38	**Nitrite-mediated Vasodilation Quantified from *In Vivo* Studies in Rat Mesentery**	Buerk	Donald
2	34	**Multi-scale Modeling of Circadian Rhythms: From Metabolism to Regulation and Back**	Cannon	William
2	84	***in silico* and *in vitro* analysis of resource allocation in a chronic wound biofilm consortia**	Carlson	Ross
1	19	**Linking Gene Dynamics to Intimal Hyperplasia – A Predictive Model of Vein Graft Adaptation**	Casarin	Stefano
2	76	**Mesoscopic modeling of biomechanics and biorheology of red blood cells in type 2 diabetes mellitus**	Chang	Hung-yu
2	48	**Genome-wide prediction of minor groove electrostatics enables biophysical modeling of protein-DNA binding**	Chiu	Tsu-Pei
1	41	**Modelling the Airway Epithelium to Facilitate Cystic Fibrosis Drug Development**	Corcoran	Timothy
1	59	**Molecular Scale Prediction of Lidocaine Interaction with the Pore Domain of Human $Na_V1.5$**	DeMarco	Kevin
2	32	**Modeling of the relation between degradation and mechanical properties of a collagen fibril: A precursor examination towards understanding cartilage health**	Dhaher	Yassin
1	27	**Integrating Microscopic Variability in Systems Modeling**	Dick	Thomas
1	3	**High-Performance and Quantum Computing for Solving Biological Problems**	Difelice	Rosa
2	28	**Multiscale modeling of the brain motor cortex circuits**	Dura-Bernal	Salvador
1	29	**Design of Biomaterial Bioinorganic Interfaces Related to Mineralization**	Ebrahimi	Davoud
2	64	**A multiscale model for predicting margination effects and transport of nanogels in blood vasculature: comparison of Dynamical Density Functional Theory and Monte Carlo based approaches**	Eckmann	David

Group	Poster Number	Title	Last Name	First Name
2	2	Democratization of Modeling & Simulation in Biomechanics	Erdemir	Ahmet
1	53	**Sugar-Sweetened Beverage Warning Labels in Baltimore, Philadelphia and San Francisco: A Simulation Study**	Ferguson	Marie
2	86	**Effectiveness of UNAIDS targets and HIV vaccination across 127 countries**	Fitzpatrick	Meagan
2	56	Multiscale Modeling of Surgical Flow in a Large Operating Room Suite: Understanding the Mechanism of Accumulation of Delays in Clinical Practice	Garbey	Marc
1	37	**Coupled multiscale modeling and pathway analysis for prediction of drug efficacy in cystic kidney diseases**	Glazier	James
2	44	**A multiscale systems biology model to characterize antitumor immunity and evaluate biomarkers for immunotherapeutics**	Gong	Chang
1	9	**Multiscale Modeling of Wound Healing**	Haugh	Jason
1	11	**Multiscale Modeling of the Mammalian Circadian Clock: The Role of GABA Signaling**	Henson	Michael
2	94	**Modeling Postsynaptic Current at the Glutamatergic Synapse of a CA1 Pyramidal Neuron: Development and Adaptation for Multi-Scale Simulations**	Hu	Eric
1	99	A Comparative Modeling Study on Intestinal Crypt Dynamics of Steady State and After Radiation	Hu	Shaowen
1	13	**Mechanistic Models, Model Mechanisms, and Computational Models of Explanation for Biological Phenomena**	Hunt	Anthony
2	52	**Systematically understanding immunity leading to CRPC progression**	Ji	Zhiwei
1	79	Multiscale Modeling of Multiple Myeloma Using Biocellion Framework	Kang	Chris
2	80	Biocellion: a large capacity modeling platform for multicellular biological systems	Kang	Seunghwa
1	69	**Computational models predict the effect of anti-fibrotic therapies in Duchenne muscular dystrophy**	Kelley	Virgilio
1	17	**Structural biomechanics of platelet-driven clot contraction**	Kim	Oleg
1	91	Development of a Pulmonary Simulator Utilizing Windkessel Modeling Techniques for Simulating Various Patient Populations within a Mock Circulatory System	King	Jacob

Group	Poster Number	Title	Last Name	First Name
1	61	Emulating Body Tissue Architectures for Computer-controlled Smart Material Design and Manufacture	Knothe-Tate	Melissa
1	93	Exploring Polygenic Mechanisms of Pathogenesis and Treatment Resistance in Childhood Absence Epilepsy with a Multiscale Thalamocortical Model	Knox	Andrew
2	58	**Multiscale modeling of myocardial growth and remodeling**	Kuhl	Ellen
2	12	**Spatial Scaling in Multiscale Models: A Method for Coupling Agent-based and Finite-element Models of Tissue Remodeling**	Lee	Jia-Jye
2	78	**Multiscale modeling of cardiac growth**	Lee	Lik Chuan
2	20	Clinical study and multiscale modeling to predict the esthetic outcome of Breast Conservative Therapy	Lesage	Anne-Cecile
1	77	**Patient-specific modeling of biomechanics and biorheology of red blood cells in sickle cell anemia**	Li	Xuejin
2	70	**A Hybrid Multiscale Tumor Growth Model**	Lima	Ernesto
1	51	**Multiscale imaging-based cluster analysis of a cohort of current smokers**	Lin	Ching-Long
2	50	**A Multi-scale Systems Pharmacology Approach to TB Treatment**	Linderman	Jennifer
1	39	**A Mathematical Model for the Role of N_2O_3 in Enhancing Nitric Oxide Following Nitrite Infusion**	Liu	Yien
1	81	"Stan": A Platform for Scalable Bayesian Inference	Betancourt	Michael
1	35	**Electrical Stimulation Waveform Design Towards Increasing the E ectiveness of Retina Prosthetic Devices**	Loizos	Kyle
1	25	**Temporal Dynamics of Macrophage Plasticity in Bone Metastatic Prostate Cancer**	Lynch	Conor
2	82	Embedded Ensemble Encoding - a new theory of brain cortex function	Lytton	William
1	45	**Systems Pharmacology Multiscale Model to Optimize Mono- and Combination-Therapy Regimens for Immune Checkpoint Inhibitors and Identify Potential Biomarkers**	Milberg	Oleg
2	42	Mass Transport in the Lymphatic Vessels and Nodes	Moore	James
1	1	Guidelines for Credible Practice of Modeling and Simulation in Healthcare	Mulugeta	Lealem
1	5	Expanding NEURON to bridge electrophysiology, chemical, and	Newton	Adam

Group	Poster Number	Title	Last Name	First Name
		network models: simulations of ischemic stroke		
1	95	**Multi-scale Modeling of Gas Transport through Channels in Living Cells**	Occhipinti	Rossana
2	4	From Desktop to Large-Scale Model Exploration with EMEWS	Ozik	Jonathan
2	40	Applying Nanocommunication Modeling to Understand Calcium Ion Influx in Neurons and Impact on Kinesin Axonal Transport of BDNF Vesicles	Paluh	Janet
2	98	Applicability analysis of validation evidence for biomedical computational models	Pathmanathan	Pras
1	43	StochSS: An Integrated Development Environment for Simulation and Analysis of Discrete Stochastic Biochemical Models	Petzold	Linda
2	100	Calculation of deletion, inversion, and ring spectra using a computational model of the radiation-induced chromosome aberrations with stochastic and amorphous particle tracks	Ponomarev	Artem
1	63	**Biophysically inspired model for functionalized nanocarrier adhesion to cell surface and the development of next-generation pharmacokinetic models**	Radhakrishnan	Ravi
1	65	The Multiscale Audible Human Project	Royston	Thomas
1	33	**Prediction of EMG based on neural firing rates using stochastic dynamical operators**	Sanger	Terence
1	31	**Multiscale Modeling of Collagen IV Network: Insights into the Structural Basis of Pathologies**	Sarkar	Biplab
1	83	**General-purpose Software for Systems Biology**	Saunders	Michael
1	97	Building Reproducible Dynamical Models with Tellurium 2.0: A Case Study using EGFR/Erk	Sauro	Herbert
1	87	Hip Prostheses Lifetime Prediction via Simulation-based Engineering	Higgs	C. Fred
2	60	**Multiscale Analysis of Trauma**	Sinno	Talid
2	36	**Comparison of Models of Hepatic Lobules at Varying Levels of Detail**	Sluka	James
2	14	Is the Mechanism of APAP Toxicity In Vivo & In Vitro really the same? A model mechanism based explanation of the in vitro–in vivo disconnect	Smith	Andrew

Group	Poster Number	Title	Last Name	First Name
2	72	**Stochastic Simulation of Functional Knee Mechanics Enabled via Statistical Shape Modeling and High Throughput Computing**	Smith	Colin
1	75	**Impact of Compartmentalization and Cell Shape on Signaling Pathways in Cancer**	Spill	Fabian
1	71	**Growth Control in Cancer: An Computational Model of YAP/TAZ Integrating cell-ECM Mechanosensing and Hippo pathway**	Sun	Meng
2	46	**Multiscale modeling of vascularized bone regeneration in hybrid constructs of soft collagen gels and rigid scaffold**	Tan	Hua
2	54	**A Parallel Fluid Solid Coupling Tool Using Lammps and Palabos**	Tan	Jifu
1	55	Development of a multiscale skin barrier model for *de novo, in silico* prediction	Tasseff	Ryan
2	92	Evaluation of ventricular assist systems through target patient models	Taylor	Charles
1	73	**Multi-scale mechanics of the tendon-to-bone attachment**	Thomopoulos	Stavros
2	88	Parallel Discrete Event Simulation of Neurons	Tropper	Carl
1	7	Computational Game Theory for Antibody Design	Vorobeychik	Eugene
1	89	Comparison of cellular- and tissue-scale models of dynamic contrast-enhanced MRI	Woodall	Ryan
2	18	**Multiscale models of blood clotting**	Xu	Zhiliang
2	10	**A multiscale model of metabolism and protein expression predicts the response of *E.* coli to oxidative stress**	Yang	Laurence
1	57	**Multiscale Multiphysics Model of Thrombus Biomechanics**	Yazdani	Alireza
2	30	**Thermal Response of Silk-Elastin-Like Protein Hydrogels: Integrating Experiments and Multiscale Computational Modeling**	Yeo	Jingjie
1	15	**Computational model of heart remodeling following relief of hemodynamic overload in a biventricular canine heart model**	Yoshida	Kyoko
2	24	**Spatio-Temporal Patterns Revealed by a Large-Scale Model of the Hippocampal Entorhinal-Dentate-CA3 System: Emergence of Clustered Activity**	Yu	Gene

Entries highlighted in **bold** letters are those of posters from **current U01 awardees.**

Sort using interactive poster table.

Attendee List

First Name	Last Name	E-mail	Affiliation
Steve	Abel	abel@utk.edu	University of Tennessee
Atif	Adam	aadam1@jhu.edu	Johns Hopkins Global Obesity Prevention Center
Nasrin	Afzal	nafzal@gmu.edu	George Mason University
Parya	Aghasafari	parya.aghasafari@uga.edu	University of Georgia
Mark	Alber	malber@ucr.edu	University of California, Riverside
Roberta	Albert	roberta.albert@nih.gov	NIBIB
Gary	An	docgca@gmail.com	University of Chicago
Sergio	Angulo	sergio.angulo@downstate.edu	SUNY Downstate
Haroon	Anwar	hanwar@njit.edu	New Jersey Institute of Technology
Michel	Audette	maudette@odu.edu	Old Dominion University
Portonovo	Ayyaswamy	ayya@seas.upenn.edu	University of Pennsylvania
Richard	Baird	bairdri@mail.nih.gov	NIBIB, NIH, HHS
Peter	Bajcsy	peter.bajcsy@nist.gov	NIST
Victor	Barocas	baroc001@umn.edu	University of Minnesota
David	Basanta	david@cancerevo.org	H. Lee Moffitt Cancer Center & Research Institute
James	Bassingthwaighte	jbb2@uw.edu	U. Washington
Tom	Battisti	tom.battisti@3ds.com	Dassault Systemes Simulia Corp.

Hojjat	Bazzazi	hbazzazi@jhmi.edu	Johns Hopkins University School of Medicine
Kylie	Beattie	kylie.beattie@fda.hhs.gov	Food and Drug Administration
Rahmatollah	Beheshti	r.b@jhu.edu	Johns Hopkins Bloomberg School of Public Health
Ted	Berger	berger@usc.edu	University of Southern California
Clint	Bergeron	clintandrewbergeron@gmail.com	University of Louisiana at Lafayette
Clayton	Bingham	clayton.bingham@gmail.com	Center for Neural Engineering, USC
Moria	Bittmann	moria.bittmann@nih.gov	NIH/NINDS
Silvia	Blemker	ssblemker@virginia.edu	University of Virginia
Danny	Bluestein	danny.bluestein@stonybrook.edu	Stony Brook University
Iman	Borazjani	iman@buffalo.edu	University at Buffalo SUNY
Walter	Boron	wfb2@case.edu	Case Western Reserve University
Olga	Brazhnik	brazhnik@nih.gov	NIH/NCATS
Paul	Brazhnik	brazhnikp@nigms.nih.gov	NIGMS/NIH
Patti	Brennan	patti.brennan@nih.gov	National Library of Medicine
Shawn	Brown	stbrown@psc.edu	Pittsburgh Supercomputing Center
Markus	Buehler	mbuehler@mit.edu	Massachusetts Institute of Technology
Donald	Buerk	dgb28@drexel.edu	Drexel University
Erin	Cadwalader	erin@lewis-burke.com	Lewis-Burke Associates
Bill	Cannon	william.cannon@pnnl.gov	Pacific Northwest National Lab

Lawrence	Carin	lcarin@duke.edu	Duke University
Ross	Carlson	rossc@erc.montana.edu	Montana State University
Joe	Carnell	joseph.a.carnell.ctr@mail.mil	OSD(AT&L)/DMSCO
Hung-Yu	Chang	hung-yu_chang@brown.edu	Brown University Applied Math
Kelly	Chang	kelly.chang@fda.hhs.gov	Food and Drug Administration
Vipin	Chaudhary	vipchaud@nsf.gov	National Science Foundation
Tom	Cheever	thomas.cheever@nih.gov	NIH/NIAMS
Weiwei	Chen	chenw6@mail.nih.gov	National Cancer Institute
Wen	Chen	chenw@mail.nih.gov	NIH
Tsu-Pei	Chiu	tsupeich@usc.edu	University of Southern California
Gene	Civillico	gene.civillico@nih.gov	NIH/OD/DPCPSI/OSC
Colleen	Clancy	ceclancy@ucdavis.edu	UC Davis
Lindsay	Clegg	lwendel2@jhmi.edu	Johns Hopkins University
Brian	Colder	bcolder@mitre.org	MITRE
Richard	Conroy	conroyri@mail.nih.gov	National Institutes of Health
Matteo	Convertino	matteoc@umn.edu	University of Minnesota
Tim	Corcoran	corcorante@upmc.edu	University of Pittsburgh
Theresa	Cruz	cruzth@mail.nih.gov	NICHD
Ming	Dao	mingdao@mit.edu	MIT

Jerry	Day	drjday@gmail.com	University of Tennessee
Marciela	DeGrace	marciela.degrace@nih.gov	NIAID/NIH
Kevin	DeMarco	kdemarco@ucdavis.edu	UC Davis
Yuefan	Deng	yuefan.deng@stonybrook.edu	Stony Brook University
Yasin	Dhaher	y-dhaher@northwestern.edu	Northwestern University
Scott	Diamond	sld@seas.upenn.edu	University of Pennsylvania
Ted	Dick	ted3@case.edu	Case Western Reserve University
Rosa	DiFelice	difelice@usc.edu	University of Southern California
Charles	DiMaggio	Charles.DiMaggio@nyumc.org	New York University School of Medicine
Molly	Domino	mollydomino@gmail.com	Johns Hopkins Global Obesity Prevention Center
Brian	Drawert	briandrawert@yahoo.com	UCSB
Linda	Duffy	duffyl@mail.nih.gov	NIH/NCCIH
Michelle	Dunn	dunnm3@mail.nih.gov	NIH
Sarah	Dunsmore	dunsmores@nigms.nih.gov	NIGMS
David	Dunson	dunson@duke.edu	Duke University
Salvador	Dura Bernal	salvadordura@gmail.com	SUNY Downstate
Sara	Dutta	sara.dutta@fda.hhs.gov	FDA
Davoud	Ebrahimi	davebra@mit.edu	MIT
David	Eckmann	eckmanndm@uphs.upenn.edu	University of Pennsylvania

Mounya	Elhilali	mounya@jhu.edu	Johns Hopkins University
Ahmet	Erdemir	erdemira@ccf.org	Cleveland Clinic
Samaneh	Farokhirad	samaneh@seas.upenn.edu	University of Pennsylvania
Marie	Ferguson	mfergu22@jhu.edu	Global Obesity Prevention Center at Johns Hopkins
Michele	Ferrante	michele.ferrante@nih.gov	NIMH
Meagan	Fitzpatrick	meagan.fitzpatrick@yale.edu	Center for Vaccine Development, University of Maryland
Ronan	Fleming	ronan.mt.fleming@gmail.com	University of Luxembourg
Alan	Freed	afreed@tamu.edu	Texas A&M
B.J.	Fregly	fregly@ufl.edu	University of Florida
Danielle	Friend	danielle.friend@nih.gov	NIH
Dan	Gallahan	dg13w@nih.gov	NCI / NIH
Nara	Gavini	nara.gavini@nih.gov	NINR/NIH
Guy	Genin	genin@wustl.edu	Washington University
Uduak	George	gu19448@uga.edu	University of Georgia
Marie	Gill	gillml@mail.nih.gov	NINDS/NIH
Elizabeth	Ginexi	LGinexi@mail.nih.gov	NIH/OBSSR
Simon	Giszter	sgiszter@drexelmed.edu	Drexel University
James	Glazier	jaglazier@gmail.com	Indiana University
Jim	Gnadt	gnadtjw@mail.nih.gov	NINDS/NIH

Mikhail	Golman	mg3693@columbia.edu	Columbia University
Chang	Gong	cgong5@jhu.edu	Johns Hopkins University
Richard	Gray	Richard.Gray@fda.hhs.gov	FDA
Tom	Greenwell	greenwellt@nei.nih.gov	National Eye Institute
Susan	Gregurick	susan.gregurick@nih.gov	NIH
Michele	Grimm	mgrimm@nsf.gov	National Science Foundation
Jason	Halloran	j.halloran64@csuohio.edu	Cleveland State University
Lisa	Hamilton	lisa.hamilton@nih.gov	NIH/NIBIB
Ross	Hammond	pouzts@brookings.edu	Brookings Institution
Jason	Haugh	jason_haugh@ncsu.edu	North Carolina State University
Jill	Heemskerk	heemskej@mail.nih.gov	NIH/NIBIB
Brian	Henry	bhenry4@uic.edu	University of Illinois at Chicago
Michael	Henson	henson@ecs.umass.edu	University of Massachusetts
Adam	Himes	adam.k.himes@medtronic.com	Medtronic
Jeffrey	Holmes	holmes@virginia.edu	University of Virginia
marc	Horner	marc.horner@ansys.com	ANSYS, Inc.
Shaowen	Hu	shaowen.hu-1@nasa.gov	KBRwyle Science, Technology and Engineering
Jay	Humphrey	jay.humphrey@yale.edu	Yale University
C. Anthony	Hunt	a.hunt@ucsf.edu	Bioengineering and Therapeutic Sciences, UCSF

Zahera	Jabeen	zahera@seas.upenn.edu	University of Pennsylvania
Mohammad	Jafarnejad	mohammadjafarnejad@gmail.com	Johns Hopkins University
Mohsin (Saleet)	Jafri	sjafri@gmu.edu	George Mason University, Krasnow Institute for Advanced Study
Samira	Jamalian	samirajamalian@gmail.com	Imperial College London
Dov	Jaron	dov.jaron@drexel.edu	Drexel University
Richard	Jenkins	jenkinsri@mail.nih.gov	NIDA
Zhiwei	Ji	zhji@wakehealth.edu	Wake Forest School of medicine
Brian	Jones	bkj3f@virginia.edu	University of Virginia
Simon	Kahan	Simon.kahan@gmail.com	Biocellion SPC
Chris	Kang	shinwook@uw.edu	University of Washingotn, Biocellion
David	Kaplan	david.kaplan@tufts.edu	Tufts University
George	Karniadakis	George_Karniadakis@Brown.edu	Brown University
Christine	Kelley	kelleyc@mail.nih.gov	NIBIB/NIH
Oleg	Kim	okim@nd.edu	University of California Riverside
Jacob	King	jmk9354@louisiana.edu	University of Louisiana at Lafayette
Mark	Knepper	knepperm@nhlbi.nih.gov	Systems Biology Center, NHLBI
Melissa	Knothe Tate	m.knothetate@unsw.edu.au	University of New South Wales
Andrew	Knox	atknox@gmail.com	Cincinnati Children's Hospital Medical Center
Soumya	Korrapati	soumya.korrapati@nih.gov	NIH/NIDCD

Susan	Krauss	suekrauss@urgrad.rochester.edu	Green Corsair Tech Labs Global TM
Joy	Ku	joyku@stanford.edu	Stanford University
Ellen	Kuhl	ekuhl@stanford.edu	Stanford University
Inez	Lam	ilam1@jhu.edu	Johns Hopkins University
Nick	Langhals	nick.langhals@nih.gov	NIH/NINDS
Jennie	Larkin	jennie.larkin@nih.gov	OREO/DEA/NIDDK/NIH
Curtis	Larsen	larsen@dixie.edu	Dixie State University
Reinhard	Laubenbacher	laubenbacher@uchc.edu	UConn Health/Jackson Labs
Gianluca	Lazzi	lazzi@utah.edu	The University of Utah
Bruce	Lee	brucelee@jhu.edu	Johns Hopkins University
Jia-Jye	Lee	jl4ny@virginia.edu	University of Virginia
Gayle	Lester	lester1@mail.nih.gov	NIAMS/NIH/DHHS
Beth	Lewandowski	Beth.E.Lewandowski@nasa.gov	NASA Glenn Research Center
Paul	Lewis	pelewisiii@gmail.com	DoD Armed Forces Health Surveillance Branch
Ying	Li	yingli@engr.uconn.edu	University of Connecticut
Zhihua	Li	zhihua.li@fda.hhs.gov	FDA
Ching-Long	Lin	ching-long-lin@uiowa.edu	The University of Iowa
Jennifer	Linderman	linderma@umich.edu	Univ. Michigan
Ruirui	Liu	liuru@oregonstate.edu	Oregon State University

Yang	Liu	liux3204@umn.edu	University of Minnesota
leonid	Livshitz	leonid.livshitz@fda.hhs.gov	FDA
Donna	Lochner	donna.lochner@fda.hhs.gov	FDA
Kyle	Loizos	k.loizos@utah.edu	University of Utah
James	Luo	luoja@mail.nih.gov	NIH / NHLBI
Conor	Lynch	conor.lynch@moffitt.org	Moffitt Cancer Center
William	Lytton	wwlytton@yahoo.com	SUNY Downstate
Feilim	Mac Gabhann	feilim@jhu.edu	Johns Hopkins University
Ramana	Madupu	ramana.madupu@science.doe.gov	US Department of ENERGY
Ramana	Madupu	ramana.madupu@science.doe.gov	US Department of ENERGY
Paween	Mahinthichaichan	mahinth1@illinois.edu	University of Illinois at Urbana-Champaign
Shadi	Mamaghani	shadi.mamaghani@nih.gov	NIBIB/NIH
Madhav	Marathe	mmarathe@vbi.vt.edu	NDSSL, Biocomplexity Institute of VT
Betty	Marciano	marcianobe@naiid.nih.gov	NIH
Stephen	Marcus	semarc737@gmail.com	NIGMS/NIH
David	Markowitz	david.markowitz@iarpa.gov	IARPA
Zaira	Martin Moldes	Zaira.Martin_Moldes@tufts.edu	Tufts University
Khalid	Masood	masoodk@csr.nih.gov	NIH/CSR
Richard	Mazurchuk	richard.mazurchuk@nih.gov	NIC / DCP

Matthew	McCoy	matthew.mccoy@georgetown.edu	Georgetown University
Andrew	McCulloch	amcculloch@ucsd.edu	UC San Diego
Robert	McDougal	robert.mcdougal@yale.edu	Yale University
David	McMullen	david.mcmullen@nih.gov	NIMH/NIH
Oleg	Milberg	oleg.milberg@gmail.com	Johns Hopkins University
David	Miller	david.miller3@nih.gov	National Cancer Institute
Nancy	Miller	nm68k@nih.gov	NCI /NIH
James	Moore	james.moore.jr@imperial.ac.uk	Imperial College London
Tina	Morrison	tina.morrison@fda.hhs.gov	Division of Applied Mechanics, OSEL/ CDRH
Elchanan	Mossel	elmos@mit.edu	MIT
Lealem	Mulugeta	lealem@insilico-labs.com	InSilico Labs LLC
Kyle	Myers	kyle.myers@fda.hhs.gov	FDA
Larry	Nagahara	larry.nagahara@jhu.edu	John Hopkins University
Manikandan	Narayanan	nmanik@gmail.com	NIAID, NIH
Pedja	Neskovic	predrag.neskovic@navy.mil	Office of Naval Research
Adam	Newton	a.newton@warwick.ac.uk	SUNY Downstate
Kerri-Ann	Norton	knorton4@jhmi.edu	Johns Hopkins University
Sergey	Nuzhdin	snuzhdin@usc.edu	Univ Southern California
Victor	Oancea	victor.oancea@3ds.com	Dassault Systemes

Rossana	Occhipinti	rxo22@case.edu	Case Western Reserve University
Elizabeth	Ogburn	eogburn@jhsph.edu	Johns Hopkins University
Alpay	Ozcan	alpay.ozcan@acibadem.edu.tr	Acibadem univ.
Jonathan	Ozik	jozik@anl.gov	Argonne National Laboratory
Janet	Paluh	jpaluh@sunypoly.edu	SUNY Polytechnic Institute
Kyemyung	Park	kyemyung.park@nih.gov	University of Maryland
Robert	Parker	rparker@pitt.edu	University of Pittsburgh
Abbas	Parsian	parsiana@nih.gov	NIH
Virginia	Pasour	pasour@gmail.com	US Army Research Office
Pras	Pathmanathan	pras.pathmanathan@fda.hhs.gov	Food and Drug Administration
Shayn	Peirce-Cottler	smp6p@virginia.edu	Univ. of Virginia
Grace	Peng	grace.peng@nih.gov	IMAG Chair NIH/NIBIB
Roderic	Pettigrew	rpettig@mail.nih.gov	NIH/NIBIB
Linda	Petzold	petzold@cs.ucsb.edu	University of California Santa Barbara
Ramana	Pidaparti	rmparti@uga.edu	University of Georgia
Artem	Ponomarev	artem.l.ponomarev@nasa.gov	KBRwyle Science, Technology and Engineering
Aleksander	Popel	apopel@jhu.edu	Johns Hopkins University
Amy	Poremba	amy.poremba@nidcd.nih.gov	NIDCD
Thorsten	Prustel	prustelt@niaid.nih.gov	NIH

Pankaj	Qasba	pq5h@nih.gov	NIH/NHLBI
Ahmad	Raeisi Najafi	arnajafi@illinois.edu	University of Illinois at Urbana-Champaign
Matt	Raymond	matthew.raymond@nih.gov	NIH/NINDS
David	Reiter	reiterda@mail.nih.gov	NIH/NIA
Haluk	Resat	haluk.resat@nih.gov	NIH/NIGMS
John	Rice	john.rice@noboxes.org	DHS S&T Directorate
Will	Richardson	wricha4@clemson.edu	Clemson University
David	Rodrick	david.rodrick@ahrq.hhs.gov	AHRQ/HHS
Alicia	Ross	alicia.ross@nih.gov	NIH/NLM
Andrew	Rossi	rossia@mail.nih.gov	NIMH, NIH
Thomas	Royston	troyston@uic.edu	University of Illinois at Chicago
Michael	Sacks	mattlrsn@utexas.edu	The University of Texas at Austin
Michael	Sacks	msacks@ices.utexas.edu	University of Texas at Austin
Ed	Sander	edward-sander@uiowa.edu	University of Iowa
Terence	Sanger	terry@sangerlab.net	USC
Anthony	Santago	asantago@mitre.org	The MITRE Corporation
Sarvenaz	Sarabipour	ssarabi2@jhu.edu	Johns Hopkins University
Biplab	Sarkar	Biplab.Sarkar@tufts.edu	Tufts University
Jeff	Saucerman	jsaucerman@virginia.edu	University of Virginia

Michael	Saunders	saunders@stanford.edu	Stanford University
Herbert	Sauro	hsauro@u.washington.edu	University of Washington
Walter	Schimmerling	walter2205@mac.com	East Carolina University
James	Schwaber	James.Schwaber@jefferson.edu	Thomas Jefferson University
Michelle	Schwalbe	mschwalbe@nas.edu	NAS
Alexandra	Seidenstein	ahs342@nyu.edu	SUNY-Downstate/NYU
Joseph	Servadio	serva024@umn.edu	University of Minnesota
Sheri	Sharareh Craig	sheri.shararehcraig@nih.gov	NHLBI
Douglas	Sheeley	douglas.sheeley@nih.gov	NIGMS
David	Simon	david.simon@fda.hhs.gov	FDA
Talid	Sinno	talid@seas.upenn.edu	University of Pennsylvania
James	Sluka	jsluka@indiana.edu	Indiana University
Jeffrey	Smith	smithj2@ninds.nih.gov	NINDS, NIH
Le	Song	lsong@cc.gatech.edu	Georgia Tech
Barbara	Sorkin	sorkinb@mail.nih.gov	NIH
Fabian	Spill	fspill@mit.edu	MIT
Coryse	St. Hillaire- Clarke	sthillaireclacn@mail.nih.gov	NIH/NIA
Roger	Stanton	roger.stanton@nih.gov	NIH - Scientific Workforce Diversity
Daniela	Stricklin	Daniela.Stricklin@fda.hhs.gov	FDA

Manana	Sukhareva	sukharem@mail.nih.gov	NIH/NIBIB
Hong-Wei	Sun	sunh1@mail.nih.gov	NIH/NIAMS
Meng	Sun	ttsunmeng@gmail.com	Boston University
Subra	Suresh	seila.selimovic@nih.gov	Carnegie Mellon University
Amy	Swain	aswawar@gmail.com	Department of Energy
Robert N	Sweet	rssched@uw.edu	University of Washington, Medicine
Jessica	Taaffe	jessica.taaffe@gmail.com	Global Renaissance Enterprises
Takako	Takeda	takako.takeda@nih.gov	NIH
Lee	Talman	leetlmn@gmail.com	University of Virginia
Hua	Tan	htan@wakhealth.edu	Wake Forest School of medicine
Jifu	Tan	jifutan@seas.upenn.edu	University of Pennsylvania
Ryan	Tasseff	tasseff.r@pg.com	Procter and Gamble
Charles	Taylor	c.taylor@louisiana.edu	UL Lafayette
Darryl	Thelen	dgthelen@wisc.edu	University of Wisconsin-Madison
Stavros	Thomopoulos	thomop@gmail.com	Columbia University
Rajanikanth	Vadigepalli	rajanikanth.vadigepalli@jefferson.edu	Thomas Jefferson University
Alan	Vanbiervliet	alan.vanbiervliet@nih.gov	NIH/NLM
Cecile	Viboud	viboudc@mail.nih.gov	NIH
Kelley	Virgilio	kelley.virgilio@gmail.com	University of Virginia

Susan	Volman	svolman@nida.nih.gov	NIH/NIDA
Yevgeniy	Vorobeychik	yevgeniy.vorobeychik@vanderbilt.edu	Vanderbilt University
Anil	Wali	walia@mail.nih.gov	CRCHD, NCI, NIH
Peggy	Wang	pegwang@jhu.edu	Johns Hopkins School of Public Health
Solita	Wang	chiayeng.wang@nih.gov	NIH/NIDCR
Xiaoming	Wang	xiaoming.wang@nih.gov	NIH
Xu	Wang	xu.wang@nih.gov	NIH/NEI
Xujing	Wang	xujing.wang@nih.gov	NIH/NIDDK
Karen	Watanabe	karen.watanabe@asu.edu	Arizona State University
Andrew	Weitz	andrew.weitz@nih.gov	NIH / NIBIB
Bridget	Wilson	bwilson@salud.unm.edu	University of New Mexico
Tarynn	Witten	tmwitten@vcu.edu	Virginia Commonwealth University
Jong Ho	Won	jongho.won@fda.hhs.gov	FDA
Ryan	Woodall	rwoodall@utexas.edu	The University of Texas at Austin
Jennifer	Worthington	jennifer.worthington@nih.gov	NIH-OD/MP
Dan	Xi	xida@mail.nih.gov	NCI
Ashley	Xia	Ashley.xia@nih.gov	NIDDK, NIH
Yining	Xie	Yining.Xie@nih.gov	NIH
Guo Feng	Xu	xuguofen@mail.nih.gov	CSR/NIH

Zhiliang	Xu	zxu2@nd.edu	University of Notre Dame
Alireza	Yazdani	alireza_yazdani@brown.edu	Brown University
jane	Ye	yej@mail.nih.gov	NIH/NLM
JINGJIE	YEO	yeojj@mit.edu	MIT
Kyoko	Yoshida	ky2p@virginia.edu	University of Virginia
Gene	Yu	geneyu@usc.edu	University of Southern California
Muhammad	Zaman	zaman@bu.edu	Boston University
Peng	Zhang	peng.zhang@stonybrook.edu	Stony Brook University
Zhensheng	Zhang	zz14h@nih.gov	NIH
Xiaobo	Zhou	xizhou@wakehealth.edu	Wake Forest School of Medicine
Jeremy	Zucker	Jeremy.Zucker@pnnl.gov	PNNL
Marvin	Slepian	chairman.syns@gmail.com	University of Arizona
Leonardo	Angelone	Leonardo.Angelone@fda.hhs.gov	FDA