The National Academies of SCIENCES • ENGINEERING • MEDICINE

Division on Engineering and Physical Sciences Laboratory Assessments Board

Sub-Panel Agenda MML Biosystems and Biomaterials Division Open Data Gathering Sessions

May 16-17, 2023

Tuesday, May 16th, 2023

Time	Торіс	Lead
1:00 p.m. EDT	Welcome & Division Overview	Sheng Lin-Gibson, Tara Eskandari
1:45 p.m. EDT	Program Area 1: Regenerative Medicine &	Sheng Lin-Gibson
	Advanced Therapies Overview	
1:55 p.m. EDT	Tour Stop 1a: Cell Processing/LIMS-coupled Cell	John Elliott, Simona Patange
	Provenance, FluidFM	
2:15 p.m. EDT	Genome Editing Consortium	Samantha Maragh
2:30 p.m. EDT	Gene Delivery Systems	Ed Kwee
2:45 p.m. EDT	Break	
2:55 p.m. EDT	Tour Stop 1b: Prototype Cell Assay Measurement	Ramila Joshi, Jason Finley
	Platform (PCAMP)	
3:10 p.m. EDT	Tour Stop 1c: Live Cell Imaging	Michael Halter, Anthony Asmar
3:25 p.m. EDT	Flow Cytometry Standards Consortium	Lili Wang
3:40 p.m. EDT	Rapid Microbial Testing Methods Consortium	Nancy Lin, Scott Jackson
3:55 p.m. EDT	Break (walk to Bldg. 224)	
4:05 p.m. EDT	Tour Stop 1d: Standards, Tools, and Control	Sumona Sarkar, Laura Pierce
	Strategies for Cell Count Based Measurements,	
	Imaging	
4:25 p.m. EDT	Tour Stop 1e: Tissue Engineering and Biomaterials	Carl Simon, Greta Babakhanova
	(imaging and characterization)	
4:40 p.m. EDT	Tour Stop 1f: Advanced Spectroscopy	Young Lee, Charles Camp

Wednesday, May 17th, 2023

Time	Торіс	Lead
9:00 a.m. EDT	Program Area 2: Precision Medicine Overview	Justin Zook
9:15 a.m. EDT	GIAB, T2T, MDIC, Tumor/Normal	Nate Olson
9:30 a.m. EDT	AI, Cybersecurity	Justin Wagner
9:50 a.m. EDT	Early Cancer Biomarkers	Hua-Jun He
10:10 a.m. EDT	Copy number & Engineering of VCN	Zhiyong He
10:30 a.m. EDT	Tour Stop 2a: Flow Cytometry Lab	Jerilyn Izac, Linhua Tian
10:50 a.m. EDT	Break	
11:00 a.m. EDT	Program Area 3: Engineering Biology Overview	Elizabeth Strychalski

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Tour Stop 3a: Living Measurement Systems	David Ross, Geoff Taghon, Simon
Foundry (LMSF)	d'Oelsnitz
Tour Stop 3b: Cell-free Systems	Jane Romantseva, Samuel Schaffter
RNA Circuits for Cellular Computation	Samuel Schaffter, Molly Wintenberg
Lunch with Postdocs / Early-Career Staff	
Program Area 4: Microbial Metrology - Overview	Scott Jackson
Clinical Applications of the Human Microbiome	Scott Jackson
Fecal Standards and Datasets	Stephanie Servetas, Sam Forry
Microbial Whole Cell Infrastructure	Kirsten Parratt
National Biodefense Strategy (NBS):	Nancy Lin
Biosurveillance - Overview	
Tour Stop 4a: Infectious Disease Diagnostics	Jason Kralj
Tour Stop 4b: Standards for Biothreat Detection	Sandra Da Silva
Tour Stop 4c: Wastewater Surveillance	Ishi Keenum
Break	
National Initiatives & EO	Sheng Lin-Gibson
NBS: Serology	Lili Wang
Break	
Meeting Recap & Discussion	Panel Members and Division Mgmt.
	Foundry (LMSF) Tour Stop 3b: Cell-free Systems RNA Circuits for Cellular Computation Lunch with Postdocs / Early-Career Staff Program Area 4: Microbial Metrology - Overview Clinical Applications of the Human Microbiome Fecal Standards and Datasets Microbial Whole Cell Infrastructure National Biodefense Strategy (NBS): Biosurveillance - Overview Tour Stop 4a: Infectious Disease Diagnostics Tour Stop 4b: Standards for Biothreat Detection Tour Stop 4c: Wastewater Surveillance Break National Initiatives & EO NBS: Serology Break