

### 5th Annual Mid-Atlantic Synthetic Biology Network (MASBN) Symposium

University of Delaware, Audion at STAR Tower, 100 Discovery Blvd, Newark, DE 19713

Thursday, Jan. 9, 2025			
Location: Audion, STAR Tower		Speaker	
2:00 PM	Registration Opens/Coffee & Snacks		
2:30 PM	<b>Welcome Remarks</b>	Keith Kozminski	UVA
2:35 PM	<b>Session 1 - New to the Mid-Atlantic</b>		
	<b>Session Chair: Tara Deans, GA Tech</b>		
2:40 PM	<i>Engineered CRISPR systems for drug discovery</i>	Sherry Gao	UPenn
3:00 PM	<i>TBD</i>	Ophelia Venturelli	Duke
3:20 PM	Coffee Break		
3:40 PM	<i>Biofabrication and Biomaterial Approaches for In Vitro 3D Models of Microbial Collectives</i>	Victoria Muir	UDel
3:55 PM	<i>Using synthetic biology to engineer living electronic materials</i>	Josh Atkinson	Princeton
4:15 PM	<i>De novo engineered living materials from bacteria</i>	Sara Molinari	UMD
4:35 PM	Coffee Break		
4:50 PM	<b>Session 2 - Fostering a Regional Innovation Ecosystem</b>		
	<b>Session Chair: Aditya Kunjapur, UDel</b>		
4:55 PM	History of DE Life Science & STAR Campus	TBD	Udel
5:05 PM	Innovation in Biopharmaceutical Manufacturing - the story of NIIMBL	Kelvin Lee	Udel
5:20 PM	Panel on Accelerating Research Translation	Mark Blenner Jill Higginson Nicole Merli Bill Provine	Udel Udel Udel DIS
6:05 PM	<b>Reception and Poster Session 1</b>		
8:00 PM	End of Day 1		

Friday, Jan. 10, 2025			
Location: Audion, STAR Tower		Speaker	
8:00 AM	Registration Opens / Continental Breakfast		
9:00 AM	Introduction of Keynote Speaker		
9:05 AM	<b>Keynote: Engineering Bacteria for Environmental Release</b>	Chris Voigt	MIT
9:50 AM	Coffee Break		
10:00 AM	<b>Session 3 - Building Communities (of Microbes)</b>		
	<b>Chair: Nathan Crook, NC State</b>		
10:05 AM	<i>Electronically communicating with and controlling biology - redox synbio</i>	Bill Bentley	UMD
10:25 AM	<i>Next-generation Biological Security and Biohackathon</i>	Corey Wilson	GA Tech
10:45 AM	<i>Combinatorial and evolutionary engineering of probiotic yeast for in situ biomanufacturing</i>	Nathan Crook	NC State
11:05 AM	<i>Engineering soil bacteria for long-term detection of TNT explosive in natural soil</i>	Howard Salis	Penn State
11:25 AM	<b>Lunch and Poster Session 2</b>	Trainee talks	Mostly UD
1:00 PM	<b>Session 4 - SynBio for Health</b>		
	<b>Chair: Jamie Spangler, JHU</b>		
1:05 PM	<i>New methods towards synthetic antibody production in yeast</i>	Johnny Blazeck	GA Tech
1:25 PM	<i>Synthesizing protein engineering with metabolic glycoengineering to enhance antibody design and function</i>	Jamie Spangler	JHU
1:45 PM	<i>Protein Engineering Approaches for Studying Cell Signaling</i>	Larry Stern	USF
2:05 PM	<i>Developing Barley Stripe Mosaic Virus-Like Particles as Modular Nanovaccines</i>	Akash Vaidya (Solomon Lab)	UD
2:15 PM	<i>Next-generation manufacturing and design of nitrated antigens for vaccination against infectious disease</i>	Neil Butler (Kunjapur Lab)	UD / Nitro Bio
2:25 PM	Coffee Break		
2:40 PM	<b>Session 5 - SynBio for Sustainability OR Tour of NIIMBL (Meet at APBio)</b>		
	<b>Chair: Josh Michener, ORNL</b>		
2:45 PM	<i>Understanding the tunability of methyl-coenzyme M reductase for methane bioconversion applications</i>	Kylie Allen	VA Tech
3:05 PM	<i>Engineering Bacillus species for improved microbiome engineering</i>	Josh Michener	ORNL
3:25 PM	<i>Engineering biology across the central dogma</i>	Samuel Schaffter	NIST
3:45 PM	Closing Remarks		
3:50 PM	End of Symposium		