# COMMITTEE ON

## EMPLOYEE POST-TRAVEL DISCLOSURE FORM



This form is for disclosing the receipt of travel expenses from private sources for travel taken in connection with official duties. This form does not eliminate the need to report privately-funded travel on the annual Financial Disclosure Statements of those employees required to file them. In accordance with House Rule 25, clause 5, you must complete this form and file it with the Clerk of the House by email at gifttravelreports@mail.house.gov, within 15 days after travel is completed. Please donot file this form with the Committee on Ethics.

NOTE: Willful or knowing misrepresentations on this form may be subject to criminal prosecution pursuant to 18 U.S.C. § 1001. I. Name of Traveter: Blake Thelander

2.	a. Name of Accompanying Relative: OR  None				
	b. Relationship to Traveler:  Spouse  Other(specify):				
3.	a. Dates: Departure: 8.7.2023 Return: 8.12.2023				
	b. Dates at Personal Expense, if any: 2 OR None				
4.	Departure City: Washington, D.C. Destination: San Francisco, CA Return City: Washington, D.C.				
<i>3</i> .	Sponsor(s). Who Paid for the Trip: Institute for Progress				
6.	Describe Meetings and Events Attended: Lectures and briefings from university professors, students, community lab employees, and				
	The American Society of Heating, Refrigerating and Air-Conditioning Engineers.				
7.	Attached to this form are each of the following, signify that each item is attached by checking the corresponding box:  a.   a completed Sponsor Post-Travel Disclosure Form;				
	b. the Primary Trip Sponsor Form completed by the trip sponsor prior to the trip, including all attachments and the Additional Sponsor Form(s);				
	c. page 2 of the completed Traveler Farm submitted by the employee; and				
d  the letter from the Committee on Ethics approving my participation on this trip.					
8.	a. represent that I participated in each of the activities reflected in the attached sponsor's agenda. Signify statements true by checking the box.				
	b. If not, explain: Did not attend the welcome dinner on Aug 7th due to illness.				
	tertify that the information contained on this form is true, complete, and correct to the best of my knowledge.				
Sig	gnature of Traveler: Blake Thelander Date 2023 08 23 16 05 20 -04/00 Date: 8.23.2023				
Di	authorized this travel in advance. I have determined that all of the expenses listed on the attached Sponsor Post-Travel is closure Form were necessary and that the travel was in connection with the employee's official duties and would not eate the appearance that the employee is using public office for private gain.				
Na	ame of Supervising Member: Mariannette Miller-Meeks Dute: 8.23.2023				
	gnature of Supervising Member: Moviametro & Micra meel				



#### SPONSOR POST-TRAVEL DISCLOSURE FORM

Institute for Progress

Original	<b>Amendment</b>
Uriginai	

This form must be completed by an officer of any organization that served as the primary trip sponsor in providing travel expenses or reimbursement for travel expenses to House Members, officers, or employees under House Rule 25, clause 5. A completed copy of the form must be provided to each House Member, officer, or employee who participated in the trip within 10 days of their return. You must answer all questions, and check all boxes, on this form for your submission to comply with House Rules and the Committee's Travel Regulations. Failure to comply with this requirement may result in the denial of future requests to sponsor trips and/or subject the current traveler to disciplinary action or a requirement to repay the trip expenses.

NOTE: Willful or knowing misrepresentations on this form may be subject to criminal prosecution pursuant to 18 U.S.C. § 1001.

1. Sponsor(s) who paid or provided in-kind support for the trip:

2. Travel Destination(	s):San Francisco			
3. Date of Departure:		Date of	Return: 8.12.23	
Name(s) of Traveler(s); Blake Thelander				
Note: You may list	more than one traveler	on a form only if all	information is identical for	or each person listed.
5. Actual amount of	expenses paid on behalf	fof, or reimbursed to,	each individual named in	Question 4:
	Total Transportation Expenses	Total Lodging Expenses	Total Meal Expenses	Total Other Expenses (dollar amount per item and description)
Traveler	Flight: \$659.7	\$537.57	\$144.74 (with gratuity)	BioLab (lunches included): 4,000 (total for 10 staffers)
Accompanying Family Member	n/a	n/a	n/a	n/a
Signify statement i	s true by checking box.  mation contained in t	261		e best of my knowledge.
Name: Alec Stapp	· · ·	-	Title: Co-	Founder
Organization: Institu	te for Progress			
I am an officer	of the above-named org	ganization. Signify st	atement is true by checki	ng box.
Address: 1140 Third	d Street NE, Suite 4	01 Washington, E	OC 20002	
Telephone: 480-628-	3863		Email: alec@pr	ogress.institute
Canoni	ittee staff may contact the	ahayo namad individe	ral if additional information	is considered

Committee staff may contact the above-named individual if additional information is required.

If you have questions regarding your completion of this form, please contact the Committee on Ethics at 202-225-7103.

#### TRAVELER FORM

This form should be completed by House Members, officers, or employees seeking Committee approval of privately-sponsored travel or reimbursement for travel under House Rule 25, clause 5. The completed form should be submitted directly to the Committee by each invited House Member, officer, or employee, together with the completed and signed trip sponsor form(s) and any attachments. A copy of this form, minus this initial page, will be made available for public inspection. This form and any attachments may be delivered to the Committee at 1015 Longworth or e-mailed to travel.requests@mail.house.gov.

Your completed request must be submitted to the Committee no less than 30 days before your proposed departure date. Absent exceptional circumstances, permission will not be granted for requests received less than 30 days before the trip commences. You must receive explicit approval from the Committee before you depart on this trip.

Name of Traveler: Blake Thelander	
NOTE: Willful or knowing misrepresentations on this form	may be subject to criminal prosecution pursuant to 18 U.S.C. § 1001
I certify that the information contained on both pages of my knowledge.	f this form is true, complete, and correct to the best of
Signature: Blake Thelander	Digitally signed by Blake Thelander Date: 2023.05.31 19:17:01 -04'00'
Name of Signatory (if other than traveler):	
For Staff (name of employing Member or Committee):	Rep. Mariannette Miller-Meeks
Office Address: 1034 Longworth House Office E	Building Washington, D.C. 20515
Telephone Number: (202) 225-6576	
Email Address of Contact Person: blake.thelander@r	nail.house.gov
Check this box if the sponsoring entity is a media outlet, t entity, and these forms are being submitted to the Commi	he purpose of the trip is to make a media appearance sponsored by that ittee less than 30 days before the trip departure date.
NOTE: You must complete all of the contact information fiel information is required.	lds above, as Committee staff may need to contact you if additional
KEEP A COPY OF THIS FORM. Page 2 (but not this padisclosure required by House Rule 25. Travel Regulation supporting paperwork for three subsequent Congresses for	ge) must be submitted to the Clerk as part of the post-travel § 404(d) also requires you to keep a copy of all request forms and

If there are any questions regarding this form, please contact the Committee on Ethics at 202-225-7103 or via e-mail: travel.requests@mail.house.gov.

#### TRAVELER FORM

1. Name of Traveler: Blake Thelander
2. Sponsor(s) who will be paying or providing in-kind support for the trip:  The Institute for Progress
3. City and State OR Foreign Country of Travel : San Francisco, CA
4. a. Date of Departure: 8/7/23 Date of Return: 8/10/23
b. Yes No Will you be extending the trip at your personal expense?
If yes, list dates at personal expense: Extending my stay for the same number of days as official programming allows to 8/12
5. a. Yes No Will you be accompanied by a family member at the sponsor's expense? If yes:
(I) Name of Accompanying Family Member:
(2) Relationship to Traveler: Spouse Child Other (specify):
(3) Yes No Accompanying Family Member is at least 18 years of age:
6. a. Yes Did the trip sponsor answer "Yes" to Question 8(c) on the Primary Trip Sponsor Form (i.e., travel is sponsored by an entity that employs a registered federal lobbyist or a foreign agent)?
b. If yes, and you are requesting lodging for two nights, explain why the second night is warranted:
7. Yes No Primary Trip Sponsor Form is attached, including agenda, invitee list, and any other attachments and Additional Sponsor Forms.
NOTE: The agenda should show the traveler's individual schedule, including departure and arrival times and identify the specific events in which the traveler will be participating.
8. Explain why participation in the trip is connected to the traveler's individual official or representational duties. Staff should include their job title and how the activities on the itinerary relate to their duties. I am Rep. Miller-Meeks' health policy advisor and handle her work on the Energy and Commerce Committee. This staffdel will provide valuable exposure to issues directly under the Committee's purview and the Congresswoman's background as a doctor and former public health director.
9. Yes No Is the traveler aware of any registered federal lobbyists or foreign agents involved planning, organizing, requesting, or arranging the trip?
10. For staff travelers, to be completed by your employing Member:
ADVANCED AUTHORIZATION OF EMPLOYEE TRAVEL
I hereby authorize the individual named above, an employee of the U.S. House of Representatives who works under my direct supervision, to accept expenses for the trip described in this request. I have determined that the above-described travel is in connection with my employee's official duties and that acceptance of these expenses will not create the appearance that the employee is using public office for private gain.
Signature of Employing Member Manuells Q. Miller - Marks, M. Date 06/02/2023

#### PRIMARY TRIP SPONSOR FORM

This form should be completed by private entities offering to provide travel or reimbursement for travel to House Members, officers, or employees under House Rule 25, clause 5. A completed copy of the form (and any attachments) should be he

Tro	ovided to each invited House Member, officer, or employee, who will then forward it to the Committee together with aveler Form at least 30 days before the start date of the trip. The trip sponsor should NOT submit the form directly to the start date of the trip.
	ommittee. The Committee website (ethics.house.gov) provides detailed instructions for filling out the form.
	TE: Willful or knowing misrepresentations on this form may be subject to criminal prosecution pursuant to 18 U.S.C. § 1001. ilure to comply with the Committee's Travel Regulations may also lead to the denial of permission to sponsor future trips.
1.	Sponsor who will be paying for the trip:
	Institute for Progress
2.	I represent that the trip will not be financed, in whole or in part, by a registered federal lobbyist or foreign agent. Signify that the statement is true by checking box.
3.	
	a. The primary trip sponsor has not accepted from any other source, funds intended directly or indirectly to finance any aspect of the trip: OR
	b. The trip is arranged without regard to congressional participation and the primary trip sponsor has accepted funds only from entities that will receive a tangible benefit in exchange for those funds: OR
	c. The primary trip sponsor has accepted funds from other source(s) intended directly or indirectly to finance all or part of this trip and has enclosed disclosure forms from each of those entities.
	If "c" is checked, list the names of the additional sponsors:
5.	an explanation of why the individual was invited (include additional pages if necessary):  TBD  Yes No Is travel being offered to an accompanying family member of the House invitee(s)?
6.	Date of departure: 8/7/23 Date of return: 8/10/23
7.	a. City of departure: Washington, D.C.
7.	b. Destination(s): San Francisco, CA
	c. City of return: Washington, D.C.
8.	Check only one. I represent that:  a. The sponsor of the trip is an institution of higher education within the meaning of section 101 of the Higher Education Act of 1965: OR
	b. The sponsor of the trip does not retain or employ a registered federal lobbyist or foreign agent: OR
	c. The sponsor employs or retains a registered federal lobbyist or foreign agent, but the trip is for attendance at a one-day event <i>and</i> lobbyist / foreign agent involvement in planning, organizing, requesting, or arranging the trip was <i>de minimis</i> under the Committee's travel regulations.
9.	Check only one of the following:
	a. I checked 8(a) or (b) above; OR
	b. I checked 8(c) above but am not offering any lodging; OR
	c. I checked 8(c) above and am offering lodging and meals for one night; OR
	d. I checked 8(c) above and am offering lodging and meals for two nights. If you checked this box, explain why

10.	Attached is a detailed agenda of the activities House invitees will be participating in during the travel (i.e., an hourly description of planned activities for trip invitees). Indicate agenda is attached by checking box.		
11.	Check only one of the following:  a. I represent that a registered federal lobbyist or foreign agent will not accompany House Members or employees on any segment of the trip. Signify that the statement is true by checking box; OR		
	b. Not Applicable. Trip sponsor is a U.S. institution of higher education.		
12.	For each sponsor required to submit a sponsor form, describe the sponsor's interest in the subject matter of the trip and its role in organizing and/or conducting the trip:		
	Biosecurity is an IFP policy priority, with IFP believing that policymakers perform best when they are educated about policy issues by different stakeholders and organizing a staffdel is an opportunity to connect congressional staff with key biosecurity experts.		
13	Answer parts a and b. Answer part c if necessary:		
	a. Mode of travel: Air Rail Bus Car Other (specify:)		
	b. Class of travel: Coach Business Pirst Charter Other (specify:)		
	c. If travel will be first class, or by chartered or private aircraft, explain why such travel is warranted:		
14.	I represent that the expenditures related to local area travel during the trip will be unrelated to personal or recreational activities of the invitee(s). Signify that the statement is true by checking the box.		
15.	Check only one. I represent that either:		
a. The trip involves an event that is arranged or organized without regard to congressional participation and the meals provided to congressional participants are similar to those provided to or purchased by other event attendees; OR			
	b. The trip involves events that are arranged specifically with regard to congressional participation.		
	If "b" is checked:		
	1) Detail the cost per day of meals (approximate cost may be provided):		
	Approx: Travel day: \$55.50 Non-travel day: \$74.00		
	2) Provide the reason for selecting the location of the event or trip:		
	Location of community biolab and other biosecurity stakeholders and experts.		
16.	Name, nightly cost, and reasons for selecting each hotel or other lodging facility:		
	Hotel Name: Double Tree by Hilton Hotels City: San Francisco Cost Per Night: \$169.00		
	Reason(s) for Selecting: Met GSA per diem rates/close to airport		
	Hotel Name: City: Cost Per Night:		
	Reason(s) for Selecting:		
	Hotel Name: City: Cost Per Night:		
	Reason(s) for Selecting:		
17.	I represent that all expenses connected to the trip will be for actual costs incurred and not a per diem or lump sum		

payment. Signify that the statement is true by checking the box.

#### 18. Total Expenses for each Participant:

Actual Amounts Good Faith Estimates	Total Transportation Expenses per Participant	Total Lodging Expenses per Participant	Total Meal Expenses per Participant
For each Member, Officer, or Employee	· \$700	\$507	\$259
For each Accompanying Family Member			

	Other Expenses (dollar amount per item)	Identify Specific Nature of "Other" Expenses (e.g., taxi, parking, registration fee, etc.)
For each Member, Officer, or Employee	\$266.66	Use of community biolab facility
For each Accompanying Family Member		Like II are the early the

NOTE: Willful or knowing misrepresentations on this form may be subject to criminal prosecution pursuant to 18 U.S.C. § 1001.

- 19. Check only one:
  - a. I certify that I am an officer of the organization listed below; OR
  - b. Not Applicable. Trip sponsor is an individual or a U.S. institution of higher education.
- 20. I certify by my signature that
  - a. I read and understand the Committee's Travel Regulations;
  - b. I am not a registered federal lobbyist or registered foreign agent; and
  - c. The information on this form is true, complete, and correct to the best of my knowledge.

Signature: Uler T	Date: 8.17.23
Name: Alec Stapp	Title: Co-Founder
Organization: Institute for Progress	
Address: 1140 Third Street NE, Suite 401 Washington, DC 20002	
	lephone: 480-628-3863
	** <b>!</b> ** *** ***

#### **INSTRUCTIONS**

Complete the *Primary Trip Sponsor Form* and submit the agenda, invitation list, any attachments, and any *Additional Trip Sponsor Forms* directly to the Travelers.

Written approval from the Committee on Ethics is required before traveling on this trip. The Committee on Ethics will notify the House invitees directly and will not notify the trip sponsors.

Willful or knowing misrepresentation on this form may be subject to criminal prosecution under 18 U.S.C. § 1001. Signatures must comply with section 104(bb) of the Travel Regulations.

For questions, please contact the Committee on Ethics at:

1015 Longworth House Office Building Washington, D.C. 20515

ethicscommittee@mail.house.gov | 202-225-7103 More information and forms available at ethics.house.gov Michael Guest, Mississippi Chairman Susan Wild, Pennsylvania Ranking Member

David P. Joyce, Ohio John H. Rutherford, Florida Andrew R. Garbarino, New York Michelle Fischbach, Minnesota

Veronica Escobar, Texas Mark DeSaulnier, California Debotah K. Ross, North Carolina, Glenn I Ivey Maryland



#### ONE HUNDRED EIGHTEENTH CONGRESS

### U.S. House of Representatives

COMMITTEE ON ETHICS

Thomas A. Rust Staff Director and Chief Counsel

Keelie Broom Counsel to the Chairman

David Arrojo Counsel to the Ranking Member

1015 Longworth House Office Building Washington, D.C. 20515-6328 Telephone: (202) 225-7103 Facsimile: (202) 225-7392

July 17, 2023

Mr. Blake Thelander Office of the Honorable Mariannette Miller-Meeks 1034 Longworth House Office Building Washington, DC 20515

Dear Mr. Thelander:

Pursuant to House Rule 25, clause 5(d)(2), the Committee on Ethics hereby approves your proposed trip to San Francisco, California, scheduled for August 7 to 12, 2023, sponsored by Institute for Progress and Stanford University. We note that this trip includes two days at your personal expense.

You must complete an Employee Post-Travel Disclosure Form (which your employing Member must also sign) and file it, together with a Sponsor Post-Travel Disclosure Form completed by the trip sponsor, with the Clerk of the House within 15 days after your return from travel. As part of that filing, you are also required to attach a copy of this letter and both the Traveler and Primary Trip Sponsor Forms (including attachments) you previously submitted to the Committee in seeking pre-approval for this trip. If you are required to file an annual Financial Disclosure Statement, you must also report all travel expenses totaling more than \$480 from a single source on the "Travel" schedule of your annual Financial Disclosure Statement covering this calendar year. Finally, Travel Regulation § 404(d) also requires you to keep a copy of all request forms and supporting information provided to the Committee for three subsequent Congresses from the date of travel.

If you have any further questions, please contact the Committee's Office of Advice and Education at extension 5-7103.

Sincerely,

Michael Guest Chairman

MG/SW:mc

Susan Wild Ranking Member

resal



# Institute for Progress 2023 Biosecurity Congressional Staff Delegation Trip August 7th-10th 2023

Dear Blake Thelander,

The Institute for Progress would like to formally invite you to participate in its biosecurity congressional staff delegation trip to the Bay Area from August 7th -August 10th 2023.

The IFP biosecurity staffdel will, through hands-on sessions, increase your understanding of key biosecurity policy issues. Programming will specifically focus on, the responsible use of synthetic biology and biosafety, the ways in which improvements in indoor-air quality can disrupt pathogen transmission, how congressional funds can shape the biotechnology sector, how wastewater detection can be used for early warning, the types of high-consequence PPE that should be stockpiled and deployed to critical workers, and an overview of the current and future medical countermeasure landscape.

Given the fractured congressional jurisdiction of biosecurity and biodefense issues, IFP believes a staffdel serves as a unique opportunity to bring together congressional staff from across the aisle and both chambers along with external stakeholders from the public and private sectors. Given recent developments such as the CHIPS and Sciences Act, the Executive Order on the Bioeconomy, the National Biodefense Strategy, and the upcoming reauthorization of the Pandemics and All-Hazards Preparedness Act (PAHPA), we feel that this is an opportune time to raise awareness of recent biological advancements that change both the threats landscape and the ways in which the U.S. can increase resiliency.

We look forward to your response and hope you can join us.

Sincerely, Alec Stapp



# The Institute for Progress 2023 Biosecurity Congressional Staff Delegation Trip August 7th-10th 2023

#### August 7, 2023 PARTICIPANTS TRAVEL TO SAN FRANCISCO, CALIFORNIA

Attire: Travel Attire

Sessions: Medical Countermeasures and Welcome Dinner

8:25 am FLIGHT DEPARTS WASHINGTON DULLES INTERNATIONAL AIRPORT (IAD)

Flight: UA 700

Flight Time: 5h 34min

#### 11:00 am FLIGHT ARRIVES SAN FRANCISCO INTERNATIONAL AIRPORT (SFO)

- Time change from departure airport: -3 hour.
- Group will convene at baggage claim travel to hotel together in a shuttle

#### 11:20 am DEPART SAN FRANCISCO INTERNATIONAL AIRPORT (SFO)

- Once entire group is at baggage claim will travel to hotel together in a shuttle
- 20 minute drive from airport to the hotel

#### 11:40 am ARRIVE DOUBLETREE BY HILTON HOTEL SAN FRANCISCO AIRPORT

- Address: 835 Airport Blvd Burlingame, CA 94010
- Phone: +1 650-344-5500

#### 12:30 - 1:30 pm LUNCH

#### 1:30 - 2:00 pm TRAVEL FROM HOTEL TO STANFORD CAMPUS

30-40 min minute drive from hotel to Biocurious Community Lab

#### 2:00 - 4:30 pm MEDICAL COUNTERMEASURE LECTURE

- Address: Jen-Hsun Huang Engineering Center Room 300, 475 Via Ortega 3rd Floor, Stanford, CA 94305
- Phone: (650) 497-1712
- Presenters:
  - Dr. Nikki Teran, IFP Senior Scholar
  - Dr. Jeffery Glenn, Stanford



 About: The goals of this session include emphasizing the promise of pathogen-agnostic medical countermeasures and explain in detail three promising areas of research and development, discussing the limitations of medical countermeasures in large-scale biological events and the need to also invest in non-pharmaceutical interventions, and building confidence in key medical countermeasure terms and tools.

#### Topics of Discussion:

- What are MCMs in the biosecurity space and what MCMs are currently stockpiled
- What are pathogen agnostic MCMs and why are they useful to stockpile
- Areas of MCM development
- Limitations of just relying on MCMs
- Strengthens of non-pharmaceutical interventions
- Ways to make SNS more resilient
- What are precursors that could be stockpiled and quickly modulated to fit different biological risks
- Three new areas of antiviral MCM development
- What are some key pathogens of pandemic concern (respiratory viruses)
- What is the current MCM landscape
- Three new areas of antiviral MCM development but with more of an emphasis on programmable antivirals

#### 4:30 - 5:15 pm TRAVEL FROM HOTEL TO STANFORD CAMPUS

30-40 min minute drive from hotel to Biocurious Community Lab

#### 6:30 pm WELCOME DINNER AT 37 NORTH RESTAURANT AT DOUBLETREE

- Address: 835 Airport Blvd Burlingame, CA 94010
- Phone: +1 650-373-2237
- Presenters: Alec Stapp, The Institute for Progress

#### Topics of Discussion:

 Welcome Speech by Alec Stapp "Why Should you Care About Biosecurity"

OVERNIGHT: DOUBLETREE BY HILTON HOTEL



#### August 8, 2023 Burlingame, CA

Attire: Laboratory Attire (Closed toe shoes and long pants)
Sessions: Synthetic Biology and Indoor Air Quality Labs and Industry Perspective Dinner

#### 9:00 am DEPART DOUBLETREE BY HILTON HOTEL SAN FRANCISCO AIRPORT

 Participants should plan to have eaten breakfast before departure. A breakfast buffet is included at the hotel.

#### 9:00 - 10:30 am TRAVEL FROM HOTEL TO BIOCURIOUS

60-90 minute drive from hotel to Biocurious Community Lab

#### While on Bus:

- Short knowledge survey conducted
- Hand out session descriptions and go over programming for the day

#### 10:30 - 1:00 pm BIOCURIOUS LABORATORY ACTIVITIES

- Address: 3108 Patrick Henry Drive, Santa Clara, 95054
- Phone: +1 408-475-2246
- Instructor: Eric Espinosa, Biocurious
- Instructor: Maria Chavez, Biocurious
- About: This activity will include an introduction to "CRISPR Technology" which is a biological tool used for genome editing.

#### Topics of Discussion:

- Introduction and overview of laboratory safety practices
- Instructors will overview the CRISPR lab protocol and explain the CRISPR platform, including how this technology has been used in biomedical research
- Begin CRISPR-based lab
- Instructors will give an overview of some of the work the community biolab does while waiting between experiment steps

#### 1:00 - 2:00 pm LUNCH AT BIOCURIOUS COMMUNITY BIOLAB



Address: 3108 Patrick Henry Drive, Santa Clara, 95054

Phone: +1 408-475-2246

60 MINUTES FOR LUNCH

#### 2:00 - 5:30 pm LAB ACTIVITY: CRISPR KIT AND MEASURING INDOOR AIR QUALITY

Address: 3108 Patrick Henry Drive, Santa Clara, 95054

Phone: +1 408-475-2246

Instructor: Eric Espinosa, Biocurious

Instructor: Maria Chavez, Biocurious

About: This activity will include an introduction to indoor-air quality and how this
can be used to mitigate pathogen transmission and how measuring CO2 levels
can be used as a proxy to determine indoor-air quality.

#### Topics of Discussion:

- Instructors will go overview the CO2 protocol and conduct experiment and analysis
- Instructors will conclude day 1 of the CRISPR lab

#### 5:30 - 6:00 pm TRAVEL FROM BIOCURIOUS COMMUNITY LAB TO DINNER LOCATION

Address: 3108 Patrick Henry Drive, Santa Clara, 95054

#### 6:00 - 7:30 pm DINNER AND DISCUSSION WITH JAMES DIGGANS AT BROADWAY GRILL

Address: 1400 Broadway, Burlingame, CA 94010

Phone: (650) 393-5897

Presenter: James Diggans, Head of Biosecurity at Twist Biosciences

#### Topics of Discussion:

- Describe the current landscape of biotechnology and present industry's perspective on some of the challenges with increasing accessibility of biotechnology tools.
- Contextualize how congressional funds can drive the biotechnology sector and foster biosecurity industry norms.
- Describe how the biotechnology sector is engaging with specific federal legislation, executive orders, and strategies

1.5 HOURS OF DISCUSSION



#### 7:30 - 7:45 pm TRAVEL FROM DINNER AT BROADWAY GRILL TO THE HOTEL

A 15-minute walk from dinner to the hotel

#### 7:45 pm END PROGRAMMING

OVERNIGHT: DOUBLETREE BY HILTON HOTEL SAN FRANCISCO AIRPORT

#### August 9, 2023 Burlingame, CA

Attire: Laboratory Attire (Closed toe shoes and long pants)
Sessions: Synthetic Biology, Indoor-Air Quality, PPE, and Biosafety

#### 9:00 am DEPART DOUBLETREE BY HILTON

- Participants should plan to have eaten breakfast before departure. A breakfast buffet is included at the hotel.
- DoubleTree by Hilton, Burlingame CA

#### 9:00 - 10:30 am TRAVEL FROM HOTEL TO BIOCURIOUS COMMUNITY BIO LAB

60-90 minute drive from the hotel to the community lab

## 10:30 - 11:00 am ARRIVE AT BIOCURIOUS COMMUNITY LAB AND REVIEW CRISPR PLATE RESULTS

- Address: 3108 Patrick Henry Drive, Santa Clara, 95054
- Phone: +1 408-475-2246

## 11:00 – 1:00 pm LECTURE AT BIOCURIOUS BIOLAB ON SYNTHETIC BIOLOGY AND BIOSAFETY

- Address: 3108 Patrick Henry Drive, Santa Clara, 95054
- Phone: +1 408-475-2246
- Instructor: Eric Espinosa, Biocurious
- Instructor: Maria Chavez, Biocurious
- Instructor: Dr. Rocco Casagrande, Gryphon Scientific
- About: The goals of this session are to illustrate the increasing accessibility of
  synthetic biology and elucidate the need for common sense biosecurity norms
  and oversight to mitigate accidental, engineered, and natural biological threats.
  This session will make concrete the need for improvements in biosafety drawing
  on parallels from other fields that receive federal funds for investigations of
  accidents and research. Additional goals include, clarifying that the goal of
  conducting biosafety research is to learn from biosafety lapses and mistakes not
  over regulate science with safety rules that are not evidence informed.



#### Topics of Discussion:

- Staffers will look at results from the CRISPR-based laboratory experiment, specifically engineered bacteria growth patterns.
- Following the laboratory analysis there will be a
  discussion that defines synthetic biology and its benefits,
  discusses increasing accessibility and new computational
  tools, the need for transparency, touches on the
  discussion around CRISPR, and introduces the concept of
  dual use research of concern.
- Other synthetic biology topics that will be discussed include pathogens of pandemic potential, enhanced potential pandemic pathogens, and modifications needed to be made to the Federal Select Agent Program given accelerations in biotechnology and synthetic biology.
- This session will:
  - Highlight a few key biosafety policies, explain that at a minimum the USG should know the number of laboratories that handle dangerous pathogens and the need for research into the causes of biosafety incidents to determine what regulations would reduce risks and inform evidence based laboratory safety protocols. Examples of federal funding for accident determination (such as aviation/transportation safety and nuclear/chem safety) will also be used.
  - Emphasize that biological risks are uncontrollable and biotechnology as a field is very open source Stress that the goal is to learn from past biosafety mistakes to do better, not point the finger at researchers.
  - Emphasize that this problem has long been acknowledged by the USG, for example the need for greater biosafety measures is mentioned in ASPR's National Health Security Strategy, the National Biodefense Strategy, and the Executive Order on the Bioeconomy.

#### 1:00 - 2:00 pm LUNCH AT BIOCURIOUS BIOLAB

- Address: 3108 Patrick Henry Drive, Santa Clara, 95054
- Phone: +1 408-475-2246



#### 1 HOUR FOR LUNCH

#### 2:00-2:30 pm TRAVEL FROM BIOCURIOUS BIOLAB TO STANFORD UNIVERSITY

25-minute drive from Biocurious Biolab Stanford University

#### 2:30 - 4:00 pm PPE LECTURE AT STANFORD UNIVERSITY

- Address: Lathrop Library Building (Lathrop 299) 518 Memorial Way, Stanford, CA 94305
- Presenters: Dr. Rocco Casagrande, Gryphon Scientific
- About: The goals of this session include explaining the uses of different types of PPE and the need for a resilient stockpile that can be both scaled up and deployed when needed, specifying critical workers in high-consequence biological events that should have already deployed PPE, and describing some of the trade-offs when designing PPE for different environments and disciplines. Staffers will have the opportunity to try on different types of PPE.

#### Topics of Discussion:

- Define personal protective equipment as a relatively threat agnostic physical barrier that protects the eyes, noise, and mouth.
- Discuss the need to have a robust stockpile of PPE especially to respond to unknown threats and describe possible modes of SNS product cycling to avoid expirations and decrease distribution time.
- Identify critical workers in a high consequence biological event and discuss the need to have already deployed PPE in order to effectively respond to known and unknown threats.
- The speaker will describe his personal experiences having to train and wear full PPE in hot environments and will ask staffers to brainstorm some of the considerations and trade-offs that pertain to what kind of PPE is best for certain environments, disciplines, and different biological events.
- Conclude with areas of PPE investment such as, the NIOSH app designed to scan a face and determine what masks might be a best match and one directional impermeable materials.

4:00 - 4:30 pm NO PROGRAMMING (BREAK)



#### 4:30 - 6:00 pm INDOOR-AIR QUALITY LECTURE AT STANFORD UNIVERSITY

- Address: Lathrop Library Building (Lathrop 299) 518 Memorial Way, Stanford, CA 94305
- Presenter:
  - Alice Yates, American Society of Heating Refrigerating and Air-conditioning Engineers (ASHRAE)
  - Corey Metzger, American Society of Heating Refrigerating and Air-conditioning Engineers (ASHRAE)
- About: ASHRAE representatives will discuss state and federal policy and new
  pathogen mitigation standards as well as examples of localities that have good
  indoor air standards. One example they will highlight are efforts to improve IAQ
  in schools, which increases productivity and reduces airborne disease
  transmission. Examples highlighted include, the Boston public school's IAQ
  sensor dashboard and Cherokee County School District's IAQ sensors.

#### Topics of Discussion:

- Demonstrate how improvements made in indoor air quality can mitigate pathogen transmission in communal areas like daycares, schools, and offices and high consequence areas like airports, power plants, and food distribution centers through an interactive session highlighting ventilation, filtration, and sterilization tools.
- Summarize current state level and federal indoor air quality policy efforts.
- Highlight federal policy recommendations to make essential places resilient to airborne biological threats.

#### 6:00 - 7:30 pm GROUP DINNER AT STANFORD CAMPUS

- Address: Jen-Hsun Huang Engineering Center Room 300, 475 Via Ortega 3rd Floor, Stanford, CA 94305
- Phone: (650) 497-1712
- Organizers
  - Arielle D'Souza, The Institute for Progress
  - Allison Berke, Stanford University
- About: This dinner will be co-hosted with a concurrent Stanford Biosecurity staffdel, giving staffers the opportunity to network with different Standard biosecurity experts as well as other staffers.

7:30 pm DEPART STANFORD CAMPUS AND TRAVEL TO DOUBLE TREE BY HILTON



25-minute drive to hotel

#### 7:55 pm END PROGRAMMING

**OVERNIGHT: DOUBLETREE BY HILTON HOTEL SAN FRANCISCO AIRPORT** 

#### August 10, 2023 Burlingame, CA

Attire: Travel Attire

Sessions: Wastewater Detection

8:30 - 9:30 pm BREAKFAST AND REVIEW OF KNOWLEDGE AND FEEDBACK SURVEY Participants should check-out before the Wastewater session

#### 9:30 - 10:00 am WASTEWATER LECTURE

- Participants should plan to have eaten breakfast and checked out of their hotel room before programming (luggage will be safely secured in the hotel lobby). A breakfast buffet is included at the hotel.
- Address: Sonoma Conference Room
- DoubleTree by Hilton, Burlingame
- Presenters:
  - Newsha Ghaeli, Biobot Analytics
  - Ethan Gauvin, Biobot Analytics
  - Researcher, Biobot Analytics
- About: The goals of this session include increasing understanding of how deploying wastewater sequencing across the country can be harnessed for community health and early warning at a favorable cost-benefit ratio.

#### Topics of Discussion:

- Introduce Biobot, touching on how the company used routine wastewater surveillance to determine opioid prevalence. Focus on Biobot's work during COVID-19 as well as wastewater applications for other health crises like Mpox, RSV, and influenza.
- Elaborate on the goals of early warning systems especially as tools of mitigation using weather forecasting as a metaphor (disease forecasting with real time information can be used to establish patterns which informs prevention efforts). Also contrast PCR capabilities now with the promise of automated metagenomic sequencing in the future.



- Discuss that a robust wastewater surveillance system across the country can improve health outcomes and help inform resource allocation. Add that routine wastewater surveillance is being implemented in other countries (EU by 2025 also help with AMR).
- Describe how wastewater surveillance can alert public health officials to new pathogens circulating in a community and gives an idea of the burden of an existing infectious disease at the community level without having to wait on individuals to get tested. Benefits touched on include protecting individual privacy and catching asymptomatic cases and trends before clinical symptoms.
- Provide examples of other applications such as aircraft testing, such as with the re-opening of China there is a risk that new variants can come to the U.S. and wastewater surveillance can identify when new variants are present in the U.S.

#### 11:00 am DEPART DOUBLETREE BY HILTON FOR AIRPORT

Transfer by hotel shuttle. 15-minute drive from the hotel to the airport.

#### 1:00 pm FLIGHT DEPARTS SAN FRANCISCO INTERNATIONAL AIRPORT (SFO)

- UA 2667
- Flight time: 4h 56m

## August 10, 2023 8:56 pm FLIGHT ARRIVES WASHINGTON DULLES INTERNATIONAL AIRPORT (IAD)

• Time change from departure airport: +3 hour

(35)

# INSTITUTE FOR PROGRESS

IFP Biosecurity Staffdel August 7-10, 2023

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## Introduction

Thank you for joining us on the 2023 IFP biosecurity staffdel. We know your time is valuable, and hope that this trip will elucidate key areas of biosecurity while also providing a variety of perspectives from public and private experts. Together in the next few days, we will focus on a wide range of biosecurity topics such as the responsible use of synthetic biology and biosafety, the ways in which improvements in indoor-air quality can disrupt pathogen transmission, how congressional funds shape the biotechnology sector, how wastewater detection can be used for early warning, the types of high-consequence PPE that should be stockpiled and deployed to critical workers, and an overview of the current and future medical countermeasure landscape.

Given the fractured congressional jurisdiction of biosecurity and biodefense issues, we hope this staffdel serves as an opportunity to foster relationships with colleagues from across the aisle and across chambers, along with external stakeholders from the public and private sectors.

With recent developments such as the CHIPS and Sciences Act, the Executive Order on the Bioeconomy, the National Biodefense Strategy, and ongoing reauthorization of the Pandemics and All-Hazards Preparedness Act, we believe this is an opportune time to increase your knowledge of recent biological advancements that change both the threat landscape and the ways in which the US can increase resiliency.

We are excited for the next few days,

Alec Stapp

## **Agenda**

#### **August 7, 2023 PARTICIPANTS TRAVEL TO SAN FRANCISCO**

Attire: Travel Attire

Sessions: Medical Countermeasures and Welcome Dinner

7:00am FLIGHT DEPARTS WASHINGTON DULLES INTERNATIONAL AIRPORT (IAD)

Flight: UA277

Flight Time: 5h 34min

#### 9:41 am FLIGHT ARRIVES SAN FRANCISCO INTERNATIONAL AIRPORT (SFO)

- Time change from departure airport: -3 hour
- Group will convene at baggage claim and travel to hotel together in a shuttle

#### 10:00 am DEPART SAN FRANCISCO INTERNATIONAL AIRPORT (SFO)

- Once entire group is at baggage claim we will travel to hotel together in a shuttle
- 20 minute drive from airport to the hotel

#### 10:30 am ARRIVE DOUBLETREE BY HILTON HOTEL SAN FRANCISCO AIRPORT

- Address: 835 Airport Blvd Burlingame, CA 94010
- Phone: +1 650-344-5500

#### 11:30 - 12:10 pm TRAVEL FROM HOTEL TO STANFORD CAMPUS

30-40 min minute drive from hotel to campus

#### 12:30 – 1:30 pm LUNCH AND KNOWLEDGE SURVEY

#### 2:00 - 4:30 pm MEDICAL COUNTERMEASURE LECTURE

- Address; Wallenberg Building 300 (Room 300) 450 JANE STANFORD WAY, BLDG.
   300. STANFORD
- Phone: (650) 497-1712
- Presenters:
  - Dr. Nikki Teran, IFP Senior Fellow
- About: The goals of this session include emphasizing the promise of pathogen-agnostic medical countermeasures and explaining in detail promising areas of research and development, discussing the limitations of medical countermeasures in large-scale biological events and the need to also invest in non-pharmaceutical interventions, and building confidence in key medical countermeasure terms and tools.

#### Topics of Discussion:

- What are MCMs in the biosecurity space and what MCMs are currently stockpiled
- What are pathogen agnostic MCMs and why are they useful to stockpile
- Areas of MCM development
- Limitations of just relying on MCMs
- Strengthens of non-pharmaceutical interventions
- Ways to make SNS more resilient
- What are precursors that could be stockpiled and quickly modulated to fit different biological risks
- Three new areas of antiviral MCM development
- What is the current MCM landscape

#### 4:30 - 5:15 pm TRAVEL FROM STANFORD CAMPUS TO HOTEL

30-40 min minute drive

#### 6:30-8:00pm WELCOME DINNER AT 37 NORTH RESTAURANT AT DOUBLETREE

- Address: 835 Airport Blvd Burlingame, CA 94010
- Phone: +1 650-373-2237
- Presenters: Alec Stapp, Institute for Progress

#### Topics of Discussion:

 Welcome Speech by Alec Stapp "Why Should you Care About Biosecurity"

**OVERNIGHT: DOUBLETREE BY HILTON HOTEL** 

#### August 8, 2023 Burlingame, CA

Attire: Laboratory Attire (Closed toe shoes and long pants)
Sessions: Synthetic Biology and Indoor Air Quality Labs and Industry Perspective
Dinner

#### 9:00 am DEPART DOUBLETREE BY HILTON HOTEL SAN FRANCISCO AIRPORT

 Participants should plan to have eaten breakfast before departure. A breakfast buffet is included at the hotel.

#### 9:00 - 10:30 am TRAVEL FROM HOTEL TO BIOCURIOUS

60-90 minute drive from hotel to Biocurious Community Lab

#### While on Bus:

- Short knowledge survey conducted
- Hand out session descriptions and go over programming for the day

#### 10:30 - 1:00 pm BIOCURIOUS LABORATORY ACTIVITIES

- Address: 3108 Patrick Henry Drive, Santa Clara, 95054
- Phone: +1 408-475-2246
- Instructor: Tony Liang, Biocurious
- Instructor: Maria Chavez, Biocurious
- About: This activity will include an introduction to "CRISPR Technology" which is a biological tool used for genome editing.

#### Topics of Discussion:

- Introduction and overview of laboratory safety practices
- Instructors will overview the CRISPR lab protocol and explain the CRISPR platform, including how this technology has been used in biomedical research
- Begin CRISPR-based lab
- Instructors will give an overview of some of the work the community biolab does while waiting between experiment steps

#### 1:00 - 2:00 pm LUNCH AT BIOCURIOUS COMMUNITY BIOLAB

- Address: 3108 Patrick Henry Drive, Santa Clara, 95054
- Phone: +1 408-475-2246

**60 MINUTES FOR LUNCH** 

#### 2:00 – 5:30 pm LAB ACTIVITY: CRISPR KIT AND MEASURING INDOOR AIR QUALITY

- Address: 3108 Patrick Henry Drive, Santa Clara, 95054
- Phone: +1 408-475-2246
- Instructor: Tony Liang, Biocurious
- Instructor: Maria Chavez, Biocurious
- About: This activity will include an introduction to indoor-air quality and how this
  can be used to mitigate pathogen transmission and how measuring CO2 levels
  can be used as a proxy to determine indoor-air quality.

- Instructors will go overview the CO2 protocol and conduct experiment and analysis
- Instructors will conclude day 1 of the CRISPR lab

### 5:30 – 6:00 pm TRAVEL FROM BIOCURIOUS COMMUNITY LAB TO DINNER LOCATION

Address: 3108 Patrick Henry Drive, Santa Clara, 95054

## 6:00 – 7:30 pm DINNER AND DISCUSSION WITH JAMES DIGGANS AT BROADWAY GRILL

- Address: 1400 Broadway, Burlingame, CA 94010
- Phone: (650) 393-5897
- Presenter: James Diggans, Head of Biosecurity at Twist Biosciences

#### Topics of Discussion:

- Describe the current landscape of biotechnology and present industry's perspective on some of the challenges with increasing accessibility of biotechnology tools.
- Contextualize how congressional funds can drive the biotechnology sector and foster biosecurity industry norms.
- Describe how the biotechnology sector is engaging with specific federal legislation, executive orders, and strategies

#### 1.5 HOURS OF DISCUSSION

#### 7:30 - 7:45 pm TRAVEL FROM DINNER AT BROADWAY GRILL TO THE HOTEL

A 15-minute walk from dinner to the hotel

#### 7:45 pm END PROGRAMMING

OVERNIGHT: DOUBLETREE BY HILTON HOTEL SAN FRANCISCO AIRPORT

#### August 9, 2023 Burlingame, CA

Attire: Laboratory Attire (Closed toe shoes and long pants)
Sessions: Synthetic Biology/Biosafety, PPE, and Indoor-Air Quality

#### 9:00 am DEPART DOUBLETREE BY HILTON

- Participants should plan to have eaten breakfast before departure. A breakfast buffet is included at the hotel.
- DoubleTree by Hilton, Burlingame CA

#### 9:00 - 10:30 am TRAVEL FROM HOTEL TO BIOCURIOUS COMMUNITY BIO LAB

60-90 minute drive from the hotel to the community lab

### 10:30 - 11:00 am ARRIVE AT BIOCURIOUS COMMUNITY LAB AND REVIEW CRISPR PLATE RESULTS

- Address: 3108 Patrick Henry Drive, Santa Clara, 95054
- Phone: +1 408-475-2246

## 11:00 – 1:00 pm LECTURE AT BIOCURIOUS BIOLAB ON SYNTHETIC BIOLOGY AND BIOSAFETY

- Address: 3108 Patrick Henry Drive, Santa Clara, 95054
- Phone: +1 408-475-2246
- Instructor: Tony Liang, Biocurious
- Presenter: Gerald Epstein, Contributing Scholar, Johns Hopkins Center for Health Security and Former Assistant Director for Biosecurity and Emerging Technologies, White House Office of Science Technology Policy
- About: The goals of this session are to illustrate the increasing accessibility of synthetic biology and elucidate the need for common sense biosecurity norms and oversight to mitigate accidental, engineered, and natural biological threats. This session will make concrete the need for improvements in biosafety drawing on parallels from other fields that receive federal funds for investigations of accidents and research. Additional goals include, clarifying that the goal of conducting biosafety research is to learn from biosafety lapses and mistakes not over regulate science with safety rules that are not evidence informed.

#### Topics of Discussion:

- Staffers will look at results from the CRISPR-based laboratory experiment, specifically engineered bacteria growth patterns.
- Following the laboratory analysis there will be a
  discussion that defines synthetic biology and its benefits,
  discusses increasing accessibility and new computational
  tools, the need for transparency, touches on the
  discussion around CRISPR, and introduces the concept of
  dual use research of concern.
- Other synthetic biology topics that will be discussed include pathogens of pandemic potential, enhanced potential pandemic pathogens, and modifications needed to be made to the Federal Select Agent Program

given accelerations in biotechnology and synthetic biology.

- This session will:
  - Highlight a few key biosafety policies, explain that at a minimum the USG should know the number of laboratories that handle dangerous pathogens and the need for research into the causes of biosafety incidents to determine what regulations would reduce risks and inform evidence based laboratory safety protocols. Examples of federal funding for accident determination (such as aviation/transportation safety and nuclear/chem safety) will also be used.
  - Emphasize that biological risks are uncontrollable and biotechnology as a field is very open source
  - Stress that the goal is to learn from past biosafety mistakes to do better, not point the finger at researchers.
  - Emphasize that this problem has long been acknowledged by the USG, for example the need for greater biosafety measures is mentioned in ASPR's National Health Security Strategy, the National Biodefense Strategy, and the Executive Order on the Bioeconomy.

#### 1:00 - 2:00 pm LUNCH AT BIOCURIOUS BIOLAB

- Address: 3108 Patrick Henry Drive, Santa Clara, 95054
- Phone: +1 408-475-2246

#### 1 HOUR FOR LUNCH

#### 2:00-2:30 pm TRAVEL FROM BIOCURIOUS BIOLAB TO STANFORD UNIVERSITY

25-minute drive from Biocurious Biolab Stanford University

#### 2:30 - 4:00 pm PPE LECTURE AT STANFORD UNIVERSITY

- Address: Lathrop Library Building (Lathrop 299) 518 Memorial Way, Stanford, CA 94305
- Presenters: Dr. Daniel Greene, Gryphon Scientific
- About: The goals of this session include explaining the uses of different types of PPE and the need for a resilient stockpile that can be both scaled up and deployed when needed, specifying critical workers in high-consequence biological events that should have already deployed PPE, and describing some of

the trade-offs when designing PPE for different environments and disciplines. Staffers will have the opportunity to try on different types of PPE.

#### Topics of Discussion:

- Define personal protective equipment as a relatively threat agnostic physical barrier that protects the eyes, noise, and mouth.
- Discuss the need to have a robust stockpile of PPE especially to respond to unknown threats and describe possible modes of SNS product cycling to avoid expirations and decrease distribution time.
- Identify critical workers in a high consequence biological event and discuss the need to have already deployed PPE in order to effectively respond to known and unknown threats
- Conclude with areas of PPE investment such as, the NIOSH app designed to scan a face and determine what masks might be a best match and one directional impermeable materials.

#### 4:00 - 4:30 pm NO PROGRAMMING (BREAK)

#### 4:30 - 6:00 pm INDOOR-AIR QUALITY LECTURE AT STANFORD UNIVERSITY

- Address: Lathrop Library Building (Lathrop 299) 518 Memorial Way, Stanford, CA 94305
- Presenters:
  - Emily Porcari, American Society of Heating Refrigerating and Air-conditioning Engineers (ASHRAE)
  - Corey Metzger, American Society of Heating Refrigerating and Air-conditioning Engineers (ASHRAE)
- About: ASHRAE representatives will discuss state and federal policy and new
  pathogen mitigation standards as well as examples of localities that have good
  indoor air standards. One example they will highlight are efforts to improve IAQ
  in schools, which increases productivity and reduces airborne disease
  transmission. Examples highlighted include, the Boston public school's IAQ
  sensor dashboard and Cherokee County School District's IAQ sensors.

#### Topics of Discussion:

 Demonstrate how improvements made in indoor air quality can mitigate pathogen transmission in communal areas like daycares, schools, and offices and high consequence areas like airports, power plants, and food distribution centers through an

- interactive session highlighting ventilation, filtration, and sterilization tools.
- Summarize current state level and federal indoor air quality policy efforts.
- Highlight federal policy recommendations to make essential places resilient to airborne biological threats.

#### 6:00 - 7:30 pm GROUP DINNER AT STANFORD CAMPUS

- Address: Jen-Hsun Huang Engineering Center Room 300, 475 Via Ortega 3rd Floor, Stanford, CA 94305
- Phone: (650) 497-1712
- Organizers:
  - Allison Berke, Stanford University
  - Arielle D'Souza, Institute for Progress
- About: This dinner will be co-hosted with a concurrent Stanford Biosecurity staffdel, giving staffers the opportunity to network with different Stanford biosecurity experts as well as other staffers.

#### 7:30 pm DEPART STANFORD CAMPUS AND TRAVEL TO DOUBLETREE BY HILTON

25-minute drive to hotel

#### 7:55 pm END PROGRAMMING

OVERNIGHT: DOUBLETREE BY HILTON HOTEL SAN FRANCISCO AIRPORT

#### August 10, 2023 Burlingame, CA

Attire: Travel Attire

Sessions: Wastewater Detection

#### 8:00 - 8:30 pm BREAKFAST AND FEEDBACK SURVEY

Participants should check-out before the Wastewater session

#### 8:30 - 10:30 am WASTEWATER LECTURE

- Participants should plan to have eaten breakfast and checked out of their hotel room before programming (luggage will be safely secured in the hotel lobby). A breakfast buffet is included at the hotel.
- Address: Sonoma Conference Room DoubleTree by Hilton, Burlingame
- Presenters:
  - Newsha Ghaeli, Biobot Analytics
  - Ethan Gauvin, Biobot Analytics
  - Jake Byrnes, Biobot Analytics

 About: The goals of this session include increasing understanding of how deploying wastewater sequencing across the country can be harnessed for community health and early warning at a favorable cost-benefit ratio.

#### Topics of Discussion:

- Introduce Biobot, touching on how the company used routine wastewater surveillance to determine opioid prevalence. Focus on Biobot's work during COVID-19 as well as wastewater applications for other health crises like Mpox, RSV, and influenza.
- Elaborate on the goals of early warning systems especially as tools of mitigation using weather forecasting as a metaphor (disease forecasting with real time information can be used to establish patterns which informs prevention efforts). Also contrast PCR capabilities now with the promise of automated metagenomic sequencing in the future.
- Describe how wastewater surveillance can alert public health officials to new pathogens circulating in a community and give an idea of the burden of an existing infectious disease at the community level without having to wait on individuals to get tested. Benefits touched on include protecting individual privacy and catching asymptomatic cases and trends before clinical symptoms.
- Provide examples of other applications such as aircraft testing during the re-opening of China when there is a risk that new variants can come to the U.S. and wastewater surveillance can identify when new variants are present in the U.S.

#### 11:00 am DEPART DOUBLETREE BY HILTON FOR AIRPORT

Transfer by hotel shuttle. 15-minute drive from the hotel to the airport.

#### 1:05 pm FLIGHT DEPARTS SAN FRANCISCO INTERNATIONAL AIRPORT (SFO)

- UA2667
- Flight time: 4h 56m

## August 10, 2023 9:01 pm FLIGHT ARRIVES WASHINGTON DULLES INTERNATIONAL AIRPORT (IAD)

• Time change from departure airport: +3 hours

## **Speakers**



#### **Alec Stapp**

Alec Stapp is the co-founder and co-CEO of the Institute for Progress. Previously, Alec was the director of technology policy at the Progressive Policy Institute, a research fellow at the International Center for Law and Economics, a technology policy fellow at the Niskanen Center, and a graduate research fellow at the Mercatus Center. Alec's work has been published in the Washington Post, MIT Technology Review, Politico, National Review, and Salon. He has also been cited in numerous publications including the Wall Street Journal, the Financial Times, and the New York Times. He received his master's degree in economics from George Mason University and a bachelor's degree from the University of Arizona.

#### **Corey Metzger**



Corey Metzger, P.E., Member ASHRAE is the founding Principal of Resource Consulting Engineers, LLC based in Ames, Iowa. He is a licensed professional engineer experienced in the design of mechanical, plumbing, and fire protection systems for numerous building types. More specifically, he has completed dozens of K-12 and higher education projects, ranging from small remodel projects to large new facilities. Mr. Metzger is active in ASHRAE, currently serving as the Vice-Chair of the Conferences and Expositions Committee and the Research Subcommittee Chair for Technical Committee 9.7 (Educational Facilities). Past ASHRAE roles include serving as Technical Chair for the 2019 Atlanta Winter Conference, Co-Chair for the 2018 Region VI CRC, Chair of the Chapter Technology Transfer Committee (CTTC), Regional Vice-Chair for CTTC (Region VI), and President of the ASHRAE Wisconsin Chapter.

#### **Daniel Greene**



Dr. Daniel Greene is a biosecurity researcher in the Biosafety, Biosecurity, and Emerging Technologies practice area at Gryphon. Daniel completed a PhD in Education at Stanford and worked for several years at an education-technology nonprofit before becoming inspired to work on biorisk issues and completing a postdoc at Stanford's Center for International Security and Cooperation. His interests include using insights from the social and behavioral sciences to improve risk-assessment methods and promote a culture of responsibility among life scientists.

#### **Emily Porcari**



Emily Porcari is ASHRAE's Manager of State and Local Government Affairs. Most recently, Emily was a Senior Associate Analyst at StateScape, a company that provides analysis to clients on federal, state, and local legislation and regulations. Her work focused specifically on energy and environmental issues. Prior to that, she served as the Special Assistant to the Director of the U.S. Fish and Wildlife Service at the Department of the Interior, where her role was to work with the Service's regions and offices around the country to provide briefings and information to agency leadership. She has also completed various fellowships related to public policy and sustainability. Emily graduated from the University of Dayton with a B.A. in Political Science.

#### Ethan Gauvin



Ethan Gauvin is Head of Government Affairs at Biobot Analytics. Prior to graduate school, Ethan spent five years on Google's Legal and Government Affairs teams, most recently in London where he helped develop the company's approach to a wide range of digital policy issues, including the EU's landmark copyright reform and antitrust investigations of Google Search and Android. Ethan also helped shape Google's position on the impact of artificial intelligence on the labor market and was instrumental to the creation of Google.org's Work Initiative, a program granting \$50M to nonprofits helping workers retrain and adapt to technological change. Ethan received his bachelor's degree summa cum laude from the University of New Hampshire.

#### **Gerald Epstein**



Dr. Epstein is a Contributing Scholar at the Johns Hopkins Center for Health Security. He joined the center after retiring from his position as Distinguished Fellow at the National Defense University's Center for the Study of Weapons of Mass Destruction, where he addressed challenges posed by nuclear, chemical, and biological weapons, particularly the security implications of advanced life sciences, biotechnologies, and other emerging and converging technologies. He came to NDU from the White House Office of Science and Technology (OSTP), where he was Assistant Director for Biosecurity and Emerging Technologies, serving on detail from his position as Deputy Assistant Secretary for Chemical, Biological, Radiological, and Nuclear Policy at the Department of Homeland Security in 2012, Dr. Epstein directed the Center for Science, Technology, and Security Policy at the American Association for the Advancement of Science (AAAS). He served in a previous White House position from 1996 to 2001.

#### **James Diggans**



James Diggans is Director, Data Science and Biosecurity for Twist Bioscience, a DNA synthesis company based in San Francisco, CA. He holds a PhD from George Mason University in Computational Biology and Bioinformatics and has worked in target discovery, molecular diagnostic development and biodefense including five years leading the computational biology group at the MITRE Corporation. His research has included methods for efficient detection of biological weapons release, machine learning-based cancer diagnosis, and novel algorithmic approaches to discerning intent in oligonucleotide-length DNA synthesis requests. At Twist, his group builds cloud-based bioinformatics systems for effective biosecurity screening and analysis of next generation sequencing data to power silicon-based DNA synthesis at record scale.

#### Maria Chavez



Maria is a biohacker from the San Francisco Bay Area with a passion for open source science and community research projects. She is a Board Member, and now Executive Director at BioCurious. She is also a Board Member of Real Vegan Cheese, an open source project to create a synthetic cheese from genetically modified yeast. She recently became an adviser to the Latin American Network of Biohacker Spaces (SynTechBio). She has led two iGEM teams in 2014 and 2015 and is a member of multiple community research projects. She believes we can increase science literacy in local communities by expanding the number of community lab spaces globally.

#### Newsha Ghaeli



Newsha Ghaeli is the president and cofounder of Biobot Analytics, the first company in the world to commercialize data from sewage. She is an urban studies researcher who explores applications for technology in urban systems to build more responsive, resilient, and efficient cities. Prior to Biobot, Ghaeli was a research fellow and project lead at the MIT Senseable Cities Lab and an instructor in the Department of Urban Studies and Planning. She has collaborated with the World Economic Forum's Council on the Future of Cities, the UN Climate Change Summit, and the US Department of Energy, and has consulted for the government of American Samoa on tsunami-resilient communities. Ghaeli earned an Honours Bachelor of Architectural Studies from the University of Waterloo and a master's of architecture from McGill University.

#### Nikki Teran



Nikki Teran is a senior fellow at the Institute for Progress. Dr. Teran has previously worked with the Committee on International Security and Arms Control at the National Academy of Science, the Council on Strategic Risks, and the Open Philanthropy Project. She received her Ph.D. in genetics from Stanford and a bachelor of science in molecular biophysics and biochemistry from Yale.

#### **Tony Liang**



Mr. Tony W. Liang has had broad academic and industry research experience spanning over 30 years. These research areas have covered developmental biology, epithelial biology, immunology, antibody characterization, antibody development, assay development, protein purification and drug development. Prior to founding PTM Therapeutics, Mr. Liang had contributed to pre-clinical and clinical efforts at Genentech, Inc., Raven biotechnologies, inc., Macrogenics, Inc., CytomX Therapeutics, Inc., and Unity Biotechnology, Inc. Mr. Liang is an author on 16 peer-reviewed journal articles and an inventor on four issued US patents.

## **Staffers**



## Andrew Doris National Security Fellow Office of Senator Bob Casey



#### Andrew Murray Legislative Aide Office of Senator Todd Young

## Andrew Smith Legislative Aide Office of Senator Ted Budd



Blake Thelander
Health Policy Advisor
Office of Representative Mariannette
Miller-Meeks



**Calli Shapiro**Senior Policy Counsel
Office of Senator Ben Ray Luján



**Colleen White**Health Policy Advisor
Office of Senator Ron Johnson



**Deepa Patel**Senior Policy Advisor
Office of Representative David Trone



**Hannah King**Senior Legislative Assistant
Office of Representative Andy Harris



**Katie Mertens**Legislative Aide
Office of Senator Ben Ray Luján



**Molly Martin**Legislative Assistant
Office of Representative Brett Guthrie



Nimit Jindal
Health Policy Director
Office of Representative Diana DeGette



Sarah Gilbert
Deputy Chief of Staff
Office of Representative Neal Dunn

## Logistics

#### **Contact Information**

Arielle D'Souza (206)-458-5839 Alec Stapp (480) 628-3863

If you are interested in joining the Signal group chat please pass along your contact information to Arielle.

#### Airport to Hotel

There is a DoubleTree shuttle between the SFO and the hotel. We will meet as a group around the flight's baggage claim carousel and proceed to the shuttle as a group.

#### **Laboratory Attire**

Please plan on wearing long pants and closed toe shoes for the laboratory experiments on August 8th and 9th. Short sleeves are alright as you will be given a laboratory coat. Long hair must be tied back.

#### Wifi

The BioCurious wifi can be found on the classroom whiteboard, you will have access to Stanford guest wifi.

#### Meetings

There will be open rooms in the Stanford buildings that can be used to take calls as well as space in the BioCurious Community laboratory.