

RE-2 Employee Post Travel Disclosure of Travel Expenses

Post Travel Filing Instructions: Complete this form within **30 days** of returning from travel. Submit all forms to the Office of Public Records in 232 Hart Building. **This form is a public disclosure. The form and all attachments will be made publicly available.**

Date/Time Stamp

RECEIVED
SECRETARY OF THE SENATE
PUBLIC RECORDS

2023 SEP -5 PM 2:11

Certification: In compliance with the Regulations Governing Privately Sponsored Travel, Senate Rule 35, and the Honest Leadership and Open Government Act of 2007, I certify that I accepted the following gift of privately sponsored travel:

Private Sponsor(s):**Travel Dates:**

Institute for Progress

8.7.23 to 8.10.23

Name of accompanying family member (if any):**Relationship to Traveler:****Total Expenses**

Transportation Expenses	Lodging Expenses	Meals Expenses	Other Expenses (Amount & Description)
\$368.90	\$537.57	\$144.74	See Attachment

I also certify that attached to this form are all required documents for post travel disclosure, including:

- The final **Employee Pre-Travel Authorization** (Form RE-1)
- The final **Private Sponsor Travel Certification Form** with all attachments
- The final invitation
- The final approved itinerary

Finally, I certify that all trip information reflected in the attachments above accurately reflects the travel that I accepted. If there were any changes to the trip after I received approval from the Committee, the changes are described in ATTACHMENT 1.

9/5/23

Andrew Murray

Date

Printed Name of Traveler

Signature of Traveler

TO BE COMPLETED BY SUPERVISING MEMBER/OFFICER

I have made a determination that the expenses set out above in connections with travel described in the Employee Pre-Travel Authorization form, are necessary transportation, lodging, and related expenses as defined in Rule 35.

9/5/23

Date

Signature of Supervising Senator/Officer

RE-1 Employee Pre-Travel Authorization

Pre-Travel Filing Instructions: Complete and submit this form at least 30 days prior to the travel departure date to the **Select Committee on Ethics in SH-220**. Incomplete and late travel submissions will not be considered or approved.

Date/Time Stamp

ETHIC JUL28 23PM 4:13

Name of Traveler:

Andrew Murray

Employing Office/Committee:

Senator Todd Young

Private Sponsor(s):

The Institute for Progress

Destination(s):

Burlingame, San Francisco, and Stanford, C

Travel Dates:

8/7/23 to 8/10/23

NOTE: If you plan to extend the trip for any reason you must notify the Committee.

Explain how this trip is specifically connected to the traveler's official or representational duties.

The staff del covers biotech - a great interest to health care policy. Senator Young is a leading mind in the biotech space and this trip will help me better understand advancements in the space as the Senator works on potential legislation.

Do you have an accompanying family member or spouse on this trip?

Name and Relationship to Traveler:

☐

(signify "yes" by checking box)

I certify that the information contained in this form is true, complete and correct to the best of my knowledge.

7/7/23

Date

Signature of Employee

TO BE COMPLETED BY SUPERVISING MEMBER/OFFICER

(President of the Senate, Secretary of the Senate, Sergeant at Arms,
Secretary for the Majority, Secretary for the Minority, and Chaplain)

Senator Todd Young

(Print Senator's/Officer's Name)

hereby authorize

Andrew Murray

(Print Traveler's Name)

an employee under my direct supervision, to accept payment or reimbursement for necessary transportation, lodging, and related expenses for travel to the event described above. I have determined that this travel is in connection with his or her duties as a Senate employee or an officeholder, and will not create the appearance that he or she is using public office for private gain.

I have also determined that the attendance of the employee's spouse or child is appropriate to assist in the representation of the Senate.

☒

(signify "yes" by checking box)

7/7/23

Date

Signature of Supervising Senator/Officer

ATTACHMENT 1 – CHANGES FROM APPROVED PRE-TRAVEL

Note: Material changes to a trip that occur after the Committee has issued an approval letter may invalidate the Committee's approval. Please contact the Committee with any questions regarding changes to an approved trip.

Were there any changes to the pre-approved travel expenses? (Transportation, Meals, Lodging, Other)?

☐ Yes ☒ No

Expense Change

Revised Amount

Explanation

Were there any changes to the pre-approved itinerary?

☐ Yes ☒ No

Explanation:

Were there any additional changes to the pre-approved trip?

☐ Yes ☒ No

Explanation:

Trip Name: IFP Biosecurity Congressional Staff Delegation Trip

Organization Information

Organization Name:

Institute for Progress

Is your organization classified as a §501(c)(3)?

☒

Yes

☐

No

If Yes, §501(c)(3) Organization Type:

☐

Private Foundation

☒

Public Charity

Address:

1140 Third Street NE, Suite 401

City, State, Zip:

Washington, DC 20002

Phone Number:

Organization URL:

<https://progress.institute/>

History of Congressional Travel

Describe your organization's history of sponsoring congressional travel.

This will be the first time the Institute for Progress is sponsoring congressional travel.

Educational Activities

Describe the educational activities performed by your organization other than sponsoring congressional travel.

The Institute for Progress (IFP) conducts non-partisan policy research and analysis on several policy areas which are published on the institute's website as well as in a variety of other news outlets. In addition to both quantitative and qualitative policy research, IFP organizes coalition meetings to help inform the public and develop stakeholder consensus which can inform future policy design and offers senior fellowships to a variety of academics so that they can take meetings with policymakers and communicate the results of their analysis.

Lobbyist and Foreign Agent Registration Information

Lobbyist Registration Status (Select one):

☒

I certify that the sponsor is not a federally registered lobbyist and does not retain or employ a federally registered lobbyist.

☐

I certify that the sponsor is not a federally registered lobbyist but does retain or employ one or more federally registered lobbyists.

Foreign Agent Registration Status (Select one):

☒

I certify that the sponsor is not an agent of a foreign principal and does not retain or employ an agent of a foreign principal.

☐

I certify that the sponsor is not an agent of a foreign principal but does retain or employ one or more agents of a foreign principal.

Foreign Government Involvement

Foreign Agent Registration Status (Must select all):

☒

I certify that the sponsor is not a foreign government.

☒

I certify that the sponsor is not an entity that is owned or operated by a foreign government.

☒

I certify that the sponsor does not receive funding from a foreign government.

Purpose and Details

Provide a brief description of the trip.

The IFP biosecurity staffdel to the Bay Area will, through hands-on sessions, increase comprehension 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 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.

Explain how the purpose of the trip relates to your organization's mission.

Biosecurity is a key policy priority for IFP because we believe accelerations in biotechnology have the opportunity to vastly improve human well-being, but without comprehensive biosecurity policies in place, misuse of these advancements could result in catastrophic bioincidents. IFP believes 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.

Is your organization the only sponsor for this trip?

☒ Yes ☐ No

If No, describe your organization's role in planning the trip.

If there are multiple sponsors, each sponsor must submit Organization Information (Page 1 of the Private Sponsor Travel Certification Form) and a Signature Page Form.

Grantmaking Organizations (Optional)

If you have a Grantmaking Organization, you must attach a Grantmaking Organization Certification Form.

- 1.
- 2.
- 3.

With or Without Regard to Congressional Participation (Select one):

- ☐ The trip is arranged or organized without regard to congressional participation.
- ☒ The trip is arranged or organized with regard to congressional participation.

Lobbyist/Foreign Agent Involvement in Planning, Organizing, Requesting or Arranging

- ☒ The trip will not in any part be planned, organized, requested, or arranged by a registered lobbyist or agent of a foreign principal, other than de minimis involvement.

Lobbyist/Foreign Agent Financing (Must select all):

- ☒ The trip will not be financed in any part by a registered lobbyist or agent of a foreign principal.
- ☒ No funds or in-kind contributions were earmarked directly or indirectly for the purpose of financing this specific trip from a registered lobbyist or agent of a foreign principal or from a private entity that retains or employs one or more registered lobbyists or agents of a foreign principal.

Lobbyist/Foreign Agent Accompaniment

Complete if all sponsors are §501(c)(3) organizations (Select one):

- ☒ The trip is limited to three days (for trips inside the continental United States) or seven days (for trips outside the continental United States), and no lobbyist or agents of a foreign principal will accompany the Member, officer, or employee at any point throughout the trip
- ☐ The trip is limited to a one-day event (exclusive of travel time and one overnight stay) and no registered lobbyists or agents of a foreign principal will accompany the Member, officer, or employee on any segment of the trip
- ☐ The trip is limited to a one-day event (exclusive of travel time and two overnight stays) and no registered lobbyists or agents of a foreign principal will accompany the Member, officer, or employee on any segment of the trip

Complete if any of the sponsors is not a §501(c)(3) organizations (Select one):

- ☐ The trip is limited to three days (for trips inside the continental United States) or seven days (for trips outside the continental United States), and no lobbyist or agents of a foreign principal will accompany the Member, officer, or employee at any point throughout the trip
- ☐ The trip is limited to a one-day event (exclusive of travel time and one overnight stay) and no registered lobbyists or agents of a foreign principal will accompany the Member, officer, or employee on any segment of the trip
- ☐ The trip is limited to a one-day event (exclusive of travel time and two overnight stays) and no registered lobbyists or agents of a foreign principal will accompany the Member, officer, or employee on any segment of the trip

Certification of No Recreational Activity and No Alcohol (Must select all):

- ☒ Travel expenses paid for will not include expenditures for recreational activities.
- ☒ Travel expenses paid for will not include expenditures for alcohol, except as permitted by the Regulations Governing Privately Sponsored Travel.

Will members and staff from the House of Representatives receive invitations?

- ☒ Yes ☐ No

Travel Details (Submit additional pages as needed)

Trip Start Date/Time:

August 7th/8:25am ET



Trip End Date/Time:

August 10th/8:56pm PT

Will the traveler be accompanied by a family member for whom the sponsor will pay travel expenses?

☐

Yes

☒

No

Transportation (Member/Officer/Employee: \$_____ Accompanying Family Member: \$_____)

Transportation Type	Class	Amount
Roundtrip Flight	Coach	\$625

Details (optional)

Lodging (Member/Officer/Employee: \$_____ Accompanying Family Member: \$_____)

Check-In	Check-Out	Facility	City	State	Country
8.7.23	8.10.23	DoubleTree by Hilton Hotel	San Francisco	CA	USA
Nights	Cost/Night	Cost Exceed Per Diem (Yes/No)	If Yes, please explain why expenses over the per diem rate are reasonable and necessary.		
3	\$169.00	NO			

Check-In	Check-Out	Facility	City	State	Country
Nights	Cost/Night	Cost Exceed Per Diem (Yes/No)	If Yes, please explain why expenses over the per diem rate are reasonable and necessary.		

Check-In	Check-Out	Facility	City	State	Country
Nights	Cost/Night	Cost Exceed Per Diem (Yes/No)	If Yes, please explain why expenses over the per diem rate are reasonable and necessary.		

Meals (Member/Officer/Employee: \$_____ Accompanying Family Member: \$_____)

Date	Breakfast	Lunch	Dinner	Incidentals	Total	City	State	Country	Cost Exceeds Per Diem (Y/N)
8.7.23		x	x		\$55.5	San Francisco	CA	USA	N
8.8.23	x	x	x		\$74.00	San Francisco	CA	USA	N
8.9.23	x	x	x		\$74.00	San Francisco	CA	USA	N
8.10.23	x	x			\$55.5	San Francisco	CA	USA	N

If costs exceed the federal per diem, please explain why expenses over the per diem rate are reasonable and necessary.

Reasonable Miscellaneous Expenses

(Member/Officer/Employee: \$_____ Accompanying Family Member: \$_____)

Expense Type	Amount	Notes
Charter Bus	\$1,800	Transportation for Duration of
Renting Biolab	\$4,000	Two days of programming

Additional Details (optional)

PRIVATELY SPONSORED TRAVEL

SPONSOR SIGNATURE PAGE

I hereby certify that the information submitted in connection with the trip listed below is true, complete, and correct to the best of my knowledge and belief.

Trip Name: IFP Biosecurity Congressional Staff Delegation Trip

Travel Date(s): 8/7/23-8/10/23

Travel Destination(s): San Francisco

Sponsor: The Institute for Progress

Alec Stapp

(printed name of sponsor representative)



(signature of sponsor representative)

Co-CEO

(title)

5/17/23

(date)



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 campus

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 Scholar
- 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 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, 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: 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.

Topics of Discussion:

- Instructors will go over 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: Tony Liang, Biocurious
- Instructor: Maria Chavez, Biocurious
- Instructor: 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 BIOCURIOS 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, nose, 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:
 - 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
 - Arielle D'Souza, The Institute for Progress
 - Allison Berke, Stanford University
- About: This dinner will be co-hosted with a concurrent Stanford Biosecurity staffedel, 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 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

8:30 - 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)

- UA2667
- Flight time: 4h 56m

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

- Time change from departure airport: +3 hour



List of IFP Biosecurity Staffdel Senate Invitees

- Sara Maskornick
- Andrew Doris
- Hannah Berner
- Sabah Ghulamali
- Abigail Hemenway
- Max Seltzer
- Beth Nelson
- Audrey Arbogast
- Jasmin Palomares
- Michael Rogenmoser
- Francesco Castella
- Andrew Smith
- Natalie Burkhalter
- Garrett Daniel
- Andrew Murray
- Christiana Reasor
- Liam Macdonald
- Berlina Wallace
- Sedef Berk
- Calli Shapiro
- Katie Mertens
- Kelli Jackson
- Rachel Fybek
- Maris Salemme
- Emily Kane
- Joel Burke

Total Expenses

-Other expenses (Amount & Description)

- BioCurious Biolab: \$4,000 (amount for all staffers and staff and includes lunches)
- Charter bus: \$361.70
- SFO airport shuttle: \$5