

II Fiocruz-NIAID symposium
**Global Health Threats in a
Changing Environment**

Belém, PA – Brazil
November 4-5 2024



Program

2nd Fiocruz-NIAID Symposium: *Global Health Threats in a Changing Environment*

Day 1 – November 4th

8:30 am – 9:00 am

Opening remarks

- **Leonardo Carvalho, Hans Ackerman, Joel Vega-Rodriguez, Giselle Viana** (Organizers)
- **Fiocruz Presidency**
- **NIAID Direction**
- **IEC Direction**

9:00 am - 9:30 am

KEYNOTE ADDRESS: **Jeanne Marrazzo** (Director, NIAID-NIH, Bethesda) – **TBD**

9:30 am - 9:40 am - **Discussion**

Moderators: Hans Ackerman (NIAID-NIH) / *Beatriz Grinsztejn* (INI-Fiocruz)

9:40 am - 11:00 am

Session 1: Geography, Physical Disruption and Health

- **André M. Siqueira** (INI-Fiocruz, Rio de Janeiro) – Infectious diseases in the Yanomami population
- **Maria Elena Crespo Lopez** (UFPA, Belem) – Environmental pollution vs public health surveillance in the Global South: the case-study of mercury in Brazil
- **Courtney Murdock** (Cornell University, Ithaca) – Landscapes of infection: the role of the environment in shaping host-pathogen interactions, life history, and pathogen transmission
- **Q&A: 20 minutes**

Moderators: Gabriel L. Wallau (IAM-Fiocruz) / *Helene M. Ueno* (USP)

II Fiocruz-NIAID symposium
**Global Health Threats in a
Changing Environment**

Belém, PA – Brazil
November 4-5 2024



11:00 am - 11:20 am **Coffee break**

11:20 am - 12:15 am **Session 2: Sexually Transmitted Infections**

- **Beatriz Grinsztejn** (INI-Fiocruz, Rio de Janeiro; NIH grantee, HIV Vaccines Clinical Trials Network Leadership and Operations Center) – HIV Prevention and STIs in sexual and gender minorities: generating evidence to tackle inequities
- **Antonio Vallinoto** (UFPA, Belem) – HTLV-1/2 infection in vulnerable populations of the Brazilian Amazonian State of Pará
- **Q&A:** 15 minutes

Moderators: **Ricardo Ishak** (UFPA) / **Lilian R. P. Riccio** (IOC-Fiocruz)

12:15 pm - 1:30 pm **Lunch**

1:30 pm - 3:10 pm **Session 3: Vector Borne Diseases and Ecology I**

- **Pedro Vasconcelos** (IEC-SVSA, Belem) – Factors associated with emergence and reemergence of arboviruses in the Brazilian Amazon
- **Neil Lobo** (University of Notre Dame, Indiana) – Utilizing an expanded toolbox of vector control interventions in a changing environment
- **Luiz C. J. Alcantara** (IRR-Fiocruz/UFMG, Belo Horizonte; NIH grantee, Arboviral Research Network – UWARN) – Intensive and optimized virus surveillance at the Public Health laboratories and riverside communities: influence of climate change on pathogen emergence and disease intensification
- **André L. Rodrigues Roque** (IOC-Fiocruz, Rio de Janeiro) – Ecological scenarios of the orally transmitted Chagas disease outbreaks in Brazil
- **Q&A:** 20 minutes

Moderators: **Ana Yece N. Pinto** (IEC-SVSA) / **Elizabeth F. Rangel** (IOC-Fiocruz)

3:10 pm – 3:30 pm **Coffee break**

II Fiocruz-NIAID symposium
**Global Health Threats in a
Changing Environment**

Belém, PA – Brazil
November 4-5 2024



3:30 pm - 5:10 pm

Session 4: Vector Borne Diseases and Ecology II

- **Felipe G. Naveca** (ILMD-Fiocruz, Manaus) – Genetic epidemiology of viruses circulating in Amazonia
- **Tovi Lehman** (NIAID-NIH, Rockville) – High-altitude windborne mosquitoes and pathogens: opportunities to monitor threats to public health, food security, and ecosystem stability
- **Dhelio B. Pereira** (CEPEM-Rondonia, Porto Velho; NIH grantee, Amazonian Center of Excellence in Malaria Research) – An integrated and functional research plan on the Amazonian border: epidemiology, translational medicine and clinical research
- **Marshall E. Bloom** (Rocky Mountain Laboratories, NIAID-NIH, Hamilton) – New dimensions in the study of tick-borne viruses
- Q&A: 20 minutes

Moderators: Rafael Maciel de Freitas (IOC-Fiocruz) / *Aline R. Matos* (IOC-Fiocruz)

End Program Day 1

6:30 pm – 9:30 pm

Reception/Dinner

II Fiocruz-NIAID symposium
**Global Health Threats in a
Changing Environment**

Belém, PA – Brazil
November 4-5 2024



Day 2 – November 5th

8:30 am - 9:00 am **KEYNOTE ADDRESS: Marco Krieger** (Vice-President, Fiocruz, Rio de Janeiro) –
How Biomanguinhos take on advanced therapies will impact public health in Brazil

9:00 am – 9:10 am - **Discussion**

Moderators: Leonardo J. M. Carvalho (IOC-Fiocruz) / *Giselle M. R. Viana* (IEC-SVSA)

9:10 pm - 10:50 pm **Session 5: Immunoprevention and Control**

- **Robert Seder** (NIAID-NIH, Bethesda) – Role of vaccines and monoclonals in response to emerging and re-emerging infectious disease threats
- **Mauricio L. Nogueira** (Famerp, São José do Rio Preto) – Vaccines against arboviruses
- **Luis Vicente Rizzo** (Albert Einstein Hospital, São Paulo) – The effectiveness of the COVID-19 vaccines in the prevention of post-COVID conditions
- **Gregory Lanzaro** (University of California, Davis) – Mendel meets mosquito: the application of gene drive for the elimination of malaria

Q&A: 20 minutes

Moderators: Alexandre Macedo (CDC, Atlanta) / *Flavia L. R. Gomes* (IOC-Fiocruz)

10:50 am -11:10 am **Coffee break**

11:10 am – 12:30 pm **Session 6: Host-parasite interactions and disease transmission**

- **Jesus Valenzuela** (NIAID-NIH, Rockville) – Impact of vector derived factors on Leishmania establishment and determinants of vector infection and transmission
- **Joel Vega-Rodriguez** (NIAID-NIH, Rockville) – The role of malaria vector and host factors for sporozoite infectivity
- **Luis Fernando Chavez** (Indiana University, Bloomington) – Health policy impacts on malaria transmission in Costa Rica
- **Q&A:** 20 minutes

Moderators: Stefanie C. P. Lopes (ILMD-Fiocruz) / *Graziela M. Zannini* (INI-Fiocruz)

II Fiocruz-NIAID symposium
**Global Health Threats in a
Changing Environment**

Belém, PA – Brazil
November 4-5 2024



12:30 pm - 1:50 pm

Lunch (and poster session)

1:50 pm – 3:10 pm

Session 7: Transdisciplinary Engagement and Data Integration

- **Claudia Codeço** (PROCC-Fiocruz, Rio de Janeiro) – Trajetórias: a dataset of environmental, epidemiological and economic indicators for the Brazilian Amazon
- **Helder Nakaya** (Albert Einstein Hospital, São Paulo) – From precision medicine to epidemiology: harnessing AI against global health threats
- **Sadie Ryan** (University of Florida, Gainesville) – **TBD**
- **Q&A**: 20 minutes

Moderators: **Anderson M. Herculano** (UFPA) / **Francisco Acácio Alves** (UFPA)

3:10 pm - 3:30 am

Closing remarks: *Leonardo Carvalho, Hans Ackerman, Joel Vega-Rodriguez,
Giselle Viana*

3:30 pm – 4:30 pm

Poster session

3:30 pm - 5:30 pm

NIH Grant Writing Workshop

“Demystifying the NIH Grant Process”

- NIAID research concepts, development of priorities and funding opportunity development
- Development of a grant application for NIH
- The grant submission process: foreign eligibility, administrative steps
- The NIH peer review process, including what reviewers look for and upcoming changes
- How to interpret summary statements, how to find contacts at NIH
- Panel Discussion and Q&A, with Panel (5-6 Members) Including: NIAID Program Officers, NIH-funded investigators (including Brazilian investigators with successful NIH grant applications) and investigators who have served as NIH peer reviewers