



Izabela Mauricio Rezende

Postdoctoral Scholar, Infectious Diseases

Bio

BIO

I have a B.S. in Biology, M.Sc. in Immunology and Infectious diseases, Ph.D. in Microbiology. I am currently a Postdoctoral Researcher at the Stanford University School of Medicine, working with Dr. Jason Andrews at the new Stanford Pandemic Preparedness Hub, a fellowship I was awarded at the end of 2022. As part of a pandemic preparedness, we are trying to understand the potential viruses at risk of pandemic spread. Using disease modeling, epidemiological, and phylogenetic analysis, we study the genomic evolution and transmission dynamics of H5N1 avian influenza A after 2020.

I am in my third postdoctoral year at Stanford and completed the first two years with Dr. Desiree LaBeaud. I have a Ph.D. in Microbiology, with an emphasis in Virology, and a Master's in Infectious Diseases. My Ph.D. was conducted in Brazil, under the supervision of Dr. Betânia Drumond, and contemplated the virological and epidemiological aspects of yellow fever (YF) outbreak in Minas Gerais/BR in 2017-2018, combining laboratory, clinical, and data analysis (publications: DOI 10.1126/science.aat7115; DOI 10.1371/journal.pntd.0006538; DOI 10.1128/jcm.00254-22; DOI 10.3390/vaccines7040206; DOI 10.1186/s12985-019-1277-7). I came to Stanford University for my first postdoc with Dr. Desiree LaBeaud. For two years, I led an international NIH R01 project investigating the dynamics of the biggest YF outbreak in Brazil, including the description of a new syndrome, Late-relapsing hepatitis after yellow fever (DOI 10.3390/v12020222), and risk factors for severe YF. I was also involved in other projects regarding SARS-CoV-2 variants and disease severity in infants (DOI 10.3389/fmed.2022.896352), Rift Valley fever virus epidemiology in humans and animals in Kenya (DOI 10.1371/journal.pgph.0000505), and dengue virus evolution in Africa (ongoing Ph.D. candidate mentorship).

During the COVID-19 pandemic, we also supported the Brazilian Ministry of Health with the SARS-CoV-2 diagnosis in human samples and also in the investigation of the SARS-CoV-2 RNA in surfaces of density public areas of Belo Horizonte. Since Nov/2018 I had been an editor in the journal *Docência do Ensino Superior* (RDES / GIZ / UFMG) and in Jan/2020 I became Editor-in-Chief.

HONORS AND AWARDS

- Highlighted poster, 7th Pan-American Dengue Research Network Meeting (2020)
- Oral presentation, IV FAMERP-UTMB: Emerging infections in the Americas (2019)
- Travel Grant: 16th International Course on Dengue, Zika, and other Emergent Arboviruses., Institute of Tropical Medicine Pedro Kourí. La Havana, Cuba. Scholarship: OPAS (2019)
- Travel grant for oral abstract presentation, 6th Pan-American Dengue Research Network Meeting (2018)
- Travel Grant for arboviruses course participation, São Paulo School of Advanced Science (2017)
- Travel grant: Molecular Epidemiology in Infectious Diseases of Global Significance, ICOPHAI and Centre for Genetic Engineering and Biotechnology (ICGEB) (2013)

BOARDS, ADVISORY COMMITTEES, PROFESSIONAL ORGANIZATIONS

- Editor-in-Chief, *Revista Docência do Ensino Superior* (UFMG - Brazil) <https://periodicos.ufmg.br/index.php/rdes> (2020 - 2020)

- Member, American Society of Tropical Medicine and Hygiene (2020 - present)
- Member, Brazilian Society of Virology (2012 - present)

STANFORD ADVISORS

- Jason Andrews, Postdoctoral Faculty Sponsor

Research & Scholarship

LAB AFFILIATIONS

- Jason Andrews, Andrews' lab (11/1/2022)
- Desiree LaBeaud, LaBeaud Lab (8/1/2020 - - 10/31/2022)

Publications

PUBLICATIONS

- **Characterization and investigation of risk factors for Late-relapsing hepatitis after yellow fever.** *Clinical infectious diseases : an official publication of the Infectious Diseases Society of America*
de Rezende, I. M., McClure, M. A., Pereira, L. S., Fradico, J. R., Cenachi, A. R., Moura, A. S., Paladino, L. L., Dutra, M. R., Alves, P. A., Xavier, M. A., Said, R. F., Ramalho, D. B., Gama, et al
2023
- **Late-Relapsing Hepatitis after Yellow Fever** *VIRUSES-BASEL*
Rezende, I., Pereira, L., Fradico, J., Xavier, M., Alves, P., Campi-Azevedo, A., Speziali, E., dos Santos, L., Albuquerque, N., Penido, I., Santos, T., Bom, A., da Silva, et al
2020; 12 (2)
- **Recent sylvatic yellow fever virus transmission in Brazil: the news from an old disease.** *Virology journal*
Silva, N. I., Sacchetto, L. n., de Rezende, I. M., Trindade, G. d., LaBeaud, A. D., de Thoisy, B. n., Drumond, B. P.
2020; 17 (1): 9
- **Genomic and epidemiological monitoring of yellow fever virus transmission potential** *SCIENCE*
Faria, N. R., Kraemer, M. G., Hill, S. C., de Jesus, J., Aguiar, R. S., Iani, F. M., Xavier, J., Quick, J., du Plessis, L., Dellicour, S., Theze, J., Carvalho, R. O., Baele, et al
2018; 361 (6405): 894+
- **Persistence of Yellow fever virus outside the Amazon Basin, causing epidemics in Southeast Brazil, from 2016 to 2018** *PLOS NEGLECTED TROPICAL DISEASES*
de Rezende, I., Sacchetto, L., de Mello, E., Alves, P., de Melo Iani, F., Ribeiro Adelino, T., Duarte, M., Furtado Cury, A., Leal Bernardes, A., Santos, T., Pereira, L., Teixeira Dutra, M., Ramalho, et al
2018; 12 (6): e0006538
- **Serum soluble mediators as prognostic biomarkers for morbidity, disease outcome, and late-relapsing hepatitis in yellow fever patients.** *Clinical immunology (Orlando, Fla.)*
Fradico, J. R., Campi-Azevedo, A. C., Speziali, E., do Valle Antonelli, L. R., Peruhype-Magalhães, V., de Rezende, I. M., Alves, P. A., Pascoal-Xavier, M. A., Pereira, L. S., Dutra, M. R., Ramalho, D. B., Cenachi, A., de Paula, et al
2023: 109321
- **Yellow Fever Molecular Diagnosis Using Urine Specimens during Acute and Convalescent Phases of the Disease.** *Journal of clinical microbiology*
de Rezende, I. M., Oliveira, G. F., Costa, T. A., Khan, A., Pereira, L. S., Santos, T. A., Alves, P. A., Calzavara-Silva, C. E., Martins-Filho, O. A., Teixeira-Carvalho, A., LaBeaud, A. D., Drumond, B. P.
2022: e0025422
- **Urban risk factors for human Rift Valley fever virus exposure in Kenya.** *PLOS global public health*
Gerken, K. N., Mutuku, F. M., Ndenga, B. A., Agola, G. A., Migliore, E., Fabre, E. P., Malumbo, S., Shaita, K. N., Rezende, I. M., LaBeaud, A. D.
2022; 2 (7): e0000505
- **Characterizing the Severity of SARS-CoV-2 Variants at a Single Pediatric Center** *FRONTIERS IN MEDICINE*

Khan, A., Ichura, C., Wang, H., Rezende, I., Sahoo, M. K., Huang, C., Solis, D., Sibai, M., Yamamoto, F., Nyathi, S., Bayrau, B., Pinsky, B. A., LaBeaud, et al
2022; 9: 896352

- **URINE AS A POSSIBLE RESOURCE FOR YELLOW FEVER DIAGNOSIS**

Rezende, I. M., Pereira, L. S., Khan, A., Oliveira, G. G., Alkifeles, T., Goncalves, A. P., Alves, P. A., Martins-Filho, O. A., Teixeira-Carvalho, A., LaBeaud, A., Drumond, B. P.
AMER SOC TROP MED & HYGIENE.2021: 187

- **RISK-STRATIFYING YELLOW FEVER PATIENTS AT THE TIME OF ADMISSION**

McClure, M. A., Rezende, I. M., Kang, A. S., Pereira, L. S., Cenachi, A., Alves, P. A., Teixeira-Carvalho, A., Martins-Filho, O. A., Drumond, B. P., Desiree LaBeaud, A.
AMER SOC TROP MED & HYGIENE.2021: 436

- **DESCRIBING PREDICTOR RISK FACTORS FOR LATE-RELAPSING HEPATITIS AFTER YELLOW FEVER**

Rezende, I. M., McClure, M., Pereira, L. S., Fradico, J. B., Kang, A. S., Goncalves, A. P., Oliveira, G. G., Alkifeles, T., Alves, P. A., Xavier, M. P., Martins-Filho, O. A., Teixeira-Carvalho, A., Drumond, et al
AMER SOC TROP MED & HYGIENE.2021: 270-271

- **Neighbor danger: Yellow fever virus epizootics in urban and urban-rural transition areas of Minas Gerais state, during 2017-2018 yellow fever outbreaks in Brazil. *PLoS neglected tropical diseases***

Sacchetto, L., Silva, N. I., Rezende, I. M., Arruda, M. S., Costa, T. A., de Mello, É. M., Oliveira, G. F., Alves, P. A., de Mendonça, V. E., Stumpp, R. G., Prado, A. I., Paglia, A. P., Perini, et al
2020; 14 (10): e0008658

- **Yellow Fever Virus Genotyping Tool and Investigation of Suspected Adverse Events Following Yellow Fever Vaccination *VACCINES***

de Rezende, I., Alves, P., Arruda, M., Goncalves, A., Oliveira, G., Pereira, L., Dutra, M., Campi-Azevedo, A., Valim, V., Tourinho, R., de Oliveira, J., Calzavara, C., Said, et al
2019; 7 (4)

- **Circulation of Chikungunya virus East-Central-South Africa genotype during an outbreak in 2016-17 in Piauí State, Northeast Brazil *REVISTA DO INSTITUTO DE MEDICINA TROPICAL DE SAO PAULO***

Cardoso, F., de Rezende, I., Teixeira Barros, E., Sacchetto, L., de Carvalho Souza Garces, T., Oliveira Silva, N., Alves, P., Soares, J., Kroon, E., Toledo da Cunha Pereira, A., Drumond, B., Ferreira, G.
2019; 61: e57

- **Evidence of natural Zika virus infection in neotropical non-human primates in Brazil *SCIENTIFIC REPORTS***

Terzian, A. B., Zini, N., Sacchetto, L., Rocha, R., Pereira Parra, M., Del Sarto, J., Fialho Dias, A., Coutinho, F., Rayra, J., da Silva, R., Costa, V., Couto De Azevedo Fernandes, N., Ressio, et al
2018; 8: 16034

- **Molecular surveillance of dengue in Minas Gerais provides insights on dengue virus 1 and 4 circulation in Brazil *JOURNAL OF MEDICAL VIROLOGY***

Dutra, K., Drumond, B., de Rezende, I., Nogueira, M., Lopes, D., Calzavara Silva, C., Siqueira Ferreira, J., dos Santos, L.
2017; 89 (6): 966-73