CURRICULUM VITAE
The Johns Hopkins University School of Medicine

Seth D. Judson, MD

9/19/2023

DEMOGRAPHIC AND PERSONAL INFORMATION

Current Appointments

2022-present Infectious Diseases Fellow, Department of Medicine, Johns Hopkins University School of Medicine

Personal Data

Business Address: 1830 E. Monument St, Rm 450B, Baltimore, MD 21205
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Education and Training

2010-2014 B.S. in Biology with Honors and Distinction, Stanford University, Palo Alto, CA
2014-2015 NIH Postbac IRTA program, Rocky Mountain Laboratories, Hamilton, MT (Advisor: Vincent Munster PhD)
2015-2019 M.D., David Geffen School of Medicine at UCLA, Los Angeles, CA
2019-2022 Internal Medicine Residency, Department of Medicine, University of Washington, Seattle, WA (Categorical Track, Global Health Pathway)
2022-present Infectious Diseases Fellowship, Department of Medicine, Johns Hopkins University, Baltimore, MD
2023-present MHS, Graduate Training Programs in Clinical Investigation, Johns Hopkins University, Baltimore, MD

PUBLICATIONS

Original Research

1. Karp DS, **Judson S**, Daily G, Hadly EA. Molecular diagnosis of bird-mediated pest consumption in tropical farmland. *SpringerPlus*. 2014;3(630):1-8.

2. Prescott J, Bushmaker T, Fischer R, Miazgowicz, K, **Judson S**, Munster VJ. Postmortem stability of Ebola virus. *Emerging Infectious Diseases*. 2015;2(5):856–859.

3. **Judson SD**, Frank HK, Hadly EA. Bartonellae are Prevalent and Diverse in Costa Rican Bats and Bat Flies. *Zoonoses and Public Health*. 2015;62(8):609-17.

4. Fischer R*, **Judson S***, Miazgowicz K, Bushmaker T, Prescott J, Munster VJ. Ebola virus stability on surfaces and in fluids in simulated outbreak environments. *Emerging Infectious Diseases*. 2015;21(7):1243-6. *Co-first authors

5. Fischer RJ, **Judson S,** Miazgowicz K, Bushmaker T, Munster VJ. Ebola virus persistence in semen ex vivo. *Emerging Infectious Diseases*. 2016;22(2):289.

6. Hoenen T, Groseth A, Rosenke K, Fischer RJ, Hoenen A, **Judson SD**, Martellaro C, Falzarano D, Marzi A, Squires RB, Wollenberg KR, de Wit E, Prescott J, Safronetz D, van Doremalen N, Bushmaker T, Feldmann F, McNally K, Bolay FK, Fields B, Sealy T, Rayfield M, Nichol ST, Zoon KC, Massaquoi M, Munster VJ, Feldmann H. Nanopore Sequencing as a Rapidly Deployable Ebola Outbreak Tool. *Emerging Infectious Diseases*. 2016;22(2):331-4.

7. Frank HK, Mendenhall CD, **Judson SD**, Daily GC, Hadly EA. Anthropogenic impacts on Costa Rican bat parasitism are sex specific. *Ecology and Evolution*. 2016;6(14):4898–4909.

8. **Judson SD,** Fischer R, Judson A, Munster VJ. Ecological Contexts of Index Cases and Spillover Events of Different Ebolaviruses. *PLOS Pathogens*. 2016;12(8):1-17.

9. Fischer RJ, Bushmaker T, **Judson SD**, Munster VJ. Comparison of the Aerosol Stability of 2 Strains of Zaire ebolavirus from the 1976 and 2013 Outbreaks. *Journal of Infectious Diseases*. 2016;214(3):290-293.

10. **Judson SD**, LeBreton, M, Fuller, T, Hoffman, RM, Njabo, K, Brewer, TF, Dibongue, E, Diffo, J, Kameni, JF, Loul, S, Nchinda, GW, Njouom, R, Nwobegahay, J, Takuo, JM, Torimiro, JN, Wade, A, & Smith, TB. Translating Predictions of Zoonotic Viruses for Policymakers. *EcoHealth*. 2018;15(1):52-62.

11. Fischer RJ, Morris DH, van Doremalen N, Sarchette S, Matson MJ, Bushmaker T, Yinda CK, Seifert SN, Gamble A, Williamson B, **Judson SD**, de Wit E, Lloyd-Smith JO, Munster VJ. Effectiveness of N95 Respirator Decontamination and Reuse against SARS-CoV-2 Virus. *Emerging Infectious Disease*. 2020;26(9):2253-2255.

12. **Judson SD**, Njabo KY, Torimiro JN. Regional vulnerability for COVID-19 in Cameroon. *Pan African Medical Journal*. 2020;31(1):16.

13. Avanzato VA, Matson MJ, Seifert SN, Pryce R, Williamson BN, Anzick SL, Barbian K, **Judson SD**, Fischer ER, Martens C, Bowden TA, de Wit E, Riedo FX, Munster VJ. Case Study: Prolonged infectious SARS-CoV-2 shedding from an asymptomatic immunocompromised cancer patient. *Cell*. 2020;183(7):1901-1912.

14. Baker SM, Leedy DJ, Klafter JA, Zhang Y, Secrest KM, Osborn TR, Cheng RK, **Judson SD**, Merel SE, Mikacenic C, Bhatraju PK, Liles W. Clinical presentation, complications, and outcomes of hospitalized COVID-19 patients in an academic center with a centralized palliative care consult service. *Health Science Reports*. 2021;4(4):e423.

15. **Judson S**, Torimiro J, Pigott D, Maima A, Mostafa A, Samy A, Rabinowitz P, Njabo K. COVID-19 data reporting systems in Africa reveal insights for future pandemics. *Epidemiology and Infection*. 2022;150:e119

16. **Judson, SD** & Munster, VJ, The Multiple Origins of Ebola Disease Outbreaks, *The Journal of Infectious Diseases*. 2023; jiad352, doi.org/10.1093/infdis/jiad352

Review Articles

1. **Judson S**, Prescott J, Munster V. Understanding Ebola Virus Transmission. *Viruses*. 2015;*7*(2):511–521.

2. Munster V, **Judson SD**, Letko M. Ecology of Emerging Zoonotic Viruses. *Oxford Bibliographies in Ecology*. 2018.

3. **Judson SD,** Munster, VJ. Nosocomial Transmission of Emerging Viruses via Aerosol-Generating Medical Procedures. *Viruses*. 2019;11(10):940.

4. **Judson SD**, Munster VJ. A Framework for Nosocomial Transmission of Emerging Coronaviruses. *Infection Control & Hospital Epidemiology*, 2020;42(5):639-641.

5. **Judson S**, Rabinowitz P. Zoonoses and global epidemics. *Current Opinion in Infectious Diseases*. 2021;34(5):385-392.

Case Reports

1. Adamson PC, **Judson SD**, Klausner JD, Kelesidis T. Neisseria gonorrhoeae as a Rare Cause of Preseptal Cellulitis. *Sexually Transmitted Diseases*. 2019;46(12),813-815.

Editorials

1. **Judson SD**. A Cab Ride. *Am J Trop Med Hyg*. 2019;101(3):478

2. **Judson SD,** van Doremalen N, Munster VJ. (2020). Stability and Viability of SARS-CoV-2. Reply *The New England Journal of Medicine*. 2020;382(20):1965-1966

3. **Judson SD** and Munster VJ. Ecology and Evolution of Coronaviruses: Implications for Human Health. *Front. Public Health*. 2022;10:926677.

Creative Writing

1. **Judson S.** Rodin's "Large Left Hand 1903." Hektoen International: A Journal of Medical Humanities. 2016;8(4).

2. **Judson S.** The Terme Boxer's Trauma. Hektoen International: A Journal of Medical Humanities. 2018;10(4).

FUNDING

2013 Major Grant, Stanford University
Project: "Bartonella in Costa Rican Bats and Bat Flies"

2014-15 Postbaccalaureate Intramural Research Training Award, National Institutes of Health
Project: "Ebola virus Transmission and Ecology"

2016 Global Short Term Training Program Grant, David Geffen School of Medicine
Project: "Translating Predictions of Zoonotic Viruses for Policymakers"

2023-present Research Training in Microbial Diseases (T32 AI007291-32)

CLINICAL ACTIVITIES

Clinical Focus

Emerging Infectious Diseases, Zoonoses, Vector-borne diseases

Medical, other state/government licensure

7/1/2021 Washington, 6118305

Boards, other specialty certification

10/12/2022 Internal Medicine, 443828

EDUCATIONAL ACTIVITIES

Educational Focus

One Health, Planetary Health

Teaching

Classroom instruction

5/18/2020 Invited speaker, Undergraduate Special Topics Course in Pandemics
University of California Santa Barbara

12/30/2021 Lecture for UW Internal Medicine Residency Academic Half Day:
"Medicine for A Changing Planet: Zoonoses and Pandemic Preparedness"
University of Washington School of Medicine, Seattle, WA

5/16/2022 Invited speaker, Undergraduate Special Topics Course in Pandemics
University of California Santa Barbara

Clinical instruction

2019-2022 Internal Medicine Residency, University of Washington
Led didactics and bedside teaching for medical students and residents

2022-present Infectious Disease Fellowship, Johns Hopkins University School of Medicine
Teach medical students and residents rotating on their Infectious Disease electives at JHU

CME instruction

Lecturer, Johns Hopkins Division of Infectious Diseases Grand Rounds Case Presentations
8/2/2022 Antimicrobial Resistance, One Health, and Campylobacter
8/9/2022 Gonococcal Conjunctivitis and Preseptal Cellulitis
9/13/2022 Disseminated VZV and Infectious Causes of Heart Block
9/20/2022 Infectious Mimickers of Malignancy

11/22/2022 Actinomycosis: Traditional Manifestations and Treatment
11/29/2022 Misdiagnosis of Lyme Disease and Subacute Bacterial Endocarditis
12/6/2022 Salmonella Bacteremia and Risk for Endovascular Infection
12/13/2022 Streptococcus bovis/Streptococcus equinus complex and colon cancer
1/10/2023 A Rare Case of Non-typhoidal Salmonella empyema
1/17/2023 Treatment for Acute Toxoplasmosis Encephalitis
1/24/2023 Amebic Liver Abscess Management
5/16/2023 Cryptococcal Pneumonia and Risk for CNS Involvement
5/23/2023 Corynebacterium diphtheriae disseminated infection
7/25/2023 Pasteurella: A Rare Zoonotic Source of Endocarditis

Educational Program Building / Leadership

3/2021-9/2023 Designed an online curriculum with case studies and clinical competencies in One Health and Planetary Health for residents and medical students called "Medicine for a Changing Planet." Wrote cases on Pandemic Preparedness and Emerging Zoonotic Diseases including Marburg and Nipah viruses. https://www.medicineforachangingplanet.org/

RESEARCH ACTIVITIES

Research Focus

Emerging Zoonoses, Pandemic Preparedness, Hemorrhagic Fever viruses, Bat-borne pathogens, Arboviruses

6/2010-9/2010 Research Assistant, Department of Ecology, University of California Santa Barbara
Advisors: Alice Nguyen PhD, Armand Kuris PhD
Studied the host specificity of a local parasitic trematode through experimental infections.

6/2012-9/2012 Research Assistant, Department of Biology, Stanford University
Advisors: Gretchen Daily PhD, Elizabeth Hadly PhD
Identified pest consumption and ecosystem services of Costa Rican bird species through molecular methods.

9/2013-12/2013 Research Assistant, Universidad de Desarrollo, Santiago, Chile
Advisor: Cecilia Vial PhD
Investigated the genetic similarity of Andes virus isolates from rodents and human cases.

1/2013-6/2014 Honors Thesis, Department of Biology, Stanford University
Advisors: Elizabeth Hadly PhD, Stanley Falkow PhD, Lucy Tompkins MD-PhD
Determined the prevalence and genetic relationships of Bartonella bacteria that infect Costa Rican bats and bat flies in order to elucidate reservoir-vector dynamics as well as potential for disease in humans.

7/2014-2015 NIH Post-bacc IRTA Fellow, Virus Ecology Unit, National Institutes of Health
Advisor: Vincent Munster PhD
Designed experiments to test the stability of the outbreak strain of Ebola virus on surfaces and in bodily fluids. Investigated the ecology and transmission of different Ebolavirus species through wildlife sampling and geospatial modelling. Developed diagnostics to be used at Ebola treatment units during the West African epidemic.

12/2015-2017 Lead author, David Geffen School of Medicine, Congo Basin Institute
Advisors: Risa Hoffman MD, Timothy Brewer MD, Tom Smith PhD
Created a project to make risk maps of emerging zoonotic viruses more useful for national policymakers. Aggregated predictive models for five hemorrhagic fever viruses and brought together a team of physicians, ecologists, and public health researchers to assess predictions in Yaoundé, Cameroon. Developed improved risk maps and methodology based on expert feedback.

3/2019-5/2019 Epidemiology Elective Program, Arbovirus Branch, Centers for Disease Control and Prevention
Advisor: Marc Fischer MD

Investigated the epidemiology and diagnosis of emerging arboviruses. Created a CDC fact sheet and literature review on Mayaro virus epidemiology and diagnostics. Designed a clinical diagnostic tool for yellow fever vaccine adverse events.

1/2020-7/2022 Global Health Pathway Resident, University of Washington
Advisor: Peter Rabinowitz MD
Formed an international collaboration to investigate COVID-19 risk and data reporting in African countries. Developed regional vulnerability maps for COVID-19 in Cameroon. Created a framework for characterizing nosocomial transmission of coronaviruses and emerging viruses. Reviewed origins of zoonotic epidemics.

7/2022-present Infectious Diseases Fellow, Johns Hopkins University
Advisor: David Dowdy MD PhD
Developing risk maps, surveillance methods, and transmission modeling tools to inform diagnostic resource allocation for Yellow Fever in West Africa. Analyzing the spatiotemporal patterns and dynamics of historic Yellow Fever outbreaks in order to develop forecasts. Working to improve access to international data for pandemic preparedness and humanitarian response.

SYSTEM INNOVATION AND QUALITY IMPROVEMENT ACTIVITIES

None

ORGANIZATIONAL ACTIVITIES

Editorial Activities

Editorial Board appointments

2020-present *Frontiers in Public Health, Frontiers in Medicine*
Guest Associate Editor for Infectious Diseases - Surveillance, Prevention and Treatment
Topic Editor, "Ecology and Evolution of Coronaviruses: Implications for Human Health"

2021-present *Therapeutic Advances in Infectious Diseases*, Editorial Board

Journal peer review activities

2015-present *Infectious Diseases of Poverty*
2020-present *Open Forum Infectious Diseases*
2023-present *Therapeutic Advances in Infectious Diseases*

Professional Societies

2016-present American Society of Tropical Medicine and Hygiene
2016-present International Society of Infectious Diseases
2018-present American College of Physicians
2020-present Infectious Disease Society of America

RECOGNITION

Awards, Honors

2014 Firestone Medal for Excellence in Undergraduate Research, Stanford University
2014 Stephen Fox Award, Most Outstanding Biology Major, Stanford University
2014 Award for Excellence in Honors Thesis Presentation, Stanford University
2014-2015 NIH Postbaccalaureate Intramural Research Training Award
2023 ID Week Trainee Abstract Travel Award

Invited Talks

2023 "The Origins of Ebolavirus Emergence: Implications for Future Outbreaks," NIH/NIAID Virus Ecology symposium keynote speaker, Rocky Mountain Laboratories, Hamilton, Montana

OTHER PROFESSIONAL ACCOMPLISHMENTS

Posters

2014 **Judson, S.,** Frank H, Hadly E, "Bats to Bedside: Diversity and prevalence of Bartonella in Costa Rican bats and bat flies reveal potential for disease spillover," Ecology and Evolution of Infectious Disease conference, Colorado State University

2018 **Judson SD**, LeBreton, M, Fuller, T, Hoffman, RM, Njabo, K, Brewer, TF, Dibongue, E, Diffo, J, Kameni, JF, Loul, S, Nchinda, GW, Njouom, R, Nwobegahay, J, Takuo, JM, Torimiro, JN, Wade, A, & Smith, TB. "Translating Predictions of Zoonotic Viruses for Policymakers: Perspectives from Cameroon," American Society of Tropical Medicine and Hygiene, New Orleans

2020 **Judson, S.D**., Munster V.J. "Aerosol-Generating Medical Procedures: Transmission of SARS-COV-2 and Emerging Viruses," IDWeek

2022 **Judson, S.D.** "Re-examining the Origins of Ebola virus Emergence," IDWeek, Washington DC

2023 **Judson, S.D.** "Yellow Fever Dynamics in Ghana During the Past Century." IDWeek, Boston

Oral/Podium Presentations

2013 Eleventh Annual Species Interactions Workshop, Stanford University. "Bats, bat flies and Bartonella: parasite and disease risk in southern Costa Rica," Palo Alto 2013

2014 Achauer Honors Symposium, Stanford University. "Bats to Bedside: Diversity and prevalence of Bartonella in Costa Rican bats and bat flies," Palo Alto, 2014

2016 UCLA World Health Night, University of California Los Angeles. "Predicting emerging zoonotic viruses in Cameroon," Los Angeles, 2016

2021 IDWeek. "COVID-19 Vulnerability and Data Reporting in Africa: Reflections from Cameroon." Session: Disparities in COVID Access to Care and Diagnostic Testing, 2021