Stanford



Joelle Ivy Rosser

Assistant Professor of Medicine (Infectious Diseases)

Medicine - Infectious Diseases

CLINICAL OFFICE (PRIMARY)

- **Infectious Disease**

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Bio

CLINICAL FOCUS

- Infectious Disease

ACADEMIC APPOINTMENTS

- Assistant Professor, Medicine - Infectious Diseases
- Member, Maternal & Child Health Research Institute (MCHRI)

BOARDS, ADVISORY COMMITTEES, PROFESSIONAL ORGANIZATIONS

- Global Health Faculty Fellow, Center for Innovation in Global Health (CIGH) (2022 - present)

PROFESSIONAL EDUCATION

- Fellowship: Stanford University Infectious Disease Fellowships (2022) CA
- Board Certification: Infectious Disease, American Board of Internal Medicine (2020)
- Board Certification: Internal Medicine, American Board of Internal Medicine (2017)
- Residency: University of Washington Medical Center Dept of Medicine (2017) WA
- Medical Education: Emory University Medical School (2014) GA
- Fellowship, Stanford University , Infectious Diseases & Geographic Medicine (2022)
- MS, Stanford University , Epidemiology & Clinical Research (2021)
- DTM&H, Gorgas Memorial Institute of Tropical & Preventive Medicine , Tropical Medicine (2018)
- Board Certification, American Board of Internal Medicine (2017)
- Residency, University of Washington , Internal Medicine (2017)
- MD, Emory University , Medicine (2014)
- BA, University of California, San Diego , African Studies (2007)
- BS, University of California, San Diego , Human Biology (2007)

COMMUNITY AND INTERNATIONAL WORK

- Drones & Dengue, Indonesia
- Revitalising Informal Settlements and their Environments, Indonesia & Fiji
- COVID-19 FRACTIONAL VACCINE TRIAL

LINKS

- Rosser Lab Homepage: https://rosserlab.stanford.edu

Teaching

GRADUATE AND FELLOWSHIP PROGRAM AFFILIATIONS

- Epidemiology (Masters Program)
- Infectious Diseases (Fellowship Program)

Publications

PUBLICATIONS

- **Drought dynamics explain once in a century yellow fever virus outbreak in Brazil with implications for climate change.** *Science advances*
  Caldwell, J. M., Grenfell, B., Vecchi, G., Rosser, J. I.
  2026; 12 (33): eadz6832

- **Immunogenicity and reactogenicity of fractional vs. full booster doses of COVID-19 vaccines: A non-inferiority, randomized, double-blind, phase IV clinical trial in Pakistan.** *Vaccine*
  Hussain, H. S., Yousafzai, M. T., Iqbal, J., Aslam, Z. M., Irum Fatima, M. S., Kehkashan Begum, M. S., Rabia Zuberi, M. S., Farheen Aftab, M. S., Mujahid, W., Irfan Ghaffar, M. S., Afshan Piyarali, M. S., Miqdad Ali, M. S., Charu, et al
  2026; 88: 128918

- **Maternal and child health challenges during and after flooding: a qualitative study in Makassar, Indonesia.** *BMC public health*
  Goel, R., Tarpenning, M. S., Ansar, J., Ansariadi, A., Syahrani, Z. P., Anggraeni, N., Coombe, K. D., Weber, W., Blythe, E., Ansariadi, A., Rosser, J. I.
  2026

- **Comparison of dried blood spot (DBS) and serum samples for measuring dengue seroprevalence in a healthy adult community in Makassar, Indonesia** *MALAYSIAN JOURNAL OF MICROBIOLOGY*
  Tamodding, N., Sjahril, R., Rosser, J., Katu, S., Patellongi, I., Rahma, N., Rahmi, S., Amiruddin, M., Emelia, N., Wahid, I.
  2026; 22 (2): 236-241

- **Enhancing Aedes aegypti breeding site detection: A deep learning approach to tire identification in unmanned aerial vehicle imagery from urban Indonesia.** *Remote sensing applications : society and environment*
  Hassan, M. M., Chamberlin, A. J., Tarpenning, M. S., Weber, W. C., Coombe, K. D., De Leo, G. A., Junaid, M., Soma, A. S., , Rosser, J. I.
  2026; 42

- **New frontiers for unmanned aerial vehicles in planetary health research.** *BMC global and public health*
  Bramante, J. T., Tarpenning, M. S., Woo, K. E., Chamberlin, A. J., Coombe, K. D., Rosser, J. I.
  2026; 4 (1)

- **Antispike IgG antibody decay after immunisation with fractional versus full booster doses of COVID-19 vaccines: a 6-month longitudinal analysis of the FRACT-COV trial in Brazil.** *BMJ public health*
  Barros Verruck, J., Moreira Puga, M. A., de Oliveira, R. D., Vieira da Silva, P., Charu, V., Hedlin, H., Lu, D., Zhang, A., Ritter, V., Shaw, B., Rosser, J. I., Seidman, J. C., Carter, et al
  2025; 3 (2): e002331

- **Randomised, placebo-controlled trial of oral hymecromone in adults with pulmonary hypertension.** *Thorax*
  Czepiel, K., Nagy, N., Panjalingam, T., Kalinowski, A., Frymoyer, A. R., Karmouty-Quintana, H., Gu, B., Hedlin, H., Kaber, G., Dobrota Lai, S., Rosser, J. I., Bollyky, P. L., de Jesus Perez, et al
  2025

- **Immunogenicity and reactogenicity of fractional vs. full booster doses of COVID-19 vaccines: a non-inferiority, randomised, double-blind, phase IV clinical trial in Brazil.** *Lancet regional health. Americas*
  Moreira Puga, M. A., Dias de Oliveira, R., Vieira da Silva, P., Charu, V., Hedlin, H., Lu, D., Zhang, A., Shaw, B., Rosser, J. I., Seidman, J. C., Carter, A. S., Qamar, F. N., Luby, et al
  2025; 44: 101031

- **Comparison of unmanned aerial vehicle imaging to ground truth walkthroughs for identifying and classifying trash sites serving as potential Aedes aegypti breeding grounds.** *Parasites & vectors*
  Tarpenning, M. S., Bramante, J. T., Coombe, K. D., Woo, K. E., Chamberlin, A. J., Mutuku, P. S., De Leo, G. A., LaBeaud, A. D., Ndenga, B. A., Mutuku, F. M., Rosser, J. I.
  2025; 18 (1): 93

- **Seroprevalence, incidence estimates, and environmental risk factors for dengue, chikungunya, and Zika infection amongst children living in informal urban settlements in Indonesia and Fiji.** *BMC infectious diseases*
  Rosser, J. I., Openshaw, J. J., Lin, A., Taruc, R. R., Tela, A., Tamodding, N., Abdullah, N. P., Amiruddin, M., Buyukcangaz, E., Barker, S. F., Turagabeci, A., , Leder, K., et al
  2025; 25 (1): 51

- **Development of a trash classification system to map potential Aedes aegypti breeding grounds using unmanned aerial vehicle imaging.** *Environmental science and pollution research international*
  Rosser, J. I., Tarpenning, M. S., Bramante, J. T., Tamhane, A., Chamberlin, A. J., Mutuku, P. S., De Leo, G. A., Ndenga, B., Mutuku, F., LaBeaud, A. D.
  2024

- **Top 5 Things Health Professions Students Should Know About Ecology and Waste Management.** *AMA journal of ethics*
  Rosser, J. I., Lavery, O. X., Christofferson, R. C., Nasoro, J., Mutuku, F. M., LaBeaud, A. D.
  2024; 26 (2): E132-141

- **Impact of the COVID-19 Pandemic on Tuberculosis Testing and Treatment at a Tertiary Hospital in Zambia.** *The American journal of tropical medicine and hygiene*
  Rosser, J. I., Phiri, C., Bramante, J. T., Fwoloshi, S., Kankasa, C., Lungu, P., Chanda, R., Chipimo, P., Mulenga, L., Claassen, C. W., Chanda, D.
  2023

- **Re-emergence of arbovirus diseases in the State of Rio de Janeiro, Brazil: The role of simultaneous viral circulation between 2014 and 2019.** *One health (Amsterdam, Netherlands)*
  Man, O. M., Fuller, T. L., Rosser, J. I., Nielsen-Saines, K.
  2022; 15: 100427

- **Oral hymecromone decreases hyaluronan in human study participants.** *The Journal of clinical investigation*
  Rosser, J. I., Nagy, N., Goel, R., Kaber, G., Demirdjian, S., Saxena, J., Bollyky, J. B., Frymoyer, A. R., Pacheco-Navarro, A. E., Burgener, E. B., Rajadas, J., Wang, Z., Arbach, et al
  2022; 132 (9)

- **Reemergence of yellow fever virus in southeastern Brazil, 2017-2018: What sparked the spread?** *PLoS neglected tropical diseases*
  Rosser, J. I., Nielsen-Saines, K., Saad, E., Fuller, T.
  2022; 16 (2): e0010133

- **The Effect of Healthcare Worker Density on Maternal Health Service Utilization in Sub-Saharan Africa.** *The American journal of tropical medicine and hygiene*
  Rosser, J. I., Aluri, K. Z., Kempinsky, A., Richardson, S., Bendavid, E.
  2022; 106 (3): 939-944

- **Case-control study evaluating risk factors for SARS-CoV-2 outbreak amongst healthcare personnel at a tertiary care center.** *American journal of infection control*
  Rosser, J. I., Tayyar, R., Giardina, R., Kolonoski, P., Kenski, D., Shen, P., Steinmetz, L. M., Hung, L., Xiao, W., Bains, K., Morrison, T., Madison, A., Chang, et al
  2021

- **Retrospective Review of Virologic and Immunologic Response in Treatment-Experienced Patients on Third-Line HIV Therapy in Lusaka, Zambia.** *Journal of the International Association of Providers of AIDS Care*
  Zulu, P. M., Toeque, M., Hachaambwa, L., Chirwa, L., Fwoloshi, S., Siwingwa, M., Mbewe, M., Rosser, J. I., Stafford, K. A., Lindsay, B., Mulenga, L., Claassen, C. W.

2021; 20: 23259582211022463

- **SARS-CoV-2 Seroprevalence in Healthcare Personnel in Northern California Early in the COVID-19 Pandemic.** *Infection control and hospital epidemiology*
  Rosser, J. I., Roltgen, K., Dymock, M., Shepard, J., Martin, A., Hogan, C. A., Blomkalns, A., Mathew, R., Parsonnet, J., Pinsky, B. A., Maldonado, Y. A., Boyd, S. D., Chang, et al
  2020: 1–27

- **Characteristics and outcomes of coronavirus disease patients under nonsurge conditions, northern California, USA, March–April 2020** *Emerging Infectious Diseases*
  Ferguson, J., Rosser, J., Quintero, O., Scott, J., Subramanian, A., Gumma, M., Rogers, A., Kappagoda, S.
  2020

- **Cervical Cancer Stigma in Rural Kenya: What Does HIV Have to Do with It?** *JOURNAL OF CANCER EDUCATION*
  Rosser, J. I., Njoroge, B., Huchko, M. J.
  2016; 31 (2): 413–18

- **Cervical Cancer Screening Knowledge and Behavior among Women Attending an Urban HIV Clinic in Western Kenya** *JOURNAL OF CANCER EDUCATION*
  Rosser, J. I., Njoroge, B., Huchko, M. J.
  2015; 30 (3): 567–72

- **Barriers to Cervical Cancer Screening in Rural Kenya: Perspectives from a Provider Survey** *JOURNAL OF COMMUNITY HEALTH*
  Rosser, J. I., Hamisi, S., Njoroge, B., Huchko, M. J.
  2015; 40 (4): 756–61

- **Changing knowledge, attitudes, and behaviors regarding cervical cancer screening: The effects of an educational intervention in rural Kenya** *PATIENT EDUCATION AND COUNSELING*
  Rosser, J. I., Njoroge, B., Huchko, M. J.
  2015; 98 (7): 884–89

- **Knowledge about cervical cancer screening and perception of risk among women attending outpatient clinics in rural Kenya** *INTERNATIONAL JOURNAL OF GYNECOLOGY & OBSTETRICS*
  Rosser, J. I., Njoroge, B., Huchko, M. J.
  2015; 128 (3): 211–15

- **Men's knowledge and attitudes about cervical cancer screening in Kenya** *BMC WOMENS HEALTH*
  Rosser, J. I., Zakaras, J. M., Hamisi, S., Huchko, M. J.
  2014; 14: 138

- **Cancers That U.S. Physicians Believe the HPV Vaccine Prevents: Findings from a Physician Survey, 2009** *JOURNAL OF WOMENS HEALTH*
  Saraiya, M., Rosser, J. I., Cooper, C.
  2012; 21 (2): 111–17

- **Effect of physiological levels of caffeine on Ca2+ handling and fatigue development in Xenopus isolated single myofibers.** *American journal of physiology. Regulatory, integrative and comparative physiology*
  Rosser, J. I., Walsh, B., Hogan, M. C.
  2009; 296 (5): R1512-7