



Ronan Arthur

Postdoctoral Scholar, Infectious Diseases

Bio

BIO

Ronan Arthur (PhD) is a postdoctoral scholar in the Stanford School of Medicine and in the Department of Biology. Ronan studies adaptive behavior and community trust during epidemics through mathematical modeling techniques and empirical work in Liberia. Current research includes: hospital hand hygiene in Liberia; hospital ventilation in rural Liberia; adaptive behavior during epidemics with age-structure; quantifying gene-culture co-evolution; trust of government and health system during COVID-19 in Liberia; and agent-based modeling of COVID-19 and Ebola Virus Disease.

STANFORD ADVISORS

- Jason Andrews, Postdoctoral Faculty Sponsor
- Stephen Luby, Postdoctoral Research Mentor

Publications

PUBLICATIONS

- **Community trust of government and non-governmental organizations during the 2014-16 Ebola epidemic in Liberia.** *PLoS neglected tropical diseases*
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- **Barriers and Opportunities for Sustainable Hand Hygiene Interventions in Rural Liberian Hospitals.** *International journal of environmental research and public health*
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- **Adaptive social contact rates induce complex dynamics during epidemics.** *PLoS computational biology*
Arthur, R. F., Jones, J. H., Bonds, M. H., Ram, Y., Feldman, M. W.
2021; 17 (2): e1008639
- **Risk and Response to Biological Catastrophe in Lower Income Countries.** *Current topics in microbiology and immunology*
Luby, S., Arthur, R.
2019
- **Contact structure, mobility, environmental impact and behaviour: the importance of social forces to infectious disease dynamics and disease ecology** *PHILOSOPHICAL TRANSACTIONS OF THE ROYAL SOCIETY B-BIOLOGICAL SCIENCES*
Arthur, R. F., Gurley, E. S., Salje, H., Bloomfield, L. S., Jones, J. H.
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- **Contact structure, mobility, environmental impact and behaviour: the importance of social forces to infectious disease dynamics and disease ecology** *Philosophical Transactions of the Royal Society B*
Arthur, R. F., Gurley, E. S., Salje, H., Bloomfield, L. S., Jones, J. H.

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- **Understanding Tribal Fates** *SCIENCE*

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