

Stanford



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Bio

BIO

How does a changing epidemic landscape impact people's perceptions of risk and their behavior? How might these changes impact disease dynamics? These questions are more complex than they seem because they involve endogenous, interacting elements in a system.

Ronan studies the interaction between the environment, infectious disease dynamics, and human behavior change. He utilizes techniques from geography and global health in empirical work on Ebola Virus Disease in Liberia and HIV in Uganda. He also utilizes mathematical biology and nonlinear dynamics tools to model these interacting complex systems.

Publications

PUBLICATIONS

- **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.
2017; 372 (1719)
- **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.
2016; 372 (1719)
- **Understanding Tribal Fates** *SCIENCE*
Arthur, R., Diamond, J.
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