

present an Interdisciplinary Seminar with

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***Cultural inheritance
mechanics: Their affordances
for evolutionary adaptation
and applications to policy
analysis***



3:30 PM*, OCTOBER 15, 2019

Hallam Auditorium, Room 206@NIMBioS · 1122 Volunteer Blvd.

****Reception & refreshments at 3 pm***

Abstract: Inheritance, meaning organisms recreating their information states in others, is a fundamental prior for evolution to produce adaptations. Novel insights about adaptation have emerged from formal mathematical models for mechanics of cultural inheritance. Such models often point to emergent phenomena from interactions among individuals being much more than the sum of the individuals' cognitions. I will illustrate such cases from my work on capuchin monkeys and human religious traditions. More practically, strategically intervening in cultural inheritance pathways presents numerous opportunities for improving public policy through analysis, such as my ongoing work to improve HIV prophylaxis prescribing among American physicians.

Bio: Luke Matthews is a behavioral and social scientist at the RAND Corporation and a professor at the Pardee RAND Graduate School. He is co-director of the RAND Center for Applied Network Analysis and Systems Science. Matthews' research focuses on studying cultural diffusion on social networks. His research has been featured in *New Scientist*, *The Washington Post*, and *The New York Times*. Prior to joining RAND, he was a postdoctoral fellow at Harvard University and worked in private industry for a startup social network analytics company. He has a Ph.D. in anthropology from New York University.