

# 第12回 MEE SEMINAR

## MATHEMATICAL ECOLOGY & EVOLUTION

2009年11月24日(火) 14:40~16:10

明治大学生田キャンパス第二校舎A館: A207

小田急小田原線 「生田駅」から徒歩10分

又は「向ヶ丘遊園」駅北口から「明治大学正門前」行きバスで10分終点下車

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Meiji Univ. Ikuta campus A207

## Models of cultural evolution

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#### Abstract:

Culture is a complex phenomenon. One way to conceptualize culture scientifically is to regard it as a kind of information that is transmitted between individuals via social learning. Basing on this premise, a quantitative framework has been developed in order to study cultural evolution and its possible impact on human genetic evolution (Cavalli-Sforza & Feldman, 1981; Boyd & Richerson, 1985; Odling-Smee et al., 2003). On the one hand, it is likely that humans, instead of being the "blank slate" (Pinker, 2002), have innate predispositions to acquire certain cultural traits more readily than their alternatives, and that cultural evolution consequently depends on such predispositions. On the other hand, the presence of culture may have modified the pressure of natural selection acting on human populations, the process referred to as cultural niche construction, and as a result played a crucial role in human evolution. Simple mathematical models have been utilized to investigate some of these issues. I will discuss such investigations taking the evolution of ingroup favoritism and the spread of costly prestige-seeking behavior as examples.

**参加自由です。皆様のお越しをお待ちしております。**

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