CONFÉRENCE

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Synthetic Genetic Systems for Rapid Mutation and Continuous Evolution *in vivo*

LE JEUDI 15 AVRIL 2021 À 12 H 30

Vous pouvez maintenant assister à la conférence via Zoom en cliquant sur ce lien : Accéder à la vidéoconférence (*pour une expérience plus agréable, préférez l'installation de l'application Zoom à l'utilisation du navigateur***).** *>> Instructions pour la configuration de l'audio <<*

We are interested in building genetic systems that have extremely high mutation rates in order to speed up the evolution of target proteins and enzymes *in vivo* as well as to record transient information, such as lineage relationships or exposure to biological stimuli, as durable genetic information *in situ*. I will primarily discuss our work on OrthoRep, a highly error-prone orthogonal DNA replication system that drives the rapid continuous evolution of user-selected genes. I will discuss applications of OrthoRep in exploring drug resistance, studying protein evolution, evolving useful enzymes, and evolving antibodies. I will also comment on the broader value of depth and scale in evolutionary search as enabled by OrthoRep.

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