



Yale SCHOOL OF MEDICINE

GENETICS DEPARTMENT SEMINAR SERIES

Understanding the Sources of Regenerative Capacity in animals

Under normal physiological conditions, the functions of many organs depend on the continuous destruction and renewal of their cells. Equally remarkable is the fact that the adult tissues and organs of many organisms can be fully restored after amputation. In fact, metazoans have evolved a series of renewal and repair mechanisms to respond to both trauma and normal wear and tear. Such mechanisms are under tight regulatory control such that the form and function of tissues, organs, and systems can be maintained throughout life. As important as repair and restoration are to the survival of multicellular organisms, we know little about how these processes are effected and regulated at the cellular and molecular levels. Here, I will discuss how the study of two research organisms, the planarian *Schmidtea mediterranea* and the African killifish *Nothobranchius furzeri* is beginning to shed light on the way adult animals regulate tissue homeostasis and the replacement of body parts lost to injury.



Dr. Alejandro Sánchez Alvarado, PhD

Executive Director & Chief Scientific Officer

Howard Hughes Medical Institute

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Host: Alexander Lin-Moore

Graduate Student, Hammarlund Lab

YSM Department of Genetics

Tuesday, March 30, 2021

11:30am - 12:30pm

[Zoom Link](#)

pw: 7852649

The Genetics Calendar of Events can be viewed on-line at
<https://medicine.yale.edu/genetics/events/seminars.aspx>