# Evolution of regenerative abilities: recapitulation of development or novel mechanisms?

## PROGRAM:

12:00 Opening Remarks (Ricardo Zayas, San Diego State University)

## Session 1: In vivo cellular plasticity underlying tissue homeostasis and regeneration

- 12:15 *Tapeworm regeneration: A gateway toward understanding stem cells in parasites* Tania Rozario, Postdoctoral Fellow, Morgridge Institute, University of Wisconsin-Madison
- 12.30 Self-Repairing Symmetry in Jellyfish Lea Goentoro, Assistant Professor, Caltech
- 12:45 *Cellular dedifferentiation during intestinal regeneration in echinoderms* José García-Arrarás, Professor, University of Puerto Rico
- 1:00 *Targeted screening to identify genes involved in hearing regeneration* Shawn Burgess, Senior Investigator, NIH
- 1:15 *PIWI-piRNA pathway function in the stem cells of "immortal" Hydra* Celina Juliano, Assistant Professor, UC Davis
- 1:30 *The planarian pharynx as a model for stem cell-driven organ regeneration* Carrie Adler, Assistant Professor, Cornell University

## 1:45 Coffee Break

## Session 2: Nervous system regeneration

- 2:15 Injury induced signals necessary for spinal cord regeneration in axolotl Karen Echeverri, Assistant Professor, University of Minnesota
- 2:30 *Lessons from the lamprey on spinal cord regeneration* Jennifer Morgan, Associate Scientist, Associate Director of the Bell Center, MBL
- 2:45 *Nerve-derived signals regulating tissue regeneration* James Monaghan, Assistant Professor, Northeastern University
- 3:00 *Pomacea canaliculata: development and regeneration of complex eyes* Alice Accorsi, Postdoctoral Fellow, Stowers Institute for Medical Research

## Session 3: Organ and appendage regeneration

3:15 Lack of fibrosis after damage makes the spiny mouse a regenerating mammal Malcolm Maden, Professor, University of Florida

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3:30 Digit tip regeneration in mice: co-evolution of epimorphic regeneration and homeostatic repair mechanisms

Ken Muneoka, Professor, Texas A&M

3:45 Regenerative markers in the ROS-stressed Xenopus laevis heart indicate a conserved repair response

Kyle Jewhurst, Doctoral Student, Tufts University

- 4:00 *Epimorphic regeneration in African spiny mice* Ashley Seifert, Assistant Professor, University of Kentucky
- 4:15 *Immune control of regeneration* Nadia Rosenthal, Professor, The Jackson Laboratory
- 4:30 Closing Remarks by Organizers: Symposium End

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