

From Labs to Lives

How Research Funding Solves Real-World Problems

NIH-Funded Research Unlocking Secrets of Regeneration

At UC Davis, Celina Juliano studies Hydra, a tiny freshwater animal with the remarkable ability to regrow its entire body. Supported by NIH funding, Juliano's lab explores the genes behind Hydra's regeneration and cancer resistance. Because Hydra shares many genes with humans, this work offers powerful clues for future breakthroughs in regenerative medicine and cancer research. Her team also compares two nearly identical Hydra species, one that regenerates and resists cancer, and one that does not, to uncover the genetic keys to healing and disease prevention.

Helping Humanity

Juliano's research could help unlock new ways to heal injuries, rebuild organs or even prevent cancer. Without continued federal funding, this vital work will be at risk, losing momentum towards medical discoveries that could change lives and provide new treatment options.

// *Losing our lab would mean losing a hub of expertise and critical infrastructure. We maintain the community resources, publish foundational data and we drive progress. Without us, that momentum would be lost and so would the opportunity to unlock Hydra's secrets and apply them to human health.*
— Celina Juliano, Ph.D.



Celina Juliano, Ph.D.

College of Biological Sciences

Regenerative Medicine

Media Contact: Andy Fell
ahfell@ucdavis.edu

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