November 2025

Grateful for our community — see how BIO5 moved forward this month

Hello Caroline,

As we approach the end of the semester, we are grateful for the staff, faculty, students, community partners, donors, industry collaborators, and supporters who bring resilience, hope, and shared purpose to the BIO5 Institute. This season reminds us how much our progress depends on the dedication of our community.

That spirit of collaboration was especially visible at the Faculty Industry Networking Event, hosted with the Bioindustry Organization of Southern Arizona. **More than 55 attendees came together to hear insights from a panel of experts** and explore how interdisciplinary partnerships can accelerate the path from discovery to real-world impact.

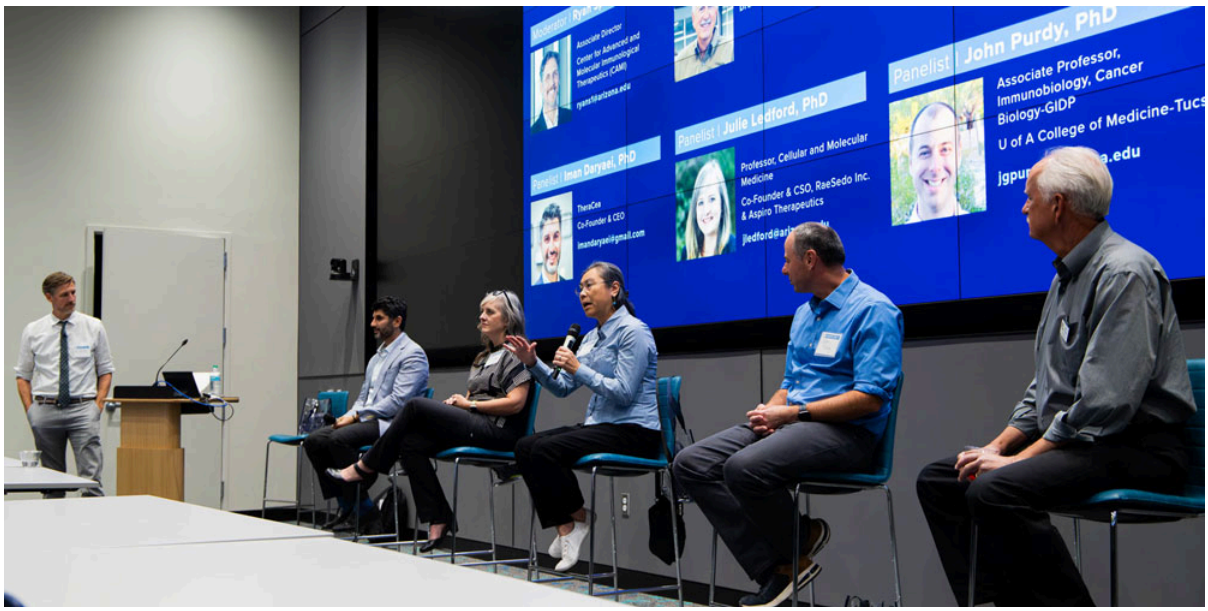
Building on this momentum, we also welcomed five tour groups to BIO5 throughout November. From students engaging with emerging technologies at the University of Arizona Health Sciences SensorLab to community members learning about our collaborative research efforts, these visits reflect our commitment to strengthening Arizona's research workforce and deepening connections between scientists and the broader community.

An exciting update for our KEYS Research Internship: **thanks to support from the APS Foundation**, next summer's 20th-anniversary program will offer free dorm housing for students outside the Tucson metro area. Our team has been visiting schools across Arizona to share this opportunity, and **applications remain open through December 18**.

As we plan to celebrate the 25th anniversary of the BIO5 Institute in 2026, stay tuned for more details on upcoming events!

We're grateful for you, and we can't wait for what's next.

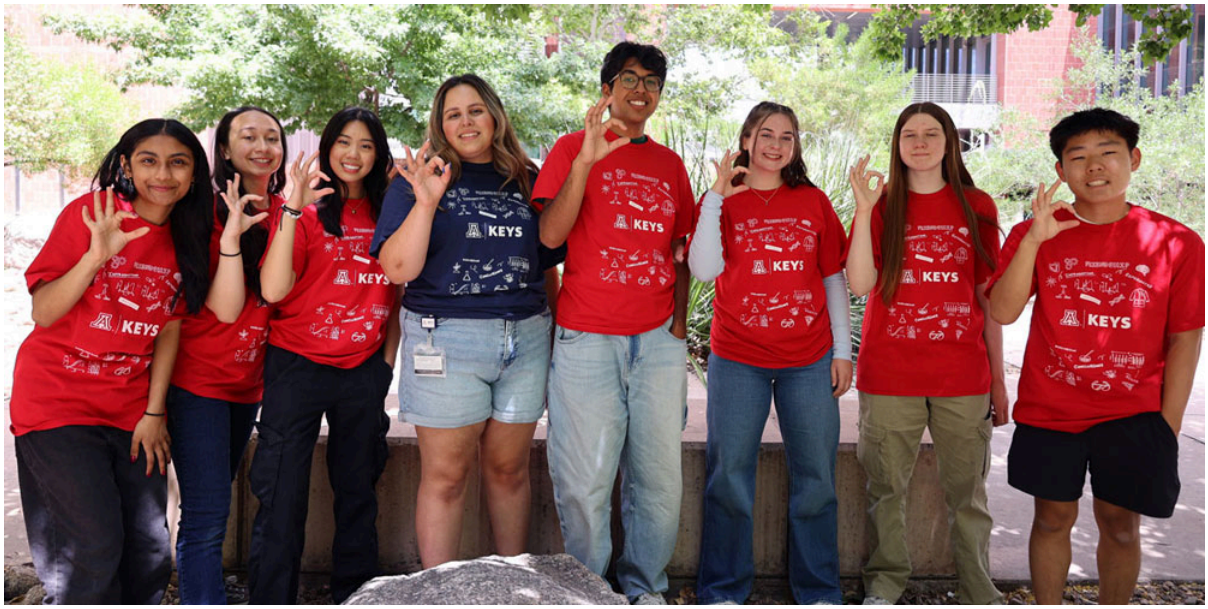
Featured Stories



Lessons in partnership from the 2025 Faculty Industry Networking Event

At the sixth annual event hosted by the BIO5 Institute and BIOSA, a new panel highlighted clear communication, thoughtful partnership structures, and student preparation as essential elements of successful university–industry collaboration.

READ MORE



APS Foundation Grant increases access for KEYS 2026

Next year's program will be more accessible for students outside the Tucson metro area with the availability of free dorm space.

READ MORE

Enhancing cell therapy through biomedical engineering and innovation

Dr. **Shang Song** and her lab use biomedical engineering to help cells change their behavior in order to develop better therapeutics.

Listen to Science Talks

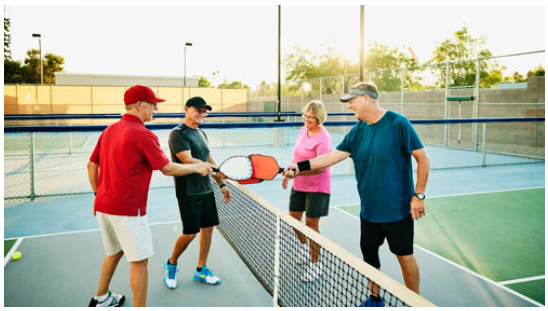
Upcoming

A big year ahead: BIO5's 25th anniversary

Next year, BIO5 turns 25! We'll be sharing more details soon about the events and celebrations we're planning for 2026.

We're so proud of everything we've accomplished together — and even more excited about what's ahead. Here's to the next 25 years of discovery, collaboration, and community. We can't wait to celebrate with you!

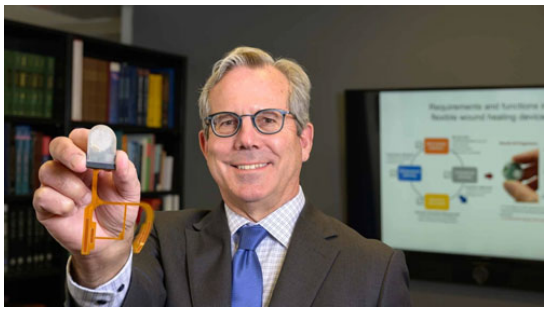
In The News



Precision Aging Network data release opens new pathways for healthy aging research

The U of A-led effort is releasing its first large-scale dataset to advance healthy aging research, with BIO5 members **Carol Barnes**, **Bonnie LaFleur**, and **Nirav Merchant** helping make the information openly accessible for scientists nationwide.

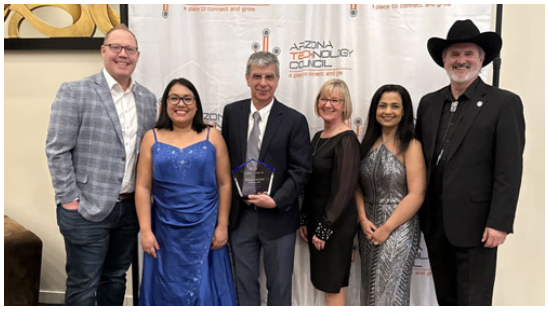
Read in UA News



Revolutionizing wound care with AI

As a surgeon and researcher, BIO5 member **Geoffrey Gurtner** is developing an artificial intelligence-enabled smart bandage that continuously monitors wounds to predict infections early and improve healing outcomes for patients.

Read in Research & Partnerships



Sounds like success, U of A NSF center wins Innovator of the Year Award

BIO5 members **Pierre A. Deymier** and **Chris Hulme** were recognized at the Governor's Celebration of Innovation, where Deymier's NSF-funded New Frontiers of Sound Center won the Innovator of the Year – Academia award and Hulme's startup was named a finalist in the Startup category.

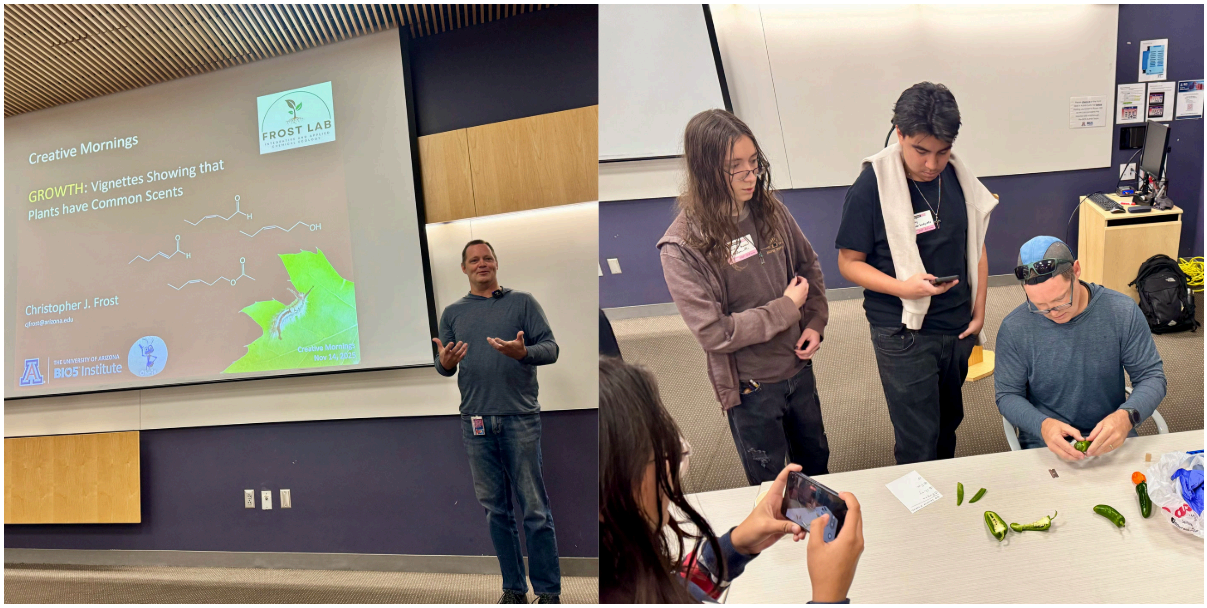
Read in Tech Launch Arizona

U of A Superfund Research Center secures $14.8M NIEHS grant to combat hazardous dust effects in Southwest

BIO5 members **Raina Maier**, **Xinxin Ding**, and **Yin Chen** are part of a $14.8 million National Institute of Environmental Health Sciences grant supporting new research to understand and reduce health risks from metalloid-contaminated dust in Southwestern mining communities.

Read in UA News

Behind-the-Scenes



What do vanilla and hot peppers have in common?

Chemistry!

BIO5 faculty and assistant research professor Chris Frost joined a group of Tucson creatives for a conversation about growth, scientific exploration, and the chemical strategies plants use to protect themselves. Frost shared his path from studying rainforest plants to his current work in chemical ecology

at the University of Arizona.

Attendees also explored where capsaicin—the natural compound that creates heat in peppers—is found inside a pepper. The thin inner rib holds most of the heat, not the seeds. In a surprising twist, capsaicin is structurally part of the same chemical family that includes vanilla.

We always enjoy learning and sharing science with our community at BIO5. 🌱

Share with a friend!

Like this newsletter? Forward to a friend and follow us on social media to see more news, events, and behind-the-scenes.

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Land Acknowledgment

We respectfully acknowledge the University of Arizona is on the land and territories of Indigenous peoples. Today, Arizona is home to 22 federally recognized tribes, with Tucson being home to the O'odham and the Yaqui. The university strives to build sustainable relationships with sovereign Native Nations and Indigenous communities through education offerings, partnerships, and community service.