

What is IALS?

A broad interdisciplinary institute to enable translational R&D

- Industry partnerships, **'thematic' translational research themes**, faculty (>300) and professional staff (>60)
- ~30 industry available **Core Equipment Facilities**
- Company **startup spaces** and **venture mentoring**
- **Student soft skills training** and **experiential training** in the Core Facilities.



Our Objectives

LEAD IALS and its Centers to become a Catalyst and Resource for **'Applied' and 'Translational' R&D Activities** on this campus.

ACCELERATE translational impact by increasing **Startup/Spinout** capacity.

ENHANCE innovation and R&D capacity through professionally led **Centralized Core Equipment & Collaboratory Facilities**.

PREPARE an industry-ready workforce by providing **Experiential Training** to our students.



PARTNER WITH US!

**Institute for Applied Life Sciences
UMass Amherst Core Facilities**

University of Massachusetts Amherst
Life Science Laboratories
240 Thatcher Road
Amherst, MA 01003

www.umass.edu/ials

Massachusetts
LIFE SCIENCES CENTER

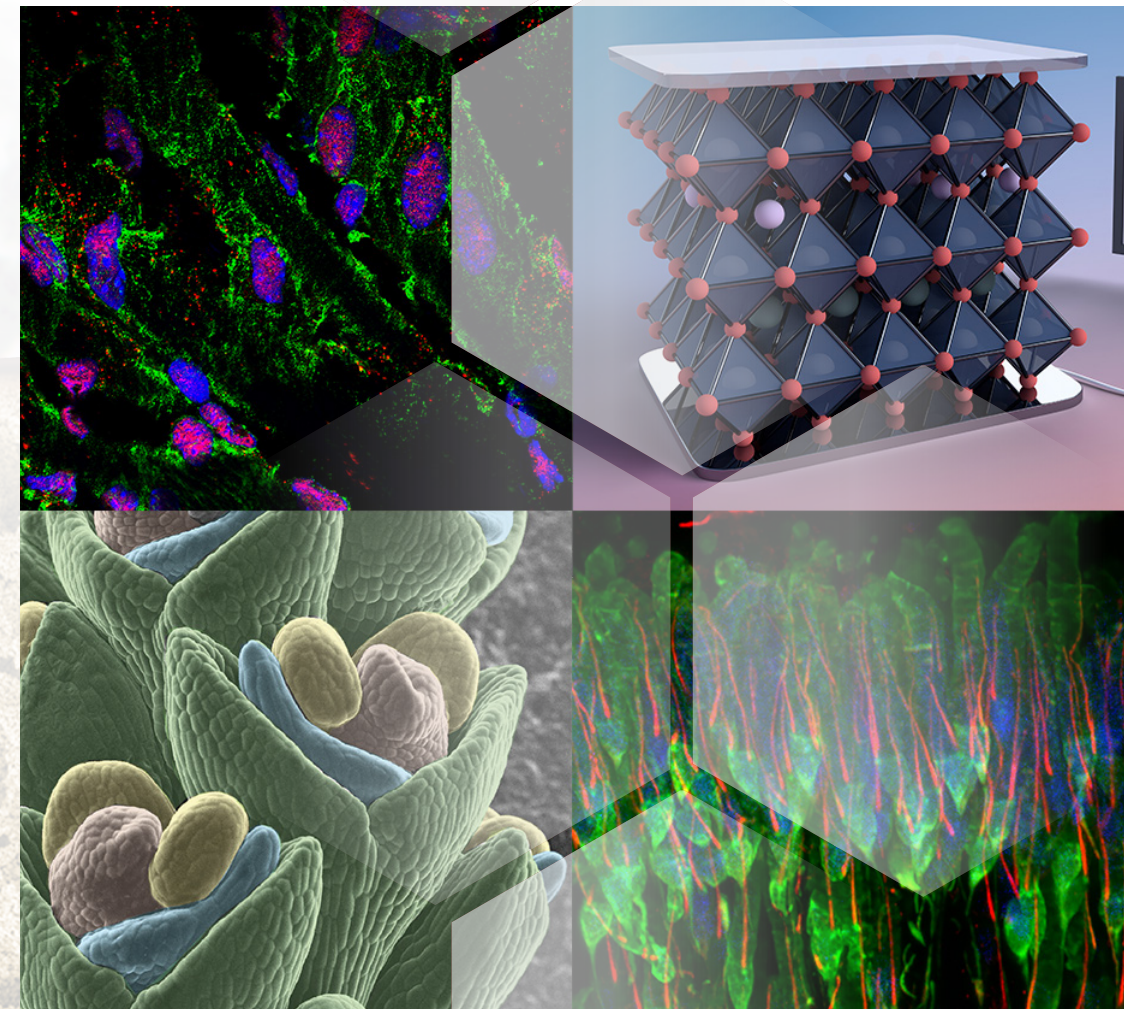


University of
Massachusetts
Amherst

UMassAmherst

Institute for
Applied Life Sciences

Institute for Applied Life Sciences

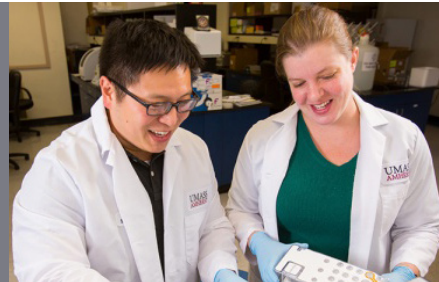


Research & Innovation to Translate Basic Science into Products, Technologies and Services to Benefit Human Health and Well-Being

IALS: A Translational Ecosystem

Talent and Resources to Fuel a Start-Up Culture & Develop Industry Engagement

“ LEVERAGE THE POWER OF RESEARCH AND INNOVATION TO IMPROVE LIVES NOW AND FOR FUTURE GENERATIONS.”



RESEARCH EXPERTISE

340
FACULTY



STATE-OF THE ART EQUIPMENT

30
CORE FACILITIES



EMERGING TECHNOLOGIES

70+
SUPPORTED



EXPERIENTIAL TRAINING

>220
STUDENTS



INDUSTRY COLLABORATIONS

>300
PARTNERSHIPS



SEED FUNDING

\$4.4M
AWARDED

Our faculty-led research groups span **five colleges** and **29 departments** across the UMass Amherst campus and are organized into **three focused research centers**:

Bioactive Delivery

The right drug to the right place: by creating novel delivery platforms for small and large molecules.

Personalized Health Monitoring

Low-cost, multi-function, wearable, intelligent, wireless sensor systems for personalized health care and biometric monitoring.

Models to Medicine

Discovering novel drug targets and therapeutic candidates.

IALS interdisciplinary research themes are more competitive to **secure federal and industry research grants**.

Our state-of-the-art laboratories, instrumentation, equipment, and world-class experts help researchers drive discovery and pursue scientific endeavors on the front line of innovation in **Life Sciences; Cellular, Molecular, and Animal Sciences; Manufacturing, Engineering, and Material Sciences; and Human Health**.

The centralized **UMass Amherst Core Facilities** are available to academia and industry on a fee-for-service basis.

IP-free, rentable wet lab, dry lab and office incubator space available in our **Collaboratories**.

Up to 75% subsidy available to Massachusetts based, small and medium sized businesses through the **Massachusetts Innovation Voucher Program**.

Our **Venture Development** program includes ‘virtual C-suite’ support for research-based prestartups and startups to advance from concept to commercialization, develop IP, and launch new ventures. Resources include:

- **Business Innovation Fellows** to collaborate with founding teams
- **Educational programs and training**
- Experienced **mentors**
- Office hours with **industry experts**
- Support for **fundraising** (grants and investment)
- **Innovators showcase** events.

Startups have **raised \$25M in external funding**.

We work to prepare an **industry-ready workforce** by providing **soft-skills and experiential training** to UMass Amherst students.

- The **Core Summer Internship** program provides hands-on technical training in our Core Facilities, has trained over 130 undergraduate students.
- The **Core Summer Research Assistantship** program, provides hands-on technical training in our Core Facilities, has trained numerous graduate students.
- The **Venture Development** program has trained close to 90 **Business Innovation Fellows** partnering with the Isenberg School of Management MBA program.

We **partner** with outside industry, the state of MA, foundations, agencies, investors, particularly regional small and medium sized enterprises (SMEs), to co-develop technology that improves human health and well being.

- Creates a pipeline of **industry-ready graduates** with the needed experiential industry training.
- Contributes to **economic development** by **training graduates with skills in demand** by regional industry.
- **Increased awareness of unmet societal needs** from our partner organizations.
- Provides **industry access** to cutting-edge **technologies, instrumentation** and **expertise**.

We provide translational **Seed Funding** to support faculty research and student training through programs such as:

- **Microgrants**
- **Core Facilities Funding Opportunities-incentive and training funds**
- **Research Thrust funding**
- **Midigrants**
- **Research Theme Activity/ Research Funds**
- **Translational Research Funding**