



Innovation Ecosystem 2024 Year-End Update

Vaccines, Diagnostics, and Immunotherapeutics

With the critical support of the Iowa Legislature – and in partnership with **BioConnect Iowa** – Iowa State University of Science & Technology continues to forge new frontiers in innovation supporting the growth of Iowa’s biobased economy.

KEY AREAS OF EMPHASIS

Key areas of emphasis for the VDI platform for 2024 were:

- **Seed grants** – 11 have been funded for 2024/25, utilizing \$500,000 in funds. A second round of funding is planned for the second quarter of 2025.
- **Commercial fellowships** – two commercial fellowships were approved for Halide Biologics and **ImmunoNanoMed**. These fellowships are intended to help retain top talent and bridge the gap between grant-based funding and venture capital.
- **CYVAX and workforce development** – **CYVAX** is a commercial development lab focused on early-stage scale-up and manufacture. CYVAX serves as a transition space for startup companies to bring product development to regulatory standards and as a wet lab training site. The facility has hosted four workforce development wet labs, with more than 100 participants representing 12 Iowa-based companies. ISU and CYVAX implemented a formal micro-credential program in 2024 to validate the training it offers.

KEY ACCOMPLISHMENTS AND ECONOMIC IMPACTS

- VDI, and all four Biosciences platforms, hosted the inaugural **Iowa Biosciences Showcase**. The Showcase was an opportunity for early-stage ideas or pre-venture capital/pre-sales to connect and present to the ecosystem to help accelerate their efforts. Seventy-five innovators participated, representing 15 early-stage startups.
- Following the recommendation of the TEconomy report, the VDI platform made a concerted effort to increase workforce development-focused activities. ISU launched a graduate level class focused on biotechnology and competency, and the CYVAX space was used to conduct formal micro-credentialed trainings focused on commercially relevant topics: potency assay development; filtration and purification; bioreactors and fermentation; and mRNA production.
- Four companies currently utilize the CYVAX facility – Elanco, HERMES, GENVAX, and ImmunoNanoMed –

supporting the strategic goal of accelerating company growth and commercial development.

KEY OPPORTUNITIES AND PRIORITIES FOR 2025

- The Biosciences Showcase demonstrated the need and significant value of this concept to early-stage technologies and companies, so it will be repeated and expanded as a critical mass of contributors is identified.
- The micro-credential and workforce development efforts should be expanded into a repeatable and defined program to facilitate improved planning and participation.
- Laboratory space for startups is currently limited. The VDI platform and ISU Research Park will investigate the potential for building a defined laboratory facility at ISU Research Park that will support startup acceleration through lab-based activities as well as workforce development and training with an emphasis on scale-up and manufacturing.

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