



Iowa State continues to expand the reach and impact of the university's Bioscience-focused Innovation Ecosystems with the critical support of the Iowa Legislature, and in close partnership with [BioConnect Iowa](http://BioConnectIowa.org).

IMMUNOVATE at Iowa State

Vaccines and Immunotherapeutics

Innovation Ecosystem 2022 Year-End Update

KEY AREAS OF EMPHASIS

- Expanded innovation and technology available for licensing and commercial development:
 - External funding through strategic partnerships with Merck Animal Health (MAH) and [Ceva Animal Health](#);
 - Platform seed grants supporting public-private collaborative research: 13 grants in total that include investigators from ISU Vet Medicine, Veterinary Microbiology and Preventive Medicine, Nanovaccine Institute, and the College of Engineering. Commercial partners include: [Boehringer Ingelheim](#); [MERCK](#); [LEAH Labs](#); [Medgene Labs](#); [Arko Laboratories](#); [Nitto BioPharma, Inc.](#); [Elanco](#); [Genvax Technologies](#); [NeoVaxSyn, Inc.](#); [Mazen Animal Health](#); and [Purina](#).
- Infrastructure and training to increase commercial development:
 - [CYVAX](#) officially launched in 2022. Located in the ISU Research Park, CYVAX is a vaccine development laboratory focused on USDA-compliant master seeds, manufacturing scale-up and commercial development of materials used for clinical trials.

- Startup Support:
 - Awarded the first Vaccines and Immunotherapeutics Innovation fellowship, which provides resources to allow active pursuit of technology licensing, commercial partnerships or a new venture. HALIDE, a University of Iowa startup with a technology focus on stabilization of proteins involved in human therapy, was the recipient;
 - Worked with BioConnect Iowa to Identify candidates for focused support.

KEY ACCOMPLISHMENTS

- External funding:
 - Finalized three-year strategic partnership with Merck guaranteeing funding of at least \$250,000 per year. By end of 2022, more than 15 animal health projects were in place, exceeding \$900,000 in funding, and ten new additional projects were being assessed;
 - CEVA also progressing toward Master Agreement and strategic partnership. ELANCO and Biogenesis recruited to ISU RP.

- [CYVAX](#):
 - By the end of the year, CYVAX had two tenants – [Skybird Research](#) and 3D Health Solutions – with three additional companies assessing lease options
 - In October, CYVAX – partnering with [Bio-Techne](#) – hosted an inaugural ISU-Industry training session focused on commercial development with 25 participants.

2023 KEY OPPORTUNITIES

- Continue efforts to leverage CYVAX as an entry point for already-existing companies to establish a presence in Iowa and to support the technology development and growth of startup companies.
- Focus on advanced manufacturing options for both animal health and FDA by redevelopment of the GMP facility at ISU Research Park (former Newlink facility).
- Continue developing the commercial environment via formal advisory teams, BioConnect Iowa, and linkages to ISU entrepreneurial programs.

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