

## UNIVERSITY OF IOWA P3 PROGRAM IN SUPPORT OF STRATEGIC PRIORITIES ANNUAL REPORT

OFFICE OF THE EXECUTIVE VICE PRESIDENT AND PROVOST SEPTEMBER 2022

STRATEGICPLAN.UIOWA.EDU

## **CONTENTS**

Priorities	2
About the Program	3
Programs to Date	
Year 0 - FY21	4
Year 1 - FY22	7
Year 2 - FY23	9
Timeline for FY24 Program 1	1

## STRATEGIC PLAN Priorities



#### **PROFESSOR JUN WANG**

Wang is part of an interdisciplinary team helping expand space-based research at lowa through a P3 grant.

ANN W COD

# **ABOUT THE PROGRAM**

The P3 Program uses funds from the University of Iowa Strategic Initiatives Fund – formed through the university's publicprivate-partnership (P3) with ENGIE North America and Meridam – to provide flexible, readily available resources to support the university's strategic plan. An expected \$15 million per fiscal year is allocated through an open and transparent grant process. Anyone in the campus community is eligible to submit a proposal for a one- to three-year grant.

To date, proposals have been funded for FY21 (limited initial funding), FY22, and FY23.



**78**PRELIMINARY APPLICATIONS
RECEIVED IN FY22 AND FY23

•	
ŀ	
ŀ	

## **GUIDING PRINCIPLES**

- All funds will be used for initiatives that support the UI 2022-2027 Strategic Plan
- \$15 million in annual revenue will not be enough to support all the strategic needs of the university
- P3 funds will be most valuable when used to leverage other support or grow new sustainable efforts in support of the strategic plan
- Sustainability of strategic activities beyond P3 support is essential
- Proposals for multi-year non-recurring funds (up to 3 years) will be considered, balanced with proposals that could benefit from shorter-term support
- The allocation process will be evaluated annually for the purpose of process improvement

## **CRITERIA**

Priority is given to projects that demonstrate the following criteria:

- Institutional-level high impact across multiple strategic priority areas, and direct alignment with one or more strategic plan goals, objectives, or strategies
- Project activities must be outside of scope, or unable to be supported, through the current budget model
- Potential for longevity beyond the funding period
- Cross-campus collaborations that build on existing strengths and/or areas of opportunity for growth and distinction

## PROGRAMS TO DATE YEAR 0 - 1921

#### **PRINCIPLES OF CHEMISTRY**

St LA

The Department of Chemistry was one of five departments that participated in the Hawkeye Introductory Courses P3 project.

## HAWKEYE INTRODUCTORY COURSES Transforming Undergraduate Introductory

STEM Courses at UI



The Hawkeye Introductory Courses (HIC) project made progress toward improving student outcomes in six large-enrollment courses taken primarily by first-year students. Ultimately, the project had a significant impact on faculty success and development, as well as creating an improved emphasis on introductory courses at a departmental level.

#### Funded: \$300k

**Progress/Next Steps:** The success of HIC has led to an expansion and centralization of the project through the Year 2 funded P3 project, Excellence in Teaching and Learning: Developing a Set of Effective Strategies for Course and Curriculum Innovation.

### **CONTINUED DEVELOPMENT OF IOWARISE** Transforming Experiential Research and Education

### MEASURES OF SUCCESS Among Faculty Participants

- 100% say the project contributed to their professional development
- 92% increased their knowledge of patterns of students' success in these courses
- 100% increased knowledge of support available to aid in student success
- ▶ 78% increased knowledge of best teaching practices
- 71% say the project improved coordination at the departmental level
- 100% of courses in the project collected feedback from students
- ▶ 92% increased use of data to inform their instruction
- 62% had increased awareness of strategies the department can use to help retain students in the course



The IowaRISE project increased experiential research and educational opportunities for UI students, faculty, and staff. Members of the project team developed a model for helping students progress through a series of experiences that would enhance their skills, confidence, and knowledge of how to build a successful career and life.

#### **Funded:** \$350k

**Progress/Next Steps:** IowaRISE reinforced the need to examine and better connect campus-wide efforts for experiential learning opportunities. Models and strategies from the project – preparing students for experiential learning, assisting faculty on engaging students in research, and expanding life discernment courses – will be integrated into ongoing institutional operations.

## HIGH IMPACT HIRING INITIATIVE

## Support, retain, and recruit faculty to strategically enhance priority areas of excellence



High Impact Hiring Initiative (HIHI) awards are one-time, non-recurring funds that collegiate units can apply for and then use to recruit or retain faculty. The first two years of HIHI has allowed the University of Iowa to build upon areas of excellence, support high-performing current faculty, and attract several additional diverse and talented faculty. As of July 20, 2022, just under \$4.2 million of the \$4.25 million in funding was committed to 25 different HIHI requests.

Funded: \$4.25M

**Progress/Next Steps:** The success of the HIHI project has led to continued funding and an expansion of the initiative through the Year 2 funded P3 project, High Impact Hiring Initiative (HIHI): A Program to Strategically Recruit and Retain Talented Faculty.



Retentions

### **DISTINCTIONS AMONG HIHI RECIPIENTS**

- More than 45 grants among six different recipients
- Nationally recognized performers
- Experts in aging, big data, climate science, genetic disease, neuroscience, physics, public policy, speech disorders, and more
- NSF CAREER award winner
- Award-winning writers
- Mentors for underrepresented minority students and faculty

## **UI P3 TO NCI/NIDCR P50** Multidisciplinary approach to oral cancer etiology and treatment



The P3-to-P50 project lays the foundation for innovative and collaborative research at the University of Iowa that has the power to have a significant impact on health care through the prevention, detection, and treatment of oral cavity cancer. The project team is using the P3 funds to compete for NCI/NIDCR (National Cancer Institute/National Institute of Dental and Craniofacial Research) funding that totals \$11M.

Funded: \$600k

Progress/Next Steps: Submission of P50 proposal in September 2022



## **JUMPSTARTING TOMORROW**

## A collaborative research pilot program for interdisciplinary research communities



Jumpstarting Tomorrow has made significant progress in encouraging collaborative, interdisciplinary research on campus. By leveraging faculty expertise and promoting innovation across disciplines, this project is helping the University of Iowa continue to advance its excellence in research and discovery.

#### Funded: \$2M

**Progress/Next Steps:** In the first year of Jumpstarting Tomorrow, a total of 21 awards were made to projects originating from five different UI colleges, with faculty involvement from nine UI colleges.

### **ROUND 1 AWARDED PROJECTS**

Addressing Health Disparities and Biases in Al and Machine Learning Tools

Decarb 2040 – Positioning Iowa as an Energy Exporter in the Coming Era of Deep Decarbonization

Iowa Initiative for Scientific Imaging and Conservation of Cultural Artifacts

Jumpstarting a Quantum Simulation Program at the University of Iowa

Public Libraries for Disaster Resilience: Assessing Libraries' Community Impacts in Times of Climate and Socioeconomic Crises

#### SCIENTIFIC IMAGING AND CONSERVATION OF CULTURAL ARTIFACTS

This Jumpstarting Tomorrow project explores the use of biomedical imaging techniques on various artifacts.

# YEAR 1 - FY2

#### EDGE OF SPACE ACADEMY

12 undergraduates from across the country participated in the first year of the program

### EXTENDING IOWA'S SUCCESS IN SPACE-BASED RESEARCH ACROSS CAMPUS



Funded: \$3.6M over three years

#### Progress:

- Instrument development for Earth and lunar science
- Infrastructure upgrades for spaceflight capabilities
- Edge of Space Academy for undergraduate students

## LEARNING@IOWA

#### A Campus-wide Framework to Increase Students' Academic Success



#### Funded: \$900K over three years

#### Progress:

- Supported student learning by introducing the Learning at Iowa framework during OnIowa!
- Provided faculty and staff with tools and skills to facilitate learning, including new training and professional development opportunities
- Increased enrollment in Learning About Learning course, which helps students feel better prepared for their courses
- Produced additional materials that focus on actionable tips for students to implement the three Ms for effective learning (Mindset, Metacognition, Memory)
- Initiated active partnerships with 25 academic departments and student-supporting administrative units across campus

## THE IOWA HEALTH DATA RESOURCE

Building the Future of Health Informatics at the University of Iowa



Funded: \$2.2M over three years

#### Progress:

- Creation and training of intercollegiate advisory and implementation team
- Established framework for building of transformative datasets
- Designed, purchased, and installed a data enclave for processing data extracts
- Improved access to Iowa health data for UI research community

### EXAMINING AND TAILORING ACADEMIC POLICIES TO ENHANCE UNDERGRADUATE STUDENT SUCCESS AND EQUITY



#### Funded: \$114K over two years

#### Progress:

- Compiled and reviewed data related to course placement and academic probation
- Conducted data analysis and prepared to coordinate with various UI stakeholders on updates to policy and practices
- Published study of effects of academic probation on four-year graduation
- Published "The Problems with Academic Probation" op-ed in Inside Higher Ed

## **CLOSING THE GAP**

Experiential Educational for All Undergraduates at Iowa



Funded: \$540K over three years

#### Progress:

- Assessed and identified gaps in experiential education for undergraduate students
- Prepared a pilot course (Experiential Education Preparation) for sophomore First Gen Hawks participants
- Developed Career Connectors training program
- Created Hawkeye Experience Grant to expand financial support for students in experiential learning opportunities

### **SEEDING EXCELLENCE** Strengthening the University as a Destination for Research and Scholarship



#### Funded: \$4M over two years

#### Progress:

- Provided competitive pilot funding for research projects concentrated across the areas of 1) community engagement; 2) diversity, equity, and inclusion, 3) early career faculty, and 4) interdisciplinary research focused on the nexus of climate-environment-health
- 26 awards have been made with faculty involvement from nine UI colleges

## EQUITY IN HEALTH SCIENCE AND PRACTICE



Funded: \$759K over three years

#### Progress:

- Engaged more than a dozen students across three UI colleges in research, community engagement, and program leadership
- Launched research survey study about COVID-19 experiences among frontline workers in Iowa
- Submitted R61/R33 proposal to National Institutes of Health
- Established statewide community advisory board to provide input on programmatic activities and research studies





### **PATHWAYS TO SUCCESS** Ensuring High Quality Career Development for Every Hawkeve



Pathways to Success will support student career preparation through the development of a technological solution to provide career advice, planning assistance, and other forms of student engagement.

Funded: \$407K over three years

### EXTERNAL JOB PLACEMENT SERVICES FOR PARTNERS OF RECRUITED FACULTY AND SELECT SENIOR-LEVEL STAFF



This project will contribute to the recruitment and retention of faculty and staff who support the university's strategic initiatives by providing external job placement services for life partners.

## MIDWEST FLASH LAB

Developing Next-Generation Radiotherapy Delivery and Expertise at the UI



The goal of the Midwest FLASH Lab is to establish the University of Iowa as a top destination in the U.S. for ultrahigh dose-rate radiation therapy (FLASH) science and training.

Funded: \$3M over three years

### HIGH IMPACT HIRING INITIATIVE (HIHI)

A Program to Strategically Recruit and Retain Talented Faculty



The continuation of the HIHI program will build upon the success of strategic hiring and retention of faculty by providing additional funds to recruit and retain highperforming faculty across all colleges and academic units.

Funded: \$7.5M over two years

Funded: \$315K over three years

## HIGHER EDUCATION MENTAL HEALTH



Higher Education Mental Health will develop a comprehensive program to address mental health issues for students, faculty, and staff in order to decrease levels of distress and promote success.

Funded: \$700K over three years

## **POST-TENURE FACULTY SUPPORT**



The Post-Tenure Faculty Support project will support faculty excellence and retention efforts by providing select midcareer tenured associate professors with tailored career development support to propel them toward promotion to full professor.

Funded: \$2M over three years

## EXCELLENCE IN TEACHING AND LEARNING

#### Developing a Set of Effective Strategies for Course and Curriculum Innovation (ETL)



Excellence in Teaching and Learning builds upon the success of the Year 0 Hawkeye Introductory Course project by expanding the focus to support learning in key courses students need to persist in their education and graduate.

Funded: \$478K over two years

## REDOX REGULATION OF IMMUNOLOGICAL RESPONSES DURING CANCER THERAPY

Using Novel Redox Active Molecule Approaches that Both Enhance Anti-Tumor Immune Responses and Limit Normal Tissue Injury



This project will enable the development of a new National Cancer Institute grant in early-stage lung cancer treatment and a clinical trial to examine the impact of pharmacological ascorbate combined with immunotherapy for the first time.

Funded: \$600K over two years



# TIMELINE FOR FY24 PROGRAM





The University of Iowa prohibits discrimination in employment, educational programs, and activities on the basis of race, creed, color, religion, national origin, age, sex, pregnancy (including childbirth and related medical conditions), disability, genetic information, status as a U.S. veteran, service in the U.S. military, sexual orientation, gender identity, or associational preferences. The university also affirms its commitment to providing equal opportunities and equal access to university facilities. For additional information on nondiscrimination policies, contact the Director, Office of Institutional Equity, University of Iowa, 202 Jessup Hall, Iowa City, IA 52242-1316, 319-335-0705, oie-ui@uiowa.edu.