**2021 MCURE RFA**

**Application Deadline:**

**March 15, 2021**

**Mentored Course-Embedded Undergraduate Research Experiences** **(MCUREs):**

**Specific Aims:**

1. **To increase mentored, course-embedded biomedical projects that scaffold considerable critical thinking and creative experiences at PUIs.**
2. **To strengthen PUI faculty connections to IDeA Network resources.**
3. **To grow the pipeline of Delaware’s biomedical workforce and students seeking biomedical careers.**

MCUREs are course-embedded inquiry-based experiences targeted at strengthening the biomedical pipeline in Delaware. This DE-INBRE supported program seeks to push the envelope by supporting PUI faculty who transform their biomedical curriculum by incorporating high-impact inquiry-based pedagogical practices in Delaware. Potential MCUREs sponsored projects include course-based undergraduate research experiences that involve students in (i) authentic research experiences as part of a class, (ii) collaborations that integrate faculty and students from PUIs into sequenced courses and class projects, (iii) service-learning projects within courses that address Delaware’s biomedical community-identified needs, or (iv) specific research-driven coursework aimed at providing professional development opportunities for students at PUIs.

For MCUREs, authentic research experiences include eight elements:

* Novel questions
* Student-generated questions
* Development of a hypothesis
* Experimental design
* Data collection
* Presentation or publication of the research
* An unknown scientific outcome
* A minimized role of the instructor

MCUREs will scaffold biomedical research skills and core content knowledge, and these creative experiences can be made available to students beginning in the freshman year. MCUREs must align with the DE-INBRE network’s ability to strengthen Delaware’s biomedical workforce with inquiry-based education opportunities for all students.

PUI faculty must submit MCUREs applications (requesting up to $15,000 maximum direct cost support) by **March 15, 2021, to Dawn Everhart, DE-INBRE Assistant Director at dawnm@udel.edu.** Also, PUI faculty can only receive one MCUREs award per funding cycle with a May 1st start date, and funds must be used by April 30th the following year (and may not exceed $15,000 direct costs).

**Guidelines**

* PUI applicant’s institution will self-certify and is responsible for the accuracy of the MCUREs project submission to the DE-INBRE office;
* MCUREs projects must identify biomedical areas of institutional and/or department need;
* An intensive educational MCUREs experience is meant to complement, enhance and deepen what is being learned in the traditional classroom;
* MCUREs projects will encourage and support multidisciplinary and/or collaborative activities that successfully enhance retention, persistence, and graduation rates of all students in biomedical fields;
* Inter-department and/or inter-institutional (amongst DE-INBRE partners) collaborations are strongly encouraged;
* MCUREs project lead(s) will adhere to the DE-INBRE goals and responsibilities with the understanding that if they are not followed, the award will be forfeited in full;
* MCUREs project lead(s) must complete an Institutional Review Board application if working with human subjects;
* MCUREs project lead(s) will set aside adequate time to meet with the EPD Committee regularly throughout the term of the award, and they must attend the biannual EAC meetings and be available regularly to meet with their DE-INBRE institutional support team;
* MCUREs project lead(s) will complete a final written outcomes statement to the EPD by the posted deadline; and
* MCUREs project lead(s) participants will complete a program exit survey, which will be received at the end of the grant period.

**Eligibility**

Regardless of the type of submission, an MCUREs project lead must:

i. Hold a full-time tenured, tenure-track, or equivalent faculty appointment;

ii. Be based at a DE-INBRE partner institution;

iii. Non-career employees such as consultants, post-doctoral fellows, visiting scientists, and limited-term researchers are not eligible.

Eligible applicants with a record of prior DE-INBRE support may compete for new awards. However, these MCUREs applicants must document **enough** outcomes and progress from past DE-INBRE support to be deemed competitive.

Applicants are prohibited from receiving simultaneous support as project lead or co-lead from more than one Institutional Development Award IDeA source. Applicants who have active support from other (IDeA) mechanisms (e.g., Centers of Biomedical Research Excellence [COBRE] or Center for Translational Research [CTR]) are not eligible for DE-INBRE MCUREs awards unless they separately petition the DE-INBRE PI to explore eligibility status before submission of an application.

**Support Team**

MCUREs award applicants will identify their support team. This Support Team will serve as a robust MCUREs advocate and a DE-INBRE consensus/coalition builder. In general, unless exceptions are allowed explicitly by the DE-INBRE PI, the members of the Support Team must:

i. Be a full-time faculty member (or Department Chair) with a thorough understanding of the full spectrum of department/institutional offerings and needs;

ii. Be experienced in the area of student engagement and academic success with course-embedded projects and must have expertise on the MCUREs applicant’s project description;

iii. Work with MCUREs project lead(s) to determine appropriate assignments to instruction, research, and service-learning, and reviews the course activities with the project lead(s) and their department chair and/or faculty members;

iv. Must represent the institution’s perspective.

The MCUREs application must explain the Support Team collaboration and the management of conflicts or differences. All team members and applicants must complete routine assessments by DE-INBRE.

**Budget:** Requests made can total **$15,000 direct costs paid over one year from May 1, 2021 – April 30, 2022**. Requests may include one-month summer salary support for the MCUREs project faculty lead(s), technical staff and/or collaborators, undergraduate support, supplies, publication fees, and travel to a project-related conference. The DE-INBRE program leadership will consider limited equipment purchases that are required to complete goals. **PHS 398 fp4 and detailed budget justification fp5 must be completed**.

[**https://grants.nih.gov/grants/funding/phs398/fp4.PDF**](https://grants.nih.gov/grants/funding/phs398/fp4.PDF)

[**https://grants.nih.gov/grants/funding/phs398/fp5.pdf**](https://grants.nih.gov/grants/funding/phs398/fp5.pdf)

**Cover Page:** Maximum 1 page. The cover page must include, in the following order: • Name, affiliation, and contact information • Project title • Requested amount of funding • Number of student participants • Administrative and financial contact information.

**Full proposal narrative (3-page limit):** Full proposals must contain the following:

* **Background:** Describe the MCUREs project background.
* **Statement of Relevance to the DE-INBRE MCUREs mission:** Describe in detail how the proposed learning experiences addresses (1) MCURE’s goal of restructuring the curricula of the biomedical courses to advance instructional competency, (2) students’ ability to make relevant connections to the real-life phenomenon, think critically, communicate effectively and solve complex problems, (3) the more profound impact on low-income/minority student’s learning than traditional approaches, (4) the department and/or institutional needs to stimulate student engagement and academic /career success in biomedical fields, and (5) the potential for the MCUREs curricula transformation to be sustainable.
* **MCUREs project plan:** Detail the engaged methods and pedagogical approaches used to address the MCUREs mission, the expected outcomes, potential pitfalls, and how results will be interpreted. If this is a collaborative proposal, briefly describe how the collaboration adds value to the application. Describe a mentoring plan that seeks mentor input to prioritize MCUREs project teaching goals and assist the MCUREs project lead(s) in building connections and accessing resources.
* **Course Description:** Provide the course information, instructor information, learning outcomes, course materials and requirements, course policies, and course schedule/calendar to be used. Indicate if this proposal is a new course being developed or an existing course being adapted.
* **Assessment Plan:** Provide strategies for designing and assessing student work depending on the learning goals, student populations, and course context.
* **References:** Please list all literature cited within the proposal. References do not count toward the page limit.

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| **Delaware INBRE PROGRAMS** |
| **Delaware INBRE** | Steven J. Stanhope | stanhope@udel.edu | 302-831-3496 |
| **Pilot Awards / Mentoring** | Robert Akins | robert.akins@nemours.org | 302-651-6811 |
| **Education/Professional Development** | Melinda Duncan | duncanm@udel.edu | 302-831-0533 |
| **Budget** | Dawn Everhart | dawnm@udel.edu | 302-831-4331 |
| **Evaluation** | Laura Lessard | llessard@udel.edu | 302-831-6857 |
| **Core Facilities** | Jeff Caplan | jcaplan@udel.edu | 302-831-3403 |
| **Bioinformatics** | Shawn Polson | polson@dbi.udel.edu | 302-831-3235 |
| **COLLABORATING WITH DE-INBRE PARTNER INSTITUTIONS** |
| **Christiana Care Health System** | Scott Siegel | ssiegel@christianacare.org | (302) 733-4730 |
| **Delaware Technical Community College** | John McDowell | jmcdowe8@dtcc.edu | (302) 453-3775 |
| **Delaware State University** | Hacene Boukari | hboukari@desu.edu | (302) 857-6511 |
| **Nemours – Alfred I. duPont Hospital for Children** | Erin Riegel | erin.riegel@nemours.org | (302) 651-5776 |
| **University of Delaware** | Dawn Everhart | dawnm@udel.edu | 302-831-4331 |
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| **COLLABORATING WITH DE-INBRE AFFILIATED AND OTHER DELAWARE INSTITUTIONS** |
| **DelawareBio** | Michael Fleming | michael.fleming@delawarebio.org | (302) 463-7873 |
| **Wilmington VA medical Center** | Suzanne Milbourne | suzanne@udel.edu | (215) 632-7742 |
| **Wilmington University** | Milton Muldrow | Milton.X.Muldrow@wilmu.edu |  |