Request for Applications

INDIANA – PURDUE ADDICTION CARE TECHNOLOGIES (InPACT)

A TRANSLATIONAL RESEARCH PARTNERSHIP BY

INDIANA UNIVERSITY SCHOOL OF MEDICINE

&

PURDUE UNIVERSITY
COLLEGE OF ENGINEERING
WELDON SCHOOL OF BIOMEDICAL ENGINEERING
REGENSTRIEF CENTER FOR HEALTHCARE ENGINEERING

ELECTRONIC RECEIPT DATES

Full applications are due on June 1, 2018.
Submissions are via the 'Start a submission' link found here CTSI InPACT Link

INFORMATION FOR APPLICANTS

GENERAL INFORMATION

Opioid use has reached epidemic proportions in the U.S. with more than 200 million prescriptions issued annually for over a decade. In 2016, there were 62,000 overdose deaths in the U.S.; more fatalities than those associated with soldiers in the Vietnam and Iraq wars combined. On the homefront, the opioid epidemic is devastating Indiana. Indiana ranks as one of the top 10 states in terms of opioid prescriptions in the country. In addition to the thousands of Hoosier lives lost each year to overdose, countless addicts struggle to hold down jobs even though employment opportunities abound in our growing economy.

No other state is as well-positioned, however, to lead a confluence of engineering and medicine to combat the opioid crisis head-on through innovation than is Indiana. Through a dedicated partnership between the Indiana University School of Medicine and its healthcare partners with the Purdue University College of Engineering and its Weldon School of Biomedical Engineering and Regenstrief Center for Healthcare Engineering, the translational capabilities of two of the world's largest and most productive clinical and technological enterprises can be brought to bear on this rapidly spreading addiction problem.

The proposed effort between the Indiana University School of Medicine and the Purdue University College of Engineering aims to develop Addiction Care Technologies that are well-suited not only for the deterrence and monitoring of vulnerable patient populations in clinical settings, but also the rapidly-increasing opioid epidemic on the streets. Potential project areas include:

- **Point of care testing and monitoring**: The development of a fast, minimally invasive test for circulating opioids is a high priority.

- **Enabling hybrid technologies**: Building upon point-of-care testing technologies, advanced systems that measure physiological parameters and administer antagonist therapies and drugs on time in a closed-loop setting remains a critical need.

- **Drug delivery systems**: The improved delivery and availability of long-term opioid antagonists is critically needed in order to save lives. Developing new delivery systems that can be injected without delay, elicit no withdrawal symptoms, and last for many months is a priority.

- **Care coordination of providers**: Understanding and enhancing the most appropriate preventive care measures, obtaining enhanced data such as real-time neonatal abstinence syndrome measures that direct care paradigms, and better directing and utilizing in-hospital and ambulatory resources is a key collaborative goal of the partnership.

Applications to this program are limited to a total of **$100,000 ($50,000 per campus)** and are **12 months (one year)** in duration. Proposed projects should have (at least) one principal investigator from each of the sponsoring affiliates (IUSM, Purdue) for this program. Budgets must equal $50,000 per campus.

WHO MAY APPLY

IUSM: All full-time faculty, regardless of tenure status, having a primary appointment within the School of Medicine as Assistant Professor or Assistant Scientist and above. This includes those faculty appointed as part-time Assistant Professor or above, if they are geographically full-time. Faculty at the IUSM regional centers for medical education are eligible to apply (assuming they meet all other eligibility criteria) and are considered IUSM faculty for purposes of identifying the sponsoring affiliate as described above. Faculty that hold the title of visiting rank must discuss eligibility with the CTSI and obtain approval. *Please email icreate@iu.edu to determine eligibility before submitting an LOI.*

Purdue: All tenured or tenure-track West Lafayette faculty at or above the Assistant Professor level; all research professors; all clinical faculty.

APPLICATION PROCESS

Full applications are due on June 1, 2018. Submissions are via the 'Start a submission' link found here CTSI InPACT Link

If you are planning to submit an application please notify the Indiana CTSI (icreate@iu.edu) so in order to facilitate reviewer identification.

NOTE: If an application is not received five business days prior to the deadline it is assumed the principal investigator has waived administrative review rights; consequently, the proposal may be subject to administrative withdrawal if not compliant with guidelines.

APPLICATIONS SEQUENCE

(Application forms available here CTSI InPACT Link)

1. **Face Page**
   The face page specifies the title of the proposal, principal investigators and his/her affiliation, collaborator(s) and affiliation, where work will be performed, and the total budget. Department / School support must be indicated by **completion of all appropriate signatures on the face page(s) FOR EACH PI/CO-PI.** As submission will be electronic only, facsimile or electronic signatures are appropriate.

2. **Abstract**
   This should be a brief (300 word maximum) abstract in layman's terms. If an award is made, this will be published on the CTSI website.

3. **Budget**
   Budget page may be duplicated and a separate budget page included for each performance site / collaborating institution. Requested grant funding period cannot exceed **twelve (12) months**.
   - Projects should have a start date no earlier than **July 1, 2018.**
   - Proposals must reflect a budget of $50,000 for each of the collaborating institutions.
   - No funds will be allocated for PI or co-investigator / collaborator salaries.
   - Supplies and other costs must relate directly to performance of the project.
   - Travel beyond that which is necessary between the institutions / campuses will require justification.
   - No indirect costs may be requested.
   - All costs for **each participating partner/institution** should be clearly denoted.

4. **Research Plan**

Research Plan should have at least **1/2 inch margins (top, bottom, left and right)** and is NOT to exceed **five (5) single-spaced pages**, excluding references. Font must be clear and readily legible and reasonable size. *Use an Arial, Helvetica, Palatino Linotype or Georgia typeface, a black font color and a font size of 11 points or larger*. The Plan narrative should be structured in accordance with the following format:

A. **Objectives of the current proposal:** State the overall objective or goal of the proposed research. Describe the collaborative research program that exists or that will develop from the collaboration and the nature of the complimentary expertise that will promote synergism.

B. **Specific Aims and methods of the current proposal:** Communicate the scientific significance and innovation of the proposed collaboration. Describe the specific aims of the proposal, the methods of procedure, how the complementary expertise contributes to those aims, and the rationale behind the chosen approach to the problem. Include a discussion of pitfalls that might be encountered and the limitations of the procedures proposed.

C. **Description of joint research program:** Briefly review the current status of research in the field and the PI / co-PI contributions to that field. Document with references. Describe any preliminary work the investigators have performed which led to this proposal, alone or in collaboration. Explain how synergism will be achieved.

D. **Significance:** What is the potential importance of the proposed collaboration? What is its potential impact on human health and/or how may it be translated to impact human health concerns in the future? Discuss any novel ideas or contributions that the collaboration offers. Make clear the potential importance of the proposed collaboration for further investigation and future research on the different campuses.

E. **Use of funds for future extramural funding / IP:** Describe how the collaboration will lead to an extramurally funded research application / program or generate IP. For extramural funding, specifically describe the agency, the program and time frame that you plan to submit an extramural proposal. Define whether this proposal will be joint between the collaborators or, if not, how the collaboration will benefit each of the collaborators individually. If this project will potentially generate IP, provide a specific timeline including short term interim deliverables toward the filing of a disclosure or patent application and discuss how this funding will help to expedite the process.

F. **Project timeline:** The following (or similar) table should be completed and inserted at the end of the research plan.

	Months			
Task	1 - 3	4 - 6	7 - 9	10 - 12
Task 1 – enter description and mark appropriate period(s)				
Task 2 – enter description and mark appropriate period(s)				
Task 3 - enter description and mark appropriate period(s)				
Task 4 - enter description and mark appropriate period(s)				
Task 5 - enter description and mark appropriate period(s)				
Task x – complete requisite progress reports		X		X

5. **References Cited**
6. **Biosketch:** Biographical sketch (5-page maximum) of the principal investigators and co-investigator/collaborator in the NEW September 2017 NIH format available at https://grants.nih.gov/grants/forms/biosketch.htm.
7. **Appendices** (not to exceed 6 pages): include supporting information as needed

PEER REVIEW AND AWARD SELECTION

Requests for funds will be critiqued on the following items:

- The strength of the research
- The strength of the collaboration.
- The strength of a defined plan for future extramural support and/or IP
- How well the application addressed the expectations outlined in the RFA

The Review Committee will evaluate the scientific merit of the proposal as well as the strength and potential of the proposed collaboration. The results / comments will be collated and final funding decisions made in June 2018. Therefore, projects should have a start date no earlier than **July 1, 2018.**

POST AWARD REQUIREMENTS

1. All awards will be monitored for progress by the Indiana CTSI. Progress monitoring generally includes the following from all project PIs:
   a. Semiannual progress reports that report status of milestone progress along with documentations of external grant submissions/awards, IP, publications, and/or presentations arising from the supported research while the project is still active.
   b. Annual follow-up reports upon request for up to 5 years after the project ends, including but not limited to the following data:
      i. External grant submissions and awards arising from the supported research
      ii. Intellectual property arising from the supported research
      iii. Publications arising from the supported research
      iv. Additional impacts of the award on your research and the collaboration
2. It is expected that this pilot funding will lead to co-authored publications and external funding submissions, generally reported on the annual progress reports.
3. Grant recipients are required to acknowledge receipt of support in any presentation or publication of work funded by this award as follows:

   This [(publication was made possible) (project was supported)] by the Indiana University School of Medicine and the Purdue University College of Engineering. The content is solely the responsibility of the authors and does not necessarily represent the official views of the National Institutes of Health."

4. By accepting this award, grant recipients agree to have their names and project abstract publicly posted on the Indiana CTSI website and/or in a publication.