



From the Director:

We look forward to seeing you at our upcoming seminar, Coalescing Teams: Collaborations at the Interfaces of PI4D on November 11th in the Deans Auditorium at Pfendler Hall. The full schedule can be seen below, but we are particularly excited about our faculty presentations emphasizing opportunities for collaborations. A special thanks to our core facility managers and representatives for being willing to "pitch" their cores and provide information about their services. I would like each of you to consider the theme of this symposium, "Coalescing Teams" and consider offering ideas and suggestions at 11:40 in the program or afterward.

8:30 - 8:40 Coffee and Opening Remarks - Dr. Richard Kuhn

8:40 - 9:00 Program Area Initiatives and Updates for Immunology and Infectious Disease

9:00 - 10:20 Inflammation Focus Section:

- **Qing Jiang** – Professor, Nutrition Science
- **Yoon Yeo** – Associate Department Head & Associate Professor, Industrial & Physical Pharmacy
- **Seema Mattoo** – Assistant Professor, Biological Sciences
- **Mark Lipton** – Associate Professor, Organic Chemistry/Chemical Biology

10:20 - 10:40 Coffee Break

10:40 - 11:40 Infectious Disease Focus Section:

- **Mohammed Seleem** – Associate Professor, Microbiology
- **Dan Flaherty** - Assistant Professor, Medicinal Chemistry & Molecular Pharmacology
- **Fang Huang** - Assistant Professor, Biomedical Engineering

11:40 Coalescing Remarks

12:00 - Core Facility Showcase (each will pitch their facility for a few minutes)

- **Greg Tamer** - 7T Magnet
- **Jyothi Thimmapuram & Nadia Atallah** - Bioinformatics Core
- **Bruce Cooper** - Metabolomic Profiling Facility
- **Sophie Lelievre & Tim Kwok** - 3D Cell Culture Facility (3D3C)
- **Andy Schaber** - Bioscience Imaging Facility
- **Chris Gilpin** - Life Science Microscopy
- **Robyn McCain & Greg Knipp** - Purdue Translational Pharmacology
- **Uma Aryal** - Purdue Proteomics Facility
- **Lan Chen** – Chemical Genomics

Please let us know if you [plan to attend here](#).

Some additional announcements from the Institute:

- As many of you may have seen, there have been a number of changes associated with the pre-award system, please be sure to identify yourselves as a member of the Purdue Institute of Inflammation, Immunology, and Infectious Disease.
- We are excited to have established an Internal Advisory Board to help guide the Institute and
- serve as a sounding board for me as the director. It's a great and diverse set of individuals and I'm counting on their imagination and insights.
- Dr. Ted Pierson, Chief of the Viral Pathogenesis Section, Laboratory of Viral Disease at the NIAID/NIH will be visiting campus on Monday, December 12th. Dr. Pierson will be giving a seminar sponsored by PI4D. Details are forthcoming - please look for future announcements regarding his talk.

- Dr. Richard Kuhn
Director, PI4D

Elizabeth Repasky, PhD, Professor of Oncology, Department of Immunology, The Dr. William Huebsch Professorship in Immunology Co-Leader, Cell Stress and Biophysical Therapies CCSG Program at Roswell Park Cancer Institute will be visiting campus on **Thursday, December 1**. Her PCCR seminar will be in the **Drug Discovery Conference room at 11:30**.

TheScientist
Free Webinar Series

REGISTER NOW!

microRNAs: Small but Mighty Tools
Wednesday, November 2, 2016
2:30 - 4:00 p.m. Eastern Time

Array-based analysis of microRNA (miRNA) expression has provided valuable insight into disease-related transcripts, both protective and predisposing. Therapeutic design based on these data sets has enabled both supplementation with protective miRNAs such as miRNA mimics, and silencing of predisposing miRNAs using complementary RNAs. For a discussion of the current state of disease-specific miRNA profiles and miRNA-based therapeutics, *The Scientist* is bringing together a panel of experts to share their work with miRNA interventions. Attendees will have the opportunity to interact with the experts, ask questions, and seek advice on topics related to their work.

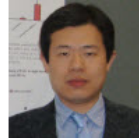
Topics to be covered include:

- The various roles of miRNAs in disease progression and recovery
- Steps for developing miRNA-based therapeutics

Meet the Speakers



Andrea Kasinski, PhD
William and Patty Miller Assistant
Professor of Biological Sciences
Purdue University



Xianshuang Liu, PhD
Senior Scientist, Department of
Neurology
Henry Ford Health System

Not able to attend?

Register now and we'll give you full access to the archived webinar when it becomes available!
Forward information on this webinar to your colleagues.

INDIANA CTSI POSTDOC CHALLENGE

\$5,000.00 for postdoctoral researchers



PURDUE POSTDOCS:

The Postdoc Challenge offers postdoctoral researchers valuable *proposal writing and reviewing* experience in areas related to translational research through the use of one or more CTSI-Designated Core Facilities.

Information at www.indianactsi.org/all-open-rfps

Application deadline Tuesday, February 28, 2017

Informational Workshops:

Thursday, November 3, 2016

3:00-4:00pm

Purdue University

BCHM 101

*"Effective Grant Writing
Techniques"*

Thursday, January 12, 2017

3:00-4:00pm

Purdue University

BCHM 101

*"Translational Science Proposals and
Core Facility Grants"*

Contact Wendy Field at wfield@purdue.edu for more information



INDIANA CTSI
Clinical and Translational Sciences Institute



PURDUE
UNIVERSITY

INDIANA UNIVERSITY
BLOOMINGTON

SCHOOL OF MEDICINE
INDIANA UNIVERSITY



2016-17 Indiana CTSI Postdoc Challenge: Grant funding to use CTSI-Designated Core Facilities

Background:

The Indiana Clinical and Translational Sciences Institute (Indiana CTSI) is a statewide collaboration between Indiana University, Indiana University School of Medicine, IUPUI, Purdue University, and the University of Notre Dame as well as public and private partnerships which facilitate the translation of scientific discoveries in the lab into clinical trials and new patient treatments in Indiana and beyond. In biomedical terminology, translational research refers to what is popularly termed "bench to bedside", the process by which research in the lab "translates" into human patient treatment. Translation involves applying research discoveries (in the lab, through animal studies, etc.) to the development of clinical trials and studies in humans, or carrying out research aimed at enhancing the adoption of best practices.

"CTSI-Designated Core Facilities" are cores that undergo a yearly accreditation process through Indiana CTSI which allows them to participate in pilot funding opportunities administered through the Indiana CTSI for all partner institutions. The Postdoc Challenge aims to introduce the postdoctoral research community to the grant-writing process and the experience of reviewing submitted proposals.

Description:

The Postdoc Challenge offers postdoctoral research associates at Indiana University, Indiana University School of Medicine, IUPUI, Purdue University, and the University of Notre Dame valuable proposal writing and reviewing experience in areas related to translational research through the use of one or more of the CTSI-Designated Core Facilities at these universities. This is a competitive opportunity for two 1-year awards of \$5000 each per institution in the form of an expense account for use of core facility services. Funding is to be used only for services provided by the core facilities. Indiana CTSI-Designated Core Facilities are listed on the HUB (www.indianactsi.org/servicecores) and have the CTSI logo (✱). *If you are interested in participating, you must discuss your proposal with your advisor prior to beginning the application process to ensure your participation will be approved.*

Postdoctoral research associates from Indiana University, Indiana University School of Medicine, IUPUI, Purdue University, and/or the University of Notre Dame are encouraged to submit applications that clearly articulate their translational strategy (ie: from lab bench to bed side) and how this strategy can be advanced through the use of technologies offered by a core facility. Applicants must make contact with and request a Letter of Support from the Core Facility Manager(s) to confirm that the proposed project can be accomplished in their core facility. Awardees will be expected to develop and manage a project budget that aligns with the translational strategy. A six-month and a final progress report will be required over the 1-year project period.

Review Process:

Applications will be reviewed and ranked by a group comprised of selected faculty and members of the postdoctoral community. The final selection and funding recommendations will be made by the Indiana CTSI Executive Committee.

Application:

Postdoctoral research associates from Indiana University, Indiana University School of Medicine, IUPUI, Purdue University's West Lafayette campus, and the University of Notre Dame are eligible to apply. A link to the application can be found at www.indianactsi.org/all-open-rfps. **Applications are due by Tuesday, February 28, 2017 at 5:00pm EDT.** Awardees will be announced in April, 2017. A letter of support from the applicant's advisor is necessary for participation in this challenge. Questions can be directed to Wendy Field at wfield@purdue.edu. *Please, only one proposal per applicant.*

CASIS and NCATS Announce International Space Station Funding Opportunity Focused on Human Physiology Research

Part of a new four-year, \$12 million partnership to fund research onboard the International Space Station U.S. National Laboratory. To view the funding opportunity, learn how to submit your proposal, and get the latest information on this initiative, please visit: www.casistissuechip.blogspot.com

Indiana CFAR Grants Program

The Indiana Center for AIDS Research (CFAR) is pleased to announce its new Junior Investigator Pilot Grants program. The purpose of this program is to support junior investigators embarking in an academic career in HIV/AIDS research.

Eligibility - applicants (MD or PhD) must be fellows, post-doctoral trainees, or faculty at the Instructor or Research Assistant Scientist/Professor rank and have no previous or current NIH grant support (except career development awards) for HIV related research. Applicants who have previously received one year of funding through this mechanism will be eligible to apply for a second year of funding through this mechanism.

Topics covered – Applications will be considered in the broad area of HIV/AIDS research including (but not limited to) HIV biology, epidemiology, or pathogenesis; pathogenesis of opportunistic infections or neoplasms; treatment of HIV or opportunistic infections; end-organ complications of HIV infection or its treatments; prevention of HIV infections; and operations or implementation research in HIV care delivery. Applications may be laboratory-based, clinical, translational, or behavioral.

Amount and duration – Applicants may request funding up to \$12,500 for 1 year. Awards will be made for one year with funding for a second year (if requested) contingent on progress during the first year and preparation of an application for external funding. Requested funds are to be used for direct costs (no indirect costs will be funded) of the proposed research and not for the salary(ies) or travel of the proposing investigators.

Application format –

- Proposal (4 pages- Arial font, 11 point type, 0.5 inch margins):
 - Title
 - Background/Rationale
 - Hypothesis/Study Objectives
 - Study Design
 - Future Directions (how these data will be used to support future extramural funding applications)
 - Career Development plan (1/2 page): include interest in HIV/AIDS Research, Mentor qualifications, training plan during the period of the award.
- Budget and Budget Justification (1 Page)
- NIH biosketch (new format)
 - Applicant
 - Primary Mentor

Key Dates:

- Application Deadline: **November 14, 2016**
- Award Announcement: **December 1, 2016**
- Funding start: **January 1, 2017**

Proposal Deadline: December 1, 2016
Drug Investigational Screening and Chemigenomics Facility Projects
Request for Applications

The Purdue Institute for Drug Discovery is allocating survey funds to support up to five projects to use the newly created high-throughput/high content chemical genomics screening facility

<http://www.purdue.edu/discoverypark/drug-discovery/facilities/cgf/index.php>

These projects should focus on the identification of hits that may have the potential to lead to further drug development. Applications should be sent to Karson Putt (puttk@purdue.edu) and must be received by 5:00 pm on December 1st, 2016.

**Indiana Clinical and Translational Sciences Institute
Purdue Retreat
Tuesday, December 13, 2016**

*Hall for Discovery Learning Research (DLR)
207 S Martin Jischke Drive
West Lafayette, IN 47907*

8:30-9:00am	Registration and Continental Breakfast	DLR atrium
9:00-9:30am	Welcome and update of CTSI opportunities <i>Connie Weaver, Deputy Director, Indiana Clinical and Translational Sciences Institute; Distinguished Professor and Department Head, Department of Nutrition Science, Purdue University</i> Preparing for the next 5 years of CTSI <i>Anantha Shekhar, Director, Indiana Clinical and Translational Sciences Institute; Executive Associate Dean for Research Affairs; August M. Watanabe Professor of Medical Research, Indiana University School of Medicine</i>	DLR 131
9:30-10:30am	New investments in the life sciences at Purdue and Notre Dame <i>Donna Fekete, John & Donna Krenicki Directorship in Integrative Neuroscience, Purdue Institute for Integrative Neuroscience; Professor, Department of Biological Sciences, Purdue University</i> <i>Richard Kuhn, Director, Purdue Institute of Inflammation, Immunology and Infectious Disease (PI4D); Professor of Biological Sciences, Purdue University</i> <i>Paul Bohn, Director, Advanced Diagnostics and Therapeutics; Arthur J. Schmitt Professor, Department of Chemical and Biomolecular Engineering; Professor, Department of Chemistry and Biochemistry, University of Notre Dame</i>	DLR 131
10:30-11:00am	Break	
11:00am-12:00pm	Cancer Prevention <i>The challenge of defining cancer prevention mechanisms underlying associations identified from epidemiological research</i> <i>Jim Fleet, Distinguished Professor of Nutrition Science; Director of the Interdepartmental Graduate Program in Nutrition, Purdue University</i> <i>Influence of dietary protein on cancer prevention</i> <i>Roberto Pili, Robert Wallace Miller Professor of Oncology; Professor of Medicine; Professor of Urology; Adjunct Professor of Pharmacology and Toxicology, Indiana University School of Medicine</i> <i>IUB cancer prevention is a multi-stage process</i> <i>James Klaunig, Professor, Environmental Health, Indiana University</i>	DLR 131
12:00-1:00pm	Lunch and Posters	
1:00-2:00pm	Breakout Session One <i>Cancer Collaborations ~ hosted by Connie Weaver and Cleveland Shields</i> <i>Microbiome ~ hosted by Steve Lindemann and Dave Nelson</i>	DLR 143 A/B
2:00-3:00pm	Breakout Session Two <i>Biology Big Data Science ~ hosted by Jim Fleet</i> <i>Neuroscience – speed dating ~ hosted by Donna Fekete</i> <i>Translational Research Collaboratory ~ hosted by Richard Kuhn and Chandy John</i>	DLR 143 A/B
Contact Information: Tommy Sors (765-586-8975) Wendy Field (765-491-3413)		

Please register by Friday, December 2nd at <http://j.mp/2d5xGuW>

Funding Opportunities

Opportunity	Award Amount	Deadline
Simon Kimmel Scholars – award for promising young cancer researchers http://kimmel.org/kimmel-scholars/	200,000	December 1, 2016
NIH Big Data to Knowledge (BD2K) Enhancing the Efficiency and Effectiveness of Digital Curation for Biomedical Big Data (U01)	Varies	December 15, 2016

<u>NIH-NLM Information Resource Grants to Reduce Health Disparities (G08)</u>	<i>Varies</i>	<i>December 16, 2016</i>
<u>HHS-CDC Creation of a Healthcare-Associated Infectious Disease Modeling Network to Improve Prevention Research and Healthcare Delivery</u>	<i>650,000</i>	<i>January 31, 2017</i>
<u>HHS-AHRQ Large Research Projects for Combating Antibiotic-Resistant Bacteria (CARB) (R01)</u> <u>http://grants.nih.gov/grants/guide/pa-files/PA-16-423.html</u>	<i>Varies</i>	<i>February 5, 2017</i>
<u>NIH Addressing Health Disparities in NIDDK Diseases (R01)</u>	<i>Varies</i>	<i>February 5, 2017</i>
<u>NIH-NCI Small Grants Program for Cancer Research (NCI Omnibus R03)</u>	<i>Varies</i>	<i>February 28, 2017</i>
<u>NIH Partnerships for Development of Vaccines to Prevent Mycobacterium tuberculosis Infection and/or Tuberculosis Disease (R01)</u>	<i>Up to 500,000</i>	<i>March 2, 2017</i>
<u>NIH Notice of Intent to Publish Funding Opportunity Announcements to Promote Implementation Science (R01) and Dissemination and Implementation Studies (R18)</u>	<i>Varies</i>	<i>Calendar Year</i>



FLUIDIGM®

Single-cell Analysis Workshop

Overview of the Fluidigm C1 automated system

Monday, November 14th

9:00am—12:00pm

MRGN 121

Refreshments will be served

Are you interested in analyzing individual cells for genomic or gene expression studies? If so, please consider attending this session on single-cell sequencing procedures and follow-on bioinformatics and statistical analysis. This workshop will also include highlights of other single-cell capabilities of Fluidigm's C1 system available at the Bindley Bioscience Center.

Workshop Program:

- Overview of single-cell analysis using the C1 system - David Coe, Fluidigm
- Considerations for experimental design and example analyses - Renee Vickman, Bindley Bioscience Center
- Sequencing single-cell samples - Dr. Phillip SanMiguel, Purdue Genomics Facility
- Bioinformatics of single-cell data - Nadia Atallah, Purdue University Center for Cancer Research.
- Addressing statistical issues within single-cell data - Min Zhang, Department of Statistics

RSVP: Susan McCreery (smccreer@purdue.edu) by Nov. 9th



Send us your images and news stories! Images and stories can be deposited [here](#), or email us at pi4d@purdue.edu

