UFII-CTSI Request for Pilot Applications:
Big Data in the Health Sciences

Timeline

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<th>Event/Deadline</th>
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<td>Collaboration Event Registration Deadline</td>
<td>Friday, October 26, 2018, by 5 p.m.</td>
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<td>Collaboration Event</td>
<td>Wednesday, November 7, 2018, 4-7 p.m.</td>
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<td>Application Deadline</td>
<td>Wednesday, December 5, 2018, by 5 p.m.</td>
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<td>Anticipated Notice of Awards</td>
<td>February 2019</td>
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<td>Award Funding Period (up to 12 months)</td>
<td>February 2019 – January 2020</td>
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Purpose and Thematic Areas of Focus

The UF Informatics Institute and UF Clinical and Translational Science Institute are jointly funding a second pilot opportunity to continue fostering collaborative momentum and catalytic projects in areas of interest identified during the CTSI-UFII Fall 2017 Roundtable Series. This RFA will support multidisciplinary pilot projects involving collaborators from two or more colleges that advance the development of novel methods, techniques or technologies with the potential to accelerate high-impact opportunities for “big data” integration and analytics in two areas:

- **Precision medicine**: integration of datasets and development of analytic approaches with the potential to yield new clinical or biological insights that could inform the development of more precise diagnosis, treatment or prevention approaches at the individual level.

- **Precision public health**: integration of datasets and development of analytic approaches with the potential to enable more precise identification of communities at risk for health disparities and yield new insights that could inform the development or delivery of evidence-based interventions tailored to a community’s needs.

Applicants are strongly encouraged to develop their projects in accordance with FAIR Data Principles, which include Findability, Accessibility, Interoperability and Reusability.¹

Total Available Funding and Award Amounts

UFII and CTSI will make a total of up to $200,000 available for this RFA depending on quality of submissions and budget availability. Teams can apply for awards of up to $75,000 each.

Collaboration Event

The UFII and CTSI are hosting a collaboration event on Wednesday, Nov. 7, from 4 p.m. to 7 p.m. in the Harrell Medical Education Building. **At least one faculty member from an applicant team is required to attend.** The event will provide an opportunity for researchers

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from across campus to learn about the types of projects of interest for this RFA and connect with potential collaborators. It also aims to showcase the breadth and depth of expertise in analytics that junior faculty and researchers across campus can bring to biomedical problems. The event will include a poster session and refreshments. **Register by Oct. 26.**

### Data and Methods of Interest

Project teams are strongly encouraged to work with HIPAA-limited or de-identified datasets. Of particular interest for this RFA are novel linkages of existing datasets to advance clinical and translational research\(^2\) with the goal of improving health for unique cohorts or populations at local, statewide or national levels. Examples of such datasets might include molecular (e.g., genomics, metabolomics, proteomics), imaging (e.g. MRI, pathology slides, or dermatology images), patient-generated (e.g., mobile health devices or apps), clinical (e.g., electronic health records or devices, insurance claims), public health surveillance, social determinants of health, economic or environmental data.

Additional areas of interest include methodologies for addressing selection bias that may occur during data linkage.

### Eligibility

- Principal investigators must meet the [guidelines for Principal Investigator status](#) as outlined by UF’s Division of Sponsored Programs.
- Applicants must assemble project teams that include trainees (graduate students, postdocs or fellows), junior faculty (assistant professors) and/or mentors, as appropriate, from at least two colleges. Single-investigator proposals are not eligible.
- Applicants can only submit one application for which they are the principal investigator, but individuals can be listed as co-investigators on more than one proposal.
- Recipients of previous UFII and CTSI pilot awards are eligible to apply for awards to support fundamentally new research projects, provided awards are at least 2 years apart.

### Awardee Requirements

- It is expected that UFII-CTSI Pilot Projects will result in one or more publications in a peer-reviewed journal and will provide critical preliminary data to support extramural applications.
- Awardees must be in compliance with all IRB policies. Applicants whose proposals will require IRB approval should demonstrate they have taken preliminary steps to prepare submissions so minimal time will be lost in securing approvals.
- Any research projects involving genomic data must comply with the National Institutes of Health Genomic Data Sharing Policy.
- Awardees must submit progress reports on the scientific and fiscal status of the project 6 months and 12 months after the notice of award is received. Awardees also will be asked to report subsequent publications and funding awards resulting from pilot projects.
- Awardees are expected to present their research during the UFII Annual Symposium and annual UF CTSI Research Day in the form of a poster or presentation. Awardees are also expected to present the results of their research at scientific meetings and publish findings in

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\(^2\) For NIH definitions of clinical and translational research please see: [http://grants.nih.gov/grants/glossary.htm](http://grants.nih.gov/grants/glossary.htm)
In accordance with NIH requirements:

- All presentations and publications resulting from work funded by a UFII-CTSI Pilot Award must include a funding citation. The following language should be used: “Research reported in this publication was supported by the University of Florida Informatics Institute SEED Funds and the UF Clinical and Translational Science Institute, which is supported in part by the NIH National Center for Advancing Translational Sciences under award number UL1 TR001427. The content is solely the responsibility of the authors and does not necessarily represent the official views of the National Institutes of Health.”

- Awardees must ensure that electronic versions of any peer-reviewed manuscripts accepted for publication are deposited in PubMed Central, the NIH's digital archive of biomedical and life sciences journal literature. See http://grants.nih.gov/grants/guide/notice-files/NOT-OD-08-033.html.

- Awardees must notify the UFII and CTSI at UFII-CTSI_Pilot-I@lists.ufl.edu during the funding period if there is a significant change in the scope of work that would affect the outcome of the project or necessitate re-budgeting.

Review Process and Criteria

All proposals will be triaged for completeness, feasibility and responsiveness to the RFA. Proposals that are accepted will be referred for scientific review.

Scientific Reviews: UFII and CTSI will conduct a scientific review of all accepted applications. Reviewers will use NIH review criteria to score submissions based on scientific merit.

Funding Decisions: In addition to scientific review scores, the UFII and CTSI will consider the following criteria in making funding decisions, specifically whether proposals:

- Are multidisciplinary, collaborative and/or inter-institutional in the clinical and translational research enterprise;
- Encourage the development or use of emerging methodologies and technologies that may affect future research;
- Allow rapid acquisition and/or analysis of proof-of-concept data to proceed with full-scale investigations;
- Support the participation of clinical and translational science trainees;
- Show significant promise in securing external funding;
- Provide insights that could be generalizable to other projects or could lead to the adoption of best practices in data integration and analytics for translational health science.

Budgeting and Spending Requirements

- Funds can only be used for direct costs.
- Funds cannot be used to support faculty salaries or major equipment purchases.
- Funds are non-transferable.
- Funds must be used in the 12-month period following their release. Any un-spent funds will be returned to the UFII and CTSI at the end of the 12-month funding period.
• Funds must be used for the activities detailed in the application.
• Funds requested for CTSI services will be provided as non-transferable credit. A list of CTSI services and contacts can be found at: www.ctsi.ufl.edu/research.
• Continued funding during the award period is contingent on compliance with awardee requirements and adequate progress in meeting the project timeline.

Application Instructions

Applications must include a cover sheet signed by the principal investigator and the PI’s department chair; abstract; brief description of translational impact; brief description of how the proposal would lead to external support; mentoring plan for trainees and junior faculty; project proposal/ research plan; metadata for datasets to be utilized in the project (three elements are required, but provision of additional metadata will be considered favorably in proposal reviews and funding decisions); key personnel and biosketches; budget, justification and cost estimates; and letters of support if applicable. Download the cover sheet and application form for complete instructions. Proposals that are incomplete or otherwise do not follow instructions will be returned to the investigator without review.

Related Resources

The following resources may be of interest for potential projects:
• UF Informatics Institute fellows programs, student organization and other resources
• UF Clinical and Translational Science Institute services and resources:
  o Pilot Grantwriters’ Toolkit
  o UF Health Integrated Data Repository
  o OneFlorida Data Trust
  o Biostatistics, Epidemiology and Research Design Program
  o Biomedical Informatics Program
  o Southeast Center for Integrated Metabolomics open-source tools
• UFIT Research Computing resources: HiPerGator, ResShield and ResVault
• UF Library Guides and Database Lists:
  o UF HSC Libraries Guide: Precision Public Health
  o UF Libraries A-Z Databases
  o UF HSC Libraries A-Z Databases

Contact for Questions

Please email questions to UFII-CTSI_Pilot-l@lists.ufl.edu.