Overview
As part of the launch of the University of Utah One Utah Data Science Hub, the Office of the Vice President for Research and the Senior Vice President for Health Sciences Research Unit are initiating a seed grant program aimed at catalyzing new collaborations and innovative research in data science and data-enabled science that will lead to federal extramural grant applications. Pilot awards will be supported up to $50,000. Up to 6 pilot awards can be funded in the pilot cycle.

The One Utah Data Science Hub will oversee two major research initiatives aimed at advancing data science research at the University of Utah:

- **The Data Exploration and Learning for Precision Health Intelligence (DELPHI) Initiative** aims to drive innovation in health and medicine by expanding data science expertise and accelerating scientific discovery. For more information on DELPHI, please visit our website or click here for a downloadable PDF flyer.

- **The Data Science and Ethics of Technology (DATASET) Initiative** aims to engage foundational questions about the role of data in society, including scholarship that advances storage capability and function, enhances visualization and analysis, critically investigates the logic and ethics of data tools, and develops policy and legal guidelines for meaningful data use. For more information on DATASET, please visit our website or click here for a downloadable PDF flyer.

Timeline
- Deadline for submission is **11:59pm (MST) on Monday, November 7th, 2022.**
- Decisions will be made in December 2022
- Funding will start in January 2023.

Research Scope
We invite applications that build upon the missions of the DELPHI and DATASET Initiatives and support innovative research that cuts across both initiatives. Areas of interest include (but are not limited to):

- Development of new data science analysis approaches for new discovery or translational applications.
- Integration of large datasets with machine learning or artificial intelligence methodologies to advance applications imperative to the
human condition.

- Novel applications of data science techniques to critical research questions
- Novel computational, data analytics, and visualization techniques and frameworks to support research and discovery
- Use of data to improve translational research and improve the human condition
- Big data driven research to optimize outcomes from ethics, fairness, and equity perspectives
- Critical examinations of data infrastructure and/or policy
- Elucidating and engaging data-centric disparities, ethical dilemmas, and historical realities
- Optimizing data presentation, storage, analytics, and/or access

We encourage projects to strongly consider the following:

- New collaborations between clinical and research faculty, faculty from different departments, or cross-campus collaborations. *See below for support for data science research collaboration “matchmaking” opportunity.
- Proposals from early career faculty or proposals from established investigators that represent new research directions
- Justice, equity, diversity, inclusion, and belonging

Eligibility

- Only one research proposal per principal investigator (PI) will be reviewed.
- All PIs must be a tenure- or career-track faculty at the University of Utah.
- PIs must have a minimum of 20% protected time to conduct the proposed research. This will be verified with the applicant’s department head.

Review Criteria

Preference will be given to projects that include all five of the following features:

- Have significant scholarly merit.
- Demonstrate innovation in data science
- Have a high potential for future extramural funding from entities like the National Science Foundation, the National Institutes of Health, the Department of Defense, the National Endowment for the Humanities, the National Endowment for the Arts, or foundations dedicated to research.
- Are not currently supported by extramural funding in the seed grant topic area.
- Represent work from new collaborative teams or that support the career development of junior faculty or new direction for an established PI
Application Instructions
Applications and all supporting documents to be submitted via InfoReady by 11:59pm (MST) on Monday, November 7th, 2022. All uploaded application documents should be single-spaced and use 11-point, Arial font and 1-inch margins. Grant administration is the responsibility of the principal investigator(s).

All applications must include each of the requested materials below:

1. **Cover page (to be collected by InfoReady):** PI(s) (department, title, and contact information), co-investigators (department, title, and contact information), project title, IRB/IAUC approval numbers—if relevant
2. **Executive Abstract (150-word max):** Abstract should consist of an accessible summary of the project and its potential impact (150-word max). This may be shared with non-scientists, scientists of different disciplines, and the greater UofU and Utah communities. Please ensure it is written for a general audience and no confidential information is provide.
3. **Project Keywords (10-word max):** Each proposal should include up to 10 keywords that help identify the key objectives, disciplines, research types, and associated entities of the proposal. Example: DEI, global, air quality, interview research, and junior faculty.
4. **Specific aims of the research proposal (1.0 page maximum)**
5. **Proposal Narrative (3.0 page maximum, including figures):** Please address significance, innovation, approach, timeline, clear deliverables, and data sharing plan.
6. **Plan for Extramural Funding (1.0 page maximum):** This plan must include specific agencies and funding mechanisms/calls that the research group plans to apply for in the next 1-3 years.
7. **References (no page limit)**
8. **Budget justification (1.0 page)**
9. **Budget – must use provided template**
10. **Biographical sketches or brief CVs for all investigators (5.0 pages maximum)**
11. **Current and pending support for all investigators (no page limit)**

Budget Guidelines
Pilot grant funds may be used for salaries and benefits of non-faculty project personnel, supplies, miscellaneous expenses, and services. Funds cannot be used for faculty salaries, travel that is not directly related to project research (e.g., conferences cannot be supported by this grant), consultants, or office equipment, including computers (unless specifically justified).
**Evaluation and Funding of Proposals**

Proposals will be reviewed by the DELPHI and DATASET Steering Committees and additional ad hoc members to assess innovation, scholarly merit, likelihood for success, and external funding, and alignment with the mission of the DELPHI/DATASET Initiatives. If human participants or animal research are involved, one copy of the IRB or IACUC approval will be required prior to release of funds.

**Progress Reports**

The following reports are required from all awarded PIs. Templates will be provided.

<table>
<thead>
<tr>
<th>Duration</th>
<th>Report Description</th>
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</thead>
<tbody>
<tr>
<td>6 months</td>
<td>Progress report will be required for review by the research committee to assure adequate progress.</td>
</tr>
<tr>
<td>1 year</td>
<td>Progress report describing the results and deliverables of the research, future directions, and plans to secure additional funding.</td>
</tr>
<tr>
<td>Up to 3 years</td>
<td>Report of outcomes, impact, publications, or extramural funding stemming from the work.</td>
</tr>
</tbody>
</table>

PIs may also be asked to participate in the preparation of additional reports to donors or in events with presentations to donors.

**Resources**

- *Do you need help finding a collaborator for a research project? Do you have certain expertise that you’d like to offer to a novel project?* We can help play matchmaker! Please submit either of the following by October 1\textsuperscript{st}, 2022, to Nicole.Frank@hsc.utah.edu.
  1) Your research idea and question and what expertise you are seeking, or
  2) Your expertise that you are willing to lend to projects

We will discuss in the DELPHI and DATASET Steering Committee meetings and post collected information [HERE](#) (in UBox).

- *Applicants are strongly encouraged to consult and utilize University resources to build a competitive application.*
  - Data Science Services
  - The Clinical and Translational Science Institute Biomedical Informatics Core
  - Utah Population Database
• **Health Sciences and HCI cores and recharge**
• **Scientific Computing and Imaging Institute**
• **Utah Center for Data Science**
• **Surgical Population Research Analysis Core**

• **Informational Webinars.** There will be two information webinars that will provide an overview of the program including a Q&A session:

  o **Wednesday, September 21, 2022 | 1:30pm – 2:30pm**
    Join Zoom Meeting: [https://utah.zoom.us/j/94169195190](https://utah.zoom.us/j/94169195190)
    Meeting ID: 941 6919 5190
    Passcode: 385334

  o **Thursday, October 6, 2022 | 9:30am – 10:30am**
    Join Zoom Meeting: [https://utah.zoom.us/j/91534556168](https://utah.zoom.us/j/91534556168)
    Meeting ID: 915 3455 6168
    Passcode: 431978

**Submit an Application**
Applications and all supporting documents to be submitted via [InfoReady](https://utah.zoom.us/j/94169195190) by 11:59pm (MST) on Monday, **November 7th, 2022**. Late or incomplete applications will not be accepted or reviewed. Application review may take up to 90 days.

**Questions?** Please contact: [Bridget Hughes](https://utah.zoom.us/j/94169195190) or [Tyler Matsamas](https://utah.zoom.us/j/94169195190)