Fred Hutch Data Strategy
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Chief Data Officer Background and Role

Fred Hutchinson Cancer Center was formed from the merger of Fred Hutchinson Cancer Research Center and the Seattle Cancer Care Alliance in April 2022. Fred Hutch is an independent, nonprofit organization that also serves as the cancer program for UW Medicine. This relationship allows for enhanced care coordination with one of the world's leading integrated health systems.

In May 2022, Fred Hutch hired Jeff Leek as Chief Data Officer for Fred Hutch and J Orin Edson Foundation Professor of Biostatistics. Previously, he was a professor of Biostatistics and Oncology at the Johns Hopkins Bloomberg School of Public Health and co-director of the Johns Hopkins Data Science Lab. Dr. Leek's responsibility as CDO in the first year was to identify the data needs of the newly merged Fred Hutch and to design a comprehensive data strategy to address those needs.

Vision and Philosophy

Dr. Leek has created the Data Science Lab (DaSL) as an integrative effort that centers Fred Hutch staff using data in their professional work. DaSL's role is to ensure that the Fred Hutch has an effective data ecosystem supporting those leveraging data regardless of "where they live," from the clinic to the research groups, and regardless of their previous experience or exposure to data in their professional work. A healthy and effective data ecosystem requires developing a modern, well documented, well implemented overall data strategy that evolves with the needs and capabilities of our staff. Our approach is to both coordinate existing data supports to extend their reach and impact and build expertise across the ecosystem to better support Fred Hutch staff.

Today we're at a turning point with respect to the way we do science and clinical care. The interplay between data and AI will transform how we approach biomedical research and superior clinical care. To be ready to take advantage of the AI transformation, we'll need our own data in all realms of Fred Hutch to be "AI ready", meaning it needs to be organized and accessible to develop the next generation of AI technologies. We'll also need Fred Hutch staff to be expert data stewards and to prioritize data literacy so we can innovate while protecting patients' privacy and data autonomy.

DaSL's strategic priorities are designed to meet the current needs of Fred Hutch's data community we discovered through our needs assessment and build an ecosystem that will enable Fred Hutch to lead in the new data and AI world. The guiding principles of DaSL's approach to closing the gap between where we are and leadership in the AI era are:

1. Democratize engagement with data via streamlining data access, training, documentation, and support for the Fred Hutch community
2. Empower existing data programs and staff to understand and use data and technology in a supportive culture
3. Be adaptable and continuously evolving to maximize opportunities over time for the Fred Hutch community in the AI area

DaSL: hutchdatascience.org   Newsletter: fhdata.substack.com

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DaSL's Strategic Priorities

Strategic Priorities	Summary
Translational Analytics	Our translational analytics group will be creating a collaborative network of clinical analytics groups and clinical research staff to support data needs including facilitated data requests and self-service data training. We will collaborate with the Sloan Precision Oncology Institute and OTR to help coordinate and support their data and technology needs.
Technology & Philanthropic Partnerships	Our facilitated technology partnership process will be a mechanism to identify emerging ideas from the Fred Hutch that, when combined with the resources and innovations in the wider data and technology space, will advance therapeutics, understanding of disease and patient outcomes.
Data Policy & Governance	We will support Fred Hutch staff in navigating the overlap of policy and biomedical data, via support for clinical data governance, data use agreements, software licensing, data oriented tech-transfer issues and guidance regarding IRB oversight of data use.
Data Infrastructure & Strategy	The diversity of focus, skills, interests and capabilities in the Fred Hutch data community requires an innovative approach to our data infrastructure, via a well integrated overall data strategy and coordinated data infrastructure development.
Workforce Training & Expertise	We strongly believe everyone will use data science in their professional lives, and building supports for training and building data expertise across the spectrum of our staff's data domains can help people use data in the ways that works for them.
Data Product & Technology Development	We will support the development of open source scientific software across Fred Hutch as well as participate in collaborations on prototyping of data products such as data dashboards, apps and research support tools with Fred Hutch staff.
Documentation & Knowledge Sharing	A critical part of supporting an ever evolving and advancing data community filled with people interacting with data in different ways and scales is actively curating and maintaining open documentation to facilitate knowledge sharing and documentation of best practices in data science.
Community Building	We will endeavor to help build beneficial communities that make Fred Hutch a great place for staff doing data intensive research and data driven clinical care by connecting people and fostering communities around data science.

Data Science Lab

Overview of Objectives

To address our strategic priorities, there are a variety of specific objectives in the Clinical or Research data programs that we will focus on.

Clinical	Research
Develop a cloud clinical data infrastructure that supports broad, secure, compliant and low friction access to Fred Hutch patient data	Develop a system for organizing, managing, and maximizing philanthropic and data technology partnerships
Develop a streamlined data governance model for clinical, operations, and research purposes	Develop a comprehensive research data management and life-cycle strategy
Develop a streamlined data abstraction model for clinical, operations, and research purposes	Develop a system for identifying, prototyping and scaling data products and apps
Develop a streamlined clinical analytics system for providing support, documentation, training and self-serve analytics for all data use types	Develop a comprehensive, searchable, crowd-sourced documentation base for all data activities around Fred Hutch
Launch integration of multimodal data into cloud data infrastructure	Develop "Fred Hutch U" collection of self-serve and hybrid delivery courses for Fred Hutch staff
Launch a training and change management effort to explain clinical data changes	Develop support for negotiating, organizing, and managing data sharing agreements