

# ODSS-NCI Collaboration

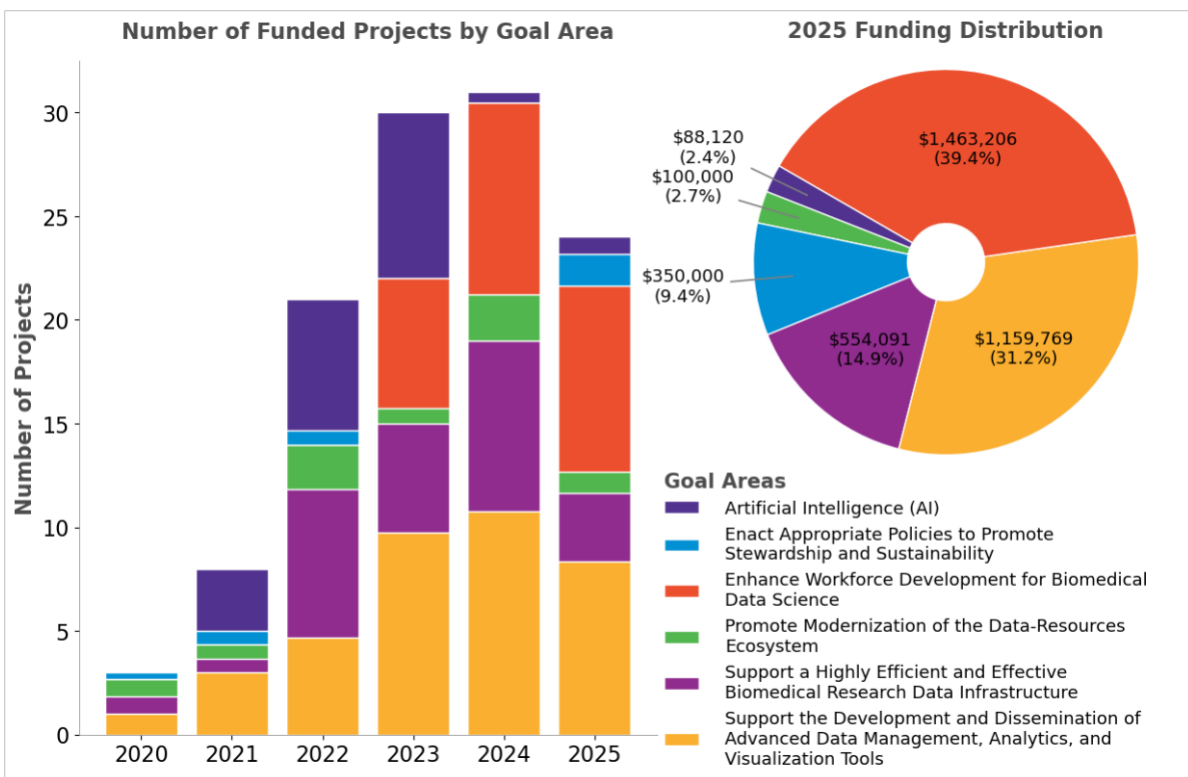
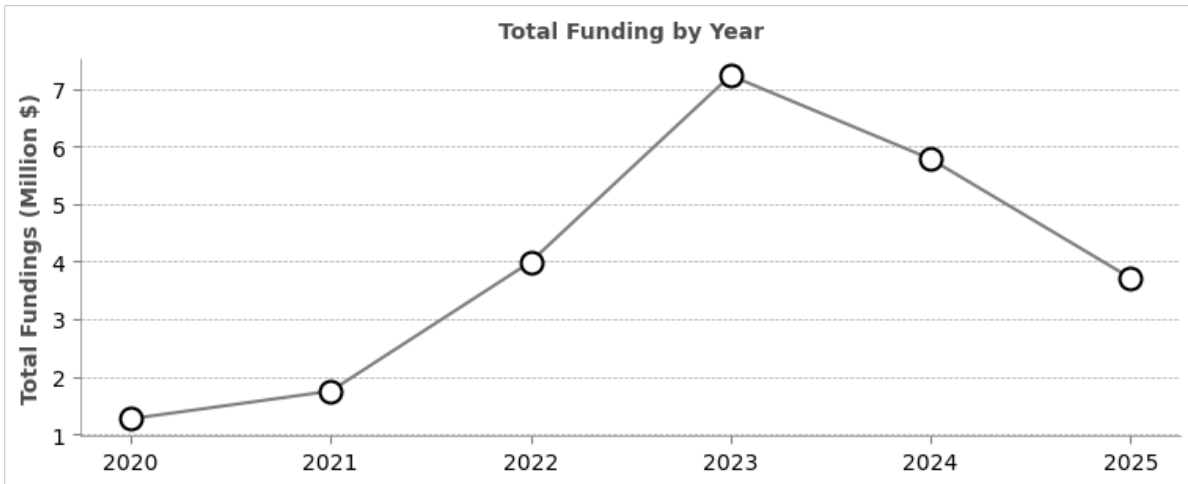
2025

A decorative graphic at the bottom of the page consisting of a network of white and light blue lines connecting various points, resembling a molecular structure or a data network, set against a dark blue background with a subtle pattern of small white dots.

# 2025 ODSS Funding for NCI

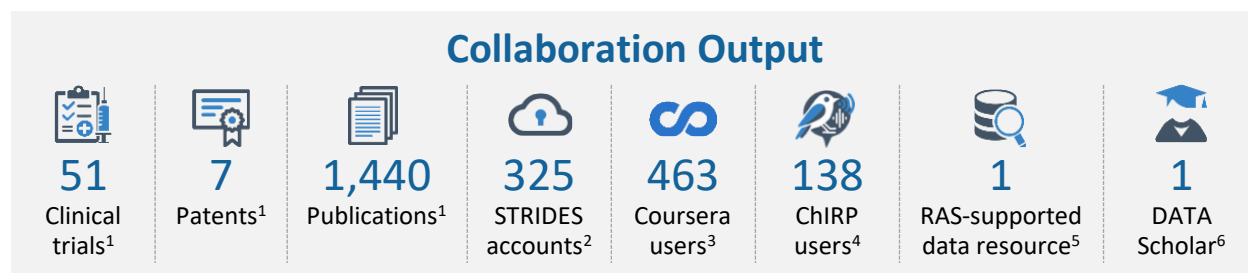
In 2025, ODSS provided \$3,715,187 in funding to NCI, supporting 24 co-funding awards across 6 goal areas.

- **Funding Trend:** Funding has risen more than three-fold from 2020 to 2025, even with the downturn after 2023.
- **Strategic Goal Trends:** NCI and ODSS have consistently partnered to develop advanced tools, AI, and data infrastructure with workforce development making up a larger share of our portfolio.



## Co-funding and Funding Highlights

- **The Young Empowered Scientists for ContinUed Research Engagement (YES for CURE) Program at the Dana-Farber/Harvard Cancer Center (Grant #: 5 R25CA291637-02).** ODSS provided \$388,712 to NCI to support the YES for CURE Program to engage the scientific curiosity and promote the academic success and future research careers of promising young scientists. This co-funding supports one goal area — workforce development.
- **Open Science Platform for Cancer Dependency Prediction and Analysis Using Deep Learning and Large Language Models (Grant #: 1 R03CA305794-01).** ODSS provided \$237,007 to NCI to support development of innovative tools to help researchers explore the genetic vulnerabilities of cancer cells. This co-funding supports one goal area — advanced tools development.
- **SCH: AI-doctor Collaborative Medical Diagnosis (Grant #: 5 R01CA277739-04).** ODSS provided \$150,000 to NCI to support the development of a computational framework for AI to collaborate with human radiologists on medical diagnosis tasks. This co-funding supports one goal area — advanced tools development.
- ODSS provided \$225,000 to NCI, in collaboration with ASTP, to support the **USCDI+ Cancer Program** to define real-world data (RWD) elements and enhance data exchange for clinical and research settings [PO: Dr. Umit Topaloglu]. This funding supports two goal areas — data infrastructure and data resources development.
- ODSS provided \$250,000 to NCI to support the **infrastructure development of an AI-assisted FHIR implementation guide with a focus on data quality assessment** [PO: Dr. Umit Topaloglu]. This funding supports two goal areas — data infrastructure and data resources development.



<sup>1</sup> Data sources: QVR and iTools. Fiscal Years: 2020-2025. These are output numbers associated with core awards, filtered to include only outputs that occurred after an ODSS-associated application was funded.

<sup>2</sup> (Collaborative support from CIT and ODSS) The NIH Science and Technology Research Infrastructure for Discovery, Experimentation, and Sustainability (STRIDES) Initiative is a partnership with commercial cloud service providers (CSPs) to allow NIH-supported researchers to affordably explore the use of cloud services and environments to streamline NIH data use.

<sup>3</sup> To enhance NIH workforce training, ODSS collaborates with NLM to fund and manage the NIH Coursera Program that offers a limited number of free Coursera licenses to NIH staff. Over the course of FY25, there were a total of 1388 Coursera users, covering all 27 ICs. Please note that Coursera paused on 9/6/2025 due to contract processing delay but will restart as soon as acquisition is processed in the new fiscal year.

<sup>4</sup> ODSS, in collaboration with OD, CIT, NHLBI, and NIA, developed an NIH community pilot LLM chatbot called **ChIRP**. ChIRP is funded by ODSS and OIR, aiming to create a secure environment for NIH staff to safely explore how generative AI technologies. As of November 2025, ChIRP had 863 active users.

<sup>5</sup> (Collaborative support from CIT and ODSS) The NIH Researcher Auth Service (RAS) is part of NIH's efforts toward a modernized, FAIR, biomedical data ecosystem. RAS facilitates access to participating NIH data assets and repositories in a consistent, secure, and user-friendly manner and provides researchers with a single sign-on experience.

<sup>6</sup> ODSS sponsors the Data and Technology Advancement (DATA) National Service Scholar Program to recruit and engage advanced data science experts to come to the NIH for one or two years and help tackle challenging biomedical and health data problems. DATA Scholars are supported 50% by ODSS and 50% by the ICO where they are matched.

## Collaboration Highlights

- NCI and ODSS co-hosted the Quantum Computing Innovation Lab in December 2024. Eight project teams selected from the Phase 1 of the competition participated in an intensive 5-day workshop to formulate quantum computing approaches to address a variety of topics. Following the event, 5 teams were selected to receive a total of \$100K in prizes.
- ODSS led NIH-wide collaborations to develop and implement CDEs in priority areas such as chronic, autoimmune, and immune-mediated conditions. ODSS partnered with Denise Warzel's team at NCI on the *NCI Support for IC CDE Co-Funding Project*, leveraging NCI's expert CDE curators and terminologists to ensure new IC CDEs are conceptually accurate, harmonized, and ready for submission to the NIH CDE Governance group for endorsement.
- ODSS partnered with an NCI/ORNL investigator team as an exploratory pilot for the ODSS AI Assurance Lab, enhancing the learnings and investigation of different concepts related to AI assurance within NIH research. These pilots provided valuable insights into the challenges, best practices, and methodologies that shape AI development, assurance, and use in biomedical and health research workflows.
- Genetic associations with consumption of palatable foods in the absence of hunger in response to food cues in children — [this study](#) published by the ODSS co-funded Dartmouth Training T32 Program in Quantitative Cancer Research at the Dartmouth College suggests that some kids may be genetically more sensitive to food marketing, leading them to overeat sugary snacks.