

ODSS-NIAID Collaboration

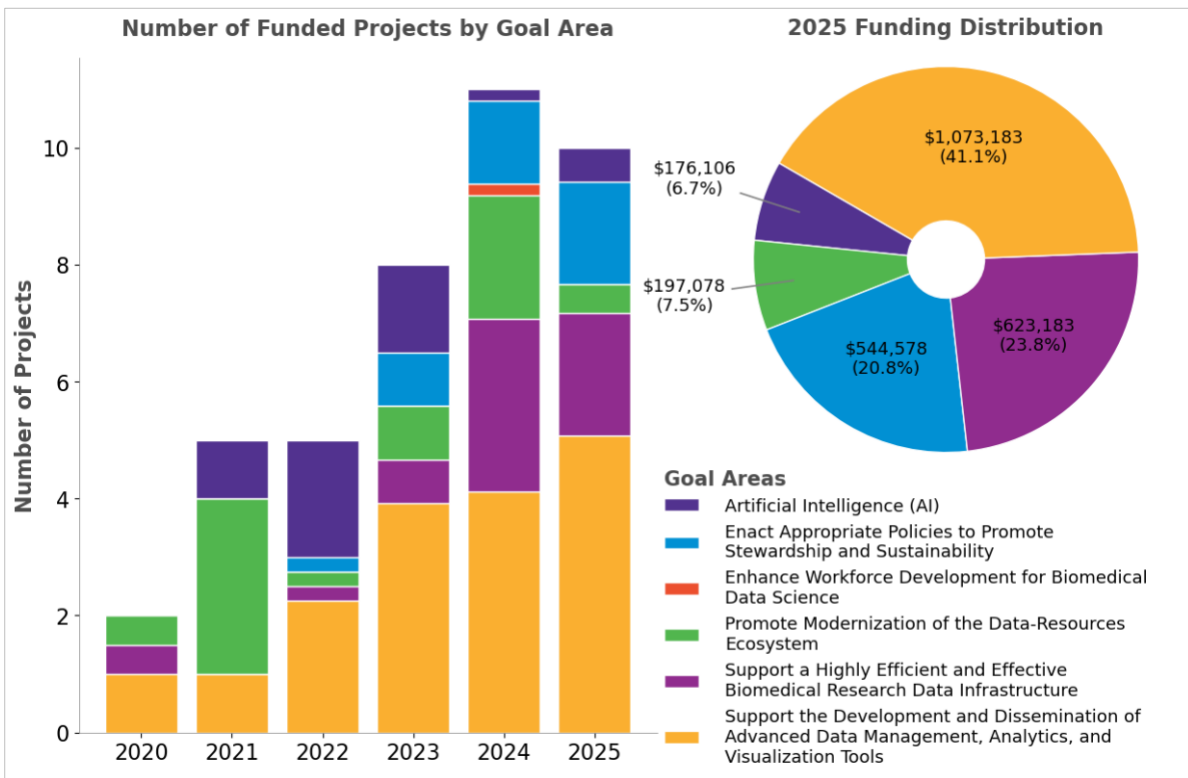
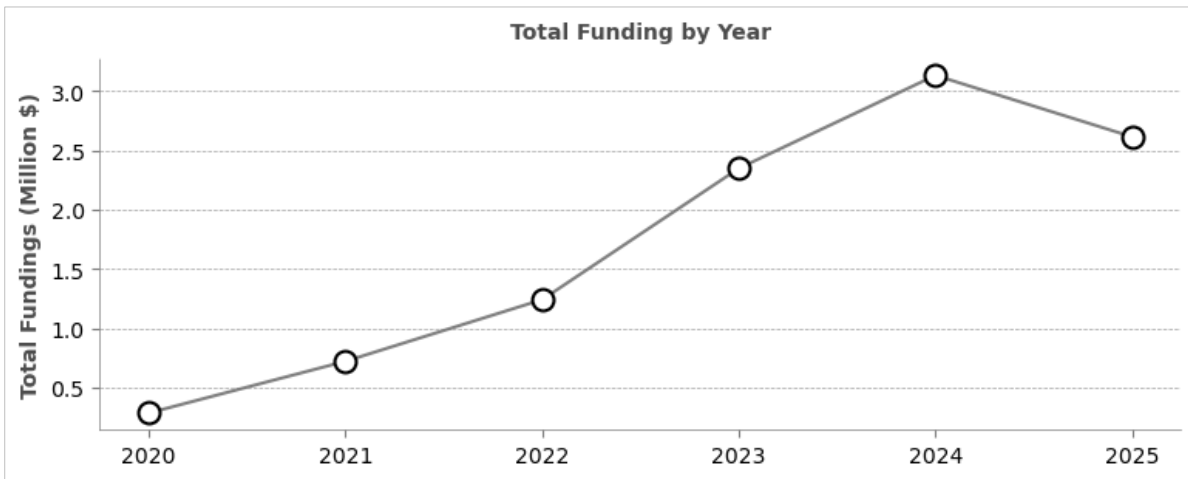
2025

A decorative graphic at the bottom of the page consisting of a network of glowing blue nodes connected by thin lines, set against a dark blue background with a subtle grid pattern.

2025 ODSS Funding for NIAID

In 2025, ODSS provided \$2,614,128 in funding to NIAID, supporting 10 co-funding awards across 5 goal areas.

- **Funding Trend:** Funding has grown nine-fold since 2020.
- **Strategic Goal Trends:** NIAID and ODSS have consistently partnered to develop advanced tools and data infrastructure, with data stewardship and data resource ecosystem making up significant shares of our portfolio.



Co-funding Highlights

- **Mechanisms of Autoimmunity in Myasthenia Gravis (Grant #: 3 R01AI114780-09S1).** ODSS provided \$335,000 as an administrative supplement to NIAID to support the study of the molecular mechanisms of the early-onset and late-onset myasthenia gravis (MG) subtypes to impact treatment outcomes. This co-funding supports one goal area — data stewardship.
- **Children's Allergy and Asthma Data Repository (CADRE) (Grant #: 5 U24AI179612-02).** ODSS provided \$250,000 to NIAID to support the establishment of the CADRE repository to ensure enduring access for the scientific community to allergy and asthma birth cohort data. This co-funding supports one goal area — advanced tools development.
- ODSS awarded \$491,000 to NIAID to support **exploration of establishing a Data Mesh architecture** using ImmPort as a foundational pilot interoperating with external data and computing resources for application within context of NAIRR Pilot (**contract # HHSN316201200036W-75N93022F00001**). This funding supports three goal areas — data infrastructure, advanced tools development and AI.



¹ 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.

² 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.

³ 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.

⁴ 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.

⁵ (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.

Collaboration Highlights

- ODSS continued to support Immunology Database and Analysis Portal (ImmPort) NAIRR Pilot Project (Year 3) to build a long-term sustainable, efficient, and impactful data ecosystem. This project will demonstrate how ImmPort can serve as a foundational repository aligned with FAIR principles and Data Mesh pillars, interoperating with external data and computing resources to validate immune response signatures and support scalable, reproducible AI workflows across biomedical domains. The project will help pave the way for health-related data to be leveraged in full NAIRR implementation.
- ODSS led NIH-wide collaborations to develop and implement common data elements (CDEs) in priority areas such as chronic, autoimmune, and immune-mediated conditions. ODSS collaborated with NIAID for the following CDE projects:
 - Generative AI to Automate the Extraction of Common Data Elements from Case Report Forms [PO: Mr. Joseph Croghan]
 - NIAID Pilot Testing of New Common Data Elements (CDEs) in Case Report Forms for NIAID Trials in Allergy and Asthma Trials "RhoFED CDSMC" [PO: Dr. Anupama Gururaj]
 - NIAID ImmPort: Advancing Common Data Elements (CDEs) for Data Standardization and Reusability [PO: Dr. Anupama Gururaj]
- Dr. Alan Remaley from NHLBI and Dr. Joe Marcotrigiano from NIAID published [an article in Nature](#), revealing for the first time how the main structural component of low-density lipoprotein (LDL) binds to its receptor, a key process that initiates the clearance of LDL from the bloodstream. The NIH STRIDES and the funds provided through the ODSS High-Value Datasets program significantly accelerated the research by offering immense computational power.