

Cancer Research Data Commons 2024 Fall Symposium

Ten Years of Empowering Cancer Researchers

Day 2: NCI Shady Grove Campus & Virtual

Thursday Oct 17, 2024, 9:00am-4:30pm

We will be starting shortly...

Cancer Research Data Commons 2024 Fall Symposium

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Day 2 Welcome

Jill Barnholtz-Sloan Ph.D.

Thursday Oct 17

Meeting Logistics

- Participant engagement via Slido (connection details next slide)
- Online participants will be muted, limited to in person audio
- Meeting chat is available to address technical issues
- Unable to connect, e-mail event staff @ crdc_pmo@mail.nih.gov
- Recordings and presentation material available following the meeting
- Food service available: Shady Grove Café and local restaurants



Participant Engagement

In Person & Online in Slido

- Live Q&A with keynote & featured speakers
- Ask questions / receive real-time responses
- Upvote and join in discussions
- Survey participation

'Tag' the presenter

- When submitting questions or comments, select the label with the presenter's name
- Enables connection to the presentation and interactive discussions throughout the day
- We are looking forward to the discussion



Slido.com #2816093



Agenda – Day 2

9:00am–10:30am: CRDC History, Current State & Lessons Learned

10:30am–10:50am: BREAK 20-minutes

10:50am–11:25am: CRDC Success Stories

11:25am–12:25pm: NCI Programs Leveraging CRDC

12:25pm–1:25pm: LUNCH 60-minutes

1:25pm–2:10pm: Artificial Intelligence (AI) and the CRDC

2:10pm–2:50pm: Future Spotlight

2:50pm–3:10pm: BREAK 20-minutes

3:10pm–4:20pm: Panel Discussion with NCI Partners

4:20pm–4:30pm: Close Out



CRDC History, Current State, & Lessons Learned

9:00am – 10:30am

Welcome & CRDC In a Nutshell

- Jill Barnholtz-Sloan, NCI CBIIT

Keynote Address

- Amanda J. Borens, Founder of Tesselate Data Consulting

Impact of Data Science on Cancer Research

- Warren Kibbe, NCI Deputy Director of Data Science & Strategy

CRDC History, Current State & Lessons Learned

- Tanja Davidsen, NCI CBIIT



Vision for Cancer Data Ecosystem

Partnerships

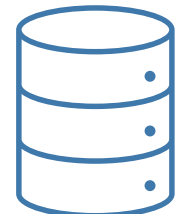
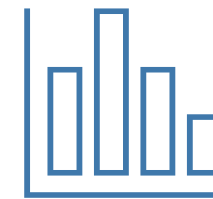
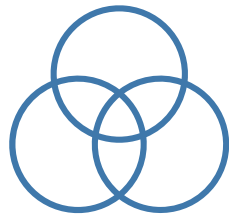
- Data Generators
- Data Submitters
- Researchers of all technical abilities using the data
- NCI/NIH/HHS Collaborators & Policies
- Standards Bodies

Lower Barriers

- Data submission
- FAIR data access, search, retrieval
- Data integration for cross-domain analysis
- Analysis tools, platforms, and workflows

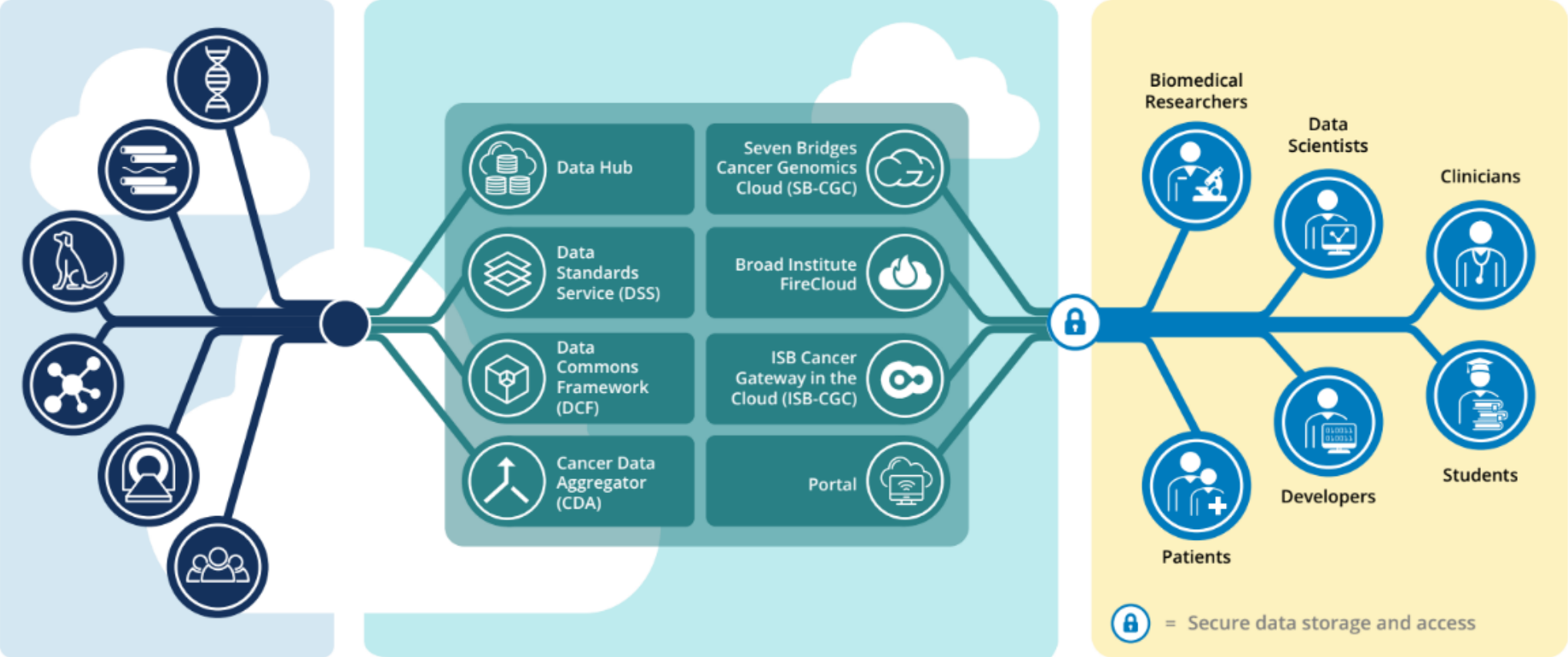
Infrastructure

- Security and appropriate access for sensitive data
- Sustainable, reusable, and uniform architecture
- Plan for long term data storage and tool accessibility



Cancer Research Data Commons (CRDC)

NCI's primary data science platform for cancer research

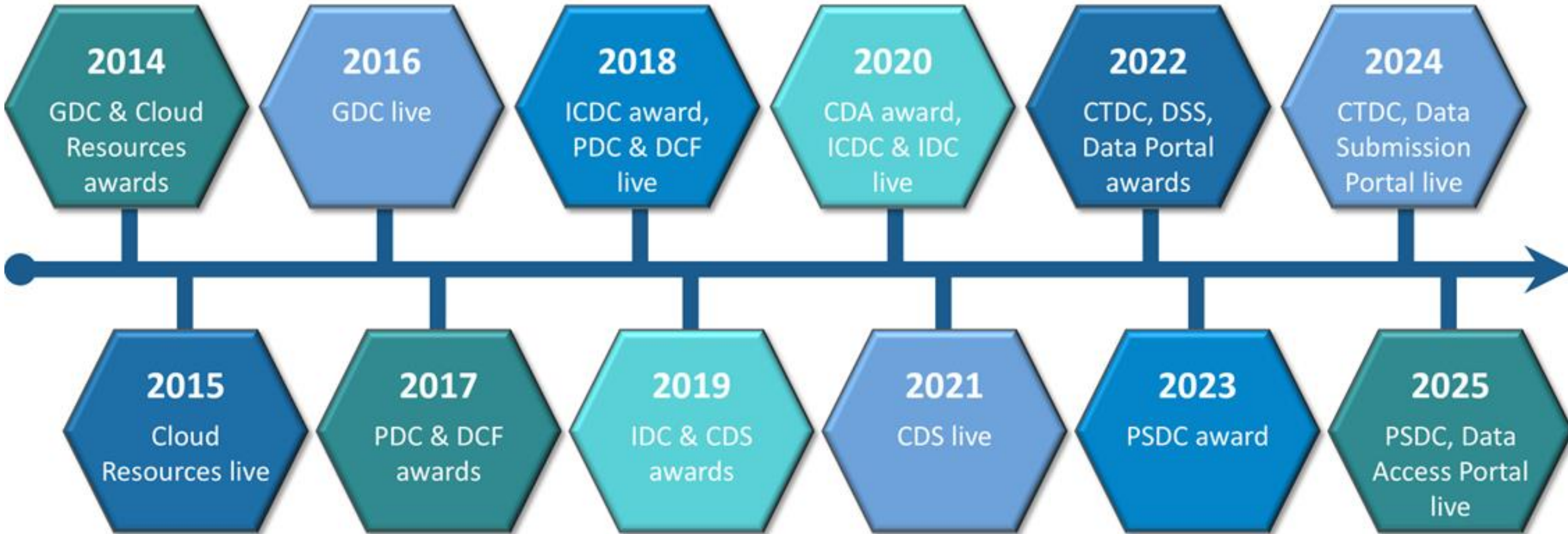


Data Commons

Infrastructure & Cloud Resources

User Community

CRDC 10 Years in the Making



CRDC: Statistics & Impact



354 STUDIES



134K SUBJECTS



10PB+ DATA



2.4K+
YEARS OF COMPUTE



2K+ PUBLIC
TOOLS AND WORKFLOWS



82.3K+
UNIQUE USERS / YEAR



30K+
CRDC DATA CITATIONS



AACR Cancer Research Series



A four-part invited series published online in March 2024 highlighting the CRDC's accomplishments from the past 10 years.

- ▶ LESSONS LEARNED AND FUTURE STATE
- ▶ RESOURCES TO SHARE KEY CANCER DATA
- ▶ CLOUD-BASED ANALYTICAL RESOURCE
- ▶ CORE STANDARDS AND SERVICES



Learn more about the series on the CRDC Website

CRDC History, Current State, & Lessons Learned

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CRDC History, Current State & Lessons Learned

- Tanja Davidsen, NCI CBIIT



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10:30am–10:50am

20-minute Break

CRDC Success Stories

10:50am – 11:25am

Unlocking Research with CRDC and NCI Cloud Resources

- Esmeralda (Emi) Casas-Silva, NCI CBIIT

Bridging the Gap: Bioinformatics Pipelines for Non-Bioinformaticians

- Daoud Meerzaman, NCI CBIIT



NCI Programs Leveraging CRDC

11:25am – 12:25pm

CPTAC: Accelerating Cancer Research Through Multiomic Integration and Data Sharing

- Rajesh Thangudu, ICF

The cBioPortal for Cancer Genomics

- Nikolaus Schultz, MSKCC

Harnessing ICDC & PRECINCT Canine Immunotherapy Trials Network to Advance Discoveries in Cancer Genomics

- Deborah Knapp, Purdue University College of Veterinary Medicine



Cancer Research Data Commons 2024 Fall Symposium

Ten Years of Empowering Cancer Researchers

12:25pm–1:25pm

60-minute Lunch Break

Artificial Intelligence (AI) and the CRDC

1:25pm – 2:10pm

AI and De-Identification for Medical Imaging within CRDC

- Granger Sutton, NCI CBIIT

Investigating CRDC AI Data Readiness

- Emily Greenspan, NCI CBIIT

AI Data Readiness Challenge

- Agnes McFarlin, Accenture



Future Spotlight

2:10pm – 2:50pm

NCI's Genomic Data Enclave: Lowering the Access Barrier with Chatbot

- Zhining Wang, NCI CBIIT

Data Fabrics for Public Health

- Alastair Thomson, APRA-H, Acting Director of Data Innovation



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2:50pm–3:10pm

20-minute Break

Panel Discussion with NCI Partners

3:10pm – 4:20pm

Moderator

- **Dinah Singer**, NCI's Deputy Director for Scientific Strategy and Development

NCI Partners

- NCI CCG, Genomic DC – **Jean C. Zenklusen**
- NCI DCCPS, Population Science DC – **Erin Siegel & Pothur Srinivas**
- NCI DCTD, CIP, The Cancer Imaging Archive – **Lalitha Shankar**
- NCI DCTD, CTEP, NCTN Data Archive – **Meg Mooney**
- NCI DCTD, DTP, Integrated Canine DC – **Connie Sommers**
- NCI DCTD, OCCPR, Proteomic DC – **Xu Zhang**



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Close Out

Tanja Davidsen, Ph.D.