

C-Path Data Collaboration Center Analytics Team Wins Metadata Automation DREAM Challenge

TUCSON, Ariz., July 14, 2020 — [Tucson-based Critical Path Institute \(C-Path\)](#) today proudly announced that the analytics team from its Data Collaboration Center (DCC) program has won first place in the validation phase of the Metadata Automation DREAM Challenge, funded by the Cancer Moonshot? initiative. The mission of C-Path's DCC program is to provide large-scale data collaboration solutions to support scientific research and advance medical innovation.

Designed and run by a community of researchers from a variety of organizations, DREAM (Dialogue for Reverse Engineering Assessments and Methods) Challenges invite participants to propose solutions to fundamental biomedical questions — fostering collaboration and building communities in the process. The Metadata Automation DREAM Challenge focused on oncology with the goal to have participants develop tools to automate annotation of metadata fields and values, using available research data annotations, as well as established terminologies and ontologies.



“This kind of leading edge metadata annotation and ontology integration is a new focus for DCC that will help expedite C-Path’s data and analytics efforts, including that of C-Path’s Rare Disease Cures Accelerator-Data and Analytics Platform or RDCA-DAP,” said C-Path Chief Science Officer, Klaus Romero, M.D., M.S., F.C.P. “To win among such a competitive and prestigious list of teams validates the DCC skills; skills that will be necessary for innovating our data management practices, and strengthening the [FAIR Principles](#) of data at C-Path.”

Ten teams participated in the Challenge. The teams received annotated clinical data files from The Cancer Imaging Archive (TCIA), and synthetic data from Applied Proteogenomics Organizational Learning and Outcomes (APOLLO), which they used to develop automated tools that can operate on input data sources. **The DREAM C-Path Analytics team included:**



Roopal Bhatnagar, M.S.
Data Analyst

Emily Hartley, B.S.
Data Analyst

Kurt Michels, Ph.D.
Data Analyst

“We are very proud of our DREAM team,” said C-Path President and CEO, Joseph Scheeren, Pharm.D. “Not only did the team demonstrate strong credentials in oncology metadata, they also developed techniques to annotate data from any disease area making this work extremely valuable to C-Path’s consortia and programs focused on multiple disease areas.”

The C-Path Analytics Team, along with other winning teams, will move on to the collaboration phase of the challenge to improve on their models. The end result is aimed at significantly lowering the burden of adding these annotations across the data ecosystem, to streamline and enable both retrospective harmonization as well as data query, discovery and interpretation.

“We are looking forward to work and shared learning with other teams in the collaborative phase of the Challenge,” said C-Path Executive Director of Data Science Amanda Borens, M.S. “Our next project internally will apply these algorithm designs with new ontologies and standards for rare diseases. The DREAM Challenge has given us a wonderful proof of concept and confidence to proceed with experience under our belts.”

Sage Bionetworks provides the expertise and infrastructure to host challenges via their Synapse platform. Work by Sage Bionetworks staff for the Challenge is supported by the [NCI Cancer Systems Biology Consortium \(CSBC\)](#) and [Physical Sciences-Oncology Network \(PS-ON\)](#).



Critical Path Institute (C-Path) is an independent, nonprofit organization established in 2005 as a public and private partnership. C-Path’s mission is to catalyze the development of new approaches that advance medical innovation and regulatory science, accelerating the path to a healthier world. An international leader in forming collaborations, C-Path has established numerous global consortia that currently include more than 1,600 scientists from government and regulatory agencies, academia, patient organizations, disease foundations, and dozens of pharmaceutical and biotech companies. C-Path US is headquartered in Tucson, Arizona and C-Path, Ltd. EU is headquartered in Dublin, Ireland, with additional staff in multiple other locations. For more information, visit www.c-path.org and c-path.eu.

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