

IN THIS ISSUE

- Celebrating 25K+ Researchers in the Workbench
- Announcements from the Academy and *All of Us*
- Feature: Landmark CDR v9 data release
- Event Recap: Summer's AIM-AHEAD In-Person Meeting
- Spotlight: Dr. Edward Preble on wearables and health research
- Workbench Watch: Billing pods explained



Learn more about the [Researcher Workbench](#)



Visit the [All of Us Research Program website](#)



Subscribe to [Connections](#)



Read past issues of [Connections](#)

Registered Researchers Surpass 25K Mark in *All of Us* Researcher Workbench

Over **25,000** researchers have registered to use the ***All of Us* Researcher Workbench** since 2020



The National Institutes of Health's groundbreaking *All of Us* Research Program is celebrating a major milestone. As of September 2026, more than 25,000 researchers have registered to use the [All of Us Researcher Workbench](#), the platform that securely affords access to health data contributed by people across the United States. The insights that *All of Us* makes possible may profoundly influence health research for decades. We also want to celebrate the dedicated efforts to build communities among researchers who engage with *All of Us* data and the tools developed to support those researchers.

One important resource is the [All of Us Researcher Academy](#), launched in 2022 and led by RTI International. The academy has developed and delivered free training and technical assistance to researchers focused on data access, management, and analysis. We have also supported collaborations between researchers, enabling them to learn from one other and helping to ensure that they not

-continued on page 2

only can access and explore available data but can also translate those analyses into contributions to scientific literature.

The Researcher Academy has evolved to meet needs of researchers, administrators who support research, and students and research mentees. We have sponsored site visits to university and college campuses across the country, hosting webinars showcasing relevant work and research. And we've offered free live and asynchronous course offerings, with more than 20 self-directed trainings currently available through the academy's online learning platform, Amaze. View the [full course catalog](#) for course descriptions, instructor bios, and course materials.

For several years, the Researcher Academy offered Institutional Champion awards to teams at research institutions across the United States. Twenty institutions in thirteen states, tribal communities, and Puerto Rico have participated. Institutional Champion researchers have participated in academy-

led faculty scholarly convenings and working groups, ultimately presenting their *All of Us*-based research in webinars, at conferences, and in peer-reviewed journals.

Central to the Researcher Academy have been our Researcher Workbench coaches—dedicated staff who advise on optimal use of the Workbench. Answering researchers' questions and providing support benefits researchers and those in their professional networks. To expand this impact, RTI has conducted two related initiatives.

The first is a Train-the-Trainer Program, which encourages research staff in institutions outside of RTI to serve as mentors, or site trainers. These mentors help train others to use the Workbench. The second is the [AIM-AHEAD All of Us Training Program](#). This program helps researchers build skills in artificial intelligence and machine learning data analysis and apply those skills to accelerate health research.

Throughout the life of the Researcher Academy, its quarterly *Connections* newsletter has informed readers about new grant announcements, research developments, and related *All of Us* opportunities. *Connections* provides a publication space for information relevant to biomedical and health researchers, and 1,000+ subscribers now regularly read about large-scale efforts to better understand health and wellbeing through *All of Us*.

"For decades, researchers have raised vital questions about health and yet haven't had the sort of data needed to answer those questions," said Dr. Brian Southwell, co-lead of the *All of Us* Researcher Academy along with Dr. Sula Hood. "*All of Us* has changed that situation, and the people who have worked on the *All of Us* Researcher Academy and related support efforts have provided a training infrastructure and community connections that can make translation of data into insights possible. We look forward to finding new ways to connect and support *All of Us* researchers." ■



The Researcher Academy has evolved to meet needs of researchers, administrators who support research, and students and research mentees.



Academy Announcements.....



New Researcher Academy LinkedIn Group

[Join today!](#)

The *All of Us* Researcher Academy Collaborative is a LinkedIn group especially for researchers using the *All of Us* dataset and Researcher Workbench.

Top 5 Reasons to Join

- 1. Coaching Insights:** Check out Workbench Wednesday, a regular post series in which experienced RTI Workbench coaches share real-world insights and advice.
- 2. Resource Awareness:** Be the first to see new training, funding, and event opportunities.
- 3. Collaboration:** Turn your real-world experience into solutions for the whole community.
- 4. Knowledge Sharing:** Ask questions, provide insights, and troubleshoot technical hurdles.
- 5. Visibility:** Build your professional network within this once-in-a generation research community.



Presentations

- **Yvonne Ford**, Institutional Champion lead at North Carolina A&T State University, presented “Effects of Perceived Discrimination and Food Insecurity on Depression and Anxiety Among *All of Us* Research Program Participants” at the 2026 American Society for Nutrition Conference. Co-presenters included NCA&T Institutional Champion team members Kristen Rhinehardt and Mariam Maraba.
- **Mariam Maraba**, a student at North Carolina A&T State University and Institutional Champion awardee, presented “Effects of Perceived Discrimination and Food Insecurity on Depression and Anxiety Among *All of Us* Research Program Participants” at the 2026 XULA Conference on Improving Health Outcomes.



Publications Alert

- Three RTI AIM-AHEAD coaches—**Daniel Brannock**, **Angela Gadaska**, and **Edward Preble**—published a paper in July examining the association between GLP-1RA prescriptions and alcohol use. [Read the paper](#) in *Alcohol, Clinical & Experimental Research*.
- **Kyle Melin**, Institutional Champion lead at the University of Puerto Rico, published a paper on utilizing the *All of Us* dataset to assess the socioeconomic and health impacts of COVID-19 on Hispanics in the United States. [Read the paper](#) in the *International Journal of Environmental Research and Public Health*.

All of Us Announcements.....



Environmental Influences on Child Health Outcomes (ECHO) Cohort Data Now Available

As of August 24, researchers can access the [ECHO Cohort](#) public use dataset through the *All of Us* Researcher Workbench as a separate data collection. ECHO offers de-identified longitudinal data from nearly 90,000 participants (including 46,000+ pregnancies), followed from before birth through age 21. The dataset includes demographics as well as observational and survey response data such as health condition status, early pediatric development measures, environmental data, and pregnancy and birth data. Hosting these data alongside *All of Us* enables lifespan research on a single secure platform.

To access [ECHO data](#), researchers must be registered for the Researcher Workbench, be affiliated with an institution that has signed the Data Use and Research Agreement for ECHO, and have signed the August 2026 Data User Code of Conduct.



New Grant Writing Studio Now Available

The *All of Us* Research Program invites researchers to explore a new grant writing studio, developed by the University of Florida and led by Drs. Linda Cottler and Mickey Eder, to support the development of grant proposals using *All of Us* data. The studio complements existing grant writing resources with training modules on [formulating a research question and specific aims](#), [All of Us data types and analytical resources](#), and [other key grant proposal components](#).



Upcoming Deadline: Biospecimen Access X01 Notice of Funding Opportunity

The next receipt date for [PAR-26-127](#), “Accelerating Discovery through Partnered Research with *All of Us* to Analyze Participant Biospecimens” is **October 30**. Researchers from academic, nonprofit, private-sector, government, and research institutions worldwide can apply to use *All of Us* samples, like blood and saliva, to conduct [partnered research studies](#).



Landmark Data Release Shifts *All of Us* into the Multiomics Era

This summer's launch of the CDR v9 dataset marked the most significant data release in *All of Us* Research Program history and the program's first step into the multiomics era. Alongside whole genome sequences for more than 535,000 participants, researchers now have access to fully overlapping multiomics data—long-read sequencing, proteomics, and RNA-seq—for more than 8,000 participants of diverse genetic ancestry. Paired with nearly 482,000 linked electronic health records (EHRs) and the world's largest, publicly available wearable dataset, this release opens the door to questions that weren't possible to ask before.

Moreover, CDR v9 dramatically expands the real-world data available to researchers:

- **22% Growth in EHR data:** This includes strategic expansion of EHR data sources for growth in phenotypic data offerings with participant mediated EHRs (58K participants) and HIE EHRs from CLAD (15K participants). Participants with linked EHRs have grown to nearly 482,000, now connected to 535,000 WGS samples.
- **First-ever clinical notes release—an unprecedented depth in phenotyping:** Registered researchers now have secure access to unstructured clinical text, with 96 million NLP-derived concept codes extracted from 9.5 million clinical notes across more than 99,000 participants using the CLAMP tool, all mapped to the OMOP standard vocabulary for seamless cross-referencing with genomic data.
- **World's largest accessible Fitbit dataset:** Active tracking data is now available for 68,000 participants, with Apple HealthKit integration available for an initial 20,000 participants.
- **New sleep data tables:** Three new Fitbit sleep tables add granular longitudinal insights, including daily sleep stage summaries (REM, light, deep, wake) for 62,000 participants, derived sleep log metrics, and micro-indicators of sleep fragmentation.
- **Geospatial and environmental data:** An upcoming release will integrate residential and geographic data linkages, enabling researchers to study air quality, neighborhood resources, and social determinants of health alongside genetics.

Read the [full announcement](#) and start exploring the dataset in the [Researcher Workbench](#) today.

Event Recap

AIM-AHEAD Summer Meeting

The 2026 AIM-AHEAD Annual Meeting was held in San Diego, CA, on July 6–9. The meeting brought together Consortium members, awardees, fellows, trainees, and collaborators for three days of networking, collaboration, and scientific exchange. Twenty-one trainees from Cohort 3 of the AIM-AHEAD *All of Us* Training Program, a collaboration between AIM-AHEAD and RTI, were in attendance and presented their research during a poster session.

One trainee, Sydney Kramer of Virginia Commonwealth University (VCU), gave an oral presentation during the Poster Blast Session on her research on graph-based Bayesian gene prioritization for PTSD gene discovery. Stephen Vieno, a fellow VCU colleague and Cohort 3 trainee, participated in the AIM-AHEAD & Next-Generation AI panel.

In addition, Angela Gasdaska, an RTI Workbench Coach, was a panelist in the session on “Building the Future of AI/ML Workforce for Biomedical Research: NIH Collaboration, Real-World Data, Cloud Infrastructure, and Responsible AI.”



AIM-AHEAD Cohort 3 Trainee Stephen Vieno (middle) participating in a panel session on next-generation AI.

RTI Workbench Coach Angela Gasdaska (pictured second from the right) with fellow panelists discussing the future of the AI/ML workforce for biomedical research.



Connecting the Data: Wearables and Health Research



For Edward Preble, PhD, working with wearable device data was a natural next step in his career. Before joining RTI International, he worked in the semiconductor industry, where he gained extensive experience using data to monitor equipment and understand complicated processes. When he began applying data science to health research, he saw a familiar challenge, only this time the complex system was the human body.

Dr. Preble, a senior research data scientist at RTI, has worked with wearable sensor data since 2018, exploring applications that include seizure detection, traumatic brain injury classification, and illness detection. He was introduced to the *All of Us* Research Program through the AIM-AHEAD *All of Us* Training Program, where RTI helped train health researchers to use modern data science methods in the Workbench.

The Fitbit data available in the Workbench offered something Dr. Preble had not previously encountered: the opportunity to conduct wearables research at a much larger scale. More importantly, the data could be connected at the individual level with electronic health records (EHR), surveys, genomic data, and other information.

“Wearables can provide data to a provider that would be otherwise invisible.”

“The possible deeper questions are endless when there is so much data directly linked together.”

That combination opens the door to questions researchers could not readily answer with wearables data alone, Dr. Preble emphasizes. “A typical patient interaction represents a single point in time, associated with an office or hospital visit. It doesn’t really provide real-world information about what is going on with that person. Wearables can provide data to a provider that would be otherwise invisible.”

He points to the COVID-19 pandemic as a powerful example of what longitudinal wearable data can reveal. Changes in physical activity and sleep behavior could be observed over time, but the linked data available through *All of Us* allow researchers to ask deeper questions about those changes. Did patterns vary among older and younger people? Did existing health conditions affect the changes people experienced? How might other individual characteristics help explain those differences? He says, “The possible deeper questions are endless when there is so much data directly linked together.”

-continued on page 8

Dr. Preble and his coauthors recently helped document that potential in the *Nature Medicine* paper titled “The *All of Us* Research Program’s wearables dataset.” Published in April 2026, the paper describes Fitbit data from 59,000+ participants spanning 14 years, with more than 39 million step observations and 31 million sleep observations. Nearly half of participants with Fitbit data also contributed EHR data, physical measurements, genomic data, and survey data.

For Dr. Preble, the publication is also an opportunity to help make wearables research more approachable. Working with these data involves numerous processing decisions, and he hopes the paper can help researchers coalesce around common approaches, making findings across studies easier to compare. By demonstrating the breadth and scale of the data and providing useful starting points, he also hopes the work can lower the barrier for researchers who have not previously worked with wearables.

That guidance matters because real-world data can be messy. Activity can vary from weekdays to weekends and from season to season. Data can also be missing, sometimes for reasons that are directly relevant to a research question. Someone experiencing a serious health event, for example, may be less likely to wear a device.

“As wearable devices become increasingly common, Dr. Preble also anticipates the data playing a larger role in health research...”

Researchers therefore need to consider not only what the data show, but how variability, missingness, and data-processing choices could influence their findings.

Looking ahead, Dr. Preble sees particular promise in connecting physical activity and sleep measures with clinical, genomic, and other health information. Those connections could give researchers a better picture of what people experience from day to day and how those experiences relate to health outcomes. As wearable devices become increasingly common, he also anticipates the data playing a larger role in health research and, when individuals choose to share them, potentially informing health care.

For researchers ready to explore that potential, his advice is pragmatic: embrace the richness of real-world wearables data, but don’t overlook its complexity. Understanding the noise and the gaps is part of understanding what the data can tell us. ■

Explore the research: [Read the article](#) in *Nature Medicine* to learn more about the scale, breadth, and research potential of wearable data available through *All of Us*.

Billing Pods Explained

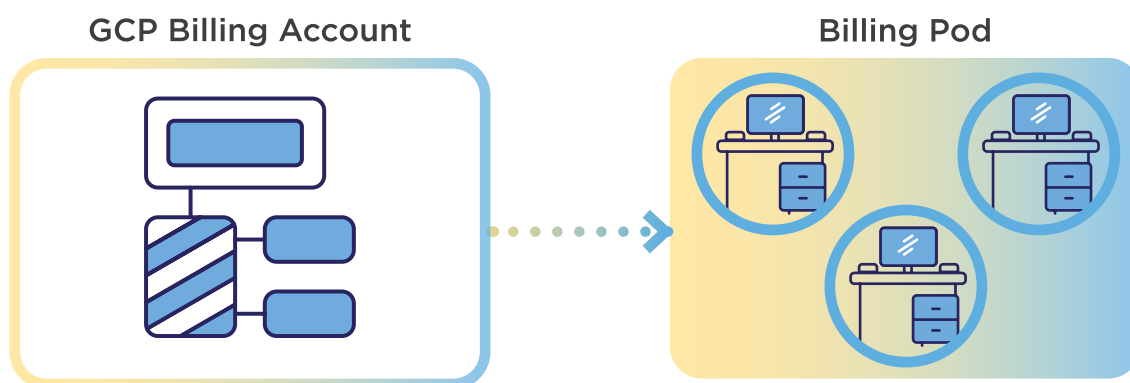
If you've logged into the Researcher Workbench lately, you've probably noticed a new term in the workspace creation menu: "Billing Pod." Understanding how pods work will save you money, confusion, and at least one panicked email to your PI.

In the previous version of the Workbench, each workspace was tied directly to a Google cloud platform (GCP) billing account. You could swap that account any time.

Grant ran out? Point the workspace at a new account and keep working.

In the current Workbench, a billing pod sits between your workspace and the GCP billing account. Think of the pod as a container. One pod can hold many workspaces, and they all charge to the same underlying account. A PI can create one pod backed by an R01 grant, invite the whole lab, and every workspace the team creates under that pod bills to the same GCP billing account.

But there is a trade-off. Once you assign a workspace to a pod, you cannot change it. To change funding sources, you need to clone the workspace and select the new pod during cloning. Alternatively, you can change the billing account linked to the billing pod, which updates the main billing source for every workspace under that pod. This works well if you want to switch all of them (for example, four workspaces at once), but not if only one should change. In that case, cloning the workspace is your best option. Learn [how to change the GCP billing account](#).



Your initial \$300 in billing credits are a pod, too. These credits show up as a pre-built pod (e.g., the name is something like user-pod-yourname-XXXX). You can't edit it, rename it, or attach your own GCP account to it. These credits expire 365 days after you sign the Data Use Code of Conduct, and once they're gone, running environments get terminated and stored files can be deleted.

-continued on page 10

This means that in order to save your work, you must do the following:

- 1 Set up a self-managed GCP billing account.
- 2 Link a pod to your GCP billing account.
- 3 Clone your workspace that was originally tied to your free credits.
- 4 Configure the cloned workspace to use your new billing pod.

What about credit sharing?

- We hear this question often from collaborative teams: “Can our lab combine our \$300 allocations into one fund?” The answer is no; you cannot transfer or pool credits. Credits belong to the individual and apply only to workspaces that person created. Five researchers cannot merge into \$1,500.
- And all costs in a workspace charge to the pod selected by the workspace creator, regardless of who triggers the compute. If you create a workspace on your initial credits and a collaborator launches a JupyterLab with a graphics processing unit, those charges drain your \$300. “Please shut down your environment when you’re done” is a conversation worth having early.
- Billing pods are a better model for multi-researcher labs, but they demand more planning up front than the old system did. Spend 5 minutes thinking about funding sources before you create that workspace. Your future self will thank you.

Want more advice like this? Join the [All of Us Researcher Academy Collaborative LinkedIn group](#) for our Workbench Wednesday post series. RTI Workbench coaches regularly share real-world insights on a range of topics.

All of Us Researcher Academy

The [All of Us Researcher Academy](#) provides training and technical assistance to researchers who are conducting research with the [All of Us Researcher Workbench](#), the cloud-based analytics platform where registered researchers can access data contributed by All of Us participants. The academy also supports peer-to-peer learning and network-building among researchers and students.

All of Us Researcher Engagement Partner



[Allofus.nih.gov](https://allofus.nih.gov)

The All of Us Researcher Academy is supported by the National Institutes of Health, Award Number OT2OD028395. The views and conclusions contained in this document are those of the authors and should not be interpreted as representing the official policies, either expressed or implied, of the NIH.

RTI International is a trade name of Research Triangle Institute. RTI and the RTI logo are U.S. registered trademarks of Research Triangle Institute.