

## All of Us at VCU Health: A Case Study

To help build the largest-of-its kind health database, Virginia Commonwealth University and VCU Health in 2020 joined a national project to better understand why people get sick or stay healthy. The <u>All of Us Research Program at the National</u> <u>Institutes of Health</u> is inviting 1 million or more people across the U.S. to partner in this effort and share their information to drive medical breakthroughs.

VCU Health was one of three sites chosen – and the only one on the East Coast – to roll out a new approach to recruitment for the program. VCU Health hopes to help as many as 1,000 people enroll.

"We're proud to contribute to this historic project," said F. Gerard Moeller, M.D., director of the <u>C. Kenneth and</u> <u>Dianne Wright Center for Clinical and</u> <u>Translational Research</u> and the VCU lead for All of Us. "As communities in Virginia work to combat the health disparities heightened by COVID-19, diverse representation in research has never felt more critical. All of Us will help find answers to some of our foundational health challenges."

"We were very excited to participate in this project with All of Us, showing that innovative methods can be used for outreach to patients and providers about the importance of the All of Us program."

**Dr. Gerard Moeller, M.D.** Director, Wright Center for Clinical and Translational Research

NIH <u>began national enrollment</u> for All of Us in 2018, aiming to learn more about what prevention and treatments work best for people of different backgrounds, based on environment, lifestyle, family history and genetic makeup. Over the course of the program, anticipated to last 10 years or more, volunteers will be able to contribute information through surveys, electronic health records, wearable technologies and biosamples.

The data and samples will be accessible to researchers nationwide for use in thousands of studies on different health conditions. Results will help researchers develop precision medicine techniques to provide better patient care based on an understanding of the individual differences that influence health and disease. All of Us has a special focus on including communities that have been underrepresented in research in the past, to support discoveries that reduce health disparities. That includes racial and ethnic minorities, sexual and gender minorities, rural residents, older adults and other groups.

As part of the partnership, VCU will support the secure transfer of electronic health records for participants at VCU Health who wish to share them. The records are a critical component of the All of Us dataset because they help researchers to get a more complete picture of participants' health, with information about diagnoses, medical visits, treatments and more.

Joining Moeller in leading VCU's involvement are <u>Tamas Gal</u>, M.B.A., Ph.D., the director of research informatics at the Wright Center, and Robert Winn, M.D., director of VCU Massey Cancer Center. "I am excited to be a part of bringing All of Us to Virginia because I believe precision medicine is the future. The All of Us program will enable researchers to create treatments that take into account human differences, and it will enable providers to match the right treatment to each patient and their illness. A future where the treatment fits the patient is one I am happy to work towards. By adding the diversity of Virginia to the program, we are helping to ensure that innovative medical treatments are available and appropriate for everyone"

Leslie Bobb, MPH CTSA Operations Manager Wright Center for Clinical and Translational Research Virginia Commonwealth University

To help cover the cost of the All of Us activities, the NIH awarded the Wright Center, as a <u>Clinical and Translational Science Award</u> hub, \$346,000 to support the complex data infrastructure behind linking local records to a national database.



All of Us is a service mark of the U.S. Department of Health and Human Services. Learn more about VCU's participation in the program at joinallofus.org/vcu or by emailing allofus@vcu.edu

## **Statements From the Field: VCU and UVA on All of Us**

Dr. Dayanjan Wijesinghe, Associate Professor in VCU's Department of Pharmacotherapy and Outcomes Sciences: "All of Us provides a platform that enables comprehensive data driven hypothesis generation. The generated hypotheses can then be further validated using other data sets or via clinical studies. Being able to generate strong hypotheses using such curated data dramatically decreases the cost of research as well as the time to impactful results by allowing us to focus on stronger hypotheses while discarding weaker ones prior to undertaking any wet lab research."

Leslie Bobb: "VCU created an infrastructure that enables us to share EHR data from consented patients with the All of Us data warehouse."

Leslie Bobb: "Many of the patients and providers that engaged were from [VCU's Massey] cancer center and had an existing appreciation of the impact of clinical research. The patients were often interested in "giving back" after being educated and/or participating in clinical research through cancer treatment." Leslie Bobb: "VCU is one of three institutions nationwide selected to participate in the All of Us-Lite pilot program. We were tasked with finding ways to promote outreach of the program without full site funding and responsibilities (such as consenting participants, collecting samples, etc)."

Leslie Bobb: "Throughout our [VCU's] outreach, two important factors were discovered; public perception/education about clinical research and provider buyin/engagement."

Johanna Loomba, iTHRIV Director of Informatics: "With the support of the integrated Translational Research Institute of Virginia (iTHRIV), the University of Virginia joined the beta phase of Research Workbench in 2020. Since then, our research teams have utilized the tool for a number of public inquiries. VCU's participation in this new All of Us enrollment effort will result in our research teams having richer datasets to support important questions related to health in the Commonwealth."

\*Thank you to Dr. Davanjan Wijesinghe and Leslie Bobb, who provided these statements on behalf of VCU, and Johanna Loomba, who provided a statement on behalf of UVA.