



NLM *All of Us* Data Training and Engagement for Academic Libraries Program

Getting Started Guide: Connecting with Researchers

A Resource Guide to Promote the *All of Us* Researcher Workbench with your Campus Community.



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Directions

This document is intended as a starting point to help connect with Researchers in your campus community.

* Articles marked with an asterisk link to publications outside the *All of Us* website.

Example Strategies for Disseminating Information

- Direct Messaging
 - Elevator Speech
 - Emails
 - Passive Digital Messaging
 - Social Media
 - Newsletter
 - Website Resource or LibGuide
 - Consider linking to this resource from existing relevant subject guides
 - Recorded Interview with Current User(s)
 - Flyers
 - In Library
 - Around Campus
 - Relevant Departments
 - Opportunities
 - National Awareness Celebrations (e.g., Love Data Week)
 - New Student/Hire Orientation
 - Relevant Institution Awareness or Activity Days
 - Partnerships
 - Research Department/Program
 - Faculty Teaching Research Methods
 - Liaison Programs
 - Activities & Active Engagement
 - Trainings – In-person or Virtual
 - Recordings for asynchronous viewing
 - Campus Wide Events Booth
 - Engagement Activities
 - Information Sessions
 - Workshops or Assignments
-

Create your Message

- Brief statement/summary of what you are offering.
- Keep it simple – avoid jargon.
- Keep it to the point.
- Use value-based language.
- Lead with information the audience might not know.
- Share positive value of the program.
- Be enthusiastic.
- Follow up!

Introduce yourself & the Program

Summarize the Program

- What you have to offer
- Why it is important

Explain what you want

- How your listener can help
- Why they would want to

End with a call to action

General Talking Points and Messaging Examples

- The *All of Us* Research Program is building a dataset to help transform the future of health research.
- *All of Us* is equipping researchers with expansive health data from diverse populations, including those underrepresented in biomedical research.
- Join more than 10,000+ registered researchers who are accessing the one-of-a-kind *All of Us* dataset to improve understanding of health and disease, identify opportunities to reduce disparities, and enable more precise approaches to care.
- The *All of Us* Researcher Workbench provides a secure, cloud-based environment for analyzing data, which can help researchers to collaborate more effectively and efficiently.
- By using the *All of Us* Researcher Workbench, researchers can contribute to a larger effort to advance precision medicine and improve health outcomes for all individuals. This can be a motivating factor for researchers who are interested in making a positive impact through their research.
- Join a growing community of researchers working with the *All of Us* Research Program and collaborate on multi-disciplinary studies to tackle complex health issues.

UNDERGRADUATE/GRADUATE STUDENTS

- Every individual has the potential to make meaningful contributions for public health. *All of Us* ensures you have data you need to make those discoveries.
 - Learn how you can register and begin your own research project.
- *All of Us* is a broad program that supports research on many aspects of health, not just a single medical or biological research question.
 - The *All of Us* dataset allows for work on interdisciplinary research teams.
- The *All of Us* Research Program offers access to a diverse, longitudinal dataset. Registered users can dive deeper into the data; conduct rapid, hypothesis-driven research; and build new methods for the future using a variety of tools.
 - Access is free! Each researcher receives a \$300 credit at signup to cover computational costs in the Registered and Controlled tiers of the dataset. Additional credit is also available from *All of Us* if you go through the initial credit.
- Students and early-stage investigators are encouraged to bring fresh, creative perspectives & innovative research outcomes.

FACULTY RESEARCHERS

- Access to this robust dataset can increase your research data capacity. Increased access to research data could increase academic publication and grant opportunities and lead to higher research designations.
- The *All of Us* Researcher Workbench is designed to foster collaboration among researchers across different institutions and disciplines. By pooling research and expertise, we can tackle complex health challenges more effectively.

TEACHING WITH *ALL OF US*

- Researchers with access to the *All of Us* Researcher Workbench can facilitate studies with their students that could lead to new insights, treatments, and strategies for disease prevention that are tailored to individuals. Get your students started today!
- Data-driven research continues to be a priority for academic institutions, but gaining access to data can be difficult for some researchers, especially those just starting out.
 - The *All of Us* Research Program offers access to a diverse, longitudinal dataset that can be used by students, faculty, and researchers in the medical/health and social sciences.
 - Access is free! Each researcher receives a \$300 credit at signup to cover computational costs in the Registered and Controlled tiers of the dataset.
 - Registered users can dive deeper into the data; conduct rapid, hypothesis-driven research; and build new methods for the future using a variety of tools.

Resources

- [All of Us Research Program](#)
- [All of Us Research Hub](#)
- [All of Us Researcher Workbench Registration](#)
- [An Instructor's Guide to Student Projects on the Researcher Workbench](#)
- [NIH Library Webinar Series with Dr. Sheri Schully](#)

Field-Specific Talking Points and Messaging Examples

The following pages provide information for specific fields that may have interest in conducting research with the *All of Us* dataset. Each section includes three or more of the following:

- Potential topics of interest
- Talking points and messaging examples
- Articles and videos of interest
- Additional resources*

This document is intended as a starting point to help connect with Researchers in your campus community. Example messaging, talking points, and links to associations, societies, and other websites are not inclusive of all possible resources available.

Fields covered include:

- Bioinformatics
- Biological Engineering
- Biomedical Sciences
- Computer Science
- Data Science
- Economics
- Epidemiology
- Forensic Science
- Health Policy
- Microscopy
- Medicine
- Neuroscience
- Nursing
- Pharmacy
- Psychology
- Public Health
- Social Work
- Sociology
- Speech and Hearing Sciences

*Links provided in this section are provided as examples only. They do not constitute endorsement of these agencies by the National Institutes of Health, National Library of Medicine, or ORAU.

Bioinformatics

POTENTIAL TOPICS OF INTEREST

- Genetic variants associated with specific diseases or traits
- Genetic factors that influence individual responses to medications
- Composition and function of microbial communities in the human body
- Novel disease subtypes or patient clusters based on genetic, phenotypic, and environmental factors
- How genetic variation affects health and disease across different populations and ancestries
- Ethical, legal, and social implications of genomic research, data privacy, consent, and data sharing practices

TALKING POINTS AND MESSAGING EXAMPLES

- Machine learning and artificial intelligence techniques can be applied to *All of Us* data to identify new risk factors for disease, develop predictive models, and improve diagnosis and treatment.
- There are over 250 *All of Us* research projects related to genetics and over 200 related to genomics in the Researcher Workbench. With access to the *All of Us* dataset, you can review, collaborate, and build upon these existing research projects.
- The Researcher Workbench enables data scientists to perform sophisticated analyses, conduct machine learning and AI research, and gain deep insights into various health factors.

ADDITIONAL RESOURCES

- [American Institute of Biological Sciences](#)
- [American Medical Informatics Association](#)
- [Bioinformatics Organization](#)
- [International Society for Computational Biology](#)

Biological Engineering

POTENTIAL TOPICS OF INTEREST

- Biomarkers and cellular mechanisms involved in tissue regeneration and healing processes
- Biomarkers or physiological patterns that indicate disease presence or progression
- How genetic variations influence drug metabolism and efficacy
- Computational models that simulate biological systems or disease processes
- Computational tools that enhance the analysis, visualization, and interpretation of health and genomic data

TALKING POINTS AND MESSAGING EXAMPLES

- Biomedical engineering researchers can use the *All of Us* Researcher Workbench to access large and diverse datasets to develop and test new medical devices and imaging technologies.
- Biomedical engineering researchers can use the *All of Us* Researcher Workbench to develop predictive models to identify patients who are at risk for specific diseases or complications, analyze data, and identify patterns that can be used to develop predictive models that can improve patient outcomes.
- With a participant goal of one million or more, the *All of Us* Research Program offers a vast and robust dataset. The large sample size can improve statistical power and enable researchers to conduct more precise analysis, leading to more reliable research findings.

ADDITIONAL RESOURCES

- [American Institute for Medical and Biological Engineering](#)
- [American Society for Engineering Education, Biomedical Engineering Division](#)
- [Biomedical Engineering Society](#)
- [Institute of Biological Engineering](#)
- [International Federation for Medical and Biological Engineering](#)

Biomedical Sciences

POTENTIAL TOPICS OF INTEREST

- Precision Medicine - an approach for disease treatment and prevention that takes into account individual variability in genes, environment, and lifestyle for each person
- Immunotherapy - treatment that uses a person's own immune system to fight cancer
- Genome (or gene) editing - a group of technologies that give scientists the ability to change an organism's DNA
- Infectious diseases

TALKING POINTS AND MESSAGING EXAMPLES

- The *All of Us* Research Program collects genomic data and environmental exposure data from participants.
- The *All of Us* dataset provides biomedical scientists with a rich source of data on the factors that contribute to disease development and progression. This can help researchers to identify new risk factors for disease and develop targeted prevention and treatment strategies.
- The *All of Us* Research Program fosters a collaborative research environment, encouraging biomedical scientists to work with researchers from different disciplines. Collaborative efforts can lead to innovative research projects and more comprehensive data analysis.
- The *All of Us* dataset has more than 245,350 whole genome sequences and more than 1,000 long-read whole genome sequences.
- A model for supporting biomedical and public health researcher use of publicly available All of Us data at Historically Black Colleges and Universities.

ARTICLES AND VIDEOS OF INTEREST

- [A model for supporting biomedical and public health researcher use of publicly available All of Us data at Historically Black Colleges and Universities](#)
- [Data Browser](#)
- [Survey Explorer](#)

ADDITIONAL RESOURCES

- [American Association for the Advancement of Science \(AAAS\)](#)
- [Biomedical Engineering Society](#)
- [Institute of Biomedical Science](#)

- [Society for Diversity in the Biomedical Sciences](#)

Computer Science

POTENTIAL TOPICS OF INTEREST

- Health Data Analytics - process of analyzing current and historical industry data to predict trends, improve outreach, and even better manage the spread of diseases
- Genomic Data Analysis - combines genetics and computational biology research with statistical data analysis and computer science
- Data Visualization - the graphical representation of information and data
- Natural Language Processing (NLP) - a machine learning technology that gives computers the ability to interpret, manipulate, and comprehend human language
- Integration and interoperability of health data systems - timely and secure access, integration and use of electronic health data so that it can be used to optimize health outcomes for individuals and populations

TALKING POINTS AND MESSAGING EXAMPLES

- The *All of Us* Researcher Workbench allows researchers to integrate data from other sources, such as electronic health records and genomic data.
- Computer scientists can develop new methods for integrating and analyzing different types of data.
- Computer scientists can use work in interdisciplinary teams using the *All of Us* data to gain a more comprehensive understanding of health and disease.
- The *All of Us* dataset has more than 400,000 survey responses.

ADDITIONAL RESOURCES

- [Association for Computing Machinery](#)
- [Association for Women in Computing](#)
- [Computing Research Association](#)
- [IEEE Computer Society](#)

Data Science

AUDIENCE CHARACTERISTICS

- Data scientists come from many different backgrounds with varied specialties
- Interdisciplinary skills in math, statistics, computing, and various subject matter
- In need of data, but may not be familiar with the type and form of health data found in the Researcher Workbench
- Seek opportunities to apply technical skills and will benefit from a partnership between their skills and another's subject matter knowledge

POTENTIAL TOPICS OF INTEREST

- Potential topics of interest are exponential for this field and will be highly dependent on individual researcher interests.

TALKING POINTS AND MESSAGING EXAMPLES

- The *All of Us* Research Program provides data scientists with access to advanced analytical tools and computational resources.
- The Researcher Workbench enables data scientists to perform sophisticated analyses, conduct machine learning and AI research, and gain deep insights into various health factors.
- The large and varied *All of Us* dataset provides data scientists with ample opportunities to explore complex research questions and uncover patterns and trends in health.
- With a participant goal of one million or more, the *All of Us* Research Program offers a vast and robust dataset. The large sample size can improve statistical power and enable researchers to conduct more precise analysis, leading to more reliable research findings.
- The *All of Us* Research Program fosters a collaborative research environment, encouraging data scientists to work with researchers from different disciplines. Collaborative efforts can lead to innovative research projects and more comprehensive data analysis.

ARTICLES AND VIDEOS OF INTEREST

- [Data Dictionaries](#)
- [Data Curation Process](#)
- [Research Projects Directory](#)

Economics

POTENTIAL TOPICS OF INTEREST

- Health economics including the cost-effectiveness of different healthcare interventions
- Environmental Health including the cost of pollution-related illnesses and the economic benefits of reducing greenhouse gas emissions
- Economic impacts of aging and long-term care
- Social determinants of health (SDOH) including economic stability, healthcare access, and neighborhood and built environment

TALKING POINTS AND MESSAGING EXAMPLES

- Potential applications of the *All of Us* Researcher Workbench for economics researchers focus on the economic impact of health and disease.
- Researchers in economics can use *All of Us* data to explore topics such as the economic burden of specific diseases, the cost-effectiveness of different healthcare interventions, or household food insecurity and health outcomes.
- Researchers in economics can upload other relevant datasets for their research, such as U.S. Census data, and integrate these data in the *All of Us* dataset for more robust research results.
- The All of Us Researcher Workbench includes a variety of tools and resources that can assist researchers with data analysis, visualization, and interpretation. This can help researchers to identify patterns and trends in the data that may be relevant to their research questions, and to generate new hypotheses for further investigation.

ARTICLES AND VIDEOS OF INTEREST

- [Study Links Birthplace and Cancer Risk Among Hispanic *All of Us* Participants](#)
- [Study Example: Impact of Social Determinants of Health on the Emerging COVID-19 Pandemic in the United States](#)

ADDITIONAL RESOURCES

- [American Society of Health Economists](#)
- [Nature.com Healthcare Economics](#)
- [Office of Health Economics](#)
- [Public Health Economics](#)
- [Social Determinants of Health](#)

- [The Professional Society for Health Economics and Outcomes Research](#)

Epidemiology

POTENTIAL TOPICS OF INTEREST

- Genetic and environmental factors in the development of non-communicable diseases
- The impact of social determinants of health-on-health outcomes
- Health disparities and the study of health equity
- The role of nutrition in disease prevention and management
- Environmental-related health outcomes

TALKING POINTS AND MESSAGING EXAMPLES

- The *All of Us* Research Program represents a transformative opportunity for epidemiology researchers, offering unprecedented access to a vast and diverse dataset that has the potential to revolutionize our understanding of health and disease, ultimately paving the way for personalized medicine and targeted public health interventions.
- Researchers can leverage longitudinal health data from the *All of Us* Research Program to track health outcomes over time, enabling you to identify trends and causal relationships in epidemiological studies.
- Utilize the *All of Us* Research Program's cutting-edge research tools and cloud-based platform to analyze data efficiently, saving time and resources in your epidemiological studies.

ARTICLES AND VIDEOS OF INTEREST

- [All of Us Data Teaches Us About Who Gets Vaccinated](#)
- [From All of Us Research to All of Us in the Real World](#)
- [Sociodemographic characteristics differ across routine adult vaccine cohorts: An All of Us descriptive study](#)
- [Survey Explorer](#)

ADDITIONAL RESOURCES

- [American College of Epidemiology](#)
- [The Association for Professionals in Infection Control and Epidemiology](#)
- [International Epidemiological Association](#)
- [Society for Epidemiologic Research](#)
- [World Health Organization Global Health Observatory](#)

Forensic Science

POTENTIAL TOPICS OF INTEREST

- Population Genetics and Ancestry - the branch of genetics dealing with the description of observed or inferred heritable features in populations through space and time
- Genetic Markers of Disease Susceptibility – a specific change in a person's DNA that makes the person more likely to develop certain diseases such as cancer
- Pharmacogenomics – the study of how genes affect a person’s response to drugs
- Environmental and Occupational Exposure - environmental hazards present in the workplace, such as exposure to chemical compounds, heavy metals, poor air quality, or extreme heat or cold
- Forensic Psychology - the application of psychological principles, theories, and skills to the understanding and functioning of the legal and criminal justice system

TALKING POINTS AND MESSAGING EXAMPLES

- Forensic scientists may be able to use data from the Researcher Workbench to identify potential biomarkers for forensic applications.
- Forensic scientists may be able to use the *All of Us* dataset to study the relationship between health factors and criminal behavior.
- The *All of Us* dataset has more than 245,350 whole genome sequences and more than 1,000 long-read whole genome sequences.

ARTICLES AND VIDEOS OF INTEREST

- [Genomic data in the All of Us Research Program](#)

ADDITIONAL RESOURCES

- [American Academy of Forensic Sciences](#)
- [Association of Forensic DNA Analysts and Administrators](#)

Health Policy

POTENTIAL TOPICS OF INTEREST

- Health equity - the state in which everyone has a fair and just opportunity to attain their highest level of health
- Healthcare access and affordability - the ability to obtain healthcare services such as prevention, diagnosis, treatment, and management of diseases, illness, disorders, and other health-impacting conditions
- Healthcare outcomes, including the impact of a healthcare service or intervention

TALKING POINTS AND MESSAGING EXAMPLES

- Researchers can use the data from the *All of Us* Researcher Workbench to identify health disparities and to evaluate the effectiveness of different interventions and policies.
- The *All of Us* dataset can be used to support public health surveillance by providing real-time data on health trends and disease outbreaks along with early warning signals for emerging health issues, allowing policymakers to take proactive measures to address potential health threats.
- By studying the data available in the Workbench, researchers can identify interventions and policies that can improve health outcomes for individuals and populations. Policymakers can use this information to develop and implement policies that promote health and well-being.
- The All of Us dataset can be used to evaluate the impact of policies and programs aimed at improving health outcomes. For example, researchers can use the data to evaluate the effectiveness of interventions such as smoking cessation programs, vaccination campaigns, or policies that promote healthy food access. Policymakers can use this information to refine and improve policies and programs.

ARTICLES AND VIDEOS OF INTEREST

- [Envisioning Future Research and Clinical Practice with a Bioethics Lens: A Word for the Next Generation of Researchers \(*All of Us* Research Program, Activism, and Policy Implications\)](#) *

ADDITIONAL RESOURCES

- [Alliance for Health Policy](#)
- [American Public Health Association](#)
- [Society of Health Policy Young Professionals](#)

Microscopy

POTENTIAL TOPICS OF INTEREST

- Disease Biomarkers and Pathogenesis - the mechanisms by which disease develops, progresses, and either persists or is resolved
- Genotype-Phenotype Correlations - typically identifies correlations between a genetic variant and the presence of a particular condition or disease
- Drug Response and Toxicity - the net effect of multiple factors: age, organ function, concomitant therapy, drug interactions, and disease
- Precision Medicine - innovative approach that takes into account individual differences in patients' genes, environments, and lifestyles
- Health Disparities - preventable differences in the burden of disease, injury, violence, or opportunities to achieve optimal health that are experienced by socially disadvantaged populations

TALKING POINTS AND MESSAGING EXAMPLES

- Researchers may be able to use the Workbench to study the relationship between microscopy data and the development or progression of certain diseases or conditions.
- Researchers may be able to explore the impact of environmental factors on microscopy data, such as the effects of air pollution on lung tissue or the effects of diet on the microstructure of cells or tissues.
- Researchers can use the *All of Us* Researcher Workbench to investigate the relationship between microscopy data and health outcomes, and to collaborate with other researchers who are working in related areas.

ADDITIONAL RESOURCES

- [American Microscopical Society](#)
- [American Society for Microbiology](#)
- [Microscopy Society of America](#)

Medicine

POTENTIAL TOPICS OF INTEREST

- Health outcomes and patient needs
- Disease mechanisms, and developing new diagnostics or therapeutic strategies
- Physical activity, sleep patterns, and other health indicators
- Disease progression and long-term outcomes of treatments
- Changes in health related to aging or environmental factors

TALKING POINTS AND MESSAGING EXAMPLES

- The *All of Us* Research Program stands as a cornerstone for medical research.
- The *All of Us* Researcher Workbench provides unparalleled access to a comprehensive and diverse biomedical dataset that holds the key to unlocking personalized treatments, advancing disease prevention strategies, and catalyzing innovations in healthcare delivery for generations to come.
- As of May 2024, the *All of Us* dataset has more than 413,350 survey responses, more than 287,000 electronic health records (EHRs), more than 15,600 Fitbit records, and more than 245,350 whole genome sequences.

ARTICLES AND VIDEOS OF INTEREST

- [Using *All of Us* Data to Learn About Glaucoma Awareness](#)
- [Discovering More Genetic Variants Thanks to *All of Us* Data](#)
- [Advancing Research in Underrepresented Communities](#)
- [Using the *All of Us* dataset to study polycystic ovary syndrome \(PCOS\)](#)
- [Diversity in Research: Cardiovascular disease risk among sexual and gender minority populations](#)
- [Participant Data in Action: A more personalized, risk-based approach to breast cancer screening](#)

ADDITIONAL RESOURCES

- [American Medical Association](#)
- [American Academy of Pediatrics](#)
- [American Psychiatric Association](#)
- [Journal of American Medical Association](#)

Neuroscience

POTENTIAL TOPICS OF INTEREST

- Relationship between cognitive function and communication abilities
- Interventions for individuals with traumatic brain injury, stroke, and other neurological disorders

TALKING POINTS AND MESSAGING EXAMPLES

- The *All of Us* dataset includes information on brain health, such as cognitive function and imaging data which can be particularly beneficial for neuroscientists who are interested in studying brain health and identifying interventions that can improve brain function.
- By studying the genetic and other health information of participants, neuroscientists can identify potential biomarkers for neurological disorders and develop personalized treatments for patients.
- The *All of Us* Researcher Workbench allows neuroscience researchers the ability to study underlying mechanisms of neurological disorders, such as Alzheimer's disease, Parkinson's disease, and multiple sclerosis.

ARTICLES AND VIDEOS OF INTEREST

- [Learning About the Health of Young Cancer Survivors with *All of Us*](#)
- [Investigating the link between rosacea and neurological diseases: an all of us case-control study](#)

ADDITIONAL RESOURCES

- [American Neurological Association](#)
- [Journal of Neuroscience](#)
- [Society for Neuroscience](#)

Nursing

AUDIENCE CHARACTERISTICS

- Faculty and graduate students do a lot of research
- Undergraduate students may be more focused on clinical work
- May want to upload their own data to Researcher Workbench

POTENTIAL TOPICS OF INTEREST

- Health Care Access
- Long Term COVID-19 Health Outcomes
- Safety and Quality of Care
- Health Literacy
- Wound Care
- Pregnancy and Childbirth
- Racial Health Disparities
- Diversity, Equity, and Inclusion

TALKING POINTS AND MESSAGING EXAMPLES

- *All of Us* has data perfect for studies that meet the [American Nursing Credentialing Center \(ANCC\) priorities](#).
- By leveraging the genetic and lifestyle data available in the *All of Us* Research Program, nursing researchers can contribute to precision nursing, tailoring healthcare interventions to individuals' unique characteristics, needs, and preferences.
- Researchers are leveraging this one-of-a-kind dataset to improve understanding of health and disease, identify opportunities to reduce disparities, and enable more precise approaches to care.
- Nursing researchers can examine participants' health behaviors, lifestyle choices, and adherence to healthcare recommendations, providing insights into effective strategies for promoting healthy behaviors and patient engagement.
- Findings from research using the *All of Us* Research Program can have implications for healthcare policies, nursing practices, and the delivery of patient-centered care.

ARTICLES AND VIDEOS OF INTEREST

- [Researcher Billy A. Caceres Taps *All of Us*' Diverse Data to Benchmark Health Disparities](#)

- [Results of a cross-sectional study using the *All of Us* Survey Data](#)
- [All of Us Data Helps Better Predict Hospital Readmission for Patients With Sepsis](#)

ADDITIONAL RESOURCES

- [American Nurses Association \(ANA\)](#)
 - [Education + Research](#)
 - [Enterprise Research Symposium](#)
- [National Student Nurses' Association \(NSNA\)](#)
- [National Institute of Nursing Research](#)
- [International Association of Clinical Research Nurses \(IACRN\)](#)

Pharmacy

POTENTIAL TOPICS OF INTEREST

- Pharmacy policy on access to medications and health outcomes
- Effects of drugs on populations
- Drug safety effectiveness
- Adverse drug reactions and prevention
- Safety and efficacy of drug combinations

TALKING POINTS AND MESSAGING EXAMPLES

- By studying the safety and efficacy of medications in different patient populations through the *All of Us* Researcher Workbench, pharmacy and pharmacology researchers can help to improve medication safety and effectiveness, and to develop personalized treatment plans for patients.
- By studying the safety and effectiveness of medications in real-world settings, pharmacy and pharmacology researchers can provide valuable information that can inform clinical practice and improve patient care.
- As of May 2024, the All of Us dataset has more than 413,350 survey responses and more than 287,000 electronic health records (EHRs).

ARTICLES AND VIDEOS OF INTEREST

- [Pharmacogenomic testing and prescribing patterns for patients with cancer in a large national precision medicine cohort](#) *
- [Race, Ethnicity, and Pharmacogenomic Variation in the United States and the United Kingdom](#) *
- [Drug-Induced Liver Injury with Commonly Used Antibiotics in the *All of Us* Research Program](#) *
- [Discovering clinical drug-drug interactions with known pharmacokinetics mechanisms using spontaneous reporting systems and electronic health records](#) *

ADDITIONAL RESOURCES

- [American Association of Pharmaceutical Scientists](#)
- [American Association of Colleges of Pharmacy](#)
- [American Pharmacists Association](#)

Psychology

AUDIENCE CHARACTERISTICS

- Often interdisciplinary (e.g., mind/body connection, nutrition psychology, wellness industry)
- Undergraduate students often use this degree program as a jumping off point for graduate degrees in other fields, so may have wider interests.

POTENTIAL TOPICS OF INTEREST

- Drug Misuse and Addiction
- Anxiety Prevention and Treatment
- Population Mental Health
- Social Media Impacts
- Stress Prevention and Treatment
- Healthy Workplace
- Diversity, Equity & Inclusion

TALKING POINTS AND MESSAGING EXAMPLES

- The broad and diverse range of participants, from various racial, ethnic, and socioeconomic backgrounds, allows psychology researchers to study mental health and behavior across different populations contributing to a more comprehensive understanding of psychological factors.
- The longitudinal approach of the *All of Us* Research Program allows psychology researchers to study the development of mental health conditions, changes in behavior, and the impact of interventions over extended periods of time.
- Psychology researchers can examine health-related behaviors, such as sleep patterns, physical activity, and substance misuse, along with social determinates of health, providing insights into those these behaviors impact mental health.
- Findings from psychology research using the *All of Us* Research Program can have implications for public health policy, mental health interventions, and the allocation of resources to address mental health challenges in the population.

ARTICLES AND VIDEOS OF INTEREST

- [Survey Explorer](#)
- [Demo Project Testimonial: Joyce Ho](#)

- [COPE survey sheds light on the pandemic's effects on physical and mental health](#)
- [All of Us Survey Development and Data](#)
- [Implementing Medications in All of Us](#)
- [Self-Rated Family Health History Knowledge among All of Us Program Participants](#)
- [What All of Us Data Says About Blindness and Mental Health During COVID-19](#)
- [All of Us Research Program Starts Collecting New Mental Health and Well-Being Data](#)
- [Validating an algorithm to predict antidepressant response](#)
- [Studying the link between discrimination and depressive symptoms](#)
- [Utilizing the All of Us Research Program for Substance Use and Mental Health Research](#)
- [All of Us Data Shows the Power of Social Support to Prevent Depression](#)

ADDITIONAL RESOURCES

- [American Psychology Association](#)
 - [Highlights in Psychological Research](#)
 - [American Psychological Association of Graduate Students \(APAGS\)](#)
- [Association for Psychological Science \(APS\)](#)

Public Health

AUDIENCE CHARACTERISTICS

- Research is done at both the undergraduate and graduate levels
- Research analysis may be completed using SPSS or SAS, rather than R or Python

POTENTIAL TOPICS OF INTEREST

- Built Environment
- Environment & Health
- Health Equity
- Covid-19
- Vaccine Rates
- Fecal Sewer Testing Related Infections
- Lead Poisoning
- Sociological Impacts of Population Mental Health

TALKING POINTS AND MESSAGING EXAMPLES

- Researchers are leveraging this one-of-a-kind dataset to improve understanding of health and disease, identify opportunities to reduce disparities, and enable more precise approaches to care.
- With access to genetic data and information on lifestyle behaviors, students can explore precision public health approaches that tailor interventions to individuals' specific characteristics, improving the effectiveness of public health initiatives.
- Aspiring public health researchers can access real-world data from a diverse and extensive cohort of participants. This data can provide valuable insights into health behaviors, risk factors, and health outcomes, allowing students to study patterns and trends across different populations.
- SAS is now available for use in the Researcher Workbench.

ARTICLES AND VIDEOS OF INTEREST

- [Survey Explorer](#)
- [COPE survey sheds light on the pandemic's effects on physical and mental health](#)
- [Atiya Shahid: A Story of Survival, Resilience, and the Power of Mentorship and Research](#)
- [Air quality and cancer risk in the *All of Us* Research Program](#)

- [Use of Fitbit data within *All of Us* Research Program](#)
- [From *All of Us* Research to All of Us in the Real World](#)
- [Covid-19 Research Initiatives](#)
- [*All of Us* Data Teaches Us About Who Gets Vaccinated](#)

ADDITIONAL RESOURCES

- [American Public Health Association](#)
 - [Student Assembly](#)
- [Association of Schools and Programs of Public Health \(ASPPH\)](#)
- [Calling on All of Us Public Health Scientists](#)

Social Work

POTENTIAL TOPICS OF INTEREST

- Mental health, including depression, anxiety, trauma-related disorders
- The role of social factors in mental health outcomes, such as social support, stigma, and access to care
- Social inequalities on health and well-being
- Interventions for preventing and treating substance misuse and addiction
- The role of social factors in substance use disorders

TALKING POINTS AND MESSAGING EXAMPLES

- Social work researchers can use the *All of Us* dataset to inform policy and practice in the healthcare and social services fields.
- By studying the social determinants of health and the relationships between social factors and health outcomes, researchers can identify interventions and policies that can improve health and well-being for vulnerable populations.
- As of May 2024, the *All of Us* dataset has more than 413,350 survey responses and more than 287,000 electronic health records (EHRs).

ARTICLES AND VIDEOS OF INTEREST

- [Utilizing a Social-Ecological Health Promotion Framework to Engage Diverse Populations for Recruitment in the *All of Us* Research Program*](#)
- [Studying the link between discrimination and depressive symptoms](#)

ADDITIONAL RESOURCES

- [National Association of Social Workers](#)
- [Society for Social Work and Research](#)

Sociology

POTENTIAL TOPICS OF INTEREST

- Social inequity, income inequity, racial and ethnic disparities, gender inequity
- Impacts of inequity on health, education, and social mobility
- Social dynamics of health care systems
- Access to care, quality of care, and patient experiences
- Social determinants of health

TALKING POINTS AND MESSAGING EXAMPLES

- The *All of Us* Researcher Workbench allows sociology researchers the ability to explore the relationship between social factors and health outcomes using the social determinates of health survey data.
- As of May 2024, the All of Us dataset has more than 413,350 survey responses.

ARTICLES AND VIDEOS OF INTEREST

- [All of Us Data Shows Resilience Lessened Effects of Discrimination During COVID-19](#)
- [Studying the link between discrimination and depressive symptoms](#)
- [Survey Explorer](#)

ADDITIONAL RESOURCES

- [American Journal of Sociology](#)
- [American Sociological Association](#)

Speech and Hearing Sciences

POTENTIAL TOPICS OF INTEREST

- Language, and communication skills in people with various conditions
- Interventions for improving speech
- Genetic markers associated with speech and language development and hearing loss
- Relationship between cognitive function and communication abilities

TALKING POINTS AND MESSAGING EXAMPLES

- By using the *All of Us* Researcher Workbench, researchers can explore the relationships between speech and hearing disorders and other health conditions, as well as identify potential risk factors and protective factors for these disorders.
- The *All of Us* Researcher Workbench can be a valuable resource for speech and hearing science researchers who are interested in exploring the complex relationships between speech and hearing disorders and other health factors, and who are looking for new ways to collaborate and analyze data.

ARTICLES AND VIDEOS OF INTEREST

- [Increasing inclusivity in precision medicine research: Views of deaf and hard of hearing individuals*](#)
- [Hearing Loss and Sociodemographic Barriers to Health Care Access Using the *All of Us* Research Program*](#)
- [Underrepresentation of blind and deaf participants in the *All of Us* Research Program*](#)

ADDITIONAL RESOURCES

- [Academy of Doctors of Audiology \(ADA\)](#)
- [American Speech-Language-Hearing Association](#)
- [American Academy of Audiology](#)
- [National Student Speech Language Hearing Association](#)
- [Student Academy of Audiology](#)

