

Research News Quarterly

JUNE 2019

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Letter from the Editor

Our feature article this month is an interview with the NIH's National Institute of Allergy and Infectious Disease (NIAID) Director Anthony Fauci, M.D. In the interview, Dr. Fauci discusses the institute's efforts to develop a universal flu vaccine, new tuberculosis tools, the institute's initiatives to support the next generation of physician-scientists and other areas. He also outlines how the institute is using state-of-the-art genomics technologies to improve the diagnosis and treatment of rare or novel immunological disorders.

Next, we report on the NHLBI Lung Division's 50th anniversary events in Washington, DC, held in April in partnership with the ATS and the respiratory community. Events included a symposium on the NIH campus heralding the progress in respiratory disease led by the Division over the past 50 years and looking towards future innovation in disease diagnosis, treatment and management through lung imaging technology.

The Quarterly's feature on NIH intramural programs provides an overview of the National Institute of Environmental Health Sciences expansive Intramural Research Division, which includes many initiatives focused on respiratory diseases. Shifting to the National Institute of Nursing Research, we share an announcement on the institute's June 27 symposium on symptom science. Continuing our reporting on upcoming events is news on PCORI's annual meeting in September.

Next is an update on the NIH All of US program, which recently celebrated its first year. This edition of the Quarterly concludes with an ATS member action alert on federal funding for COPD, an update from the ATS Washington Office on health research funding overall and a photo of one of our advocacy teams in action from the March 2019 ATS Hill Day, led by ATS President James Beck, M.D.

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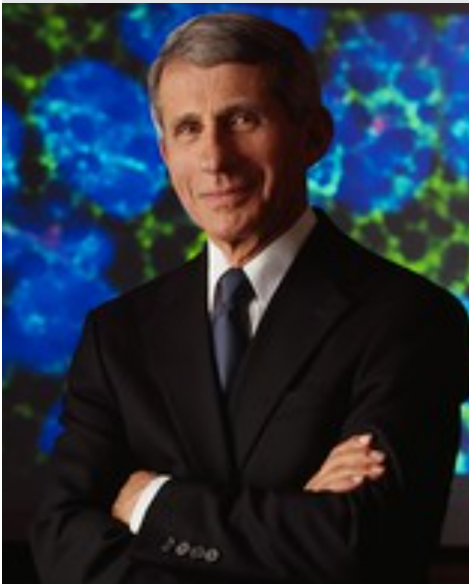
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Anthony S. Fauci, MD, director, National Institute of Allergy and Infectious Disease

INTERVIEW WITH National Institute of Allergy and Infectious Disease (NIAID) Director **Anthony S. Fauci, MD**

Q: The Universal Influenza Vaccine Strategic Plan outlines NIAID's initiative to create a robust influenza vaccine with broad and enduring protection. The Phase I clinical trial that was just initiated is testing the efficacy of H1ssF_3928 universal influenza vaccine candidate. How is this trial and vaccine candidate overcoming the challenges and practicality of staying ahead of the rapid natural evolution of influenza viruses?

A: H1ssF_3928, a candidate universal influenza vaccine developed by NIAID's Vaccine Research Center, is designed to protect against diverse flu subtypes, including those that may cause a pandemic. The experimental vaccine is designed to focus the immune system on the stem region of the influenza surface protein hemagglutinin (HA). The HA stem varies relatively little from strain to strain, and, therefore, a vaccine targeting this region could potentially protect against multiple influenza subtypes and would not need to be updated annually. The Phase 1 clinical trial is examining the safety and tolerability of the experimental vaccine as well as its ability to induce an immune response in healthy volunteers. This clinical trial is being conducted at the NIH Clinical Center in Bethesda, Maryland, and will enroll at least 50 adults aged 18 to 70 years.

Q: Vaccine hesitancy and decreased host immunity are major contributors to the re-occurrence/rising incidence of "old" infectious diseases like measles and chicken pox: a) How does the NIAID plan to counter societal vaccine hesitancy that may contribute to decreased herd immunity? b) Does the NIAID have specific funding mechanisms focused on vaccine initiatives that are geared toward basic science as well as sociology surrounding vaccine use/awareness?

A: All of us in the public health community are concerned about the resurgence of measles and other serious diseases for which safe and effective vaccines are available. Vaccine hesitancy is in part a consequence of the declining support for and trust in public health programs, and this is not unique to the United States. When public health messages are challenged by campaigns of misinformation, myths and rumors can easily persist and flourish. Over decades, NIAID-supported research has led to safe and effective vaccines that have saved countless lives in the U.S. and worldwide. Our counterparts at the U.S. Centers for Disease Control and Prevention (CDC), the Office of the U.S. Surgeon General, and the National Vaccine Program Office have primary responsibility for promoting the use of licensed vaccines, which includes

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Dr. Fauci Interview *(Continued from page 2)*

conducting research about vaccine hesitancy that informs ongoing educational and outreach programs. We must intensify our efforts to communicate the message that vaccines are safe and effective and have enormous individual and public health benefits. NIAID uses every opportunity to reinforce this vital public health message.

NIAID does not have specific research projects aimed at addressing the social dynamics of vaccine hesitancy. Other entities, such as the CDC, the World Health Organization, and public health advocacy groups do study that topic.

Q: The September 2018 United Nations High-Level Meeting (UNHLM) on Tuberculosis (TB) has increased global momentum on combating TB. NIAID's strategic plan for TB research showcases the NIAID's dedication to accelerating TB research and development. Will the plan reach the global TB community's fair-share target to invest 0.1 percent of the U.S.'s overall research and development spending to TB research, which if all TB-high-burden countries and highly developed countries adopt, would achieve the UNHLM target of \$2 billion annually for TB research and development?

A: The fair-share funding targets, as reported in the [Treatment Action Group Tuberculosis Research Funding Trends](#), put the United States at about \$440 million. Guided by NIAID's strategic plan and aligned with the UNHLM, NIH is moving toward this goal. In 2018, NIH funding for TB was \$403 million, and in 2019 NIH will spend an estimated \$422 million on TB research. NIAID accounts for most of NIH TB-research funding.

NIAID is working to meet the goals set by the UNHLM and the NIAID strategic plan for TB research. Efforts focus on basic, translational, and clinical research to develop and evaluate tools to control the current epidemic and accelerate ending TB. For example, NIAID supports several projects to advance new TB interventions, including a large-scale genome sequencing project for *Mycobacterium tuberculosis* to better understand genetic diversity and molecular patterns of drug resistance. NIAID also is soliciting research proposals to support the evaluation of [early-stage diagnostics and novel diagnostic strategies](#) for TB, and to advance easy-to-use [TB diagnostics for children](#).

A large, NIAID-funded initiative, [IMPACT-TB](#), aims to better understand immune responses that are needed to prevent initial *Mycobacterium tuberculosis* infection, slow or prevent development of latent TB infection, or avoid transition to active TB disease. Knowledge generated by this project will lead to improved TB vaccines. NIAID also supports research to better understand the factors associated with TB transmission in individuals and populations, to develop strategies to intervene in TB transmission, and to identify the risk factors for transmission in TB high-burden settings.

Of interest, listed below are the links to three open funding opportunity announcements for TB/HIV/DM2 and TB meningitis:

<https://grants.nih.gov/grants/guide/pa-files/PAR-18-822.html>

<https://grants.nih.gov/grants/guide/pa-files/PA-17-282.html>

<https://grants.nih.gov/grants/guide/pa-files/PA-17-283.html>

Q: Rapid climate change is impacting human vulnerability to disease as indicated by increases in vector-borne disease and allergen/pollutant-induced asthma. Does the NIAID have any cross-institute initiatives with the NIEHS to help investigators that evaluate the influences of climate variation on human health?

A: Climate change likely does have an impact on vector-borne diseases, as well as other health conditions. As the length of the season and the geographical range in which mosquitoes flourish increase, the risk for mosquito-borne infections rises. Additional human factors, including population growth, urbanization, and the ease of travel, also contribute to the spread of disease. Global health research is an integral part of many of NIAID's research projects and initiatives, allowing NIAID-supported scientists to study the effects of different environmental conditions, including climate, on infectious diseases and immunology. NIAID collaborates with NIEHS, as well as other NIH institutes and federal agencies, to set scientific agendas and accelerate research on the intersection between health and environment, including the impact of climate change on human health.

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Dr. Fauci Interview *(Continued from page 3)*

Q: How does the NIAID balance funds between large consortia versus single investigator R01 grants? What are the pros and cons of dividing funds between these?

A: NIAID supports extramural research through a variety of mechanisms, including individual research project R01, U01 and R21 grants; multi-project grants; consortia grants; small business grants; and research training grants. The extramural grant budget of NIAID is approximately \$3.3 billion and is divided between investigator-initiated and solicited research programs.

The majority of the annual grant budget for both investigator-initiated and solicited programs supports ongoing grants and contracts. Concepts for new initiatives are presented three times per year at NIAID Advisory Council meetings, usually two fiscal years before we anticipate making awards. Additionally, Congress may appropriate funds for special purposes, such as development of a universal influenza vaccine and research on antimicrobial resistance. These funds are used to support both investigator-initiated and solicited research, depending on programmatic needs.

NIAID supports solicited research and clinical trials in areas we consider particularly valuable, as well as investigator-initiated research on topics submitted by the scientific community. Our consortia provide funding and infrastructure to sustain research progress over many funding cycles, and our R01 grants provide a stream of new scientific discoveries and opportunities.

Q: The rapid disappearance of physician-scientists is a burden faced by most academic institutions. How does the NIAID support the recruitment and retention of physician-scientists beyond the K-award program?

A: NIAID supports the recruitment and retention of physician-scientists through multiple funding mechanisms. Some of these mechanisms are part of larger efforts to support the recruitment and retention of all scientists, while others are specifically targeted to dual-degree holders and clinicians who want to pursue research careers.

Programs focused on physician-scientists include the Stimulating Access to Research during Residency (StARR) program and the Physician-Scientist Pathway to

Independence Award (K99/R00). Through StARR awards, NIAID supports institutional programs that provide mentored research opportunities for medical residents in structured programs for clinician-investigators. The K99/R00 awards support physician-scientists transitioning from postdoctoral positions to independent tenure-track or equivalent faculty positions.

NIAID also offers a variety of training and educational awards that benefit physician-scientists. These include training programs and individual fellowship awards for predoctoral and postdoctoral scientists, research education awards, and research supplements to support trainees from underrepresented groups. Additionally, NIH's loan repayment program repays qualified educational debt, helping MDs and other doctoral-level professionals pursue careers in clinical, health disparities, or pediatric research.

Physician-scientists can learn more about NIAID's awards and training opportunities on the [Training and Career Development Grant Programs](#) website and in [Funding News](#).

Q: What advice would you give to the new generation of scientists based on your incredibly successful career?

A: Follow your instincts and do not be afraid to take chances and pursue uncharted avenues of research. In 1981, I was in the early stages of a successful career studying immune-mediated diseases when the first reports came out describing the disease that would later become known as AIDS. I recognized very early on that this was going to become a global problem, but many people did not agree. While many of my friends, colleagues, and mentors advised against pursuing what they called a "curiosity," I ignored their advice and listened to my gut feeling. That choice informed the entire trajectory of my career.

Q: Genomics and precision medicine have altered the practice of medicine. How does the NIAID envision integrating the power of precision medicine to future patient care?

A: NIAID physician-scientists already are applying genomic and precision-medicine approaches to patient care. At the NIH Clinical Center in Bethesda, Maryland, NIAID's Clinical Genomics Program uses state-of-the-art genomics

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Dr. Fauci Interview *(Continued from page 4)*

technologies to improve the diagnosis and treatment of rare or novel immunological disorders. Additionally, the new Immune Deficiency-Cellular Therapy Program, a multi-institute initiative at NIH, aims to accelerate progress in the treatment of genetic diseases of the blood and immune system through focused collaborations to synergize disease-specific and gene mutation-specific approaches.

Additionally, NIAID supports research worldwide to apply genomics and other advanced technologies to biomedical research and patient care. Sequencing human and microbial genomes and advances in functional genomics can enhance our understanding of human susceptibility to disease and microbial pathogenesis, as well as inform the development of new diagnostics, vaccines, and therapies. As part of efforts to develop and refine diagnostic tools for tuberculosis, NIAID contributes to global consortia that are mapping the genetic diversity of multidrug-resistant or extensively drug-resistant strains of *Mycobacterium tuberculosis*, and NIAID's [Tuberculosis Research Units Network](#) has helped identify biomarkers that define the various stages of infection.

Q: Cross disciplinary science is paving the way of future treatment protocols. What are some of NIAID's collaborative projects with NHLBI, NIEHS, and NICHD that may be of benefit to research in lung health?

A: Cross-disciplinary collaborations are essential to advancing biomedical research, and NIAID works collaboratively with a variety of partners, including other NIH Institutes. In the field of lung health, NIAID participates in a large, multi-Institute effort called the Childhood Respiratory and Environmental Workgroup (CREW), which is part of NIH's Environmental Influences on Child Health Outcomes (ECHO) initiative. CREW involves 12 asthma birth cohorts across the U.S., including the Urban Environment and Childhood Asthma (URECA) birth cohort study funded through NIAID's Inner-City Asthma Consortium, and several other NIAID-funded cohorts. CREW proposes to identify specific types of childhood asthma, develop an understanding of which early-life environmental influences cause these different types of asthma, and identify targets for future efforts aimed at preventing childhood asthma.

Thank you, Dr. Fauci. ■

News from NHLBI

News from NHLBI

NHLBI, ATS and Partners Celebrate Lung Division's 50th Anniversary with DC Events

On April 9, 2019, the National Heart, Lung, and Blood Institute's Lung Division celebrated its 50th anniversary with a series of events in the Washington-DC area with the ATS and other partners. The institute held a symposium on the NIH campus, "50 Years of Progress is Pulmonary Science: Innovations in Lung Imaging for Diagnosis, Treatment and Management of Lung Diseases." Symposium speakers included:

- NHLBI Director Gary Gibbons, MD, with opening remarks.
- James Crapo, MD, speaking on the historical perspective of the Lung Division's advancements.
- Scott Fraser, PhD, speaking on multi-dimensional and multiplex light lung imaging.
- Sanjay Jain, MD, speaking on molecular imaging technologies for bacterial and drug resistant infections.
- Adrienne Campbell-Washburn, PhD, speaking on low field MRI.
- Carmen Priolo, MD, PhD, speaking on metabolic imaging.

- Marcus Chen, MD, speaking on low dose CT imaging.
- R. Graham Barr, MD, DrPH, speaking on opportunities for machine learning and lung imaging.

In the evening, the ATS, NHLBI Constituency Group, and other organizations, including ATS PAR partners, sponsored a Capitol Hill reception in the Rayburn House Office Building in Washington, DC. ATS President Polly Parsons, MD, introduced former Department of Health and Human Services Louis Sullivan, MD, who served as master of ceremonies for the event. Speakers included Harold Wimmer, President & CEO of the American Lung Association; Gary Gibbons, MD, James Crapo, MD; and Mary Stojic, patient advocate with the LAM Foundation.

Several members of Congress attended the reception and spoke, including COPD Caucus Co-Chair Chris Stewart (R-UT), Peter King (R-NY), COPD Caucus Co-Chair Sen. Mike Crapo (R-ID), and House Labor-Health and Human Services Appropriations Subcommittee Chair, Rosa DeLauro (D-CT). Actress Kathy Bates also attended the reception. ■



From left: Adrienne Campbell-Washburn, Sanjay Jain, Scott Fraser, James Crapo, James Kiley, and Gary Gibbons.

Quarterly Spotlight Series

Quarterly Spotlight Series on NIH Institute Intramural Divisions – NHLBI

The National Institute of Environmental Health Science's broad mission is to discover how the environment affects people in order to promote healthier lives. The institute's Intramural Research Division studies include epidemiological studies of environmentally associated diseases, toxicological testing of environmental substances, and intervention and prevention studies to decrease the effects of exposures to hazardous environments. The division is headed by pulmonary physician-scientist Darryl C. Zeldin, MD. NIEHS's intramural scientists collaborate significantly with partners in other NIH institutes, federal agencies, and academic institutions and aims to support new ideas, pioneering theories, and new paradigms.

The intramural division comprises 11 branches and laboratories:

- Administrative and Research Services Branch.
- [Biostatistics and Computational Biology Laboratory.](#)
- [Clinical Research Branch.](#)
- [Comparative Medicine Branch.](#)
- [Epidemiology Branch.](#)
- [Epigenetics and Stem Cell Biology Laboratory.](#)

- [Genome Integrity and Structural Biology Laboratory.](#)
- [Immunity, Inflammation, and Disease Laboratory.](#)
- [Neurobiology Laboratory.](#)
- [Reproductive and Developmental Biology Laboratory.](#)
- [Signal Transduction Laboratory.](#)

Epidemiology Branch

The Epidemiology Branch, one of the largest of NIEHS's intramural programs, conducts basic and applied laboratory research in a broad range of health conditions throughout the life span centering on known and potential environmental toxins. The branch comprises nine investigator-led research groups, including:

- [Chronic Disease Epidemiology Group](#)

The group utilizes prospective cohorts to study the impact of environmental and lifestyle exposures on population health, including cancer, respiratory health, autoimmune diseases and neurological diseases. Its main current studies are the [Agricultural Health Study \(AHS\)](#); the Sister Study, which investigates the environmental and genetic contributors to breast

cancer; and the GuLF STUDY, created in response to the 2010 Gulf of Mexico oil spill.

One of the projects of the AHS study is the Agricultural Lung Health Study (ALHS), an intensive examination of the effects of genetic factors, pesticides, and other agricultural exposures on pulmonary function and respiratory health. The initiative also includes a cohort of over 3,000 U.S. farmers and their spouses who are being followed to investigate associations between farming exposures and asthma and allergies. The study's findings have revealed that protective effects of early exposures to agricultural environments extend into adulthood. Additional findings from the ALHS:

- Early life [raw milk consumption](#) is related to better adult pulmonary function.
- House dust [endotoxin](#) is related to asthma and to reduced pulmonary function in asthmatics.
- Use of carbofuran is associated with development of [sleep apnea](#).
- [Environment and Cancer Epidemiology Group](#)
The group's research concentrates on the links between breast cancer

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Quarterly Spotlight Series *(Continued from page 10)*

and environmental exposures, including air pollution and chemicals, and detecting underlying biologic mechanisms in hopes of identifying potentially adjustable environmental and lifestyle cancer risk factors.

• [Genetics, Environment and Respiratory Disease Group](#)

This research group studies the role of genetic, epigenetic, and environmental influences affecting the development of respiratory illness across the life span, including the affect on pulmonary function, asthma, and COPD. The group, led by Stephanie London, MD, DrPH, has done leading-edge research on genetic susceptibility to respiratory disease and the genetics of asthma.

The section's work on early life factors affecting asthma, which started through a collaboration with Norwegian researchers through the Norwegian Mother and Child (MoBa) pregnancy cohort, expanded and made groundbreaking discoveries on the effects of maternal smoking during pregnancy on newborn babies, which were published in 2012. These international collaborations led Dr. London to create the Pregnancy and Childhood Epigenetics Consortium (PACE). The PACE Consortium continues to study the effects of maternal smoking and development of childhood asthma.

[Environmental Cardiopulmonary Disease Group](#)

This group, led by NIEHS Scientific Director Darryl Zeldin, MD, does basic, clinical, and translational

research to investigate environmental influences in the pathogenesis of respiratory and cardiovascular diseases, including asthma, adult respiratory distress

syndrome, and pulmonary fibrosis. Current studies include exploration of role of cyclooxygenase-derived eicosanoids in lung function and disease and clinical research on how indoor allergen exposures affect the development and exacerbation of asthma and other allergic diseases. The section's large national studies on asthma have improved our understanding of the disease and have paved the way for development and implementation of asthma management and prevention interventions.

[Clinical Research Unit](#)

NIEHS's Clinical Research Branch includes the onsite Clinical Research Unit (CRU) in Research Triangle Park, North Carolina, which enables researchers to do studies involving human sample collection, analysis, and evaluation and translational research. The unit is engaged in 15 individual research studies on areas, including asthma, e-cigarettes, inflammatory response to DNA damage, myositis, and metabolic disease. The E-cigs and Smoking Study aims to develop biomarkers of tobacco smoke exposure or e-cigarette use. The CRU also provides advanced training opportunities for students and postdoctoral fellows whose research interests require access to clinical samples and patients.

One of the CRU's key respiratory projects is the Natural History of Asthma with Longitudinal Environmental Sampling (NHALES) study, led by CRU Medical Director Stavros Garantziotis, MD, a pulmonologist. NHALES, a five-year study still enrolling patients, is examining how bacteria and other environmental influences affect moderate to severe asthma. Patients participating in the study receive free asthma care and medications.

[NIEHS Research Training](#)

One of NIEHS's strategic priorities is to develop and retain a pipeline of environmental health professionals across disciplines. Towards this goal, the institute provides a number of fellowships, training grants, career development awards and loan repayment programs, including programs for international researchers. About 200 graduate students, postdoctoral fellows, and other trainees work in NIEHS's intramural division.

[Career Development Awards](#)

Career Development Awards NIEHS provides over eight different career development awards (CDA) geared to the needs of early and mid-career environmental health scientists with a mix of mentored and independent research support. CDA applications must include both a research proposal and a detailed career development plan. As these awards are mainly for salary support, funding for the research proposal must be largely supported from the mentor or the independent

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Quarterly Spotlight Series *(Continued from page 11)*

research funding of the candidate. Here are a few of NIEHS's career development awards:

- [Transition to Independent Environmental Health Research Career Award \(K01\)](#).
- [Independent Scientist Award \(Parent K02\)](#).
- [Mentored Clinical Scientist Research Career Development Award \(Parent K08\)](#).
- [Mid-Career Development Award in Patient-Oriented Research \(K24\)](#).

Institutional Research Training

NIEHS awards Ruth L. Kirschstein National Research Service Award Institutional T32 and T35 Training Grants (NRSA) to academic institutions to support pre and post-doctoral training for medical students.

International Scientist Opportunities

NIEHS's global environmental health efforts supports research training for international researchers at U.S. and overseas institutions.

To learn more about these many opportunities, [visit the NIEHS's Careers and Training website](#). ■

CALL FOR INPUT

DEADLINE:

June 26, 2019

5:00pm EDT



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News from NIEHS

NEWS FROM NIEHS

NIEHS Unveils New Respiratory Health-Related Resources

In more news from the NIEHS, the institute recently unveiled new websites focused on select respiratory issues, including [asthma](#), [smoking and vaping](#) and [dust mites and cockroaches](#). The web pages include highlights of NIEHS's current environmental health research. The asthma page, for instance, includes an overview of the disease for the public followed by a section outlining recent and ongoing NIEHS studies categorized across 6 different research areas including outdoor triggers of asthma, asthma and changing climate and asthma and the immune system.

The smoking and vaping website highlights recent NIEHS research showing the link between youth use of e-cigarettes and transition to combustible cigarettes. The site also points to the need for more research on e-cigarettes and other tobacco products.

NEWS FROM NINR

NINR Hosts June 27 Symptom Science Symposium

The National Institute on Nursing Research (NINR)'s Intramural Division will launch its new Symptom Science Center by hosting a scientific symposium, "Symptom Science: A Resource for Precision Health," on June 27, from 8 a.m. to 4 p.m., in the NIH Clinical Center in Bethesda, MD.

The symposium will include:

- A keynote address by NIH Deputy Director for Intramural Research, Dr. Michael Gottesman.
- An introduction to the [Symptom Science Center](#).
- Scientific panels on cancer-related symptoms, patient-reported outcomes, and symptom science at the NIH Clinical Center.
- Poster session showcasing innovative research conducted by NIH intramural researchers and trainees.

The NINR Symptom Science Center is an NIH-wide resource for researchers, clinicians, students, and the public. It aims to support the understanding of the behavioral and biologic mechanisms of symptoms to improve patient outcomes.

[View the agenda for the symposium and register for the event here.](#) ■

NEWS FROM PCORI

PCORI ANNUAL MEETING – September 18 – 20, Washington, DC

The Patient-Centered Outcomes Research Institute's (PCORI) 2019 Annual Meeting will be held September 18 to 20 at the Marriot Wardman Park Hotel in Washington, DC. The theme of the 2019 meeting is "Making A Difference: Using Patient-Centered Research Results in the Real World." The meeting will feature the latest results of PCORI-funded research and promote their use in practice. Attendees will also learn how the institute's unique strategy to engage patients and other stakeholders is transforming health research. [Click here to learn more about the meeting and to register.](#) ■

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NIH Precision Medicine

NIH PRECISION MEDICINE

The All of Us Research Program— Changing the Future of Health

The All of Us Research Program seeks to enroll one million or more participants who will share their health information to help accelerate medical breakthroughs and bring about more personalized and effective treatment and prevention strategies.

The All of Us Research Program is not one single health study; it will serve as a database that researchers can use to run thousands of their own health studies. The data collected can be used by any researcher, as long as they follow strict privacy and security rules. The program removes obvious identifiers, encrypts the data, and stores it on a secure platform. Researchers seeking access to the data will be required to register with the program and verify their identity, take ethics training, and sign a contract for responsible data use, including promising that they will not try to find out the identity of participants. All of US hopes access to this rich data resource will enable researchers to achieve a wide range of medical breakthroughs that can lead to individualized care and improve health for future generations.

All of US reached its one-year milestone on May 6, 2019. As the program's administrators reflect on the journey thus far, they are excited about the work already done to spread awareness and reach diverse populations that have been historically underrepresented in biomedical research. But, they also recognize the massive amount of progress yet to be made if we are to harness the true potential of this program.

All of Us is unique in many ways. One of the most important differentiators of the program is its aim to have 75 percent of participants come from a community that has been historically underrepresented in biomedical research (UBR). Many groups, such as racial and ethnic

minorities, women, persons with disabilities, and the LGBTQ community, have been included in research at a disproportionately low rate. As a result, the treatments that are born from the research are often tailored to an "average" that is actually not reflective of the rich diversity of the people within the U.S. Achieving these goals will require significant effort to build trust, overcome barriers, and work with participants as true partners in research. To date, 180,000 people have already registered and consented to participate.

To learn more about the program, including what it means to be a participant, please visit <https://allofus.nih.gov/>. ■

RESEARCH FUNDING UPDATE

ATS Member Action Alert on COPD

The ATS is working to secure funding for public health efforts on COPD at the CDC in the FY2020 health spending bill. A dedicated COPD program at CDC would be a timely and meaningful investment of resources for a variety of reasons, including:

- Implementing the COPD National Action Plan, developed by the National Heart, Lung, and Blood Institute in coordination with CDC.
- CDC's full integration of COPD surveillance, research, prevention, and management strategies into its existing chronic disease efforts.

By June 24, ATS members are urged to contact their senators and ask them to support creation of a COPD program at CDC. [Call or email your senators here!](#) ■

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Research Funding Update

House Committee Approves \$2 Billion NIH Funding Increase

In early May, the full House Appropriations subcommittee, chaired by Rep. Lowey (D-NY), approved the fiscal year (FY) 2020 health research and services spending bill, known as the Labor-HHS bill. The bill includes a proposed \$2 billion funding increase for the NIH and a \$921 million proposed funding increase for the CDC. In another success, the bill includes \$10 million in new funding for CDC's global tuberculosis (TB) program. Prior to the House bill's allocation, CDC's global TB program was relying on annual funding transferred in from the domestic TB program, an action that was effectively reducing the domestic TB program annual budget by \$7 million.

The House FY2020 bill includes the following proposed funding levels for programs that the ATS monitors:

- \$2 billion funding increase for the NIH, for a proposed FY2020 level of \$41.1 billion.
- \$921 million funding increase for the CDC, for a proposed FY2020 level of \$8.3 billion.
- \$10 million funding increase for CDC's domestic TB program, for a proposed FY2020 funding level of \$152.3 million.
- \$10 million in new funding for CDC's global TB program.
- \$40 million funding increase for CDC's tobacco control program, for a proposed level of \$250 million.
- \$5 million funding increase for CDC's asthma program, for a proposed FY2020 funding level of \$34 million.
- \$10 million funding increase for the National Institute of Occupational Health and Safety (NIOSH) for a proposed FY2020 level of \$346 million.
- \$5 million funding increase for CDC's Health Impacts of Climate Change program, for a proposed FY2020 level of \$15 million.

Next Steps

The next step for the FY2020 health spending bill is a full House floor vote, expected mid- to late June. However, the bill's overall outlook is unclear due to austere overall budget caps still in effect, absent a bipartisan deal to lift them. The Senate subcommittee, chaired by Sen. Roy Blunt (R-MO), is expected to begin moving its bill in late June, although if there is still no bipartisan budget deal by then, the Senate bill will provide flat funding at FY2019 levels for most programs. ■



ATS President James Beck, M.D., Stephen Hoffman, M.D., Carolyn Welsh, M.D. and Amali Samarasinghe, M.D., at the ATS Hill Day on March 19, 2019.