Research News Quarterly

JUNE 2014

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Letter from the Editor

The June ATS Research News Quarterly begins with an interview with new ATS President Tom Ferkol, MD. Dr. Ferkol discusses his presidential initiative, the ATS Academy, which aims to support young physicianscientists. This month's Quarterly also features an article by former ATS Patient Advisory Roundtable Chair Teresa Barnes, who discusses opportunities to fund pulmonary, critical illness, and sleep research through the Patient-Centered Outcomes Research Institute (PCORI).

Next, we report on the findings and recommendations of the NIH's new Physician-Scientist Workforce Working Group report on the biomedical research workforce and the appointment of Timothy O'Leary, MD, PhD, as the new Chief Research and Development Officer (CRADO) of the VHA Office of Research and Development.

This issue includes an update on the U.S. Preventive Services Task Force (USPSTF) draft research plan on latent TB screening, followed by an overview of the Fogarty International Center's (FIC) new strategic plan to guide its global research and training efforts for the next five years.

We conclude with an update on 2015 health research and services funding and a quick update on the Research Advocacy Committee's 2014 Hill Day in Washington, D.C. We hope you enjoy it!

Sincerely,

Linda Nici, MDEditor



INTERVIEW WITH NEW ATS PRESIDENT, THOMAS FERKOL, MD

Q: What will be the special focus during your ATS presidency?

A: During my career, I have seen how scientific discoveries have led to treatments for cystic fibrosis that are changing the lives of affected children, but at the same time, we are facing a serious threat: the disappearing pulmonary scientist.

Admittedly, we are facing challenging times, but the need for pulmonary scientists to tackle fundamental questions through research has never been greater. They are key to the search for new treatments, cures, and prevention of lung diseases worldwide. We must help them succeed, especially those who are just starting their careers as basic and clinical investigators. Moreover, we need to nurture medical educators who are devoted to disseminating this knowledge and will define new standards of care.

To provide young scholars with a competitive edge, we are creating the ATS Academy, which will recognize and support our most promising young academic scientists, educators and clinicians in their efforts to study and treat respiratory disease, critical illness and sleep disorders in children and adults. I'll provide more details regarding the ATS Academy in an upcoming President's Message in ATS News.

Q: In the last edition of the Research News Quarterly, you and Stephanie Davis, MD, wrote that the shrinking pool of young pediatrician clinician-scientists is at a crisis point. As ATS president, how will you direct resources to counter this trend?

A: The "vanishing" pediatric scientist is a problem that appears to be getting worse, not better. Few medical students who enter pediatric residencies consider subspecialty training, even fewer select pediatric pulmonology as a career path, and only a handful choose a research career. Over time, we have seen attrition in the number of pediatric pulmonary scientists, and the loss of established, "anchor" investigators has further weakened the field. More worrisome, this phenomenon may not be limited to pediatrics.

While I expect that the ATS Academy will address some of the issues that hinder recruitment and retention of clinician-scientists,

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Thomas Ferkol Interview (Continued from page 2)

pediatric leaders must also organize and plan for greater involvement in lobbying and defining the needs of our field. Earlier this spring, the pediatric physician-scientist shortage was highlighted at the ATS Research Advocacy Day, where our members met with representatives on Capitol Hill to promote research in respiratory diseases and advocate for funding programs to meet public needs. Additional pressure should be applied through the Society to address the growing issue of training and certification requirements imposed by specialty boards, which distract investigators from their research programs. We can no longer afford to be silent.

Q: What other plans do you have to highlight research during your presidential year?

A: We will continue our determined advocacy efforts that are coordinated by the ATS Washington Office, closely working with our colleagues from the National Institutes of Health and other federal agencies to advance essential research in areas of pulmonary, critical care, and sleep medicine.

In addition to the ATS Academy, there are other new initiatives on the horizon. In 2015, the Society will commemorate its 110th anniversary. To honor our history, we plan to highlight the scientific achievements and discoveries in pulmonary, critical care, sleep medicine, and pediatrics made over the past century that have changed the lives of the patients we treat. These breakthroughs will be featured in ATS journals, our website, and at next year's International Conference in Denver, Colorado. We will use these materials as part of our research advocacy efforts.

We will also celebrate the 10th anniversary of the ATS Foundation, the fundraising arm of the Society, which has allowed us to provide funds to promising investigators in pulmonary, critical care, and sleep medicine, supporting them during the most vulnerable time of their careers.

Led by Jim Donohue, MD, the ATS Foundation is a success story. Research support has steadily grown from roughly \$100,000 at its inception to now more than \$1.5 million annually. We hope to increase fundraising this year and expand our grants program, thus allowing more of our young colleagues to pursue discovery research and medical innovation. I ask all members to help us achieve our goal.

PCORI

Pulmonary Researchers Look for "New Cheese" in PCORI

Teresa Barnes, Patient Advisory Roundtable, Past Chair & Coalition for Pulmonary Fibrosis, Vice President

In case you haven't noticed it, someone moved the cheese. For researchers looking in the same old places for funding, it could be a good time to re-read the book "Who Moved My Cheese?". As lower pay lines for research funding at the National Institutes of Health create an increasingly challenging research funding environment, researchers must be more diligent about looking for new sources of "cheese".

One source that is providing research funding for U.S. and foreign- based medical research efforts to the tune of hundreds of millions of dollars each year is a government mandated and Congressionally-created organization called the Patient Centered Research Outcome Institute (PCORI). But you might want to hurry the U.S. government has only funded the organization through 2017.

A couple of years ago, researchers were likely to look the other way without paying much attention to the work PCORI was funding, but today it's difficult to miss. PCORI, an independent, non-profit, non-governmental

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organization, has approved 280 awards to advance patient-centered comparative clinical effectiveness research projects to date totaling more than \$464.4 million to advance patient-centered comparative clinical effectiveness research projects.

There are several potential avenues of funding at PCORI for pulmonary, critical care and sleep researchers, but all of them share two critical components that are deal breakers if not met in a letter of intent or application from researchers. First, the project must be "patient centered" and second, it must be a comparative research project that compares one option to another.

"Patient centered" means that a project is centered on outcomes that are important to patients. While it sounds simple, being "patient centered" has not been an easy concept for researchers to grasp and apply.

PCORI described the concept as helping "people and their caregivers communicate and make informed healthcare decisions, allowing their voices to be heard in assessing the value of healthcare options. This research answers patient-centered questions such as:

- 'Given my personal characteristics, conditions and preferences, what should I expect will happen to me?'
- 'What are my options and what are the potential benefits and harms of those options?'
- 'What can I do to improve the outcomes that are most important to me?'
- 'How can clinicians and the care delivery systems they work in help me make the best decisions about my health and healthcare?'"

One avenue PCORI suggests for giving a research project "patient centeredness" is for researchers to partner with patient organizations. Patient-advocacy organizations can play a valuable role in projects, as can individual patients, according to PCORI. "What is most important is to secure the viewpoint of patients from your population of interest and to ensure that the involvement of your patient or patient-advocate

partners is meaningful and authentic", PCORI recommends.

When PCORI opened its doors and began accepting applications for funding a few years ago, they found that about 90 percent of the applicants totally missed the mark in submitting a truly "patient centered" research application. They denied the ones that didn't include patients/patient representatives and who didn't offer up a research project that provided a comparator.

Today, PCORI has implemented a system to guide researchers in making applications to their funding programs. The program provides training online at pcori.org/funding-opportunities/funding-announcements/applicant-training/.

PCORI has also designed a rubric to help researchers understand the patient centered approach, which is available at: pcori.org/assets/2014/02/PCORI-Patient-and-Family-Engagement-Rubric.pdf.

PCORI rewards researchers who are interested in doing projects that address health disparities by giving their projects priority, provided other criteria are met. "Our funding announcements have always noted the importance of including in studies diverse populations with respect to age, gender, race, ethnicity, geography, or clinical status," PCORI notes.

PCORI lists "hard-to-reach" or lesser-studied populations to guide their research and engagement efforts which include:

- Racial and ethnic minority groups
- Low-income groups
- Women
- Children (age 0–17)
- Older adults (age 65 and older)
- Residents of rural areas
- Individuals with special healthcare needs, including individuals with disabilities
- · Individuals with multiple chronic diseases
- Individuals with rare diseases

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- Individuals whose genetic make-up affects their medical outcomes
- Patients with low health literacy/numeracy and limited English proficiency
- · Lesbian, gay, bisexual, transsexual (LGBT) persons

Funding opportunities are announced on a rolling basis, so if you're not on PCORI's email list, you probably should be. To sign up, visit pcori.org/home/signup. While you're there, you can benefit from reading the PCORI blog for discussions important to the applications process at pcori.org/blog/.

The PCORI Funding Center website contains all of the resources applicants need to apply for current (PCORI Funding Announcements (PFAs) and other open funding opportunities. Researchers can also find out about future funding plans and timelines for closed PFAs and other funding opportunities.

To learn more about PCORI's funding opportunities, visit http://www.pcori.org and also check out their frequently asked questions at: http://www.pcori.org/funding-opportunities/funding-center/faqs-for-applicants/ (FAQs).

WORKFORCE

NIH Releases Recommendations on Biomedical Workforce

On June 5, the National Institute of Health's (NIH)
Physician-Scientist Workforce Working Group released its
report on the state of the physician-scientist biomedical
workforce. The report analyzes the size and current
makeup of the physician-scientist workforce (PSW)
and issues recommendations for actions that the NIH
should take to help sustain and strengthen a robust and

diverse PSW. Full chapters are devoted to analysis of the current status, including training processes, of each of the following components of the research workforce: physician-scientists with medical degrees, nursescientists, veterinarian-scientists and dentist-scientists.

The report reveals that while the percentage PSW's in the workforce has been declining since the 1970s, the total number of physician-scientists with a medical degree has remained steady over the past few decades, with MDs and MD/PhDs each comprising about 50 percent of the PSW. It identifies key challenges for the PSR workforce, including rising educational debt, lengthier training, the drop in NIH grant funding, conflicting demands offered by clinical practice and significant changes in the health system.

The report offers the following recommendations for NIH to improve and expand the PSW:

- NIH should sustain strong support for the training of MD/PhDs, including programs such as the Medical Scientist Training Program (MSTP) program funded by NIH.
- 2. NIH should shift the balance in National Research Service Award (NRSA) postdoctoral training for physicians so that a greater proportion are supported through individual fellowships, rather than institutional training grants. The number of individual fellowship awards for MD -PhD students (F30/F31 grants) should also be increased.
- NIH should continue to address the gap in RPG award rates between new and established investigators.
- NIH should adopt rigorous and effective tools for assessing the strength of the biomedical workforce, including physician-scientists, and tracking their career development and progression.
- NIH should establish a new physician-scientistspecific granting mechanism to facilitate the transition from training to independence, similar to the K99/R00 program.

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Workforce (Continued from page 5)

- NIH should expand Loan Repayment Programs and the amount of loans forgiven should be increased to more realistically reflect the debt burden of current trainees.
- NIH should support pilot grant programs to rigorously test existing and novel approaches to improve and/or shorten research training for physician-scientists.
- 8. NIH should intensify its efforts to increase diversity in the physician-scientist workforce.
- NIH should leverage the existing resources of the Clinical and Translational Science Awards (CTSA) program to obtain maximum benefit for training and career development of early-career physicianscientists.

The full Physician-Scientist Workforce Working Report can be found online at: acd.od.nih.gov/reports/PSW
Report ACD 06042014.pdf.

VA RESEARCH

VA Research Program Names New CRADO

The VA Research program recently announced that Timothy O'Leary, MD, Ph.D., is the new Chief Research and Development Officer (CRADO) of the VHA Office of Research and Development.

As CRADO, Dr. O'Leary will oversee the VA's research program, based at more than 100 VA medical centers that address health conditions affecting veterans, from post-deployment health to chronic diseases such as COPD and aging.

O'Leary, a pathologist, holds a doctorate in physical chemistry from Stanford University and a medical degree from the University of Michigan. Prior to his VA service, O'Leary chaired the Department of Cellular Pathology at the Armed Forces Institute of Pathology for more than 15 years. Dr. O'Leary became Acting CRADO in 2013 following the departure of Joel Kupersmith, M.D. His research interests are in genomics, proteomics, and ultrasensitive detection of biological toxins. Dr. O'Leary is a past president of the Association for Molecular Pathology.

TUBERCULOSIS

USPSTF Releases Proposed Research Plan on Latent TB Screening

This week, the U.S. Preventive Services Task Force (USPSTF) released a draft research plan on screening for latent TB infection (LTBI) and is inviting public comment on the document. Once finalized, the research plan will be used to guide a systematic evidence review by the Agency for Health Research and Quality (AHRQ). The resulting evidence report will be the basis for new USPSTF recommendations on latent TB screening in the U.S. The USPSTF's recommendations will then be used to determine whether LTBI screening will become a required preventive service covered under the Affordable Care Act's (ACA) essential health benefits package for private health plans and Medicaid. The deadline for comments on the plan is July 2.

The draft research plan outlines proposed questions to be systematically reviewed and the proposed research approach. Proposed questions focus on issues such as available evidence that targeted screening for latent TB in adults at risk for developing active TB reduces the incidence of active TB infection and transmission of the disease and on the accuracy and reliability of

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Tuberculosis (Continued from page 6)

TB diagnostic tests used in the U.S. The ATS will be commenting on the USPSTF plan. To view the research plan, visit: http://www.uspreventiveservicestaskforce.org/draftresplan3.htm.

GLOBAL HEALTH

Fogarty Center Releases New Global Health Research and Training Plan

The Fogarty International Center (FIC), the NIH's global health institute, recently released its new strategic plan, Advancing Science for Global Health, which sets new goals for the center's efforts in global health research and training. The institute currently funds 400 research and training projects through partnerships with over 100 U.S. and foreign universities on infectious diseases, chronic conditions, tobacco, biodiversity, implementation science, mobile health and other topics.

The FIC's new goals are as follows:

- Building research capacity to meet current and future global health challenges
- Stimulating innovation in the development and evaluation of technologies to address global health problems
- Supporting research and research training in implementation science
- Advancing research on prevention and control of communicable and non-communicable diseases and disabilities
- Forming partnerships to advance global health research and research capacity

Under the new plan, the FIC aims to maintain its leadership on infectious disease research and training but additionally, respond to the growing burden of

non-communicable diseases in the developing world, such as heart disease, cancer and diabetes, by training more scientists from developing-countries in specialties that have not been traditionally included in the realm of global health such as cardiology, oncology, neurology, and mental health. "By taking science to where the problems are, and by supporting research and research training in areas where the burden of disease is greatest, Fogarty investments will continue to build the health research workforce of the future," FIC Director Roger Glass says.

The FIC strategic plan is available at: fic.nih.gov/About/Pages/Strategic-Plan.aspx.

Global Health Training Opportunity - The FIC's Fulbright-Fogarty U.S. scholar grant program is now accepting applications until August 1. This program supports post-doctoral research in public health in resource-limited settings affiliated with the FIC. Scholars who received their Ph.D. or other appropriate terminal degree within the past five years are eligible to apply. For more information, visit: cies.org/program/fulbright-fogarty-postdoctoral-awards. ■

RESEARCH FUNDING

Senate Panel Approves NIH Funding Increase

On June 10, the Senate Labor-Health and Human Services and Education Appropriations subcommittee, chaired by Sen. Harkin (D-IA), approved the fiscal year (FY) 2015 health research and services spending bill, known as the Labor-HHS-ED bill, by voice vote. This annual spending bill provides funding for the NIH, CDC and other health programs. The bill provides \$30.459 billion for the NIH, an increase of \$605.668 million, or just under 2 percent, over FY2014. This includes \$3.022

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billion for the National Heart, Lung and Blood Institute (NHLBI), an increase of \$44 million, or about 1.5 percent above FY2014.

For the CDC, the bill provides \$7.054 billion, an increase of \$170.915 million, or about 2.3 percent, from the FY2014 level and includes the funding levels for the following programs that the ATS monitors:

- Flat-funding for the tuberculosis program, at \$135 million
- Flat-funding for the National Institute of Occupational Safety and Health at \$315 million

The next steps for the FY2015 Labor-HHS-ED bill are full Appropriations Committee votes followed by full Senate floor votes. The House Labor-Health and Human Services Appropriations subcommittee, chaired by Rep. Jack Kingston (R-GA), has not yet announced a panel vote date for its version of the 2015 health spending bill. It is likely that the fall election will disrupt the FY2015 funding process, so the final outcome for FY2015 funding is uncertain at this point.

from Arizona, California, Illinois, Indiana, Louisiana, Mississippi, Tennessee, and Rhode Island to meet with more than 25 Senate and House offices, including personal visits with Senator Jack Reed (D-RI) and Ron Barber (D-AZ).

The committee advocated for increased health research and services funding for the National Institutes of Health, Centers for Disease Control and Prevention, including the asthma, tuberculosis programs, and National Institute of Occupational Safety and Health programs, the VA Research Programs its aging laboratory infrastructure. Additionally, ATS members advocated for increased support for pediatric lung research and healthy equality.

RAC members participating in the Hill Day included Linda Nici, MD, Rajesh Baghat, MD, Lynn Gerald, MD, James Brown, MD, Stephanie Davis, MD, Jeffrey Jacobson, MD, James Klinger, MD, Daniel Salerno, MD and ATS PAR members, Teresa Barnes and Katharine Kroner.

ADVOCACY

ATS RAC Visits Capitol Hill to Advocate for Health Research Funding

In early May, members of the ATS Research Advocacy Committee, chaired by Linda Nici, MD, took to Washington, D.C. their message of the urgent need to increase NIH funding. Committee members traveled



From left to right, Jill Brimmer, Staff to Sen. Reed, Nuala Moore, ATS Staff, James Klinger, MD, Sen. Jack Reed (D-RI), Linda Nici, MD, Rajesh Bhagat, MD.