



# THE SCIENTIST OFFICER

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In this issue of the Scientist Officer, we feature several scientists of the Commissioned Corps of the US Public Health Service (Corps) who have made integral contributions toward eradicating polio. Polio is a crippling and potentially fatal infectious disease. There is no cure, but there are safe and effective vaccines. Therefore, the strategy to eradicate polio being implemented by the Centers for Disease Control and Prevention (CDC) is based on preventing infection by immunizing every child to stop transmission and ultimately make the world polio free. The eradication of polio is an important priority for the CDC. As of early 2012, the world is not on track to eradicate polio by the end of the year. Yet, we are closer than we have ever been to eradicating polio and it is critical that we take advantage of this opportunity.

On December 2, 2011, CDC Director Thomas R. Frieden, MD, MPH, activated CDC's Emergency Operations Center (EOC) to strengthen the agency's partnership engagement through the Global Polio Eradication Initiative (GPEI), that is committed to completing the eradication of polio.

On December 14, 2011, Dr. Frieden enlisted the support of the entire CDC community to become active participants in an

intensified effort to eradicate polio worldwide.

CDC polio eradication activities and staff have moved into the EOC operational structure to ensure maximum use of CDC resources to support polio eradication, and to scale up timely technical expertise and support for polio-infected countries including Angola, Chad, Democratic Republic of the Congo, Nigeria, Afghanistan, and Pakistan, and for countries at risk of polio outbreaks (at-risk countries), in coordination with GPEI partners. A total of 415 personnel have worked in the EOC and in the field since the EOC polio activation to support CDC's headquarters polio eradication efforts. Of these, 106 employees have completed 200 field deployments to Angola, Chad, Nigeria, Cote d'Ivoire, and other areas. On a daily basis, an 80-90 CDC personnel are typically working in the EOC.

Activation of the EOC has provided enhanced capacity for CDC's Stop Transmission of Polio (STOP) program, which trains public health volunteers in the United States and globally to improve polio surveillance and help plan, implement, and evaluate vaccination campaigns. Since December 2, 2011, more than 160 individuals have been deployed to work with the STOP program in Nigeria, Chad, Kenya, and other countries.

The editorial board members of the Scientist Officer are proud to highlight some of the work that Corps scientists have undertaken in support of CDC's polio eradication efforts.

*Compiled by LCDR Deborah Dee. Adapted from: [www.cdc.gov/polio/](http://www.cdc.gov/polio/) and [www.cdc.gov/polio/updates/](http://www.cdc.gov/polio/updates/). Accessed September 20, 2012.*



*Workers creating a billboard in Columbus, Georgia, during the 1950s to promote public health awareness of polio vaccinations within a community. This campaign was produced in part by the CDC, in conjunction with local, state, and federal partners. Although the Americas were declared polio-free in 1994, the virus has yet to be eradicated globally. Photographer unknown, [phil.cdc.gov](http://phil.cdc.gov) image 8286.*

**Cover image:** A child from Nepal receives two drops of oral polio vaccine during a mass vaccination campaign along the India border. LCDR Adam Bjork, a CDC Epidemic Intelligence Service officer, spent three months working for the STOP (Stop Transmission of Polio) program with the World Health Organization in Nepal during 2011. His work involved monitoring, supervising, and educating partners during routine immunization, mass vaccination campaigns, and surveillance efforts. The work involved multi-day treks between tiny villages high in the Himalayas and door-to-door visits in densely populated cities. Thanks to strong commitments and hard work by the thousands of people who have contributed to polio eradication in the region, no cases of wild poliovirus have been detected in Nepal since August 2010 or in India since January 2011.

When the World Health Assembly committed to polio eradication in 1988 there were more than 350,000 cases occurring worldwide every year — approximately 1,000 new paralysis cases occurring daily! CDC and partners including Rotary International, WHO, and UNICEF quickly got involved by providing financial and technical assistance. Although only 650 polio cases were confirmed in 2011, donors and health care workers are challenged to maintain momentum when fighting a tenacious virus whose transmission has never been interrupted in only three countries: Nigeria, Afghanistan, and Pakistan.

To reinvigorate the fight against polio, CDC Director Dr. Thomas Frieden activated CDC's Emergency Operations Center (EOC) on December 2, 2011. Consequently, CDC's polio eradication efforts were centralized under an incident command structure that supported the CDC's increased commitment to achieving eradication. CAPT Robert Linkins, a Corps scientist officer, was

appointed Incident Manager for the initial scale-up phase of the activation.

CAPT Linkins began his public health career at the University of California at Berkeley, earning a MPH in behavioral science. While there he was introduced to epidemiology and became convinced that this was his calling. Five years later he had completed a in PhD epidemiology and post-doc in clinical trials at Johns Hopkins and joined CDC's Epidemic Intelligence Service (EIS). His first post was a frontline experience with the New Mexico Health and Environment Department in Santa Fe. While there he was exposed to a broad range of public health challenges from foodborne outbreaks to bubonic plague. In this role, CAPT Linkins got his first experience in international health by filling in for a month for

CDC's Field Epidemiology Training Program director in Riyadh, Saudi Arabia, including supervising a polio outbreak on the Saudi Arabia/ Yemen border — a

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*CAPT Linkins in the CDC Emergency Operations Center in 2012. While Incident Manager, CAPT Linkins was responsible for all aspects of CDC's polio eradication activities.*

**"We've got to get over the finish line..."**





*LCDR Sara Lowther in the CDC Emergency Operations Center — July, 2012. LCDR Lowther, a USPHS scientist officer, leads a team dedicated to preventing the spread of wild poliovirus into non-endemic countries.*

The Scientist Professional Advisory Committee (SciPAC) Visibility Subcommittee is proud to highlight the achievements of LCDR Sara Lowther for this issue's Junior Officer Spotlight. LCDR Lowther received her Bachelor of Science from the University of Michigan in 1996 and her Master's in Public Health from Emory School of Public Health in 1998. While a student at Emory, she worked at the Centers for Disease Control and Prevention (CDC) and after graduation, she

was a CDC fellow with the Epidemiology of Respiratory and Enteric Viruses Team. During 2000–2002, LCDR Lowther lived in Pakistan, where she was a consultant for the United Nations Children Fund (UNICEF) for immunization and the World Health Organization (WHO) for polio eradication. In 2002, she returned to CDC to work on severe acute respiratory syndrome (SARS) and West Nile Virus outbreaks before returning to school to obtain her doctorate in epidemiology from Johns Hopkins Bloomberg School of Public Health. After graduating in 2008, LCDR Lowther joined the CDC Epidemic Intelligence Service (EIS) where she had a field assignment with the Minnesota Department of Health; when she joined the Corps as a scientist officer. LCDR Lowther notes that because she knew other PhD epidemiologists who had joined the Corps, she

decided to join the Corps during EIS as well. "During any of the time during the EIS program and ever since, I have been happy to participate in any response in which there is a call for action and am happy to be on call 24/7."

Currently, LCDR Lowther is an epidemiologist within the CDC Center for Global Health in the Global Immunization Division (GID) where her duties have involved providing technical assistance on immunization against polio, measles, and rubella. In December 2011, the polio eradication effort at CDC moved into the Emergency

Operations Center (EOC) as part of the polio response and she transferred into a full time EOC position as the leader for a team that analyzes the risk of outbreaks in countries where wild poliovirus transmission has been interrupted. LCDR Lowther also oversees the actions taken to mitigate the risk of an outbreak

subsequent to an imported polio case. LCDR Lowther comments that "I am happy to be working on polio eradication again, especially when we are so close to the final goal of global eradication."

When asked to describe the most rewarding aspect thus far in her career in the Corps, LCDR Lowther points toward a sense of duty and responsibility, and her ability to be a part of important public health responses as they occur. "This was true during EIS as well as now as a staff epidemiologist in GID.

Working in the EOC on the polio response has been rewarding but can also be challenging and tiring." LCDR Lowther offers the following advice to fellow junior officers: "New officers should participate in the activities that interest them most but also be flexible and volunteer as much as possible in any opportunities presented to them. During EIS, I was able to go to Malawi for a typhoid outbreak, Haiti following the earthquake, and numerous outbreaks in Minnesota. In the polio response, we are trying to find ways to involve junior officers, such as EIS officers, so that they can also be part of the history of

**"We are trying to find ways to involve junior officers... so that they can also be part of the history of finally eradicating polio."**

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## President Obama Honors Scientist Officer CDR Lauren Bailey Zapata

DC scientist officer CDR Lauren Bailey Zapata, PhD, MSPH, an epidemiologist in the Women's Health and Fertility Branch of the Division of Reproductive Health at the National Center for Chronic Disease Prevention and Health Promotion, received the **2011 Presidential Early Career Awards for Scientists and Engineers (PECASE)**, the highest honor bestowed by the United States government on science and engineering professionals in the early stages of their independent research careers.

CDR Zapata received the PECASE award for her dedicated application of the science of public health to change clinical and public health systems and to improve the health of women, children and families. Her contributions to adapt two World Health Organization guidelines for the U.S. led to the first national evidence-based guidance for contraceptive use among women with certain medical conditions or characteristics, and will lead to the first evidence-based guidance to address a select group of common yet controversial or complex management issues around the initiation and use of specific contraceptive methods.

During the 2009 H1N1 pandemic, Zapata also participated on CDC's Maternal Health Team and led the review and summary of evidence on preventing newborn infection in hospitals and helped to develop national guidance on preventing newborn infection in obstetrical settings.

Zapata first became interested in public



President Barack Obama addresses recipients of the 2011 Presidential Early Career Awards for Scientists and Engineers (PECASE) in the East Room of the White House, July 31, 2012. CDR Zapata is in the front row, 3<sup>rd</sup> from left. (Official White House Photo by Pete Souza)

health while an undergraduate student at Emory University. "Although I began my undergraduate education as a pre-medical student, I soon realized that I was more interested in preventing illness than treating illness. Courses in women's health and maternal and child health began me on my career trajectory; I was fully committed to the content area. But it was not until I took my first courses in research methods and data analysis that I fully realized my inclination towards numbers, programming, and identifying risk factors for behavioral and clinical outcomes. Melding the two together and pursuing a career in reproductive health epidemiology made great sense."

Zapata received her MSPH in maternal and child health, and her PhD in behavioral

sciences from the College of Public Health, University of South Florida. After graduation, she joined the Commissioned Corps of the U.S. Public Health Service (Corps) as an Epidemic Intelligence Service officer where she worked in the Division of Reproductive Health. Zapata is committed to promoting the reproductive lives of women and children. She has published papers related to risky sexual behaviors among substance-using youth, preconception and interconception health behaviors of mothers with recent live births, HIV infection and unintended pregnancy rates among street and high-risk youth in Eastern European settings, prevention of novel influenza infection in newborns in hospital settings, and safety of certain contraceptive methods for women with

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During January 2012, Corps scientist officers LCDR Heather Scobie (Epidemic Intelligence Service [EIS] officer in CDC Global Immunization Division/CGH) and LT Cara Halldin (EIS officer in CDC Division of Respiratory Disease Studies/NIOSH) arrived in Kenya to evaluate national polio surveillance and routine immunization programs. Their duties included liaising with the Kenya Ministry of Health, reporting polio surveillance and

routine immunization progress to national and international partners, drawing attention to program gaps, and participating in the creation of work plans for carrying out recommendations. In practice, their work involved

“We quite literally got our hands dirty climbing over boxes in cold rooms...”

spending a substantial amount of time in hotels entering data, writing reports, and making presentations, as well as bonding with the other EIS officers and staff. LCDR Scobie and LT Halldin describe the mission as valuable

quite literally got our hands dirty climbing over boxes in cold rooms during our observation of the cold store, which was in need of an expansion and upgrade. Conducting the review on the national level shed light on some of the reports EIS colleagues had brought back from their field experiences at the more peripheral levels. Changes on the national level had created ripple effects on the levels below. For example, the more than six-fold expansion of administrative districts in recent years from 47 to nearly 300 districts had resulted in dilution of the pool of trained staff, and the diversion of funds for polio outbreak investigations and supplementary immunization campaigns had taken away the meager funds reserved for normal operating costs. These observations and the experience of the review gave me a valuable perspective about how these systems function from the top to the bottom.

not only because of the final products, but also for their professional development. They reflect on their individual experiences below.

**LCDR SCOBIE:** Because I work in GID, I was familiar with the subject matter, and had actually conducted a similar review in Kyrgyzstan months earlier. But I was really excited about working in Africa for the first time, and an assignment in warm, sunny weather was a welcome relief from a cold Atlanta winter. Along with another GID staff member, Samir Sodha (EIS 2006), Cara and I were tasked with reviewing the national-level surveillance and immunization units, as well as the national vaccine storage depot in Nairobi. In addition to conducting interviews with the national officials responsible for surveillance and immunization, we

**LT HALLDIN:** I have to admit that I didn't know much about polio or routine immunizations. But, within a week of exhausting fieldwork, I quickly learned polio eradication is not an easy battle. Less than 12 hours after arriving in Nairobi, we were tasked with reviewing Kenya's surveillance and immunization

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LT Cara Halldin and Kenyan Ministry of Health staff member Wycliffe Matini (right) meet with the Kowino Dispensary nurse and a community health worker in the slums of Kisumu, Kenya, to review their polio surveillance capacity and routine immunization practices. Note: in accordance with Commissioned Corps Instruction (CCI) CC26.3.2, officers working in locations other than the US are typically not authorized to wear the PHS uniform.

LCDR Luz Rivera



## JOAG Officer Spotlight: LCDR Luz Rivera, an Officer who is Worldly and Dedicated

Rarely does one come across a person that not only deserves to be an officer, but embodies what it means to be an officer. One such officer is LCDR Luz Rivera. LCDR Rivera received her bachelor's degree in psychology from the University of Puerto Rico. Immediately afterward, she knew she wanted to help the underserved on the world's stage, so she joined the United States Peace Corps. She served in Ecuador for over 4 years as a Youth Program and Project Consultant to develop programs and shelters for at-risk youth. Upon returning back to Puerto Rico, she completed a doctoral degree in clinical psychology, specializing in the treatment for sexual abuse and domestic violence. Clinically, she treated patients with psychological trauma and post-traumatic stress disorder for a number of years. With this career path, one can easily see how

LCDR Rivera could leave a lasting impact within the Corps.

She chose a career in the Corps mainly because of its mission and goals. It was easy for her to identify with the mission and core values of the Corps. She states, "It was the way I was raised and the norm, to continue improving myself, [to] behave with the highest standards, to be committed to provide service to others, as well as providing dedication and inspiration." She knew the Corps would provide her with numerous opportunities to serve diverse populations, in turn reaching more individuals, while serving in multiple roles and locations. Presently, LCDR Rivera is serving as a Regulatory Project Manager in the Office of New Drug Quality Assessment for the Food and Drug Administration (FDA) in Silver Spring,

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## New COA Board of Directors Ready for the Challenges Ahead

Ad day following the USPHS Scientific and Training Symposium, the Commissioned Officers Association (COA) and the Commissioned Officers Foundation Board of Directors and Trustees met for our annual in-person meeting. We welcomed new and current board members to the board for another year and identified our priority agenda items for this coming year.

The COA has an ambitious agenda this year and continues to monitor legislative activity to ensure that the interests of the Corps are not compromised. While there are many issues we are addressing, some of the key priorities for the Board this year are COA membership, seeking funding for the public health science track, and addressing the status of Corps officers during government furlough. While we continue our efforts to boost the membership of COA, progress has been slow. Less than 60 percent of officers are members of COA and the deadline for our goal of reaching 75 percent membership by the end of 2012 is quickly approaching. In order for COA to advocate effectively on our behalf, it is

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## PsyPAG Update

The Psychology Professional Advisory Group (PsyPAG) has continued to expand its advocacy of issues that are important to psychologists. In January 2012, new leadership began guiding PsyPAG with CDR Jeff Goodie serving as PsyPAG Chair, CDR Anne Dobmeyer as Chair-elect, and LCDR William (Tony) Satterfield as Secretary. Members of PsyPAG included Psychologist Officers from both the Scientist and Health Service Officer categories across multiple agencies. PsyPAG has a number of efforts underway to advocate for Corps psychologists and promote the Corps' mission of protecting, promoting, and advancing the health and safety of our nation.

PsyPAG members continued to support efforts to recruit and retain psychologists to help meet the expanding Corps behavioral health mission. Through continued collaboration with CAPT Dean Coppola, Director of the Division of Commissioned Corps Recruitment, PsyPAG has assisted with the development of a brochure and a comprehensive Web site for behavioral health in the Corps. Please visit [PHS Behavioral Health](#)

to learn more.

CDR Christopher Hunter won the annual PsyPAG Psychologist of the Year Award for exceptional service to the field of psychology and Corps. One factor contributing to his selection was his leadership of collaborative efforts with Army, Navy, Air Force, and Department of Defense (DoD) Health Affairs subject matter experts to secure \$250 million in funding for ongoing support of behavioral health in primary care integration to hire and train 470 full-time behavioral health personnel to work in primary care throughout the DoD.

The PsyPAG DoD Special Interest Group (SIG) meets bi-monthly to advocate for and foster continued development of psychologists serving in DoD. The SIG is co-chaired by CDR Jennifer Bodart (a psychologist) and LCDR Renee Pleasanton (a social worker), and hosts a speaker series targeting the special needs of those serving in DoD. All officers assigned to DoD, or considering such an assignment, are invited to participate. The next PsyPAG DoD SIG meeting is on 19 Sept 2012 at 1200 EDT with a dial-in

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## Scientist Discipline Colloquium: Providing Limits for Adult Subsistence Fishermen for Consumption of Methyl Mercury Contaminated Fish

### EDITORIAL NOTE

This is the inaugural installment of the Scientist Discipline Colloquium, which highlights scientific contributions made by Corps scientist officers. By providing summaries of recent publications or narratives of unpublished activities, we hope to raise awareness of the breadth and depth of this important work. To propose a topic for a future issue, please email LCDR Loren Rodgers ([lroddgers@cdc.gov](mailto:lroddgers@cdc.gov)).

### INTRODUCTION AND STATEMENT OF ISSUES

Under the Comprehensive Environmental Response, Compensation, and Liability Act (1980), the Agency for Toxic Substances and Disease Registry (ATSDR) was mandated to implement the health-related sections of laws to protect the public from exposures to environmental and hazardous wastes. Subsequently, in 2007, ATSDR was requested to review

the results of tissue sample analysis of White Suckers and Small Mouth Bass fish from a section of a river in Maine, and calculate protective fish consumption limits for a subsistence population.

US Environmental Protection Agency's (EPA) guidance for evaluating potential health risks associated with consumption of contaminated fish recommends that a minimum of two target species be sampled including one predatory and one bottom feeding species. Target species are chosen if they: (1) bioaccumulate high concentrations of contaminants; (2) normally populate the freshwater system being studied; (3) are routinely caught and consumed by anglers; (4) non-migratory; (5) pollutant-tolerant; (6) easily identified; (7) abundant and easy to catch; (8) and sufficient in size to provide adequate tissue samples for analyses.

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## 2012 United States Public Health Service Scientific and Training Symposium

**M**ore than 1,200 officers participated in the 2012 United States Public Health Service Scientific and Training Symposium. The largest crowd in Corps history turned out for the event whose theme was "Prevention Strategies for a Healthy Nation: Building on the Basics of Public Health."

The symposium is an annual event co-sponsored by the Commissioned Officers Foundation (COF) and the Commissioned Officers Association (COA) that draws attendees from across the nation. This year the symposium was held at the University of

Maryland at College Park, an outstanding venue in close proximity to a large number of officers, which helped drive a record turnout.

The symposium formally opened on the evening of June 19 with the Anchor and Caduceus Dinner. Rear Admiral Ken Moritsugu, USPHS (Ret.), delivered the C. Everett Koop Honorary Lecture. RADM Moritsugu's remarks highlighted "staying focused on the mission: Lessons I learned from the Corps." He spoke eloquently on the need for officers to identify learning opportunities in every assignment in order to continuously grow and

improve as individuals and to apply those lessons to improving public health.

June 20, the first full day, started with the Junior Officer Advisory Group (JOAG) meeting. Attendees learned about the many great things committee members were accomplishing for the Corps. For many, the high point was when the group was visited by the cadre of Chief Professional Officers representing each category and led by Deputy Surgeon General Boris Lushniak. The cadre expressed their gratitude to JOAG and acknowledged that junior officers

are the future of the Corps. They emphasized that the voices of junior officers are critical to the evolution of the Corps. This session fostered a true sense of camaraderie that could be felt by all ranks and exemplified the importance of the Symposium. This was one of the many examples throughout the symposium where Corps leadership made themselves accessible to junior officers. Junior Officers felt privileged to have such access to Corps leadership to discuss concerns, provide opinions, and share experiences.

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*All scientist officers with Surgeon General Benjamin*

## Scientist Officers Contribute to the National Institutes of Health (NIH) Commissioned Corps Uniform Symposium

The NIH Commissioned Corps Uniform Symposium took place on NIH's main campus in Bethesda, Maryland, on June 26, 2012. The event was hosted by the NIH Subcommittee for Social Events, chaired by LCDR Eric Zhou and including members CDR John Stansberry, CDR Claudine Samanic, LT John Pesce, and Ms. Brenda Harvey.

The uniform symposium is part of a series of events that will assist in the professional development of officers while providing a relaxed and interactive environment. The goal of the symposium was to raise awareness of current uniform regulations and appearance standards for officers, with an emphasis on reaching those who will be promoted in the near future. This goal was easily met, as the symposium was fortunate enough to have the expertise of the Officer Basic Course (OBC) cadre, led by CDR Jill Eich, and supported by LCDR Mark McKinnon, LCDR Dean Trombley, and LT Kevin Kunard.

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## Scientist Officers Deploy for the National Independence Day Celebration in D.C.

As requested by the U.S. National Park Service, National Mall and Memorial Parks, the Department of Health and Human Services (HHS) deployed an Incident Response Coordination Team (IRCT) to provide health and medical support for the National Independence Day Celebration in Washington, DC, on July 4. The Regional Incident Support Team – National Capital Region (RIST-NCR), a Tier 1 response team, also was deployed to coordinate the planning and logistics necessary for this event.

About half a million attendees participated the National Independence Day Celebration in Washington, DC, on the 4<sup>th</sup> of July, and activities included listening to bands and watching a parade and evening fireworks. To support their potential medical needs, approximately 120 members of the Readiness and Response Program of Division of Commissioned Corps Personnel and Readiness (RRP-DCCPR, formally OFRD), National Disaster Medical System (NDMS), Center



*LCDR James L. Kenney, CDR Sally Hu, and LCDR Eric Zhou (from L to R), stationed at IRCT headquarters in Virginia, were monitoring the accountability of the staff deployed for the National Independence Day Celebration in Washington D.C.*

for Disease Control and Prevention, and Department of Veterans Affairs were also deployed for this event. These responders were grouped into nine medical teams who attended to those seeking medical aid in eight medical

stations around the National Mall where the celebration was held. Most of the response teams were in their medical stations at around 9:00 AM, while one team stayed on ready standby at HHS headquarters as a reserve

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## Scientist Officers Participate as Judges in Washington, D.C., Area Science Fairs



Frederick County, Maryland, Science and Engineering Fair, one of 11 fairs with Corps participation. Corps judges (from left to right): LCDR James L. Kenney (Scientist), LT Andrew Kim (Pharmacy), LCDR Qiao Bobo (Scientist), LCDR Mark Clayton (Scientist), LT David Eng (Pharmacy), LCDR Phoebe Underwood-Davis (Nursing), and LCDR Kimberly Scott (Nursing).

For the past 17 years, Corps scientist officers have assisted the District of Columbia Commissioned Officers Association's community outreach program in which commissioned officers judge and present awards to high

school and middle school science fair participants in Washington, DC; Maryland; and Virginia. These regional science fairs are a great opportunity for Corps officers to promote science and public health education, inform participants

about the mission of the Corps, and encourage students to think about a career in the Corps. By encouraging the youth of today to be excited about science, Commissioned Corps Officers can ensure that future generations are prepared to meet the scientific and public health challenges of tomorrow. America's future as a global leader in science, technology, and public health depends on inspiring young minds to explore the scientific world around them and, ultimately, to pursue careers in science and public health.

In February 2012, a call for volunteer judges went out on the SciPAC listserv, which generated a welcomed response. Since it generally takes about 15 to 20 minutes to judge each entry and the judging process is usually completed within 4 hours (depending on the fair), decisions are made during a prejudging meeting to identify which presentations will be judged. At this time, volunteers are briefed on judging criteria and scoring procedures to facilitate and ensure consistency in the

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## Scientist Officers Enhancing USPHS Commissioned Corps Visibility and Engaging Future Scientists

Science is cool... and so are scientists and engineers! That was the message of the 2nd USA Science and Engineering Festival, held April 28-29 at the Walter E. Washington Convention Center in Washington, DC. Twenty-five Corps officers (8 of whom were scientist officers), representing 5 categories and 6 agencies, volunteered at the country's largest science festival in order to raise public awareness of the importance of science and engineering.

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Corps officer LCDR Lana Rossiter greeting visitors at the 2012 USA Science and Engineering Festival. Photo by LCDR Theodore Garnett.

**Q:** When and how did the Scientist Category start? Is the category limited to Officers who have a Ph.D.?

**A:** Approximately 41 years after the PHS Commissioned Corps was formally established in 1889, the Parker Bill was signed into law, allowing for the commissioning of scientist officers in the regular corps of the US Public Health Service.

On April 1, 1930, the Parker Bill passed the Senate and was signed into law by President Herbert Hoover on April 9, 1930.

The Scientist Category of the PHS Commissioned Corps was formally established in 1945 and a number of civil service scientists converted over to the Regular Corps after passing appropriate examinations. On July 1, 1946, there were eleven scientist officers listed on active duty in the Official List of Commissioned and Other Officers of the Public Health Service. By January 1, 1948, the ranks of scientist officers had swelled to 50 offic-

ers. In 1984, the Scientist Category became an “active” category with the establishment of the Scientist Professional Advisory Committee (SciPAC) and the assignment by the Surgeon General of the first Chief Professional Officer (CPO), CAPT Jim McTigue.

PHS officers in the Scientist Category must meet the same basic requirements as all officers and, in addition:

- Scientist officers must hold a doctoral degree (Ph.D., Dr.P.H., D.Sc., Ed.D., or other qualifying doctoral degree) that required successful completion of independent, scientific, data-driven, original research in the specialty field. This research generally takes the form of a doctoral dissertation and can involve a variety of scientific research designs, including meta-analyses.

- Scientist officers who have qualifying doctoral degrees with a licensure requirement must also have a current, unrestricted, and valid license in any of the 50 states; Washington, D.C.; the Commonwealth of Puerto Rico; the U.S. Virgin Is-

lands; or Guam.

The Parker Bill was originally designed to include and allow the commissioning of the directors of Divisions at the Laboratory of Hygiene (later the National Institutes of Health), most of whom held a Ph.D. or D.Sc. degree. Today, the assigned billets and duties of Scientist officers are diverse and include a wide array of career tracks such as research scientist, regulatory scientist, environmental health scientist, epidemiologist, psychologist, and laboratorian. Currently, there are 334 Scientist officers (August 14, 2012; [dcp.psc.gov](http://dcp.psc.gov) in the Scientist Category, encompassing more than 46 distinct disciplines in their primary assignments. Each of these professions contributes to the Commissioned Corps mission in unique and valuable ways.

Reference:  
[usphs.scientist.org](http://usphs.scientist.org)

BY LCDR RENEE CALANAN



CDR (sel) Matthew Murphy, Samantha Murphy, Dr. Sylvia Murphy, and Ellyson Murphy (L to R). CDR (sel) Matthew Murphy and his family were enjoying the reception following the 2012 Atlanta COA Promotion Ceremony held on August 6, 2012.



(From L to R): Shalin (age 9) and Anjali (age 10) Sharma, children of CDR Andrea Sharma, on the first day of school, Atlanta, GA.



*(Continued from page 3: Sr. Officer Spotlight)*  
substantial shift from his chronic disease epidemiology training.

As EIS neared completion, CAPT Linkins considered the vacancies in Atlanta and decided that rather than targeting chronic disease positions, he would apply for any job with strong epidemiologists and mentors. Before long, CAPT Linkins found himself in the



*CAPT Linkins and his family enjoy local transportation in Chiang Mai, Thailand, in 2008.*

Epidemiology Research Section of the National Immunization Program. One of his early projects was analyzing data from an oral poliovirus vaccine immunogenicity trial conducted in the Gambia and Brazil. He found it so engrossing that he would often work through the night uncovering new predictors of immunogenicity. This work led to a change in the vaccine's formulation and a life-long interest and involvement in polio eradication.

After 6 years supporting polio eradication with a heavy travel burden that sometimes reached 75 percent of his time, CAPT Linkins and his wife decided to start a family in Atlanta. The next 8 years brought fatherhood and work on domestic immunization issues, first as Chief of the Immunization Registries Support Branch, and then as Director of the Data Management Division. Domestic immunization work provided new challenges and lots of opportunities for growth, but when his wife was offered a job at CDC's country office in Bangkok, Thailand, CAPT Linkins shifted course again and became the post's Associate Director for Science and then Director of the HIV/STD research program. Despite 5 years of rewarding work with Thailand's high-risk populations of commercial sex workers and injection drug users, CAPT Linkins' interest in polio never waned. When he got a call from CDC's Global Immunization Division with an offer to lead the Vaccine Preventable Disease Eradication and Elimination Branch (DEEB) in Atlanta in 2004, he jumped at the opportunity.

Although DEEB covers vaccine preventable diseases with eradication or

elimination goals (i.e., polio, measles, rubella, hepatitis B, and tetanus), the highest priority for the branch was support of the polio eradication effort. CAPT Linkins explains, "After a nearly 25-year eradication effort, funders and national public health officials were saying, 'we've got to get over the finish line. It's time to finish this and move on to other public health priorities'." With the realization that the window of opportunity was closing, CDC's eradication activities were substantially scaled-up through the activation of the EOC.

Since December 2011, CDC's polio workforce has increased from fewer than 100 staff members to over 400, with 143 completed missions to high-risk countries. More importantly, polio is at an all-time low, with only 91 cases occurring so far in 2012 compared with 267 in the same time period in 2011 (data from WHO as of 10 July 2012). "It's been a phenomenal experience and an honor to be involved in this program," states CAPT Linkins.

When asked to provide career advice for junior officers, CAPT Linkins recalled his transition from chronic to vaccine preventable disease epidemiology. "It was serendipitous," states CAPT Linkins, "I wanted the best environment where I could grow as a scientist, regardless of the subject matter." He adds, "Be open-minded and flexible. Look for opportunities to work with good people," CAPT Linkins explains, "If I hadn't been flexible, I would have missed one of the most important and thrilling experiences of my life."

**BY LCDR LOREN RODGERS**



(Continued from page 8, PsyPAG Update)  
number of 877-691-9937, and the  
passcode 4549026.

PsyPAG has continued to support  
the efforts of psychologists to earn their  
board certification. LCDR Tony Satter-  
field leads a monthly group to guide and  
support psychologists interested in  
pursuing professional board certifica-  
tion.

A new initiative this year is the  
development of the PsyPAG curriculum  
vitae (CV). Initiated by LCDR Robin  
Toblin, the CV highlights recent peer-  
reviewed publications and presentations  
and is disseminated via the PsyPAG  
listerv. The PsyPAG CV allows PsyPAG  
members and others to quickly see the  
multiple scientific accomplishments of  
psychologists.

PsyPAG general meetings are  
held on the first Wednesday of every  
other month at 1200 EST. Meetings  
generally last an hour and often include  
a speaker highlighting the work of  
psychologists with different agencies,  
unique opportunities for psychologists in  
the Corps, and topics related to profes-  
sional development. The next PsyPAG  
meeting is on 3 Oct 2012. The dial-in  
number is 1-877-691-9937, and the  
passcode is 4549026.

To learn more about members  
can go to [PsyPAG](#). If you are a  
psychologist and would like to join  
PsyPAG, please contact: LCDR William  
Satterfield  
([william.satterfield@tma.osd.mil](mailto:william.satterfield@tma.osd.mil)).

BY CDR NICOLE FRAZIER AND CDR JEFFREY GOODIE

(Continued from page 9, USPHS  
Symposium)

The morning keynote speech  
delivered by CAPT Donald Mattison,  
USPHS (Ret.), titled "What Is Needed  
for Success in Public Health,"  
provided a framework of key factors  
that influence the success or failure  
of public health initiatives. The  
morning continued with five  
concurrent breakout sessions, and  
there was something for everybody!  
Concurrent with the breakout  
session, the Scientist Professional  
Advisory Committee (SciPAC) offered  
career counseling, which was  
coordinated by CDR Boris Aponte.  
Senior and junior officers shared  
their experiences on developing their  
careers and offered advice to those  
assembled. LCDR Steffen  
commented that the session had  
encouraged him to reevaluate  
certain aspects of his position and to  
consider new career directions. CAPT  
Pamela Ching, CDR Boris Aponte,  
CDR Sally Hu, CDR Margo Riggs, and  
LCDR James Kenney were generous  
with their time and their advice, and  
provided thoughtful counsel to junior  
officers.

The day concluded with the  
JOAG social. This event celebrated  
the 10-year anniversary of the JOAG.  
The social was well attended by flag,  
senior, and junior officers. Many  
officers came to the event right after  
taking their Annual Physical Fitness  
Test to show their support, including

(Continued on page 15)



CAPT Marco Montoya, USPHS (Ret.) with list of fallen PHS  
officers

*(Continued from page 14, USPHS Symposium)*

RADMs Giberson and Lushniak. The highlight of the social was a slideshow documenting the past 10 years of JOAG and providing numerous commentaries from former JOAG chairs.

The second full day was Scientist Category Day, where over 70 officers had the opportunity to spend the entire day with fellow officers within our category. Scientists were able to hear about a variety of scientific endeavors ranging from large case studies, like the National Children's Study, to narrowly-focused presentations on diagnostic techniques. All of the presentations were interesting and informative. One particular presentation that resonated with

moms and dads in the audience was a study on infant head trauma led by LCDR Sharyn Parks. Additionally, a Corps panel of retired officers (pictured below) discussed their careers following retirement from the Corps. The panelists were incredibly well versed and provided invaluable guidance regarding planning for life after the Corps. One of the most heart-felt moments of Category Day was provided by CAPT Macro Montoya (Ret.). He (pictured) reminded us that our service sometimes places officers in harm's way. He carried with him a list of officers who died in the line of duty since the inception of the Corps, including 33 Scientist officers, with the most recent casualty from 2008. Category Day

promoted a lively discussion among professionals from numerous fields. The free flow of ideas and camaraderie engendered further strengthened the bonds among category members, in turn, promoting a more cohesive SciPAC. This cohesion was further demonstrated at the conclusion of the day with a well-attended social at the Hard Times Café that was arranged by LCDR Robin Toblin.

The symposium concluded with closing remarks from RADMs Giberson and Lushniak. They talked about the importance of taking pride in the work that the Corps does, but also taking the responsibility that comes with wearing the uniform of the Corps. RADM Giberson noted that the PHS

is the only service, anywhere in the world, focused solely on public health. His thoughts were echoed by Deputy Surgeon General Lushniak who noted how the Corps was instrumental in campaigns like the eradication of smallpox and the near-eradication of polio, which are considered some of the greatest accomplishments in modern medicine. They highlighted the history and legacy of the Corps and RADM Lushniak urged officers to take pride in the uniform, whether or not others understood the role of the PHS.

The 2012 United States Public Health Service Scientific and Training Symposium was more than a training conference: the symposium offered officers the opportunity to reflect on their careers as well as the role of the Corps in society. The speeches and presentations were humbling as well as inspiring, and everyone left with a renewed commitment to be the best officer possible and a desire to live up to the proud legacy that they have inherited.

**BY LCDR SCOTT STEFFEN, LCDR QIAO Y. BOBO, CDR MATTHEW MURPHY, AND CDR JENNIFER ADJEMIAN**



*Panelist of retired Corps officers (L to R) CAPT Eve Moscicki (Ret.), CAPT James Hoadley (Ret.), CAPT Mark Paris (Ret.), and RADM Bill Maas (Ret.).*

(Continued from page 8: Scientist Discipline Colloquium)

We used US EPA's default assumptions and equations (equations 1 and 2 below) to calculate daily and monthly meal limits that would be unlikely to pose increased health risks to adult anglers who consumed the contaminated fish from the river on a regular basis. These consumption limits may be more conveniently expressed as the allowable number of fish meals of a specified meal size (8 ounces) that may be safely consumed over a given time period. Human consumption limits for methyl mercury contaminated fish were based on adult body weight of 70 Kg and ATSDR's oral chronic minimal risk level (MRL) for mercury of 0.3 micrograms/kilograms/day ( $\mu\text{g}/\text{Kg}/\text{day}$ ). The MRL is a daily estimate of human exposure to a contaminant that is unlikely to result in deleterious non-cancer adverse health effects over an acute, intermediate, or chronic exposure. Edible fish portions used in our calculations ranged from 32 grams (g) to 453.5 g; or 1.12 ounces (oz.) to 16 oz. and were expected to bracket actual meal sizes. Using EPA's standard default value of an 8 ounce meal size, a person can eat about nine meals per month probably without experiencing adverse health effects, if the fish

**Equation 1.**

$$\text{Max. Fish Meals/Month} = \frac{\text{Kg Fish/Day} \times 30 \text{ Days}}{\text{Meal Size (Kg Fish/Meal)}}$$

Meal Size (Kg Fish/Meal)

**Equation 2. Equation for Cancer Health Effects**

$$\text{Max. } x \text{ Fish Meals/Day (Kg Fish/Day)} = \frac{\text{Cancer Risk} \times \text{Body Weight (Kg)}}{\text{Slope Factor} \times \text{Fish Pollution Level}}$$

**Table 1. Monthly Fish Consumption Limits for Methyl Mercury Contaminated Fish**

Fish Tissue Methyl Mercury Concentration ( $\mu\text{g}/\text{Kg}$ , Wet Weight)	32g of Fish Per Meal (1.12oz.)	97g of Fish Per Meal (3.42oz.)	227g of Fish Per Meal (8oz.)	340g of Fish Per Meal (12oz.)	453.5g of Fish Per Meal (16oz.)
0-0.029	90	90	90	64	48.5
30.0-59.0	90	90	47.5	32	24
60.0-78.0	90	84	36	24	18
79.0 120.0	90	55	23	15.5	11.5
121.0-230.0	86.5	28.5	12	8	6
231.0-310.0	64	21	9	6	4.5
311.0-470.0	42.5	14	6	4	3
471.0-940.0	21	7	3	2	1.5
941.0 2,000	10.5	3	1	1	0.5
>2,000	10	3	1	0.5	None

$\mu\text{g}/\text{Kg}$ = microgram/kilogram; g = grams; oz. = ounces; None = Recommends No Fish Consumption

contains methyl mercury, for example, at 231-310  $\mu\text{g}/\text{Kg}$  (Table 1).

US EPA's upper bound acceptable lifetime cancer risk level of 1 in 1,000,000 or  $1 \times 10^{-6}$  was also used to calculate consumption limits for cancer health effects. The cancer health effects and meal consumption limit

equations were used to calculate risk-based consumption limits for dioxins/furans (data not shown) with cancer slope factors, based on an assumed 70 year human exposure. This is a standard default value, but some persons may be exposed for lesser or greater durations depending on their lifespan, consumption habits, and residential locations.

**SUMMARY**

The following risk characterization may not be applicable for current human exposures to contaminated fish from a section of the river in Maine, because the sampling data used to prepare the published version of this article were generated over 10 years ago, and we do

(Continued on page 17)



(Continued from page 7: COA Board of Directors)

critical that COA can speak on behalf of a strong majority of officers, not just a little more than half. This is a key reason membership of all officers is such a priority for the Board.

We need a mechanism to attract young, bright, and eager public health and medical students into the Corps. The Public Health Sciences Track (PHS Track) is such a program. The program was approved in the Affordable Care Act; however, it has not yet been funded. The PHS Track program would create a Reserve Officer Training Corps (ROTC)-like mechanism to expand the Corps. The COA is working hard to identify funding for this essential program.

You may have noted from the "Latest Story" section of the COA Web site that on July 31, 2012, the House passed legislation that the Senate introduced and passed last year to remove Senate confirmation of Corps officers [coausphs](http://coausphs). The legislation essentially removes the requirement for the Senate to confirm presidential appointments or promotions of Corps and NOAA officers. While the intent of this legislation was to minimize demand on the Senate and increase efficiencies. First, it is not clear how much this really does increase efficiency. According to the COA, the

Senate confirmation and promotion process for Corps officers was never reported to cause any delay or inefficiency. Second, and more importantly, this legislation may have greater negative implications for the Corps. It reduces the parity of the Corps with the armed services and may set a bad precedent for other parity issues, for example, the status of Corps officers during a government shutdown. The COA Board of Directors will consider whether amending this provision of the law is critical for the Corps.

I want to thank all of you for entrusting me to continue to represent our category for another three years on the Board. And because I was elected by the Board to serve as the Treasurer for COA this year, I also welcome this additional opportunity to serve your interests on the Executive Board with my colleagues CAPT Nita Sood (pharmacist), COA Board Chair, and CDR Jonathan Rash (Engineer), COA Board Chair-Elect. Please be sure to contact me if you would like to get involved in helping to ensure a secure future for the Corps by participating in COA at the national level. I can be reached at [saraneuman55@gmail.com](mailto:saraneuman55@gmail.com).

By CDR SARA NEWMAN

(Continued from page 16, Mercury in Fish)

not know the current status of any remedial measures taken, and whether the fish contamination has decreased or increased over time.

However, in characterizing adult human health risks posed by consumption of methyl mercury-contaminated fish from a section of the river in Maine, a 70 Kg adult body weight was assumed along with consumption of an average level of 0.50 mg/Kg mercury in an 8 ounce fish meal for 4 days/week/ for 1 year, which would result in an estimated exposure dose of 0.9 µg/Kg/day of mercury. This level of exposure would exceed the chronic duration oral MRL of 0.3 µg/Kg/day for mercury.

Fish advisories are issued for the general population, as well as for certain segments of the population that may be at a higher risk such as pregnant women, nursing mothers, infants and developing children. Fish advisories can vary somewhat by state, province, and audience, but are generally issued to inform

the public of chemical contaminants in sport fish; educate consumers as to how they can minimize their exposure to contaminants; as a reminder of the health benefits of consuming fish and; present advisory information in a manner conducive to maximal voluntary compliance. Results of this type of analysis indicate that fish advisories can be varied with location, size and species of fish.

A review of this type is critical in public health practices as it relates to fish advisories and other health guidelines on a site-specific basis.

#### ACKNOWLEDGEMENT

The final, definitive version of this paper has been published in Toxicology and Industrial Health Journal Vol. 23: No. 3: p. 147-153: April 2007 by <<SAGE Publications Ltd.>>/ <<Sage Publications, Inc.>>, All rights reserved. © [as appropriate] [tih.sagepub.com](http://tih.sagepub.com)

By CDR ROBERT L. WILLIAMS AND CAPT LARRY CSEH



*(Continued from page 4, Junior Officer Spotlight)*  
have been supported by the Scientist Professional Advisory Committee (SciPAC). “Ever since joining the Corps, I have found the SciPAC group extremely helpful, organized, and informative in guiding me on how to take the appropriate steps in the Corps. I appreciate the time that members take to make sure that we are all informed by having the most up-to-date information on the SciPAC website and putting us in touch with members who have been through the same challenges that we have. SciPAC is very supportive of all of its officers and their careers.”

Having worked on polio eradication 10 years ago in Pakistan, LCDR Lowther knows how much effort it has taken to reach this point. “It is frustrating to see that some problems have remained the same for the last decade; however, it has been reassuring to see substantial progress in recent years and months. It was also exciting when the World Health Assembly declared polio eradication a public health programmatic emergency in 2012. This declaration placed polio eradication in the global spotlight and helped accelerate efforts. Partners of the Global Polio Eradication Initiative are working harder than ever, with the motivation that we have finally reached a tipping point and [are] close to achieving the final goal of eradicating polio. I’m very proud to be a part of this mission and the EOC to support staff and partners in achieving our final goal.”

*(Continued from page 7, Luz Rivera)*  
Maryland.

LCDR Rivera has been a Corps officer for 2 years and has been highly active in groups like the Junior Officer Advisory Group (JOAG) and the Scientist Professional Advisory Committee (SciPAC). When asked about JOAG, she said, “I heard about JOAG during...[an] orientation at FDA.” Since then, she quickly got involved. She served as the Phoenix Meet and Greet lead from 2011–2012, where she coordinated Meet and Greets at the Phoenix Indian Medical Center and the Bureau of Prisons. She is also the co-chair of the newly formed Professional Advisory Committee (PAC) Liaison Task Force under the JOAG Membership Committee. This task force works closely with the JOAG PAC liaisons to identify ways to increase JOAG membership and optimize the dissemination of information about JOAG to the PACs. The idea for this subcommittee began in 2011; she is quick to acknowledge that “being part of the initiation of this subcommittee has been rewarding in terms of seeing [it] become a reality and learning... different ways to help other officers achieve their goals.” In addition to JOAG, she has served the Corps in other capacities as well. She has served in the honor guard at the

National Honor Flight for American WWII veterans, ushered for the Corps Music Ensemble at the WWII Memorial, volunteered for the 16<sup>th</sup> Annual FDA Promotion Ceremony for Corps officers, and served as a busboy for the Office of the Surgeon General Promotion and Award Ceremony.

For LCDR Rivera, groups like JOAG and SciPAC provide crucial mentoring that can only come from well-trained and experienced officers. For example, she was originally classified in a different PAC and her first mentor assisted her in the process of correcting her category classification. This positive interaction triggered LCDR Rivera to volunteer on the mentoring committee, so she can contribute to the development of guidelines and be a mentor to others. When asked what advice she would give new officers, she highly recommends that they acquire a mentor early in their career so they maintain balance while juggling the expectations associated with their careers as Corps officers. Clearly, LCDR Rivera has far-reaching vision and worldly experience that most of us aspire to have.

**BY LCDR SCOTT STEFFEN (JOAG LIAISON)**



*(Continued from page 11: DC Science Fair)*  
judging process. Corps judges review all projects in the medicine and health category and any other project they deem applicable to the public health mission, such as water and food safety, microbiology, medical technology, biochemistry, psychological sciences, etc. During the judging process, judges introduce themselves as Corps officers and explain that their judging is focused on public health-related entries. They are encouraged to talk with the presenters as much as possible by asking them questions and commenting on their projects. During the fair, Corps officers are frequently asked questions about the Public Health Service and are equipped with a one-page handout that includes information about the PHS Web site ([www.usphs.gov](http://www.usphs.gov)) the Corps in general.

The Corps judges present award certificates for the top three projects in the medicine and health category and for meritorious achievement in other categories in which projects demonstrate independent thought, creative ability, and scientific skill in addressing issues relevant to public health. The names of the winners are announced during a ceremony attended by large numbers of students, parents, teachers, other award presenters, and interested community members. During the ceremony, the lead Corps judge at each fair presents their

By encouraging the youth of today to be excited about science, Commissioned Corps Officers can ensure that future generations are prepared to meet the scientific and public health challenges of tomorrow.

Public Health Service awards and provides the audience with background information about the Corps such as the Corps' major accomplishments (e.g., the eradication of smallpox) and its mission. In addition to Corps awards, there are special category and community awards given by various businesses, corporations, universities, scientific organizations and government

agencies. Thus, the students are competing for cash prizes, scholarships, internships, bonds, merchandise, and certificates. The top high school winners from these fairs are awarded a fully funded travel scholarship to present their project at the International Science and Engineering Fair. This year, a high school student from one of the regional science fairs that our Corps officers assisted in judging received top honors at the International Science and Engineering Fair for developing a new method to detect pancreatic cancer. This patent-pending method is over 90 percent accurate, and is roughly 30 times faster, 28 times less expensive, and over 100 times more sensitive in detecting pancreatic cancer than current diagnostic methods.

Regional Corps-sponsored science fairs provide an opportunity for Corps scientist officers to serve local communities in a direct and tangible way, communicate the mission of the Corps, mentor future generations of young scientists, and provide recognition to the best and brightest scientific investigators of tomorrow. If you are stationed in the DC area and are interested in being a science fair judge next year, look for the next call for volunteers to be sent out on the SciPAC listserv sometime next February.

By LCDR QIAO Y. BOBO, LCDR MARK CLAYTON, AND LCDR JAMES L. KENNEY



*(Continued from page 11: Visibility)*

With more than 3,000 exhibits and 150 stage shows, the festival celebrated science in much the same way as society celebrates Hollywood personalities, professional athletes, and pop stars. The crowd cheered science luminaries, including astronauts, Bill Nye the Science Guy, and even the Science Cheerleaders (think molecular biologists, astrophysicists, and surgeons, who also happen to be current or former NFL and NBA cheerleaders). The organizers clearly did something right



*Corps Officers (from left to right) LCDR Qiao Bobo and LCDR Jill Hammond surrounded by visitors and answering questions at the 2012 USA Science and Engineering Festival. Photo by LCDR Theodore Garnett.*

because more than 150,000 attendees battled the rain, traffic, and crowds to attend the events at the Convention Center. The theme of the Corps exhibit booth was, “Inspiring the Next Generation of Public Health Responders.” In this spirit, our enthusiastic volunteers greeted over 1,000 visitors, many of whom had never heard about the Corps. The visitors included high school students, undergraduate and graduate students, as well as teachers, parents, nurses, doctors, and other uniformed service officers from our sister branches. We engaged students about their career interests, promoted our student opportunities, fielded questions about the Corps, handed out PHS promotional materials, and directed them to our online resources for additional information. We emphasized jokingly to the students that, while we may not carry rifles, we surely know how to use a gene gun!

The event was sponsored by the District of Columbia Commissioned Officers Association (DC COA) and supported by Dr. Lesley Russell, Senior Advisor for Science and Policy for the Office of the Surgeon General; RADM Boris D. Lushniak, Deputy Surgeon General, and RADM Christopher G. Halliday, Chief of Staff at that time for the Office of the Surgeon General. Dr. Russell visited our booth on Saturday to show her support and encouragement. It is comforting to know that the future of the Corps is in the hands of such a supportive, charitable, gifted, and generous group of officers.

The Corps representation at this highly

attended and visible festival would not have been possible without the hard work of the Corps Science and Engineering Festival Committee, which included LCDR Ted Garnett, LCDR Kun Shen, LT Samantha Spindel, and LT Pattama Ulrich, and the full support of DC COA president CDR Vicky Borders-Hemphill, DC COA Community Outreach Committee Chairpersons LT Dustin Price and LT Ulrich, and Science Fair Judge Subcommittee Chairpersons CDR Jacqueline Rodrigue and LCDR Yvette Waples. The Corps Science and Engineering Festival Committee, under LCDR Ted Garnett’s leadership, is now part of the DC COA Science Fair Judge Subcommittee. The DC COA Science Fair Judge Committee also hosts the development of the criteria and implementation plan for the Surgeon General’s Science Award, and many of the officers mentioned above are part of this initiative. The committee plans to continue its effort for years to come. If you are interested in being a volunteer next year, a call for volunteers will be sent out on the DC COA and PAC listservs.

Many thanks to our volunteer scientist officers, including: CAPT Omar Hottenstein (DoD), CDR Chekesha Clingman (FDA), LCDR Qiao Bobo, LCDR Dominic Frasca (FDA), LCDR Theodore Garnett (FDA), LCDR Lana Rossiter (FDA), LT Nancy Tian (ASPR), and LT Nadra Tyus (HRSA).

**By LCDR Qiao Bobo, LCDR Theodore Garnett, and LT Samantha Spindel**

*(Continued from page 5, White House)*

specific health conditions. She is married to Dr. Mauricio Zapata and is the proud mother of three young sons, Paolo (10), Noah (8), and Michael (4). She enjoys spending time with her family, visiting the beach, watching movies, and salsa dancing.

#### **MORE ON THE AWARD**

Initiated in 1996 by the White House Office of Science and Technology Policy (OSTP), the PECASE program honors and supports the achievements of young professionals at the outset of their independent research careers in the fields of science and technology. The awards foster innovative and far-reaching developments in science and technology, increase awareness of careers in science and engineering, give recognition to the scientific missions of

participating agencies, enhance connections between research and national goals, and highlight the importance of science and technology for the nation's future.

The White House Office of Science and Technology Policy recognized CDR Zapata, along with 95 other highly accomplished scientists and engineers funded or employed by 11 federal departments and agencies in a ceremony hosted at the National Museum of Natural History on July 31<sup>st</sup> in Washington, DC. The Honorable John P. Holdren, assistant to the President for science and technology, made remarks. Following the ceremony, President Obama congratulated the PECASE awardees in the White House and they posed for photographs. The following day awardees and their guests toured the East Wing of the White

House. See the White House press release and ceremony information for more.

**BY JULIANA CYRIL**



*Zapata, shown here with sons Paolo (10), Noah (8), and Michael (4), celebrating over lunch after the awards ceremony.*

*(Continued from page 6, Polio in Kenya)*

programs on the province, district, and health facility levels; a week later, I was able to participate in the national-level review. My first team consisted of Ministry of Health and World Health Organization (WHO) representatives and was assigned to evaluate Nyanza Province — the location of the 2011 polio outbreak. Our driver proceeded west from Nairobi to Nyanza along Lake Victoria, as if we were rushing to a fire — passing cars, large 18-wheelers, and the occasional cow, goat, and zebra. We had an exhausting week of administering surveys, examining records and the cold chain, as well as assessing the availability of specimen collection kits. Nevertheless, the most rewarding visits were to health facilities, from large city hospitals to tiny clinics located in the slums or bush. Through interacting with nurses and community

health workers — the foundation of the public health system in Kenya — I glimpsed the true face of the polio eradication effort. I experienced their passion for public health and disease prevention. Employees used personal money for fuel and personal phone minutes to trace vaccine defaulters and transport polio and measles specimens, and nurses hand-carried coolers with vaccines to the nearest health facility when their facility's freezer broke down. It was apparent to me that these health workers are really doing the best they can with the scarce amount of training, resources, and time that they have.

*This article was adapted from the June, 2012 edition of the CDC Epidemic Intelligence Service (EIS) Bulletin.*

**BY LCDR HEATHER SCOBIE. AND LT CARA HALLDIN**



*LCDR Heather Scobie (middle) and LCDR Samir Sodha (left) review national polio laboratory records with Ministry of Health staff at the Kenya Medical Research Institute (KEMRI).*



*(Continued from page 10, Uniform Symposium)*

Approximately 25 officers attended the symposium, which began with a cordial meet and greet session, followed by an informative and highly interactive presentation by the OBC Cadre. Multiple topics were covered, including: proper uniform wear, grooming standards, and a brief introduction to the new Operational Dress Uniform (ODU) that will replace the current Battle Dress Uniform (BDU). The officers in attendance had multiple questions regarding these topics, which highlights the necessity of such informative events.

The subject of uniform standards and appearance has become an important issue since the issuance of Commissioned Corps Directive CC46.3.1 on 29 September 2009, which details the mandatory requirement for daily uniform wear by commissioned officers. This topic was recently reinforced by RADM Scott Giberson, who reminded us of the importance of uniform wear and our responsibility as officers to wear it properly as

proud representatives of our service. The timeliness and content of this event proved to be in direct support of RADM Giberson's entreaty, and a valuable service to officers who attended.

Several scientist officers were in attendance, most prominently RADM Helena Mishoe, who provided opening remarks about the importance of this symposium. Furthermore, multiple NIH institutes and offices were represented, including the National Institute of Allergy and Infectious Diseases (LCDR Zhou and LT Pesce); the National Heart, Lung, and Blood Institute (RADM Mishoe); and, the NIH Office of the Director (CDR John Stansberry and CDR Sally Hu). Overall, the event was a success, and as the organizers of this event were largely from the scientist category (LCDR Eric Zhou, CDR John Stansberry, and LT John Pesce), it is fair to say that members of the Scientist category have significantly contributed toward the professional development of Corps officers working at NIH.

**BY LT JOHN PESCE**

*(Continued from page 10, Independence Day Deployment)*

medical team.

The Washington, DC, metropolitan area was hit by a severe storm on June 27, which left more than one million households without power; some did not have their power restored for over a week. With this storm came record-breaking high temperatures, which reached 97 °F with a heat index of 105 °F on the 4<sup>th</sup> of July. Potentially complicating this event, thunderstorms were forecast to reach Washington, DC, around the time the fireworks were scheduled to begin. With the oppressive weather conditions, the medical teams treated over 300 patients, most of whom suffered from heat-related illnesses and blisters. The extreme weather conditions and the large crowd also posed a huge challenge to the IRCT. Overall, however, the national Independence Day Celebration went well, with no major unforeseen events, and the thunderstorms did not arrive until after the majority of attendees had left the area. The IRCT was demobilized at approximately 1:00 AM on July 5, 2012.

Eight RIST-NCR members including 3 scientist officers were deployed to support this National Security Special Event under Emergency Support Function 8 (ESF-8), and were led by Mr. Glenn

Blanchette of HHS. During this 3-day IRCT deployment, Corps scientist officers CDR Sally Hu and LCDR James L. Kenney worked in the resource unit, and LCDR Eric Zhou worked in the situation unit of the Planning Section (Picture 1). In addition, two other Scientist officers, LCDRs Scott Steffen and Ruiqing Pamboukian, were deployed with a Tier 3 volunteer group to support the logistics branch.

The RIST-NCR team currently consists of 23 members who serve in different sections under the Incident Command System (ICS). Team members perform various leadership functions in the Planning, Operation, Logistics, and Administration and Finance sections, and include Liaison and Safety officers who partner with other agencies or teams, depending on the deployment. The team provides great opportunities for Corps officers who are interested in roles in ICS to develop leadership skills through deployments. The team is currently led by CDR Hu, who is recruiting Corps officers in the Washington metropolitan area. CDR Hu can be reached at [hus@mail.nih.gov](mailto:hus@mail.nih.gov). For more information about Regional Incident Support Teams please see:

[RedDOG/FactSheets RIST Fact Sheet](#)

**BY LCDR ERIC ZHOU, LCDR JAMES L. KENNEY,  
AND CDR SALLY HU**



## Calendar of Events

### October

10/27-10/31 American Public Health Association (APHA) [www.apha.org](http://www.apha.org) San Francisco, CA  
Annual Meeting

### November

11/1-11/2 The AICR Annual Research Conference [www.aicr.org](http://www.aicr.org) Washington, DC  
2012 on Food, Nutrition, Physical Activity &  
Cancer

11/15-11/18 9th National Harm Reduction Conference [www.cvent.com](http://www.cvent.com) Portland, OR

11/9 HiMSS: New York HIMSS Chapter - Student [www.himss.org](http://www.himss.org) New York, NY  
Nursing Informatics Event

11/11 HiMSS: Midwest Chapters Fall Technology [www.himss.org](http://www.himss.org) Des Moines, IA  
Conference

### December

12/3-12/5 mHealth Summit: Connecting the Mobile [www.mhealthsummit.org](http://www.mhealthsummit.org) National Harbor, MD  
Health Ecosystem

12/3-12/5 International Society for Disease [www.syndromic.org](http://www.syndromic.org) San Diego, CA  
Surveillance (ISDS) Conference

### January

1/27-1/30 2013 Midyear Topical Meeting - Medical <http://hps.org> Scottsdale, AZ  
Health Physics and Accelerator Dosimetry

### February

2/11-2/15 Military Health System Conference [www.health.mil](http://www.health.mil) National Harbor, MD



## Editorial Note

**T**he *Scientist Officer* newsletter has been available online since October 2009. CAPT Christine Benally was the inaugural editor for the first three issues during the first 2 years of the newsletter. During the period of September 2010 through September 2011, the Scientist Officer Newsletter Team identified SciPAC Visibility Subcommittee team volunteers to join the team, and also selected a subgroup to participate on the editorial board of the newsletter. It was during that time that I became the editor and LT Heather Silvio was the co-editor. We revamped the objectives and set new targets, moving from releasing three newsletters in a 2-year cycle to three newsletters each year (one every 4 months). We believed that the Scientist Officer newsletter served as an invaluable medium through which to share and highlight the work of scientist officers, enhance networks among officers, and provide updates

from the Psychology Professional Advisory Group (PsyPAG), the Junior Officer Advisory Group (JOAG), and the Commissioned Officers Association (COA). The Newsletter was made as a downloadable document available through the listserv, the Commissioned Corps Bulletin, and the scientist Officer Web site. The Scientist Officer Newsletter provides a avenue for scientists to network through sharing experiences and challenges, whether they are part of their daily work, deployment, or training, as well as highlighting ways to increase visibility of the scientist role in the Corps. The dissemination of the Scientist Officer Newsletter reaches scientist officers, Corps officers, civil service scientists, and the public across the country and globe. Previous issues of The Scientist Officer Newsletter have included coverage of science and health fairs, conferences, and other events that enhance the visibility and contribution of the scientist

officers. In addition, the Newsletters have included information about broader visibility-related activities of scientist officers, such as participation in field exercise trainings, a scientist team bowling tournament, volunteering for judging school science fairs throughout the continental states and Puerto Rico, and Scientists marketing the Corps at events including the Washington, DC, NBC 4 Health and Fitness Expo, where officers talked with many of the 85,000 people in attendance.

It has been a great pleasure working with everyone on the SciPAC Visibility Subcommittee, especially those on the newsletter team and editorial board. This September issue, I am stepping down as editor, and LCDR Loren Rodgers is taking the helm with co-editor LCDR Deborah Dee. It has been a tremendous commitment of time and energy, but also one of professional growth and development. I appreciate and

have enjoyed the opportunity to serve as editor for the last two years. I would also like to take this opportunity to acknowledge and thank the editorial board and newsletter team colleagues for giving their time and expertise in reviewing articles and newsletter templates during my term as editor of this newsletter. LCDR Rodgers has already made wonderful improvements in this issue with a new attractive front page layout and horizontal style that improves the legibility of this online newsletter. I look forward to continuing to interact with LCDRs Rodgers and Dee as part of the editorial board.

Our newsletter team and editorial board teleconference will occur this October. We are looking for new team members for the newsletter and also hope newsletter team members may be interested in joining the editorial board.

BY CDR CARMA AYALA



## Show Your Support of the Scientist Officers: Get Your Coin and T-shirt!

We have SciPAC coins and T-shirts available for \$10.00 each. T-shirts are white, 100% cotton, with the Scientist logo on the left front (pocket area) with "USPHS Scientist" across the back in blue lettering, available in S, M, L and XL. Coins are enameled metal.



Coin Front



Coin Back

To order your Scientist coin or T-shirt contact (order form):  
LCDR Tegan Boehmer  
CDC, National Center for Environmental Health  
4770 Buford Hwy NE, MS F-58  
Atlanta, GA 30341  
Tel: (770) 488-3714  
[tboehmer@cdc.gov](mailto:tboehmer@cdc.gov)

***Make check or money order payable to:  
"Commissioned Officers Foundation"***

***In the memo line, write "SciPAC coin" or "SciPAC t-shirt" or both.  
Contact LCDR Boehmer for shipping cost!***

If you would like to submit an advertisement, announcement, article, or photo to the *Scientist Officer*, please contact LCDR Loren Rodgers at

[lrodgers@cdc.gov](mailto:lrodgers@cdc.gov).

Visit our website at  
[www.usphs-scientist.org](http://www.usphs-scientist.org)

### The Scientist Officer Editorial Team

**Editors:** LCDR Loren Rodgers, LCDR Deborah Dee, CDR Carma Ayala

**Editorial Board:** CAPT Christine Benally, LCDR Renee Calanan, CDR Wei Guo, CDR Sally Hu, CDR Danisha Robbins, LCDR Scott Steffen, LCDR Fei Xu, CDR Yi Zhang

**Newsletter Team:** CDR Anne Dobmeyer, LCDR Theodore Garnett, LT Seth Green, CDR Sara Newman, LT Erin K Nichols, LCDR Anne Purfield, LCDR Richard Schobitz

