### Biographies In order of appearance



Major General Eric B. Schoomaker
Commanding General of the US Army Medical Research and
Materiel Command and Fort Detrick

MG Schoomaker was born into an Army family in Detroit, Michigan. In 1970 he graduated from the University of Michigan in Ann Arbor, was commissioned a Second Lieutenant as a Distinguished Military Graduate, and awarded a Bachelor of Science degree. He received his medical degree from the University of Michigan Medical School in 1975 and completed his Ph.D. in Human Genetics in 1979.

He completed his internship and residency in Internal Medicine at Duke University Medical Center in Durham, North Carolina, from

1976 to 1978, followed by a fellowship in Hematology at Duke University Medical Center in 1979. He is certified by the American Board of Internal Medicine in both Internal Medicine and Hematology. His military education includes completion of the Combat Care Casualty Course, Medical Management of Chemical Casualty Care Course, AMEDD Officer Advanced Course, Command and General Staff College, and the US Army War College.

General Schoomaker has held a wide variety of assignments. From 1979 until 1982, he was a research hematologist at Walter Reed Army Institute of Research. He served as Assistant Chief and Program Director, Department of Medicine, Walter Reed Army Medical Center, 1982-1988; Medical Consultant to Headquarters, 7th Medical Command, Heidelberg, Germany, 1988-1990; Deputy Commander for Clinical Services, Landstuhl Army Regional Medical Center, Landstuhl, Germany, 1990-1992; Chief and Program Director, Department of Medicine and Director of Primary Care, Madigan Army Medical Center, Tacoma, WA, 1992-1995; Director of Medical Education for the Office of The Surgeon General/HQ USAMEDCOM conducting a split operation between Washington, DC, and Fort Sam Houston, TX, 1995-1997; and Director of Clinical Operations at the HQ USAMEDCOM, February to July 1997. From July 1997 to July 1999, he commanded the USA MEDDAC (Evans Army Community Hospital) at Fort Carson, CO. He attended the US Army War College in Carlisle Barracks, PA, from 1999 to 2000 followed by assignments as the Command Surgeon for the US Army Forces Command (FORSCOM) from July 2000 to March 2001, and Commander of the 30<sup>th</sup> Medical Brigade headquartered in Heidelberg, Germany, from April 2001 to June 2002. Prior to his current assignment as Commanding General of the US Army Medical Research and Materiel Command and Fort Detrick, he was Commanding General of the Southeast Regional Medical Command/Dwight David Eisenhower Army Medical Center from June 2002 to June 2005.

In August 2002, The Army Surgeon General appointed General Schoomaker to the position of Chief of the Army Medical Corps.

His awards and decorations include the Distinguished Service Medal, the Legion of Merit with four oak leaf clusters, the Meritorious Service Medal with two oak leaf clusters, the Joint Service Commendation Medal, the Army Commendation Medal, the Army Achievement Medal and the Humanitarian Service Medal. He has been honored with the Order of Military Medical Merit and the "A" Proficiency Designator and holds the Expert Field Medical Badge.

General Schoomaker is married and has three children.



## Dr. Bruce A. Fuchs, Director of the National Institutes of Health's (NIH) Office of Science Education (OSE).

Dr. Fuchs is responsible for monitoring a range of science education policy issues and providing advice to NIH leadership. He also directs the creation of a series of K-12 science education curriculum supplements that highlight the medical research findings of the NIH. The NIH Curriculum Supplement Series is designed to meet teacher's educational goals as outlined in the National Science Education Standards and is available free to teachers across the nation. The office also actively creates innovative science and career education Web resources, such as the

*LifeWorks* career exploration site, accessible to teachers and students across the nation. These resources are available at http://science.education.nih.gov

Dr. Fuchs is serving on the Education and Workforce Development working group of the *National Science and Technology Council* (NSTC) and on working groups of the Department of Education's *Academic Competitiveness Council* (ACC). He was a member of the K-12 education focus group for the National Academy of Science's report *Rising Above the Gathering Storm*. (The *Gathering Storm* report led the President to propose the *American Competitiveness Initiative* during his 2006 State of the Union speech.) In 2005, Dr. Fuchs was requested by the Department of Education to serve as the U.S. representative to the Asian Pacific Economic Cooperation (APEC) meeting on *Best Practices in Math and Science Education*. For a number of years Dr. Fuchs was the NIH representative to the Department of Education's *National Education Research Policy and Priorities Board* (NERPPB) That experience led to his continuing interest in the debate over how to make educational research more effective.

Prior to coming to NIH, Dr. Fuchs—an immunologist who did research on the interaction between the brain and the immune system—was a researcher and teacher on the faculty of the Medical College of Virginia. He had grant support from both the National Institute of Mental Health and the National Institute on Drug Abuse. He has a B.S. in Biology from the University of Illinois and a Ph.D. in Immunology from Indiana State University. He was born and raised in Springfield, Illinois (although not actually in a corn field as he sometimes claims.)



## Linda Burgee, Ed.D. Superintendent of Frederick County Public Schools

A Frederick County native, Dr. Burgee began her education career with Frederick County Public Schools (FCPS) in 1976 as an elementary teacher. In the years since, she has advanced through the district's administrative ranks, rising from assistant principal and principal to elementary instructional director and then associate superintendent. In June 2004, Dr. Burgee was appointed Superintendent of FCPS, which today includes leadership of 5,000 employees and the education of more than 40,000 students.

Committed to working with families, community agencies and organizations to support student achievement, Dr. Burgee is involved in a number of community organizations, including the Rotary Club of Frederick and the Committee for Frederick County. In 2005, the Frederick County Commission for Women honored her with the Frederick Woman of Achievement Award.

Dr. Burgee believes that public education serves as the foundation for a community's quality of life and that all children deserve the very best possible opportunity to learn and grow.



# Carol W. Eaton, Ph.D. President of Frederick Community College

Dr. Carol W. Eaton assumed her duties as the seventh President of Frederick Community College (FCC) in August of 2005. Prior to joining FCC, she served as the Vice Chancellor for Community Colleges at the State University of New York (SUNY), and as President of Clinton Community College in Plattsburgh, New York. Carol has earned all of her degrees from the State University of New York beginning with an Associate in Applied Science Degree in Data Processing from SUNY Cobleskill. She also has a bachelor's degree in Mathematics, a master's degree in Mathematics Education, and a Ph.D. in Curriculum and Instruction with major emphasis in Mathematics Education from SUNY Albany.

To ensure that FCC is responding to the needs of the Frederick community, Carol gains insight from her involvement in a wide variety of organizations. Her community activities include the Frederick Rotary, Fort Detrick Community Liaison Council, as well as board positions with the Business Development Advisory Council, Frederick Innovative Technology Center, Goodwill Industries of Monocacy Valley, and National Institute for Leadership Development. Along with the presidents of the other 15 community colleges in the state, she is extremely active in the Maryland Association of Community Colleges.



#### Donna L. Vogel, M.D., Ph.D Deputy Director, Ellison Medical Foundation

Donna Vogel is a graduate of Bryn Mawr College, and of the Medical Scientist Training Program at the Albert Einstein College of Medicine where she received her Ph.D. in developmental biology and her M.D. with a subspecialty in endocrinology.

In 1980 Dr. Vogel joined NIH as a clinical fellow in the National Institute of Child Health and Human Development, conducting clinical and basic research relating to infertility and reproductive medicine. She moved to the extramural program in 1987 to manage the Reproductive Medicine portfolio, and worked as a program director for 13 years in positions of increasing responsibility. These included Training Officer for the Reproductive Sciences Branch,

covering training and career development activities, and minority/disability issues; Associate Branch Chief for Clinical Research, and Acting Deputy Director, Center for Population Research.

For many years, Dr. Vogel has been an advisor to NIH on women's health, in various capacities. In 1999 she worked with the Office of Research on Women's Health to create and manage the innovative career development grant program, "Building Interdisciplinary Research Careers in Women's Health."

From 2001 to 2005, Dr. Vogel worked at the National Cancer Institute. She was the first Director of its Fellowship Office, dedicated to enhancing the professional experience for postdoctoral fellows. She continues to serve on the Advisory Board of the NIH Visiting Fellows Committee, and is especially interested in career development and mentoring.

Dr. Vogel has served on the Executive Council of the American Society of Andrology, and has chaired and served on numerous committees within the government and for professional organizations. She has organized many workshops, published research and administrative papers and book chapters, and has received awards from NICHD, the US Public Health Service, professional societies, and community groups.



Debra L. Yourick, Ph.D. Associate Director for Research, Marketing and Policy Development, WRAIR

Dr. Yourick received her Ph.D. in Pharmacology and Toxicology in 1987 from the University of Kansas. In 1988, She accepted a position working for Dr. James Meyerhoff, Division of Neuropsychiatry, at the Walter Reed Army Institute of Research (WRAIR) in Washington, DC. Her initial work involved studies of acquired epilepsy and head injury. Since 2004, her position at WRAIR has been that of Associate Director for Research, Marketing and Policy Development, where she works with public affairs and news agencies from around the world. She is involved in communicating the Institute's scientific studies in the areas of

combat casualty care, infectious diseases, military operational medicine and chemical and biological defense to the public. She reviews and provides guidance to augment funding of these research endeavors for the Institute's scientists. She continues active research in the area of chemical defense and studies new therapeutic options to protect the brain from chemical weapons such as nerve agents. Other active research areas include neurotoxicity as a consequence of malaria prophylaxis and novel antimalarial drugs.

She is very interested in the education of young people, especially in the sciences, and is the Co-Director of Science Education Programs at WRAIR working with the Department of Defense Science and Engineering Apprentice Program. She and Dr. Marti Jett have created and received National Institutes of Health funding for the Gains in the Education of Mathematics and Science (GEMS) program which was recently recognized as a 'best practice' by the Office of the Assistant Secretary of the Army (Acquisition, Logistics and Technology). The GEMS program is currently being disseminated nationally to other Army research laboratories (including Fort Detrick) throughout the Major Commands (MACOMS). The programs included over 600 students at WRAIR in 2005. Their work with student programs was recently featured in a cover story by the Washington Post Magazine (31 July 2005). She is active in her community and professional societies with respect to outreach in science education through lectures and volunteering.



R. Daniel Cunningham, Jr., Ed.D. Deputy Superintendent, Frederick County Public Schools, Frederick, Maryland

For 32 years, Dr. R. Daniel Cunningham, Jr. has been a leader in education. He began his affiliation with Frederick County in 1983 first serving as an Assistant Principal for middle and high schools. As his career progressed, Dr. Cunningham's leadership roles included working as Principal of a middle and high school, and as Assistant to the Superintendent, Associate Superintendent and currently, he is the Deputy Superintendent. Prior to his work with Frederick County Public Schools, Dr. Cunningham was a teacher, counselor and member of the administration of the Caroline

County Public Schools for almost a decade. Dr. Cunningham has published and presented widely on high school block scheduling, dropout prevention and leadership development. During his career, Dr. Cunningham has been recognized for his commitment to excellence in educating students by the U.S. Department of Education as Principal of a Blue Ribbon School, by The Washington Post as a Distinguished Educational Leader, and by colleagues in the Frederick County Public Schools as Administrator of the Year. Dr. Cunningham's professional affiliations include membership in the National and Maryland Association of Supervision and Curriculum Development, American Association of School Administrators, and in the College Board, where he sits on the Middle States Regional Advisory Board. In addition, he is currently the chair of the

local Chamber of Commerce Education Committee and he is an adjunct professor at Towson University in their graduate educational leadership program. Dr. Cunningham holds B.S. and M.Ed. Degrees from Towson University, Baltimore, Maryland and an Ed.D. from Nova Southeastern University, Fort Lauderdale, FL.



#### Keith Thompson STEM Education and Workforce Development Office of the Director for Basic Research, DoD

Keith Thompson has been employed by the Department of Defense since 1985 and was on assignment from the Defense Technical Information Center to the Office of the Secretary of Defense from 1992 until 2004. Keith became involved in STEM education issues in 1994 and has represented OSD on numerous interagency workforce and education committees including several subcommittees and working groups of the President's National Science and Technology Council. The Director, Defense Research and Engineering identified the need within his office for full time attention to the task of organizing the DoD STEM outreach efforts and created a position to fulfill that role. Mr.

Thompson was selected for that task in 2004 and now serves as the Manager of DoD's Science, Mathematics and Engineering Education and Workforce Development efforts.

#### Elizabeth Leffel, Ph.D., M.P.H. Research Toxicologist, USAMRIID

Dr. Leffel received her Bachelor of Science degree in Biochemistry and Nutrition from Virginia Polytechnic Institute and State University, Blacksburg, VA and her Masters in Public Health in Occupational and Environmental Health from The George Washington Univ. in 1996. She received her Ph.D. in Pharmacology and Toxicology from the Medical College of Virginia/Virginia Commonwealth University in 2002. Later that year she came to the U.S. Army Medical Research Institute of Infectious Diseases, Ft. Detrick and joined the Center for Aerobiological Sciences as an Aerobiology Toxicologist; developing in vivo models for studies on aerosolized biological threat agents. In addition to her research, she has had an interest in science education since 1999, at which time she developed courses and laboratory experiments for teaching high school students in the Questers Program. Dr. Leffel expanded this interest to the Botetourt County Young Scholars program, where she organized and taught "hands-on" toxicology classes to elementary school students. Although she found teaching college level and graduate level courses rewarding, her primary interests remain in younger students. This was made evident during the spring/summer of 2006 in which she was an active leader in establishing the first Gains in the Education of Mathematics and Science (GEMS) program in West Frederick Middle School modeled after a similar program at WRAIR.

#### Marti Jett, Ph.D. Chief, Department of Molecular Pathology, Walter Reed Army Institute of Research

As a research scientist, Dr. Jett's lab has focused on host-pathogen interactions as a means to identify "stage-specific" biomarkers to indicate the progression of illness and utilize stage-appropriate therapeutic approaches.

She has been a strong supporter, since the mid-80's, of the Science and Engineering Apprentice Program (SEAP) in which talented 11-12<sup>th</sup> grade high school students work in DoD laboratories during the summer. She took over the administration of the program at WRAIR in 1991. It became clear that to infuse diversity into SEAP, it would require reaching out to younger

students. Due to demands of her full-time research responsibilities, the new effort would need a different approach. She noticed that one of her very capable college students was a "natural" in talking and working with the high school students and came up with the idea of the "near-peer" approach, in which young Jr/Sr high school students (in groups of 4-6) would carry out well-designed, exciting experiments in a teaching lab at WRAIR under the guidance of the well-trained college student. These internships were 1-2 weeks in duration and during that time, the college student would have the opportunity to describe college life and what it took to get there, including a strong emphasis on taking the highest level math classes in school. This program "Gains in the Education of Math and Science" (GEMS) showed success by 1997, with the young 8-9<sup>th</sup> graders, developing science skills. Many chose science majors in college and are now returning to work in our laboratories as young college students.

In 2000, Dr. Jett was awarded a research grant (NIH, National Center for Research Resources) to optimize and characterize the GEMS internship program, and in 2004, Drs. Jett and Yourick were awarded a second grant to design, carry out and characterize the dissemination of GEMS to other sites. Dissemination has been carried out successfully at 3 other DoD research laboratories and the George Washington University for 3 years. During the summer of 2006, dissemination occurred at the Salish-Kootenai College, Pablo, MT (Flathead Indian Reservation) and West Frederick Middle School (Frederick, MD).

## Carrie Arnold-Gutierrez Field Engineering Manager for Bechtel Construction Operations

Ms Arnold-Gutierrez has a Bachelor's of Science degree in Civil Engineering from Texas A&M University and over 18 years of experience in the construction industry. She has worked for Bechtel at the Department of Energy Savannah River Site in South Carolina, Houston, TX and is currently working in Bechtel's office in Frederick, Maryland, as the Field Engineering Manager for Bechtel Construction Operations. Throughout her career Carrie has been an advocate for developing the next generations of Bechtel employees. Recognizing the growing gap in students pursuing careers in the engineering and construction professions, she worked with the ACE Mentor Program of America to start a chapter in Frederick to encourage high school students to follow in her footsteps.

# Barbara Birnman Public Affairs Specialist Outreach and Special Programs, National Cancer Institute

Ms. Birnman holds a Bachelor of Arts Degree in Business with a minor in Journalism from the University of Maryland University College. She has 30 years of federal service; four years with the National Eye Institute and the remaining 26 years with the National Cancer Institute. Prior to that, she worked in private industry for ten years. In her ten years at the NCI-Frederick, she has helped to develop and administer educational programs and internships for students K-12 and undergraduates She is also involved with community outreach initiatives including but not limited to the NIH Speakers Bureau and Science Fair Judges listserv, conducting facility tours, arranging lectures, presentations, and interviews for the press, student groups, teachers, and other community based groups, and responding to new educational and community based challenges and initiatives by serving on advisory boards and focus groups and other related committees while consistently interacting with representatives from local, state, and national educational and community-based organizations. She is also involved with coordinating special events for employees at the NCI-Frederick and Fort Detrick.

#### Diana Sherman USDA Biologist, Equal Opportunity/CR Representative

Ms. Diana Sherman is a Biologist working in the Plant Virology Laboratory at the U.S. Department of Agriculture, Foreign Disease Research Unit at Fort Detrick. Since 2004, she has also served as the Unit's Equal Opportunity/Civil Rights representative focusing her efforts on improving the educational opportunities for local and minority students. She has been active in instituting a formal summer internship program, as well as recruiting more heavily within Maryland for students. Diana has also worked toward diversifying the recruitment process for administrative and technical staffing. Diana received a BS in Biochemistry from Virginia Polytechnic Institute and State University in 1999. Prior to joining USDA-ARS-FDWSRU, she worked for the Biological Defense Research Directorate (Naval Medical Research Center) as a molecular biology technician for 2 years. She is an active member of the North Atlantic Area EO/CR Committee, the Fort Detrick Special Emphasis Program Committee and the Education and Training Working Group of the Scientific Interactions Subcommittee.



# Freeman A. Hrabowski, Ph.D. President, The University of Maryland, Baltimore County

Dr. Hrabowski has served as President of UMBC (The University of Maryland, Baltimore County) since May, 1992. His research and publications focus on science and math education, with special emphasis on minority participation and performance. He serves as a consultant to the National Science Foundation, the National Institutes of Health, and universities and school systems nationally. He also sits on several corporate and civic boards. Examples include the Carnegie Foundation for the Advancement of Teaching, Constellation Energy Group, the France-Merrick Foundation, Marguerite Casey Foundation (Chair), McCormick & Company, Inc., Mercantile Safe Deposit & Trust Company, and the Urban Institute.

Examples of recent awards or honors include election to the American Academy of Arts & Sciences and the American Philosophical Society; receiving the prestigious *McGraw Prize in Education*, the U.S. *Presidential Award for Excellence in Science, Mathematics, and Engineering Mentoring*, and the Columbia University *Teachers College Medal for Distinguished Service*; being named a Fellow of the American Association for the Advancement of Science and *Marylander of the Year* by the editors of the *Baltimore Sun*; and being listed among *Fast Company* magazine's first "Fast 50 Champions of Innovation" in business and technology. He also holds a number of honorary degrees, including most recently from Princeton University, Duke University, the University of Illinois, the University of Alabama-Birmingham, Gallaudet University, Goucher College, the Medical University of South Carolina, and Binghamton University.

He has co-authored two books, *Beating the Odds* and *Overcoming the Odds* (Oxford University Press), focusing on parenting and high-achieving African American males and females in science. Both books are used by universities, school systems, and community groups around the country.

A child-leader in the Civil Rights Movement, Dr. Hrabowski was prominently featured in Spike Lee's 1997 documentary, *Four Little Girls*, on the racially motivated bombing in 1963 of Birmingham's Sixteenth Street Baptist Church.

Born in 1950 in Birmingham, Alabama, Dr. Hrabowski graduated at 19 from Hampton Institute with highest honors in mathematics. At the University of Illinois at Urbana-Champaign, he received his M.A. (mathematics) and four years later his Ph.D. (higher education administration/statistics) at age 24.