

Warfighter Nutrition: Advanced Technologies and Opportunities

15–16 JULY 2008

CONFERENCE ORGANIZERS



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**WARFIGHTER NUTRITION:
ADVANCED TECHNOLOGIES AND OPPORTUNITIES
15–16 JULY 2008**

DAY 1: 15 JULY 2008

0730-0830 *Registration and Breakfast*

0830-0845 *Welcome:* Dr. Dale C. Smith, Senior Vice President, USU

OPENING ADDRESS

0845-0915 Ms. Ellen Embrey, Deputy Assistant Secretary of Defense for Force Health Protection and Readiness: A Charge to Action –Warfighter Nutrition

FUELING THE FORCES: PRACTICAL APPROACHES

0915-0930 21st Century Military Nutrition: Considerations & Approaches:
Dr. Andrew Young, Chief, Military Nutrition Division, USARIEM

0930-0945 Fueling the Forces: LT Ericka Cisco, SP, USA & COL Michael Coss, IN, USA

0945-1000 See The Potential, Plan The Future: Healthy Market Trends: Practical Applications: Tina Reddington, Suzanne Snyder

1000-1015 75th Ranger Regiment Nutrition Program: LTC Russ Kotwal, MC, USA

1015-1030 *Break*

1030-1045 NAVSUP Food Service Initiative: Ms. Jennifer Person, RD

1045-1100 Wright Patterson Medical Center Dining Facility Initiatives:
Lt Col Jane Heetderks-Cox, USAF, BSC

1100-1200 Brainstorming Discussion: COL Gaston Bathalon & Lt Col Heetderks-Cox

1200-1300 *Lunch*

KEYNOTE ADDRESS

1300-1330 ADM Patrick Walsh, Vice Chief of Naval Operations:
A Line View of Nutrition in the Military

PERFORMANCE OPTIMIZATION: PRACTICAL APPROACHES

1330-1345 Recovery Meals: Ms. Lori Tubbs, MS, RD, CSCC, Naval Special Warfare

1345-1400 Comfort Foods and Mood: Dr. Tracy Sbrocco, USUHS

1400-1415 Choose to Lose: Lt Col Tammy Lindberg, USAF, BSC

1415-1430 Making it Fresh: COL George Dilly, SP, USA

1430-1530 Operational Nutrition Needs

Panel Leader: COL Francis O'Connor, MC, USA

Panel Members:

Col James Wright, USAF, MC, Special Tactics Group Surgeon, AFSOC

CAPT Neal Naito, MC, USN, Director of Public Health, BUMED

Col Steven Hadley, USAF, MC, Eglin Air Force Base

COL Rocky Farr, MC, USA, Command Surgeon, SOCOM

CAPT Michael Cubano, MC, USN, Command Surgeon, SOUTHCOM

1530-1545 *Break with Snack*

1545-1600 Quercetin and Performance: Dr. Mark Davis, University of South Carolina

1600-1700 Brainstorming Discussion: Co-Leaders—COL Rocky Farr & CAPT Neal Naito

1700 *Adjourn*



DAY 2: 16 JULY 2008

0730-0815 *Breakfast*

0815-0830 *Morning Announcements*

NUTRITIONAL ALTERNATIVES FOR RESET AND HEALING: NOVEL APPROACHES

0830-0845 Omega 3 and TBI/PTSD: LTC Michael Lewis, MC, USA

0845-0900 Vitamin D and Influenza: CDR John Umhau, MD, MPH, USPHS

0900-0915 Potential Anti-Inflammatory Foods and Products: Dr. David Gangemi,
Clemson University

0915-0930 “Zone”-ing in on Healthy Eating: COL Gaston Bathalon, SP, USA

0930-0945 Lipid Profiles and SOF: LCDR James Mucciarone, MC, USN

0945-1000 Nutrigenomics and Healing: Dr. Adam Russell, SCITOR

1000-1015 *Break*

1015-1115 Medical and Nutritional Challenges During Reset and Healing

Panel Leader: BG Rhonda Cornum, MC, USA

Panel Members:

CAPT Miguel Cubano, MC, USN, SOUTHCOM

Col Warren Dorlac, USAF, MC, FS, Trauma Consultant

CAPT Robert Hain, MC, USN (Ret), POW Center

LTC Evan Renz, MC, USA, USAISR Burn Center

CDR Jack Tsao, MC, USN, USU

1115-1200 Brainstorming Discussion: LTC Evan Renz & CAPT Robert Hain

1200-1300 *Lunch*

ADVANCED TECHNOLOGY RESEARCH AND DEVELOPMENT: THE FUTURE

1300-1310 Charge to Breakout Groups: BG Cornum

1310-1500 Breakout Groups and Leaders

Fueling the Forces: COL Gaston Bathalon & CAPT Neal Naito

Performance Optimization: Col James Wright & LTC Russ Kotwal

Reset and Healing: CDR John Umhau & CAPT Miguel Cubano

1500-1515 *Break with Snack*

1515-1600 Reports from Breakout Groups

1600-1630 BG Rhonda Cornum: Discussions for Future Vision

1630 *Adjourn*

Keynote Speakers

ELLEN P. EMBREY

DEPUTY ASSISTANT SECRETARY OF DEFENSE FOR FORCE HEALTH PROTECTION AND READINESS

Ms. Embrey is the Deputy Assistant Secretary of Defense for Force Health Protection and Readiness in the Office of the Assistant Secretary of Defense for Health Affairs. She oversees Department-wide efforts to develop and implement policies and programs relating to DoD deployment medicine, force health protection, national disaster support, and medical readiness for 2.3 million service members.

Under her direction, Force Health Protection and Readiness Policy and Programs proactively initiates policies and programs that address deployment-related health threats to the welfare of U.S. service members and their families, as well as integrating medical lessons learned from previous conflicts into current policy, doctrine and practice. This dynamic process involves all components of the military health care system, emphasizing the relationship between military medicine and the fighting forces it supports. The health care policies and programs overseen or developed under Ms. Embrey's direction have ensured the healthcare needs were met for the more than 1.3 million service members who have deployed to Operations Enduring Freedom and Iraqi Freedom since 2001, as well as providing comprehensive deployment health information to their families.

In February 2004, Ms. Embrey was given a special temporary assignment when she was appointed Director of the DoD Task Force on Care for Victims of Sexual Assaults. For six months, the task force reviewed how the Defense Department handled the treatment of and the care for victims of sexual assault, with particular attention to the special issues in a combat theater. Its recommendations led to the establishment of the Sexual Assault Prevention and Response Office, a single point of accountability for addressing sexual assault matters.

Before coming to Health Affairs, Ms. Embrey held a variety of senior and executive level positions in the Office of the Assistant Secretary of Defense for Reserve Affairs (OASD/RA) from 1987-2001, where she worked to ensure that the reserve components of the U.S. Armed Forces, which make up more than half of the U.S. military, were adequately trained, equipped and ready to serve when required. She performed the duties of the Assistant Secretary of Defense for Reserve Affairs during the transition to the new administration, was the Chief of Staff (2000-2001) and the Deputy Assistant Secretary of Defense for Military Assistance to Civil Authorities (1998-2001), and held senior staff and management positions relating to reserve component program analysis and oversight, fiscal and budget oversight, legislative and intergovernmental relations, and information and resource management.

Prior to her OASD/RA assignments, Ms. Embrey held staff and management positions at the Defense Contract Audit Agency Headquarters (1981-1987) and the U.S. Office of Personnel Management (1978-1981). She began her career as a management intern at the U.S. Civil Service Commission (1976-1978), following her graduation from Virginia Tech in 1976 with a Bachelor of Science degree.

ADMIRAL PATRICK M. WALSH

VICE CHIEF OF NAVAL OPERATIONS

Admiral Patrick M. Walsh graduated with honors from Jesuit College Preparatory in Dallas, Texas, and was the second student in the 60 year history of the school to receive both the Distinguished Graduate and Distinguished Alumnus awards. He graduated from the United States Naval Academy in 1977 with a Bachelor of Science degree.

As a Naval Aviator, Adm. Walsh began operational flying with the "Golden Dragons" of Attack Squadron 192, deployed to the Indian Ocean aboard USS America (CV 66), and was later selected by Commander, Light Attack Wing Pacific, as the Junior Officer/Tailhook Pilot of the Year. He then reported to Air Test and Evaluation Squadron 5 as an Operational Test Director until selection to the Navy Flight Demonstration Squadron, "Blue Angels," where he flew the Left Wingman and Slot Pilot positions. When he returned to the fleet, Adm. Walsh joined the "Golden Warriors" of Strike-Fighter Squadron 87 as the Operations Officer and flew combat missions in support of Operations Desert Storm and Provide Comfort from USS Theodore Roosevelt (CVN 71).

ADM. Walsh commanded the "Gunslingers" of Strike-Fighter Squadron 105 for missions in support of Operations Southern Watch and Deny Flight from USS Dwight D. Eisenhower (CVN 69). He commanded Carrier Air Wing 1 for deployment in support of Operation Southern Watch aboard USS John F. Kennedy (CV 67), and Carrier Group 7/USS John C. Stennis Strike Group for a deployment to the western Pacific Ocean. Most recently, he commanded U.S. Naval Forces Central Command and U.S. 5th Fleet, while also commanding the Combined Maritime Forces conducting Operations Enduring Freedom, Iraqi Freedom and maritime security operations in the Central Command area of responsibility.

ADM. Walsh has been a Special Assistant to the Director of the Office of Management and Budget as a White House Fellow. He chaired the Department of Leadership, Ethics and Law at the U.S. Naval Academy, served as the Executive Assistant to the Chief of Naval Personnel, and reported to the Joint Staff for his first flag assignment as the Deputy Director for Strategy and Policy, (J-5). He also served concurrently as the Director, Navy Quadrennial Defense Review and Director, Navy Programming Division. He attended graduate studies in the International Relations curriculum at the Fletcher School of Law and Diplomacy, Tufts University, as part of the Admiral Arthur S. Moreau Scholarship Program. Adm. Walsh graduated first in his class and received a Master of Arts in Law and Diplomacy degree, entered the Doctorate Program with distinction and subsequently received a Ph.D.

His awards and decorations include the Distinguished Service Medal, Defense Superior Service Medal, Legion of Merit (4), Meritorious Service Medal (2), Air Medal with Combat V, Strike/Flight Medal (5), Navy Commendation Medal (3) with Combat V, Navy Achievement Medal, Presidential Service Badge, and numerous other awards.

BRIGADIER GENERAL RHONDA CORNUM, PhD, MD

ASSISTANT SURGEON GENERAL FOR FORCE PROJECTION

BG Rhonda Cornum is the U.S. Army's Assistant Surgeon General for Force Projection. She was commissioned into the Army and began a research career in 1978 after receiving her Ph.D. in nutrition and biochemistry from Cornell. Assigned to the Letterman Army Institute of Research, she focused on wound healing metabolism and improving liquid blood preservation and transfusion therapy. From 1982-1986, she attended medical school at the Uniformed Services University, received her MD, and completed a General Surgery Internship at Walter Reed Army Medical Center. In 1987, she transferred to the Army Aeromedical Center at Fort Rucker, Ala., first as Chief, Primary Care and Community Medicine, then Chief of Aviation Medicine. In 1989, research again became her primary duty as Chief, Crew Life Support Branch at the Army Aeromedical Research Laboratory, also at Fort Rucker. While there, her interests revolved around enhancing pilot performance and use of helmet-mounted displays in advanced attack helicopters.

Research was interrupted by the Persian Gulf conflict. In August of 1990, BG Cornum was assigned as the flight surgeon to the 2/229 Attack Helicopter Battalion. During the last week of February 1991, while performing a search and rescue mission for a downed Air Force F-16 pilot, her Blackhawk helicopter was shot down. Five of the eight-person crew were killed. The three survivors, including BG Cornum, were captured by Iraqi forces. She was repatriated on March 6, 1991.

BG Cornum attended Air Command and Staff College at Maxwell Air Force Base from 1991 through 1992. She began Urologic Surgery training in 1993. In addition to academic and clinical responsibilities, she renewed her blood and metabolic research interests, including use of the absorbable fibrin bandage, and evaluating alternate strategies for treating prostate cancer. Following graduation in 1998, she was assigned as the assistant DCCS and staff urologist at Eisenhower Army Medical Center in Augusta, Ga. She is Board certified in Urology and a Fellow in the American College of Surgeons and Aerospace Medical Association. She took command of the 28th Combat Support Hospital at Fort Bragg, NC, on July 25, 2000. In this position, she deployed as the Medical Task Force Commander to Bosnia for SFOR 9, and deployed three subordinate units to Afghanistan for Operation Enduring Freedom. Following that command tour she attended the National War College and graduated in June 2003. BG Cornum then commanded Landstuhl Regional Medical Center, Germany. During this time, Landstuhl cared for over 26,000 war heroes, including 5,540 battle injuries, evacuated from Iraq and Afghanistan. In June 2005, she became the U.S. Army Forces Command (FORSCOM) Surgeon, Fort McPherson, Ga., where her responsibilities included casualty care of the deployed forces and providing medical expertise to the higher headquarters for all CONUS-based Army Forces.

In addition to senior flight surgeon wings, BG Cornum wears the airborne, air assault, and the expert field medic badges. Decorations include the Legion of Merit (with two oak leaf clusters), Distinguished Flying Cross, Bronze Star, Meritorious Service Medal (with four oak leaf clusters), Purple Heart, Air Medal, POW Medal and others. Dr. Cornum has written or co-authored one book, four book chapters, and numerous scientific articles. She sits on numerous committees and advisory boards, including the Secretary's POW Advisory Committee for the VA.

DALE C. SMITH, PHD

UNIFORMED SERVICES UNIVERSITY, SENIOR VICE PRESIDENT AND PROFESSOR

Dale C. Smith is Professor and Senior Vice President of the Uniformed Services University of the Health Sciences, Bethesda, Maryland. In 1979 he received his Ph.D. in the History of Medicine from the University of Minnesota under the direction of Professor Leonard G. Wilson. From that time until he moved to the Uniformed Services University in 1982, he was on the Faculty of the University of Minnesota. He is the author of numerous papers on medical history. His critical edition of William Budd's Essay on the Causes of Fevers was published by the Johns Hopkins University Press in 1984. His most recent book is a centennial history of the American Gastroenterological Association (1999). Dr. Smith is active within the historical profession, having served as chairman of the program committee (1984) of the American Association for the History of Medicine (AAHM), as a member of the NIH Special Study Section on the History of the Life Sciences on two occasions, as a member of the Council of the AAHM, as Associate Editor of the Journal of the History of Medicine and Allied Sciences, on the editorial board of the Bulletin of the History of Medicine and as the editor of the AAHM NewsLetter. He is also a Consulting Historian for Military Medicine, the journal of the Association of Military Surgeons of the United States. In 1987 he received the Laurance D. Redway Award for Excellence in Medical Writing. He has been honored with the USU University Medal for his commitment to the academic life of the University and by the medical students with the honor of being named the Outstanding Civilian Educator in 2005. His professional interests include the history of graduate medical education, the history of infectious diseases, the history of surgery, and the problems of patient evacuation in military operations.

Speakers and Panel Members

FUELING THE FORCES: PRACTICAL APPROACHES

ANDREW J. YOUNG, PhD, USARIEM

Dr. Andrew Young is a research physiologist and Chief of the Military Nutrition Division at the US Army Research Institute of Environmental Medicine (USARIEM) in Natick, Massachusetts. He obtained a BS in Biology and Commission in the US Army at Virginia Military Institute, and a Ph.D. in Physiology at North Carolina State University. He then served in the US Army with assignments at USARIEM (1977-1981) and at the Walter Reed Army Institute of Research (1981-1983). After leaving active duty, Dr. Young continued government service as a civilian scientist at USARIEM. Dr. Young has authored over a hundred peer-reviewed articles in scholarly journals reporting research concerning stressors such as intense physical exertion, sleep restriction, nutritional deprivation and exposure to extremes of heat, cold and high altitude. He has also written many textbook chapters and is a frequent invited lecturer in academic and professional scientific colloquia. Dr. Young graduated from the US Army's Command and General Staff Officer's Course, and was awarded the Army Commendation Medal with Oak Leaf Cluster, the Department of Army Achievement Medal for Civilian Service, the Expert Field Medical Badge and the Army Medical Department's Order of Military Medical Merit. Dr. Young is a member of the American Physiological Society, a Fellow of the American College of Sports Medicine, and the Editor-in-Chief of the American College of Sports Medicine's flagship scientific journal, *Medicine and Science in Sports and Exercise*.

ERICKA M. CISCO, LIEUTENANT, RD, LD, SP, USA

Lieutenant Ericka Cisco is Chief of the Clinical Dietetics Branch at Martin Army Community Hospital in Georgia. She obtained her BS in Nutrition and Food Science from Georgia Southern University and completed her Dietetic Internship at Brooke Army Medical Center in San Antonio, Texas.

MICHAEL A. COSS, COLONEL, IN, USA

Colonel Michael Coss commands the 192d Infantry Brigade at Fort Benning, GA and is responsible for training approximately 15,000 Initial Entry Soldiers each year. He previously served as the CJ3 of Combined Joint Task Force-76 in Afghanistan during Operation Enduring Freedom and as G-3 for 10th Mountain Division (Light Infantry), Fort Drum, New York providing support for Operation Iraqi Freedom. He was the 2004 US Army Fellow at the Center for Strategic and International Studies and commanded 1-14 Infantry during Operation Joint Forge. His other command and staff assignments include operational deployments with the 75th Ranger Regiment, 2d Infantry Division, 9th Infantry Division, 10th Mountain Division, and 25th Infantry Division. Colonel Coss holds a Masters Degree from Harvard University and has attended Ranger School, the Command and General Staff College, and the Armed Forces Staff College.

SUZANNE SNYDER, SODEXO

Ms. Suzanne Snyder has served in a variety of positions, in operations as well as staff roles for Sodexo. Her career spans 28 years. Her responsibilities have included Project Manager for New Offer Development, Marketing Director & Sales Support for National Accounts working both nationally and internationally. In operations, she has served as District Manager, General Manager and Efficiency Analyst to utilize innovative approaches and achieve high standards of service and

trust with clients and customers to cultivate profitable business. Currently, Suzanne is in Sodexo's Government Services Division and oversees New Program Development, Culinary, Marketing, Procurement and Quality Assurance. The Government Services Division serves the USMC as well as Federal Agencies in the Continental United States. Suzanne resides in Chapel Hill, North Carolina with her husband and three children. She graduated from Cornell University's School of Hotel and Restaurant Administration.

TINA REDDINGTON, RD, LD, SODEXO

Ms. Tina Reddington began her career with the Marriott Corporation and has worked in the food service industry for 25 years. She has held positions in multiple facets of the industry from production manager, clinical nutrition manager, to Senior Manager of Procurement and Nutrition. Tina has led a clinical nutrition team and provided operations and marketing excellence in a highly diverse campus environment at American University in Washington, DC. Tina currently provides nutrition, marketing and procurement support to the USMC food through Sodexo. She holds a Bachelors of Science in Nutrition and completed her clinical practice through Virginia Tech. She resides just outside of Charles Town, WV with her husband and 4 children.

RUSS S. KOTWAL, LIEUTENANT COLONEL, MC, USA

Lieutenant Colonel Russ Kotwal received his commission into the U.S. Army in 1985 upon graduation from Texas A&M University. He initially served with the 25th Infantry Division (Light) and Tripler Army Medical Center in Hawaii prior to obtaining post-baccalaureate education in Nutrition and attending medical school at the Uniformed Services University of the Health Sciences in Bethesda, Maryland. He completed an initial residency in Family Medicine and served as a battalion surgeon with the 3rd Battalion, 75th Ranger Regiment at Fort Benning prior to obtaining a Masters in Public Health from the University of Texas Medical Branch in Galveston, Texas. He completed his second residency in Aerospace Medicine with the Navy at the Naval Operational Medicine Institute in Pensacola, Florida and subsequently returned to Fort Benning where he is currently serving as the Regimental Surgeon for the 75th Ranger Regiment. He has served the Rangers for seven years, deploying to combat with them eight times, five times to Afghanistan and three to Iraq.

JENNIFER PERSON, RD

Ms. Jennifer Person is a Registered Dietitian currently working for Navy Food Service in Mechanicsburg, PA. She has been the Nutrition Program Manager for 6-1/2 years. She is responsible for providing healthy options for the ashore and afloat commands and providing nutrition education classes approved by the American Culinary Federation. She consults with Natick Laboratories on all food service issues from menu selections to product testing. In addition, she maintains the Armed Forces Recipes Service through Computrition and communicates key messages to the fleet via Food Flashes.

JANE E. HEETDERKS-COX, LIEUTENANT COLONEL, USAF, BSC

Lieutenant Colonel Jane Heetderks-Cox obtained her BS in Dietetics from Western Michigan University and her MS in Nutrition from Texas Woman's University. She is currently the Nutritional Medicine Flight Commander at Wright Patterson Medical Center and directs nutrition care and food production operations at Air Force Medical Center's largest Medical Treatment Facility in Ohio. She is a member of the American Dietetic Association and the American Dietetic Association's Practice Group for Food and Culinary Professionals.

GASTON P. BATHALON, COLONEL, RD, PHD, SP, USA

Colonel Gaston Bathalon, Ph.D., is a Registered Dietitian currently working in the Military Nutrition Division as the Senior Operational Nutrition Research Staff Officer at the U.S. Army Research Institute of Environmental Medicine (USARIEM) in Natick, Massachusetts. His research interests include weight control, body composition assessment, and energy expenditure. He received his BS in Human Nutrition and Foods from the University of Vermont and an MS and Ph.D. in Human Nutrition Sciences from Tufts University. Colonel Bathalon is a member of the American Dietetic Association.

Performance Optimization: Practical Approaches

LORI A. TUBBS, MS, RD, CSCC

Ms. Lori Tubbs is a board certified sports nutritionist responsible for developing a comprehensive nutrition program supporting nutritional needs of SEAL operators and their family members. She assists in performance-enhancement trainings with athletic training staff to integrate injury prevention and wellness into current training practices and schedules on an ongoing basis. She supports nutrition initiatives with Navy Food Services in integrating recovery meals and performance-enhancing foods and supplements to be available in all training evolutions. Ms. Tubbs coordinates with Navy Health Promotion headquarters on best practices and updated nutrition trainings for Navy-wide GMT's and educational courses involving basic nutrition principles and performance nutrition. She obtained her B.A. in Athletic Training and Nutrition from the School of Sports Medicine and Physical Education of San Diego State University in 1990 and her MS in Health Services Administration, Community Health and Nutrition from the School of Health Science and Human Ecology of California State University in 1993.

TRACY SBROCCO, PHD, UNIFORMED SERVICES UNIVERSITY

Dr. Tracy Sbrocco is currently an Associate Professor of Medical & Clinical Psychology and Director of Research for the USU Center for Health Disparities at the Uniformed Services University in Bethesda, MD. She obtained her BS in Biology and Chemistry in 1983 from the University of Akron and her Ph.D. in Clinical Psychology from Vanderbilt University in 1994. She presently conducts research designed to promote long-term behavior change in the treatment of obesity. She develops and examines the efficacy of community-based weight management programs for African American women in the Washington, DC, metropolitan area. Her goal is to develop ways to empower communities to support behavior change that prevents weight-related diseases, including cardiovascular diseases, diabetes, and cancers. She is also involved in research examining ethnic differences in biological (e.g., HPA axis) and psychological (e.g., body image, anxiety) responses to stress, especially among people who are overweight or obese.

TAMMY J. LINDBERG, LIEUTENANT COLONEL, USAF, BSC

Lieutenant Colonel Tammy Lindberg is the Operations Officer/Food Production Flight Commander for the 59th Diagnostics and Therapeutics Squadron, encompassing the largest Nutritional Medicine Service and only Dietetic Internship in the Air Force. Commissioned as a "fully qualified" registered dietitian, she has over 21 years of active duty service. She earned the Adult and Childhood Weight Management Certifications from the American Dietetic Association, and is a sought-after conference speaker for the Major Aspects of Growth in Children (MAGIC) Foundation for Adult Growth Hormone Deficiency. She holds a BS in Human Nutrition and Foods from Washington State University, a MS in Resource Management from Chapman University, a MS in Biology/Nutrition

from Incarnate Word College, and is currently a Ph.D. student in Public Health and Community Education at Walden University. She has numerous local assignments as well as several that span Europe and Asia and throughout her career has been the consultant dietitian to numerous international and domestic air force bases. She has been appointed United States Air Forces in Europe (USAFE) Dietitian and Health Promotion Command Consultant and is currently the Air Education and Training Command (AETC) Consultant Dietitian for 12 AETC bases.

GEORGE A. DILLY, COLONEL, SP, USA

Colonel George Dilly is the 21st Chief Dietitian for the U.S. Army and the U.S. Army Medical Command Nutrition Program Manager. He has held a variety of policy, force structure, operational, and clinical positions in the Army Medical Department during the past 25 years. He holds a Ph.D. from Kansas State University, a Masters of Science from Boston University, and a Bachelors of Science from the University of Louisville. He is also a graduate of the National War College where he earned a Masters of Science in Strategic Studies. Colonel Dilly is a published author, a member of many professional and service organizations, and a proud father of two Boys Scouts.

FRANCIS G. O'CONNOR, COLONEL, MC, USA

Colonel Francis O'Connor obtained his BS from the United States Military Academy (1981), his MD from the State University of New York (1985) and completed his Family Medicine Residency at St. Joseph's Hospital Health Center in Syracuse, NY. He went on to earn an MPH from the Uniformed Services University of the Health Sciences in 2005. He has held positions as Command Surgeon, Special Operations Central (SOCCENT), Combined Forces Special Operations Coalition Command (CFSOCC), Director of Primary Care Sports Medicine at Dewitt Army Community Hospital and subsequently Chief of the Dewitt Family Health Center. He is currently Medical Director of the Consortium For Health and Military Performance (CHAMP) in the Department of Military and Emergency Medicine at USUHS in Bethesda, MD He is presently a member of the Board of Trustees, American College of Sports Medicine and a Board Member of the American Medical Society of Sports Medicine and the American Medical Athletic Association.

JAMES K. WRIGHT, COLONEL, USAF, MC

Colonel James Wright is the surgeon for the 720th Special Tactics Group (AFSOC), Hurlburt Field, FL. The 720th STG is comprised of Battlefield Airmen - Combat Controllers, Pararescuemen, Special Operations Weather Team members, and Tactical Air Control Party members. Colonel Wright is board certified in Surgery, Plastic Surgery, Hand Surgery, and Undersea and Hyperbaric Medicine, and has had a long term interest in nutrition, particularly as applied to wound healing and performance enhancement. He has directed or participated in several research projects in nutrition as part of performance enhancement for warfighters. His research interests are in battlefield trauma, traumatic brain injury, and performance enhancement in training and on the battlefield.

NEAL A. NAITO, CAPTAIN, MC, USN

Captain Neal Naito is currently the Director of Public Health at the Bureau of Medicine and Surgery, which is the headquarters of Navy Medicine in Washington, DC. He received his Bachelors of Science degree in Environmental Toxicology from the University of California, Davis in 1982. He joined the Navy in 1982 upon matriculation into the medical degree program of the Uniformed Services University of the Health Sciences (USUHS) in Bethesda, Maryland. After graduation from USUHS in 1986, he did his Internal Medicine internship at the Naval Hospital, Oakland, California. Upon completion of his internship, he received training in Undersea Medicine at the Naval Undersea

Medicine Institute, Groton, Connecticut and then did an extended tour as an undersea medical officer at Submarine Group Seven in Yokosuka, Japan. He completed his Internal Medicine residency training in 1994 at Naval Hospital, Oakland, and served as the Department Head for Internal Medicine at Naval Hospital, Groton. He returned to USUHS in 1999 for further training and earned his MPH in 2000. He finished a second residency in Occupational Medicine in 2001. He subsequently completed tours at the National Naval Medical Center, Bethesda, Maryland practicing Occupational Medicine and Internal Medicine. Prior to his present position at BUMED, Captain Naito was an Assistant Professor in Preventive Medicine and Biometrics at USUHS. Captain Naito's expertise in nutrition issues as it pertains to the Navy stems from its impact on the readiness of forces to deploy for operational missions.

STEVEN C. HADLEY, COLONEL, USAF, MC

Colonel Steven Hadley, MD, is one of ten USAF Pilot-Physicians: fully rated operational pilots concurrently functioning as trained physicians. He is an HH60G (PaveHawk) Pilot-Physician with over 4000 flight hours including 1500 NVG and 1500 Instructor Pilot flight hours. Colonel Hadley served four combat tours including commander, 366 Rescue Squadron (a flying squadron), ONW, 1999; Operations Officer, Joint Special Operations Aviation Component, OEF, 2001-2002; Flight Surgeon, 160 Special Operations Regiment, ODS, 1990-1991; and Pilot-Physician and flight surgeon, OEF, 2003. Colonel Hadley has served as a pilot on 51 combat missions. He completed five rescues behind enemy lines in OEF, was directly credited with saving 24 soldiers lives and was wounded in combat. Colonel Hadley is a West Point and USUHS graduate. He served twenty years in the Army and eight years in the USAF. He is American College of Surgeons State Faculty for Trauma Instruction and is also a current practicing eye surgeon, completing over 150 surgeries a year.

WARNER D. FARR, COLONEL, MC, USA

Colonel Warner "Rocky" Farr, Medical Corps, Master Flight Surgeon, U.S. Army enlisted in the Airborne Infantry in 1967. He graduated from the Air War College at Maxwell Air Force Base, Alabama before becoming the Command Surgeon, U.S. Army Special Operations Command at Fort Bragg, NC and later Tampa, FL. He has also served the U.S. Army Civil Affairs and Psychological Operations Command and the U.S. Army John F. Kennedy Special Warfare Center and School. He holds an Associate of Arts degree from the State University of New York, a Bachelor of Science from Northeast Louisiana University, obtained his Doctor of Medicine from the Uniformed Services University of the Health Sciences, and a Masters of Public Health from the University of Texas. In addition, he has completed medical residencies in aerospace medicine, and anatomic and clinical pathology. He is the only army officer to be board certified in these three specialties. Solo-qualified in the TH-55A Army helicopter, he received flight training in the T-37 and T-38 aircraft as part of his USAF School of Aerospace Medicine residency. He has completed numerous operational tours including Bosnia, Kosovo, Vietnam, Cambodia, & Afghanistan. He has an interest in military medical history and has published two books and numerous other publications. He currently lives in Texas with his wife, Dr. Kathleen Dunn Farr (LTC, USAR) and has two children: LTC David D. Farr, State Military Judge, Texas Army National Guard & Maj. Timothy A. Farr, USAF, serving in the Pentagon.

MIGUEL A. CUBANO, CAPTAIN, MC, USN

Captain Cubano is a Board Certified General Surgeon in the USN. He obtained his BS from the University of Massachusetts at Amherst in 1984 and his MD from Ponce School of Medicine, Ponce Puerto Rico in 1988. His surgical training included St Agnes Hospital Surgical program, the oldest community base surgical program in the nation, and a Fellowship at Johns Hopkins University

Hospital in Surgical Nutrition and Critical Care. Captain Cubano has held multiple leadership positions, previously CO/Chief of the Deployed Warrior Medical Management Center (DWMMC) at Landstuhl, Germany, the organization responsible for the swift transport of casualties and wounded from both theaters of operation through Germany to the USA for treatment and rehabilitation. He is currently the SOUTHCOM Surgeon General and has much operational experience, including a 6 month tour during Operation Iraqi Freedom in 2003. Captain Cubano is a published author and pioneer of the early stages of Telemedicine programs that are frequently used today.

J. MARK DAVIS, PHD, UNIVERSITY OF SOUTH CAROLINA

Dr. Mark Davis is a professor and Director of the Exercise Biochemistry Laboratory at the University of South Carolina. He obtained his BS in Physical Education/Biology from Cal Poly in 1976 and his Ph.D. in Exercise Physiology/Neuroscience from Purdue University in 1982. His areas of interest include the effects of nutrition and exercise on mental and physical performance during intense exercise and training in athletes and military personnel, physiological mechanisms of central nervous system and muscular fatigue and the effects of nutrition and exercise on immune function and susceptibility to infection and cancer.

Nutritional Alternatives for Reset and Healing: Novel Approaches

MICHAEL D. LEWIS, LIEUTENANT COLONEL, MC, USA

Dr. Michael Lewis is an Army Preventive Medicine physician where he is the head of the Division of Epidemiology and Biostatistics and Assistant Professor in the Department of Preventive Medicine at the Uniformed Services University. Prior assignments include tours at the joint US-Royal Thai Army medical research lab in Bangkok, Thailand, chief of the primary care and flight medicine clinics at the Pentagon and line officer in the 2nd and 7th Infantry Divisions. In addition to his medical degree from Tulane University, Dr. Lewis has a Masters Degree in Public Health from Johns Hopkins University, an MBA from American InterContinental University, and is a graduate of the US Military Academy at West Point. Diverging from his previous research in emerging infectious diseases, Dr. Lewis is currently developing a research program evaluating the use of omega-3 essential fatty acids in trauma patients.

JOHN C. UMHAU, COMMANDER, MD, MPH, USPHS

Dr. John Umhau earned a BS degree from Davidson College, an MD degree from Wake Forest University, and an MPH degree from Johns Hopkins University where he completed a residency in Clinical Preventive Medicine. He practiced emergency medicine in Wyoming, and was medical director of a group of community clinics in Seattle. He was medical director of Health Care for the Homeless in Baltimore before joining the USPHS. Presently, he is a Senior Clinical Investigator at the National Institute on Alcoholism and Alcohol Abuse of the National Institutes of Health. He has published articles describing biological abnormalities in alcoholics and perpetrators of violence, with a particular interest in the impact of nutrition on these issues. Currently he is working to determine the human brain requirement for the omega-3 fatty acid, docosahexaenoic acid, using positron emission tomography.

DAVID GANGEMI, PHD, CLEMSON UNIVERSITY

Dr. David Gangemi is the Director of the Institute for Nutraceutical Research and the Executive Director of the National Nutraceutical Center at Clemson University. He has a BS in Microbiology

from Clemson University (1969) and a Ph.D. in Virology/Immunology from the University of North Carolina School of Medicine, Chapel Hill (1973). His present areas of research include immune modulation in therapy of chronic disease, antiviral chemotherapy, and modulation of TH1 and TH2 responses in therapy and augmentation of vaccine effectiveness. He currently resides in Clemson, SC with his wife and three children.

JAMES MUCCIARONE, LIEUTENANT COMMANDER, MC, USN

Lieutenant Commander James Mucciarone graduated from the U.S. Naval Academy in 1991, completed Basic Underwater Demolition/SEAL Training, Class 179, obtained his MD from the Uniformed Services University of the Health Sciences School of Medicine in 2004 and completed Underwater Medical Officer Training in 2006. He served as an officer in Naval Special Warfare for nine years before medical school and is currently the Senior Medical Officer at Naval Special Warfare Group TWO.

ADAM RUSSELL, PHD, SCITOR

Dr. Adam Russell is a social anthropologist who received his Ph.D. from Oxford University as a Rhodes Scholar while studying "objective self-fashioning", the ways in which different groups incorporate various biomedical facts and technologies about the body and brain into their own self-narratives and identities. Later research has included the study of ways in which the Department of Defense and its subcultures are equipped to handle increasingly sophisticated "human performance enhancing" biotechnologies (drugs, techniques, machines, and genes or DTMGs) and how potential DoD competitors may approach those biotechnologies, leading to potential asymmetries and/or erosion of current U.S. human performance advantages. Presently, he is with Scitor Corporation as a consultant to various organizations, from Net Assessment to DDR&E to OUSD(I) to USA Rugby, looking at emerging DTMGs that could alter competitive landscapes, whether through disruptive revolutions or incremental evolutions.

WARREN C. DORLAC, COLONEL, USAF, MC

Colonel Warren Dorlac, MD graduated with a BS degree in Chemistry, magna cum laude, from Regis College in Denver in 1984 and is a 1989 Doctor of Medicine graduate of the Uniformed Services University of the Health Sciences. Following graduation from USU, he completed a general surgery residency at Wilford Hall U.S. Air Force Medical Center in San Antonio, Texas. He spent several years as a staff general surgeon at Air Force medical facilities in the Sacramento, California, area before completing a surgical critical care fellowship at Baylor College of Medicine, Ben Taub Hospital, in Houston. From 2002-2004, he participated as a U.S. Air Force Medical Exchange Officer in Santiago, Chile. He was assigned to Landstuhl Regional Medical Center in Germany in 2004, the only American College of Surgeons verified trauma center outside of the United States, where he served as Chief of Trauma and Critical Care. He is currently the Director of CSTARS-Cincinnati and the trauma consultant to the USAF Surgeon General. CSTARS-Cincinnati is the advanced training platform for Critical Care Air Transport Team (CCATT) training and is a predeployment requirement for all CCAT teams. Colonel Dorlac is married to fellow USU alumnus, Gina Dorlac.

ROBERT E. HAIN, CAPTAIN, MC, USN (RET)

Captain Hain received his Medical Degree from New York University, obtained a Master of Public Health degree from the University of Texas, Houston and graduated from the Naval War College with Highest Distinction with a M.A. degree in National Security and Strategic Studies. He has served in the USAF, USN and USMC in several capacities. These include but are not limited to Flight Surgeon, Director of Medical Programs and the Deputy Medical Officer of the Marine Corps,

in which capacity he was responsible for formulating health care policy recommendations for the USMC, Director of Aerospace Medicine Division for the Chief, Bureau of Medicine and Surgery, and Surgeon General's Aerospace Medicine Specialty Advisor. In April 2001, Captain Hain became the Deputy Director at the Robert E. Mitchell Center for Prisoner of War Studies and subsequently Executive Director in which position he remained following retirement from active duty, 1 October 2003. Captain Hain is a Diplomat of the American Boards of Surgery (1973) and Preventive Medicine (Aerospace) (1982). He is a Fellow of the Aerospace Medical Association, the American College of Surgeons, and the American College of Preventive Medicine. His personal awards include the Legion of Merit with Gold Star, Bronze Star, Meritorious Service Medal, Air Medal, Joint Service Commendation Medal, and the Navy Commendation Medal. He is married to the former Phyllis Anita Brown of Mobile, Alabama.

JACK TSAO, COMMANDER, MC, USN

Commander Jack Tsao received his undergraduate and medical degrees from Harvard and doctorate from the University of Oxford, England. He completed his neurology residency at the University of California-San Francisco and was then stationed at Naval Hospital Jacksonville, where he was neurology department head. While there, Commander Tsao completed a behavioral neurology fellowship at the University of Florida. He is currently Associate Professor of Neurology and Neuroscience at the Uniformed Services University of the Health Sciences and is actively involved in medical student and resident education, clinical and basic science research, and telemedicine development. His clinical research is focused on treatments for phantom limb pain in amputees and methods for detecting and preventing traumatic brain injury.

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We are grateful to have so many wonderful speakers join us for this event. In particular, special thanks to ADM Walsh, BG Cornum, Ms. Ellen Embrey and Dr. Dale Smith for speaking on these important issues.