

# Navy Entomology Community Resume 2001

## *Significant Positions Held*

- Executive Director, Armed Forces Pest Management Board (AFPMB), Forest Glen, MD
- Executive Officer, Naval Medical Research Unit No. 3 (NAMRU-3), Cairo, Egypt
- Executive Officer, Navy Environmental Health Center, Norfolk, VA
- Executive Officer, Naval Dental Research Institute, Great Lakes, IL
- Officer in Charge, Navy Disease Vector Ecology and Control Center (NDVECC), Bangor, WA
- Officer in Charge, NDVECC, Jacksonville, FL
- Chief, Defense Pest Management Information Analysis Center, Forest Glen, MD
- Executive Assistant to Assistant Chief for Operational Medicine and Fleet Support (MED-02), Bureau of Medicine and Surgery, Washington, DC
- Deputy Director, Command Leadership School, Newport, RI
- Vice Chairman, AFPMB
- Head, Medical Plans, Operations and Logistics, MARFORPAC
- Head, Research Sciences Directorate, NAMRU-3, Cairo, Egypt
- Coordinator, Navy West Nile Virus Surveillance Program
- Assistant Professor, Preventive Medicine and Biometrics, Uniformed Services University (USU), Bethesda, MD
- Adjunct Assistant Professor, Preventive Medicine and Biometrics, USU

## *Major Deployments/Exercises/Operational Support*

- Exercise New Horizons 2001, Bahamas - 2
- Operation Sharp Wedge 2001, Camp Lejeune, NC - 2
- Ulchi Focus Lens, Korea
- MEFEX (I MEF), Hawaii
- Operation Bright Star 01, Egypt - 2
- Operation Enduring Freedom, Afghanistan and Southwest Asia
- Exercise Tandem Thrust 01, Australia - 2

## *Pest Management Program Reviews – 30*

**Professional Publications** (Navy Entomologists **Bolded**)

1. Andreadis, T.G., J.F. Anderson, L.E. Munstermann, R.J. Wolf and **D.A. Florin**. Discovery, distribution and abundance of the newly introduced mosquito *Ochlerotatus japonicus* (Diptera: Culicidae) in Connecticut, USA. *J. Medical Entomology*.
2. Baird, J.K., M. Lacy, H. Basri, M.J. Barcus, J.D. Maguire, **M.J. Bangs** et al. Randomized, parallel placebo-controlled, open label trial of primaquine for malaria prophylaxis in Indonesian New Guinea. *Clinical Infectious Diseases*.
3. **Bangs, M.J.** et al. Detection of dengue viral RNA in *Aedes aegypti* (Diptera: Culicidae) exposed to sticky lures using reverse transcriptase polymerase chain reaction. *J. Medical Entomology*.
4. Burkett, D.A. W.J. Lee, K.W. Lee, H.C. Kim, H.I. Lee, J.S. Lee, E.H. Shin, R.A. Wirtz, H.W. Cho, **D.M. Claborn** et al. Light, carbon dioxide and octenol-baited mosquito trap and host seeking evaluations for mosquitoes in a malarious area of the Republic of Korea. *J. American Mosquito Control Assoc.*
5. **Claborn, D.M.** Disaster Relief and the Navy Entomologist. *Navy Medicine*.
6. Corwin, A.L., R.P. Larasati, **M.J. Bangs** et al. Epidemic dengue transmission in southern Sumatra, Indonesia. *Transactions Royal Society Tropical Medicine Hygiene*.
7. Gionar, Y.R., S. Rusimiarto, D. Susapto, I.R.F. Elyazar and **M.J. Bangs**. Domestic wells as important *Aedes aegypti* L. breeding sites. *Bulletin Penelit. Kesehatan*.
8. Guerrero, F., R.B. Davey and **R.J. Miller**. Use of an allele-specific polymerase chain reaction assay to genotype pyrethroid resistant strains of *Boophilus microplus* (Acari: Ixodidae). *J. Medical Entomology*.
9. Hanafi, H.A., **G.M. Beavers** and **E.A. Dykstra**. New Record of *Phlebotomus sergenti*, the vector of *Leishmania tropica*, in the Southern Nile Valley of Egypt. *J. American Mosquito Control Assoc.*
10. **Miller, R.J.** et al. Characterization of acaricide resistance in *Rhipicephalus sanguineus* (Latreille) (Acari: Ixodidae) collected at the Corozal Army Veterinary Quarantine Center, Panama. *J. Medical Entomology*.
11. **Schoeler, G.B.** and S.K. Wilel. Modulation of host immunity by haematophagous arthropods. (invited review) *Annals of Tropical Medicine and Parasitology*.
12. Sungvornyothin, S., T. Chareonviriyaphap, A. Prabaripai, V. Thirakhupt, S. Ratanatham and **M.J. Bangs**. Effects of nutritional and physiological status on behavioral avoidance of *Anopheles minimus* (Diptera: Culicidae) to DDT, deltamethrin and lambda-cyhalothrin. *J. Vector Ecology*.

13. **Tetreault, G.E.**, A E.B Zayed, H.A. Hanafi, **G.M. Beavers** et al. Susceptibility of sand flies to selected insecticides in North Africa and The Middle East. *J. American Mosquito Control Assoc.*

*Articles for Newsletters, Bulletins, Base Newspapers, etc.* – 40

***Professional Presentations***

- *Entomological Surveillance – Vector Mapping; Vector Control – Feasibility; Strategies for Use in High Risk Situations.* Symposium – 'Reducing the Risk of Rift Valley Fever Virus Transmission' sponsored by Food and Agriculture Organization, Rome, Italy.
- *Modification of the FAO Larval Packet Test for the Evaluation of Amitraz Resistance in Boophilus microplus.* Food and Agriculture Organization Headquarters, Rome, Italy.
- *Ticks and Tick-borne Diseases.* Peruvian National Institute of Health, Lima, Peru.
- *Control of Vector-borne Diseases.* Peruvian National Police National Hospital, Lima, Peru.
- *Specific Control Issues: Dengue Hemorrhagic Fever and Yellow Fever.* Intercountry meeting on viral hemorrhagic fevers sponsored by World Health Organization, Cairo, Egypt.
- *Control of Vector-borne Diseases – Entomological Aspects.* Symposium on public health surveillance and emerging infectious diseases, sponsored by the US Southern Command, Lima, Peru.
- *Estimating Region-specific Risk of Malaria in Developing a Prevention Strategy.* Asia Pacific Military Medicine Conference, Auckland, New Zealand.
- *Ability of Phlebotomus kazeruni (Diptera: Psychodidae) to transmit Leishmania major.* 2<sup>nd</sup> World Congress on Leishmaniases, Crete.
- *Vector Bionomics and Perennial Malaria Transmission in the Menoreh Hills of Central Java.* American Society of Tropical Medicine and Hygiene, Atlanta, GA.
- *Navy Entomology: Focused on Education.* Entomological Society of America, San Diego, CA.
- *Remote Sensing and GIS as Decision-making Tools for Control of Malaria in the Republic of Korea.* American Public Health Association, Atlanta, GA.
- *Entomology Experiences with the Fleet Marine Force.* Entomological Society of America, San Diego, CA.
- *Medical Entomology Research at Naval Medical Research Center Detachment, Lima, Peru.* Center for Microbial Pathogenesis, University of Connecticut Health Center, Farmington, CT.
- *Military Preventive Medicine in Developing Countries.* University of South Florida, Tampa FL.

- *Medical Entomology and the United States Navy*. University of Kentucky, Lexington, KY.
- *Impact of Vector Ecology on West Nile Virus Distribution*. Eastern Virginia Medical College, Norfolk, VA.
- *Geographic Information Systems as Decision-support Tools for Control of Malaria in South Korea*. Army Force Health Protection Conference, Albuquerque, NM.
- *The U.S. Marine Corps Agricultural Washdown Program*. Invasive Species Symposium, 16<sup>th</sup> Triennial DoD Pest Management Workshop, Jacksonville, FL.
- *Use of IKONOS and Landsat to Estimate Mosquito Habitat for Malaria Control in South Korea*. High Spatial Resolution Commercial Satellite Imagery Workshop, Greenbelt, MD.
- *Biological Warfare and Terrorism*. Pacific Southwest Safety Conference, San Diego, CA.
- *Sustainable Malaria Control in the Republic of Suriname*. Virginia Mosquito Control Association (VMCA), Williamsburg, VA.
- *Biology of Culiseta melanura (Coquillett) in Florida*. VMCA.
- *Unique Malaria Vector Challenge in Sao Tome and Principe*. Florida Mosquito Control Association, Winter Haven, FL.
- *Cooperative Malaria Control Efforts in Suriname*. Florida Mosquito Control Association, Winter Haven, FL.
- *Navy Entomology*. Mosquito and Vector Control Association of California, Napa, CA.
- *Military Experience With Biting Flies in the Arctic*. Georgia Mosquito Control Association.
- *An Overview of Military Entomology*. Pennsylvania Department of Environmental Protection.

### ***Professional Training***

- Prospective Executive Officer Continuum
- Advanced Officer Leadership Continuum
- Intermediate Officer Leadership Continuum - 2
- Medical Regulating
- Operational Entomology
- Combined Humanitarian Assistance Response Training
- Management of CBRE Casualties
- CBRE Casualty Care Awareness - 2
- Battelle Training in CBRE – 2
- Transportation of Hazardous Materials
- Institutional Animal Care and Use Committee Training
- Good Laboratory Practices
- Seven Habits of Highly Effective People
- Risk Assessment and Operational Risk Communication

### ***Professional Service***

- Chair, Information Transfer Committee, Armed Forces Pest Management Board (AFPMB)
- Chair, Medical Entomology Committee, AFPMB
- Chair, Equipment Committee, AFPMB
- Chair, Stored Product Pests Committee, AFPMB
- Chair, Contingency Advisory Committee, AFPMB
- Chair, Entomology Committee, Hawaii Joint Interservice Regional Support Group
- Navy Representative, Animal Health Surveillance Group, San Diego County Department of Health Services
- Member, Duval County Florida, Task Force for Arthropod-Borne Viruses
- Member, National Lyme Disease Review Board
- Member, Bioterrorism Response Team, Naval Hospital Camp Lejeune
- Reviewer, Journal of Medical Entomology
- Reviewer, Journal of Economic Entomology
- Reviewer, Journal of Veterinary Parasitology
- Reviewer, United States Department of Agriculture Research Service

### ***Awards Received***

- Meritorious Service Medal – 2
- Navy and Marine Corps Commendation Medal – 2
- Joint Service Achievement Medal
- Navy and Marine Corps Achievement Medal – 2
- Expert Pistol Shot Medal
- Navy and Marine Corps Overseas Service Ribbon – 5
- Meritorious Unit Commendation
- Charles S. Stephenson Award for Excellence in Preventive Medicine
- Letters of Appreciation/Commendation - 9

### ***Other Significant Accomplishments***

- Program Manager and Vector Team Leader for U.S. Navy support to the JFCOM-sponsored humanitarian assistance project to assess and control malaria in the Democratic Republic of Sao Tome and Principe.
- Conducted humanitarian assistance and disaster preparedness surveys in Ethiopia and Eritrea for CENTCOM/SOCCENT initiatives. Assessed infrastructure, environmental issues, health structure and demographics of each country.

Developed list of 11 medical and engineering projects for possible future execution through U.S. embassies.

- Team leader of SOUTHCOM-sponsored humanitarian assistance project to assess and control malaria in Suriname.
- At request of Centers for Disease Control and Prevention and State of Hawaii, developed a DoD task force to investigate outbreak of dengue fever in Hawaiian Islands. Contributions included trapping/identification of mosquitoes; consultation on pesticides and application equipment; dengue threat assessments; public education lectures and articles; and inspection of military facilities for mosquito breeding sites.
- Team leader for SOUTHCOM-sponsored humanitarian assistance visit to Guyana to liaison and lay foundation for future projects designed to control malaria and dengue fever.
- Served as II MEF Senior Agricultural Quarantine Inspector and USDA liaison during major outbreak of foot-and-mouth disease (FMD) in Europe. Consulted by MARFORLANT, Headquarters Marine Corps, and Joint Chiefs of Staff. Drafted guidance ensuring that FMD was not imported to the U.S. Efforts changed USDA policy for all returning DoD assets and prevented unnecessary exposure of DoD personnel to dangerous disinfecting agents.
- Supervised washdown operations in Spain for 2 Marine Expeditionary Units, preclearing 6 USS ships, 10 LCUs, 15 LCACs, 950 pieces of rolling stock and 300 containers, for return to the U.S.
- Served as consultant on West Nile virus control and prevention to 41 Naval installations in the Eastern U.S. Provided on-site technical assistance for enhanced mosquito surveillance; specific mosquito identification training; bird collection and processing; specimen testing; and, public education. Coordinated with Naval Facilities Engineering Command Applied Biologists to ensure commands possessed appropriate surveillance and control capabilities.
- In support of Operation New Horizons, provided direct support to over 125 Navy, Marine, Coast Guard and Army personnel. Specific areas supported included training, vector surveillance and control, sanitation, migrant operations, food and water safety, and general camp hygiene.
- As part of Operation Sharp Wedge, provided vector-borne disease training and preventive medical services to over 500 reserve SEABEES.
- Established Internship Program with Naval Hospital, Jacksonville FL to train the hospital's Preventive Medicine Technicians (PMTs). The operational platforms for the PMTs are either the Fleet Hospital or 2<sup>nd</sup> FSSG. PMTs receive intensive training in all aspects of vector/pest surveillance and control.
- Developed Integrated Pest Management program for Army and Air Force Exchange Service (AAFES) CONUS distribution centers. Served as Pest Management Consultant to AAFES Quality Assurance personnel.
- Developed and implemented a fresh fruit and vegetable quarantine pest reduction program for airlifted produce to Japan and Korea.
- Platform development manager for the Disease Vector Component of the Forward Deployed Preventive Medicine Unit (FD-PMU).
- Logistics component manager for the FD-PMU.

- Produced a CD-ROM for deploying troops containing DoD contingency pest management and preventive medicine resources with emphasis on South Central Asia, Middle East and Africa.
- Oversaw contracting, writing and production of Disease Vector Ecology Profiles (DVEPs) for South Central Asia and East Asia. These unique, 200-plus page documents use a regional approach to provide timely and critical vector-borne disease information to deploying troops.
- Navy Disease Vector Ecology and Control Centers, Jacksonville FL and Bangor WA, updated 206 Vector Risk Assessment Profiles (VECTRAPS). VECTRAPS are country-specific documents which aide medical staff and planners in assessing risk of vector-borne disease to deploying troops.
- At the request of the United States Embassy, Yemen, provided training in the identification and handling of potential anthrax specimens.
- Developed a military entomology image database that serves as a repository of images on vectors, equipment, techniques, facilities, deployments and historical pictures.
- First representative of the Bureau of Medicine and Surgery to attend the U.S. Army's Command and General Staff College.
- Awarded Masters of Military Arts and Sciences, Strategic Studies.
- First military graduate of the Doctor of Public Health program, Uniformed Services University.
- Completed one-year internship in Medical Entomology at Centers for Disease Control and Prevention, Atlanta GA.
- Lecturer, San Diego State University Graduate School of Public Health; Southwestern Community College.
- National finalist, Delta Omega student presentation competition, American Public Health Association.

*Acknowledgement – CDR Stanton E. Cope, MSC, USN, Naval Dental Research Institute, and LCDR George B. Schoeler, MSC, USN, Naval Medical Research Center Detachment, Lima, Peru, compiled and produced this document. It is intended as a sampling of significant activities and accomplishments of entomologists serving in the Medical Service Corps of the United States Navy. Please send comments to [secope@nidbr.med.navy.mil](mailto:secope@nidbr.med.navy.mil).*