

SOCIETY SCOPE

PO BOX 2549 • FAIRFAX, VIRGINIA 22031-0549
Fall 2002 • Volume 5 Number 3



Cleared for Open Publication

Epidemic Outbreak Surveillance (EOS) - Microarray Incorporation for Pathogen Identification

Maj Eric Hanson, USAF, MC, SFS¹, Capt Robb Rowley, USAF, MC², Maj Brian Agan,
USAF, MC³, Dr. Clark Tibbetts², and Lt Col Debra Niemeyer, USAF, BSC⁴

¹51st Medical Group, PSC 3 Box 2541, APO AP 96266-0025, ² Expeditionary Operations, Science & Technology Directorate,
Office of the Air Force Surgeon General, Falls Church, VA 22041, ³ Infectious Disease Department,
Wilford Hall USAF Medical Center, Lackland AFB, TX 78236, ⁴ Joint Program Office for Biological Defense and
Program Executive Office for Chemical & Biological Defense, Falls Church, VA 22041

A model is proposed for validating the use of oligonucleotide arrays (microarrays) in the rapid detection and identification of biological agents. Random samples will be obtained from a study population of 76,000 active duty military personnel requiring approximately 30,000 evaluations for respiratory infections per year. This high incidence density of infectious disease in a controlled military setting creates a real-world opportunity for implementing and validating genomics technologies for the rapid detection of disease causing pathogens. Program processes include rapid biologic agent identification (target time for detection is less than two hours); diagnostic correlation with specific syndromic indicators for outbreak and surveillance purposes; longitudinal tracking of affected personnel; and utilization of hybrid information system technologies for relationship, association and predictive modeling. Program outcomes include assessments of 1) clinical accuracy of respiratory pathogen diagnosis and therapeutics utilizing genotypic-phenotypic information correlation; 2) cross platform comparison with existing polymerase chain reaction technologies and 3) predictive modeling techniques for outbreak investigations and disease surveillance. Future research applications based on this test program will include microarray assessments of other biologic, chemical and physical exposures (i.e., ecogenomics) and incorporating a genomics module into an electronic surveillance system, the Lightweight Epidemiology Advanced Detection and Emergency Response System (LEADERS) for nationwide surveillance information.

Background

The primary goal of the Epidemic Outbreak Surveillance (EOS) project is the rapid detection and identification of respiratory pathogens using genotypic specific information. The EOS project will serve as a model for microarray identification of organisms in an outbreak investigation. Success with this methodology will be a first step in revisiting the current methodology used in outbreak investigation protocols. This project also provides a real-world model for pathogen identification, which is required for early detection purposes in a scenario of a biologic agent release. Early pathogen detection and identification

EOS - continued on page 5



Table of Contents

Epidemic Outbreak Surveillance	1
Editor's Page	2
President's Message	3
Call for Nominations	3
Consultant's Corner	4
SAFMLS Emeritus Corner	5
In Memorial	8
Investigation the Effect of Statin Drug	9
What is P.A.C.E.®?	11
The Society of Armed Forces Medical Laboratory Scientists	
2003 Annual Meeting and Exposition	14
Invitation to Exhibit	15
Call for SAFMLS 2003 Poster Abstracts	16
SAFMLS 2003 Annual Meeting Workshop & Short Topic	17
Nominee Requirements for SAFMLS Awards 2003	18
Award Description	19
SAFMLS 2003 Annual Meeting Special Meeting Room	20
Floor Plan	21
Membership Application	22
Calendar of Events	24

**Society of Armed Forces
Medical Laboratory Scientists**



Board of Directors

President: LtCol Dale Ferguson USAF
Vice-President: LTC Helen Viscount, USA
Treasurer: LCDR Larry Ciorlorito, USN
Secretary: LCDR Cynthia Wilkerson, USN
President - Elect: CDR Michael Finch,
USN
Past President: LTC Chris Whelen, USA

Members-at-large:

LTC Danny Deuter, USA
MAJ Martin Tenney, USA
LCDR Thomas Delucia, USN
LCDR Christine Congdon, USN
Maj Carol Walters, USAF
Capt Norman Fox, USAF
TSgt Ileanthea Maxwell, USAF

Ex-Officio Members:

COL Noel Webster, USA
COL Renata Greenspan, USA
CAPT Greg Craigmiles, USN
CDR Douglas Knittle, USN
Col Donna Roncarti, USAF
Maj Mark Burton, USAF

Historian: Col Suellyn Novak, USAF

Web Master: Capt Norman Fox, USAF

Newsletter Staff

Editor: Maj Bailey Mapp, USAF
Bailey.mapp@keesler.af.mil
Office (228) 377-6499 DSN 597-6499
Assistant Editor: Capt Richard Schoske

SOCIETY SCOPE is published three times per year for \$30 (nonmember rate) by the Society of Armed Forces Medical Laboratory Scientists (SAFMLS). Send SCOPE correspondence to 9301 Blueberry Drive, Ocean Springs, MS 39564. Annual dues (\$15) for SAFMLS membership and address changes should be sent to LCDR Cynthia Wilkerson, SAFMLS Secretary, 611 Hawkes Island Drive, Green Cove Springs, FL 32043

Advertising rates:
Display ads- ½ page ad, \$400; ¼ page ad, \$200.

Ads, articles or inquiries should be sent to: PS design & type, 3095 PS Business Center Drive, Woodbridge, Virginia 22192. Voice: 703-583-0781; Fax: 703-878-4987; e-mail: sales@psdesignandtype.com.

Editor's Page



Dear Reader,

I hope you find that the new review procedures we have put in place result in better overall quality. As you know, SAFMLS is an organization run entirely by volunteers. But we are committed to bring you a professional product. If you have any ideas about how we can make the SAFMLS Society Scope a more useful publication, please let me know. I have one correction to make from our last issue. The "Conclusion" from the article "Genomics and Bioinformatics: The Next Technological Leap," was not printed in its entirety. Our apologies to the authors. You can read the entire article at www.safmls.org under the Scope page.

Bailey H. Mapp, Maj, USAF, BSC
Bailey.mapp@keesler.af.mil
Tel: (228) 377-6499/DSN 597-6499

The Society Scope is published three times annually:

Winter	Vol X Number 1	(Deadline: 15 Jan)
Summer	Vol X Number 2	(Deadline 15 May)
Fall	Vol X Number 3	(Deadline 15 Sep)

Look for
ON-LINE REGISTRATION
to begin 1 February 2003!

Check Us Out
on the Internet at
www.safmls.org

for current information about the meeting.



President's Message

by LtCol Dale Ferguson, dale.ferguson@nellis.af.mil

The last time the Society of Armed Forces Medical Laboratory Scientists met in Reno, the Dow Jones peaked at \$3978, the first international World Wide Web conference was held, there was no World Series, and the top movie was Forrest Gump...it was 1994. Nine years later we will return once again to "the biggest little city in the world."

The planning committee has begun its arduous task and the wheels are in motion to produce another memorable and informative SAFMLS meeting.

A successful meeting requires contributions and participation from many. One priority I outlined for the current year was mentoring of colleagues and subordinates to include the importance of active involvement in societies of their profession. In the Summer 2002 Society Scope, Army Clinical Laboratory Consultant COL Noel Webster addressed the importance of mentoring junior personnel to prepare them for challenges ahead. Encouraging SAFMLS membership is a mentoring opportunity that all senior leadership, officer and enlisted must not miss. This small investment in time will reap huge benefits later on. More specifically, it will aid junior personnel in the challenges they will face in their career and make them aware of future leadership roles. Membership in SAFMLS not only provides an avenue for our professionals to formally share their scientific and management expertise but it also provides an extensive network of tri-service personnel that each can use as resources to overcome challenges ahead. I continue to

encourage all members to support the society by introducing their staffs to the society and the benefits of membership. The membership application is available at www.safmls.org.

The annual meeting is beginning to crystallize with plans for an exciting general session. The topics of the general session will address improvements in analytical techniques and sweeping advances in how data is evaluated and applied. These advances will decrease the "kill cycle" interval for pathogens of operational concern and other biowarfare agents, leading to increased force health protection and survivability. You will leave the session with a grander appreciation of the powerful role laboratory professionals play in national defense and warfighter protection.

This edition of the Society Scope includes applications and points of contact for workshops, short topics, posters, and award nominations. Every year we have a mix of sustaining presenters and new presenters. Encouraging your staffs to participate through presentations reinforces the priority you place on Society membership. Please share your experiences and expertise with your fellow members by presenting at the Reno meeting.

The planning committee has much work to do between now and March 2003. Vice president and planning committee chair, Maj Helen Viscount, has all her team on vector. If you have questions about the meeting or wish to contribute to the planning committee efforts, please contact her. Helen.Viscount@NA.AMEDD.ARMY.MIL

CALL FOR NOMINATIONS FOR 2003 SAFMLS BOARD POSITIONS

- Open Positions: Pres Elect, VP, Army/AF/Navy Member-at-Large.
- Nominees must be a regular member of SAFMLS
- Send the following to the SAFMLS Secretary, LCDR Cynthia E. Wilkerson, email: cewilkerson@sar.med.navy.mil. Phone: 904-542-7386/DSN: 942-7386
 - o Nomination Letter
 - o Letter of Intent (1 page)
 - o Picture (electronic preferred)
 - o CV (1 page)
- The Officers of the Society shall be, by order of succession, President, Vice-President, Treasurer and Secretary. A conscious effort should be made to effect multiple agency representation among the Officers of the Society and under no circumstances will the President be from the same service for more than two consecutive terms.
- The Officers and a President-Elect shall be elected annually from among the commissioned officers of the Society by majority vote during the Business Session at each Annual Meeting, with the exception of the Treasurer and Secretary, who shall be elected for a three-year term.
- The Officers shall take office at the conclusion of each Annual Meeting, and shall be responsible for the affairs of the Society during the following year, and for the conduct of the succeeding Annual Meeting.
- The President-Elect will serve as a Society President the year following the term of office of the current President, and shall serve during this interim period as a non-voting member in all meetings of the Board of Directors, unless the President-Elect qualifies as a voting member under Articles IV or V or the Bylaws.
- The Vice-President, in the event the President is unable to serve, shall assume all the President's functions.
- There shall be seven Members-at-Large, each elected for a period of two years. Six of the seven Members-at-Large shall be Commissioned Officer Members, with not more than two members from any one service. In addition, one term for each service will expire each year. The seventh Member-at-Large will be an Enlisted Member representing any service. Each Member-at-Large will have one vote.

Consultant's Corner

by Col Donna M. Roncarti, USAF, BSC

A great big, “Hello There!” to everyone. It’s really quite good to be back in DC—yes, despite all the traffic and the long commute. I’m looking forward to working with all of you and getting to ‘re-know’ most of the Air Force folks. Other than my Bio, I have only three points to share with you this time ‘round as I will have plenty of time to wax philosophical with you in the future. “Aim High; Be All You Can Be, and Full Speed Ahead.” Thanks!

Colonel Donna M. Roncarti is the Director, Center for Clinical Laboratory Medicine and Clinical Laboratory Consultant for the Air Force Surgeon General.

Colonel Roncarti was born in Waterbury, Connecticut. She received a Bachelor of Science degree in Medical Technology from Western Connecticut State University in 1977; a Masters in Management and Human Relations from Webster University in 1983, and a Masters in Health Care Administration from Golden Gate University in 1986. She completed Squadron Officer School and Air Command and Staff College residence courses in 1983 and 1993 respectively, and completed the Air War College in 1995.

Colonel Roncarti received a direct commission in October 1979 and was assigned as Chief, Laboratory Services, McConnell AFB, Kansas. From 1983 to 1987, she was assigned to Davis-Monthan AFB, Arizona, first, as Chief, Clinical Laboratory, and then as Director, Medical Readiness, having responsibility for medical peacetime and wartime planning, training, and deployments. In 1987, Colonel Roncarti was asked to report to Osan AB, Korea, as Chief, Laboratory Services, to initialize laboratory operations in the new medical treatment facility. She also worked with PACOM personnel to initiate the theater’s new frozen blood program.

Between 1988 and 1992, Colonel Roncarti completed a medical plans internship with the Command Surgeon’s

Office, Headquarters, European Command (EUCOM), Stuttgart, Germany, and remained in place to negotiate peacetime and wartime host nation medical support for NATO, and other countries. She became the EUCOM medical planner and represented the EUCOM Surgeon on the Crisis Action and Battle Staff teams.



From 1992 to 1995, Colonel Roncarti was a student, then faculty, at Air Command and Staff College, Air University, Maxwell AFB, Alabama. In 1995, Colonel Roncarti was assigned to the Office of the Assistant Secretary of Defense (Health Affairs), Falls Church, Virginia, where she was responsible for functional management and information technology integration. In 1998 she became the Chief, Air Force Medical Service (AFMS) Doctrine Development, Bolling AFB, Washington, D.C., where she authored and published the first-ever AFMS doctrine.

Colonel Roncarti was the Clinical Laboratory Flight Commander and the Senior Biomedical Sciences Corps Executive Advisor, 3rd Medical Group, Elmendorf AFB, Alaska from August 2000 until August 2002. During that time she held key leadership positions as the Pacific Air Forces’ (PACAF) Clinical Laboratory Consultant and the PACAF Blood Support Program Consultant to Pacific Command. Colonel Roncarti also augmented as the 3rd Medical Support Squadron Commander from August 2000 until Aug 2001. She assumed her present duties in September 2002.

SAFMLS EMERITUS CORNER

Michael H. Caldwell, Colonel (Ret.), USAF, BSC

The 2003 SAFMLS meeting is set for Reno, NV after an eight-year hiatus! A Reno meeting has special memories for me since 1986 was my first meeting as a Board member and at the 1994 meeting it was my honor to serve as President! The planning committee is hard at work and promises a successful return to a great venue! Start working that abstract!

Mine as well as many others main objective in promoting SAFMLS history and encouraging continued Emeritus participation is to remind current members of the rich traditions and contributions of those who dedicated much of their career to our profession and

this Society.

I direct you to this edition's 'memorial'! Colonel Sue Kuhlmeier was one of those unique individuals that enhanced the lives of all who knew her. She had that innate ability to share her knowledge, energies, and wisdom with humility, professionalism, and sincerity! Those who knew her remember that Sue always made you feel special. She always saw something good in every situation and refused to concede to any problem!

Colonel Kuhlmeier's contributions to SAFMLS were noteworthy. She will be greatly missed by family, friends, and SAFMLS colleagues!

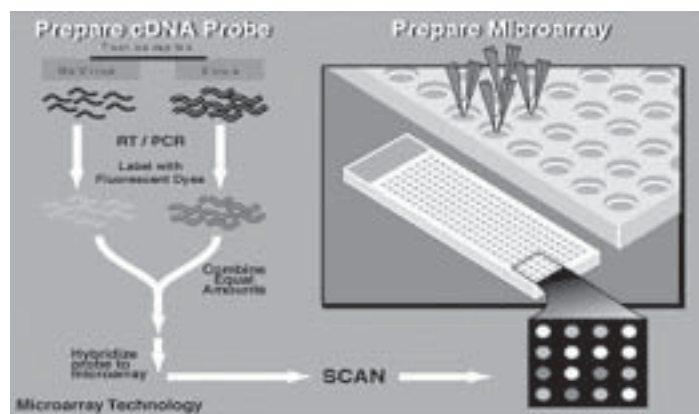
EOS - continued from page 1

is key to disease prevention and maintenance of airpower projection. Case in point: 57% of personnel deployed in Desert Shield had diarrheal disease and 20% of the affected personnel were incapable of carrying out their duties¹. Early detection of the diarrhea-associated pathogen can limit disease. This was demonstrated in December 1999 when a laboratory team deployed in Southwest Asia using new testing technology (real-time PCR) rapidly identified a food borne outbreak, thereby limiting the effects to only 3% of the base population with minimal mission impact^{2,3}. Real-time PCR screening of a variety of environmental samples was key to alerting public health officials to improper food-handling practices. Subsequent molecular assessment of the food borne pathogen afforded determination of the contamination source⁴. The utility of PCR was again demonstrated when the technology was successfully applied to aid agent identification and clear sample backlogs following intentional release of anthrax October 2001^{5,6}.

Worldwide, laboratories currently utilize culture for pathogen detection. This results in delays with specific pathogen identification, feedback to health care providers (HCPs) and proper implementation of public health interventions. Furthermore, this technology is difficult to use in the deployed environment. The end result is inadequate epidemiologic information for HCPs and other decision-makers to promptly stop disease transmission. Additional delays result from a combination of disjointed record-keeping often inherent in a mobile patient population, "shoe leather" epidemiologic techniques, inadequate real-time disease surveillance data and inability to access filtered or analyzed data. Advances in the fields of genomics and information systems have produced breakthroughs that will eliminate many of the current outbreak investigation problems.

To accomplish rapid pathogen identification, EOS will innovate current technology in microarrays. The EOS project will use low-density, high-throughput oligonucleotide-based microarrays for the rapid detection of respiratory pathogens in a controlled population. Basically, microarrays are miniature DNA-based testing platforms upon which a test sample is applied. Short pieces of single stranded DNA on the array corresponding to DNA of various pathogens will adhere to complementary DNA in the test sample. A visible signal is generated with DNA strand matching or hybridization (Figure 1)^{7,8}. Innovations will include the combination of an advanced microarray substrate and matrix, sequence-specific identification of pathogens, and advanced signal detection methodologies. A project goal is the identification of a viral respiratory pathogen from clinical sample to identification in less than two hours. This represents outbreak investigation timesavings of over 500 hours based on current viral culture methods.

Figure 1. Microarray Technology



EOS - continued on page 6

EOS - continued from page 5

Clinical and epidemiological surveillance for infectious disease outbreaks in a large training population is critical to military mission accomplishment. This has been true throughout the history of warfare and the threat of infectious disease remains an omnipresent threat for the Department of Defense (DoD) to confront. Controlled populations in the DoD, Veterans Administration (VA) and civilian communities are numerous⁹. They include special operations training, deployed sites, military academies, prisons, nursing homes, childcare and even the dining facilities at the Pentagon. Time savings in pathogen identification in any one of these settings will significantly decrease threats to mission accomplishment and save significant amounts of time, rescued productivity, money and resources by decreasing morbidity and mortality in the event of a biological disease outbreak. EOS will demonstrate rapid pathogen detection capabilities in a controlled population and real-world setting. Likelihood of technology transition to civilian industry and other governmental agencies will be favorable when total cost-effectiveness evaluations are modeled for outbreak scenarios. Decreased microarray costs with increased production will follow the initial pilot studies proposed here. Data generated from the microarrays will be fed into a genomics module surveillance system to include the Lightweight Epidemiology Advanced Detection and Emergency Response System (LEADERS). LEADERS is currently being developed by the US Air Force and tested by DoD as a nationwide surveillance information system to provide early warning of aberrant events, particularly the presence of environmental hazards^{10,11}.

The goal of phase I is to standardize production of disease-specific diagnostic microarrays to improve the speed and sensitivity of respiratory pathogen detection in the Basic Military Training (BMT) population. Young recruits residing in close quarters are physically and mentally stressed during this training and this can increase their susceptible to a variety of communicable diseases. Close monitoring with improved pathogen identification will limit disease spread, diminishing morbidity and mortality. Phase II's goal is performing comparisons with the current "gold standard" of viral cell cultures and real-time polymerase chain reaction technology using the Ruggedized Automated Pathogen Identification Device (RAPID™; Idaho Technology, Salt Lake City, UT). An additional application consideration for future development is a field-capable handheld microarray processing and reader unit. The assembled resources and team of USAF personnel partnering with other DoD institutions, civilian industry and academic leaders will provide the research setting and expertise to create this model

system. This system will demonstrate the effectiveness of microarray technologies in pathogen identification. EOS will start with detection of viral respiratory pathogen-specific sequences, but the system proposed can be expanded to evaluate bacterial, fungal, parasitic and chimeric nucleotide sequences. Development efforts for EOS have emphasized future capabilities that allow not only direct hybridization and re-sequencing capabilities, but will evaluate for simultaneous assessment of biochemical reactions and proteomics capabilities.

Challenges for the future microarray applications to overcome will be decreasing the expense of microarray production. It is not cost-effective to use microarrays to diagnose every respiratory pathogen seen in the HCPs office. However, this model will demonstrate utility of microarray use in a controlled population to rapidly diagnose militarily important disease processes in an operationally relevant model. Performing additional molecular assessments of biological, chemical, physical, and social exposures (i.e., ecogenomics) will be the logical progression in this developmental process. Continued collaborations within DoD, with other governmental agencies, industry and academia will be necessary to make this happen.

References

1. Hym, K.C., A.L. Bourgeois, B.R. Merrell, et.al. Diarrheal Disease During Desert Shield, *NEJM*, Vol 325:1423-1428, No. 20, November 1991; abstract: http://content.nejm.org/cgi/content/abstract/325/201423?maxtoshow=&HITS=10&hits=10&RESULTFORMAT=&searchid=1015709380815_13011&stored_search=&FIRSTINDEX=0&volume=325&firstpage=1423&journalcode=nejm.
2. USAF Force Protection Battlelab News Release, Rapid Biological Agent Identification Initiative Enhances Force Protection through Early Foodborne Outbreak Detection, 20 June 2000: <http://www.idahotec.com/rapid/success.htm>.
3. Niemeyer, D., M. Corkern, W. Mobley, M. Eitutus, D. Dubois, W. Barnes, W. Hamilton, K. Lohman, R. McBride Real-time PCR Speeds Laboratory Diagnosis to Rapidly Identify a *Salmonella* Outbreak at a Deployed Location. 24th Annual Meeting of Society of Armed Forces Medical Laboratory Scientists (SAFMLS) Proceedings, p 34, March 2000.
4. Niemeyer, D., R. Watson, N. Wertz, A. Salmen, F. McCleskey. *Salmonella* Surveillance Using Molecular Genotyping – Part of a Prevention Oriented Process Approach

EOS - continued on page 7

EOS - continued from page 6

to Food Safety in the Deployed Environment. Presented at the International Conference on Emerging Infectious Diseases, Atlanta, GA, Jul 00.

5. Jernigan, J. et al. Bioterrorism-Related Inhalational Anthrax: The First 10 Cases reported in the United States. *Emerging Infectious Diseases*, Nov-Dec 01; Vol.7, No. 6, Nov 01, Center for Disease Control: <http://www.cdc.gov/ncidod/eid/vol7no6/jernigan.htm>.

6. Air Force Link. Air Force sends teams to help anthrax assessment. 22 October 2001: http://www.af.mil/news/Oct2001/n20011022_1502.shtml.

7. Brazma, A., H. Parkinson, T. Schlitt, M. Shojatalab. A quick introduction to elements of biology – cells, molecules, genes, functional genomics, microarrays. Oct 01. EMBL European Bioinformatics Institute: http://www.ebi.ac.uk/microarray/biology_intro.htm.

8. Brown, P.O., D. Botstein. Exploring the new world of the genome with DNA microarrays. *Nature Genetics*, Vol 21, Supplemental pp 33-37, 1999: http://www.nature.com/cgi-taf/DynaPage.taf?file=/ng/journal/v21/n1s/full/ng0199supp_33.html.

9. Hanson, E., B. Agan, L. Folio, R. Rowley, D. Niemeyer. Evaluation of Potential Methods for Rapid Identification of Central Nervous System Pathogens Using Microarray Technology. Accepted for publication, *Mil Med*, October 2001.

10. Lightweight Epidemiology Advanced Detection and Emergency Response System (LEADERS): <https://www.afms.mil/sgx/sgxy/index.htm>, Point Paper: Same subject, 16 April 2001: https://www.afms.mil/sgx/sgxy/LEADERS_Point_Paper_Ver2.doc.

11. Niemeyer, D., E. Hanson, R., R. Rowley, R. Munson, K. Schafer. Real-time Medical Surveillance for Early Warning and Mitigation of Environmental Hazards. Proceedings of the International Conference on Protection Against Biological Threats, Sponsored by DARPA and the General Karol Kaczkowski Military Institute of Hygiene and Epidemiology, Warsaw, Poland, June 2001.

Acknowledgements

We particularly appreciate the contributions and support from Dr. Dan Brown, Lynn Difato, RN, MPH, Dr. Michael Dobson, Dr. Matt Dolan, Dr. Ted Hadfield, Dr. Russell Kruzelock, Dr. Jim Neville, Dr. Joe Pancrazio, Dr. Klaus Schafer, Dr. Don Seto, Dr. David Stenger, Dr. Beth Walter, Dr. Jennifer Weller, Dr. Janet Warrington, and reviewers Mrs. Susan Hubbard and Mr. Thomas Emsley.

Disclaimer

The conclusions and opinions expressed in this document are those of the author cultivated in the freedom of expression for the *Society Scope*. They do not reflect the official position of the U.S. Government, Department of Defense, Joint Program Office for Biological Defense and Program Executive Office for Chemical & Biological Defense, United States Air Force, or the Society of Armed Forces Medical Laboratory Scientists (SAFMLS).



Silver Legacy Resort Casino, voted “Best of Reno” is northern Nevada’s premier mega resort and a ‘must see’ vacation destination, featuring top name entertainment and exciting gaming action - all under one roof. A skywalk links the hotel towers to the main casino, restaurant facilities and additional public areas on the mezzanine level. Skywalks also connect

Circus Circus Hotel Casino on the north and the Eldorado Hotel Casino on the south to Silver Legacy. **Guest must be at least 21 years of age to check into the hotel.** For reservations, call 1-800-687-7733.

IN MEMORIAL

Colonel Sue A. Kuhlmeier, USAF, BSC SAFMLS Emeritus



Colonel Sue A. Cartington Kuhlmeier, 58. USAFR, Ret., Ft. Walton Beach, Florida, died June 6, 2002, while on vacation at Honolulu, Hawaii. She was born April 9, 1944, at Eureka, Kansas, the daughter of Elton J. and Mary E.

Evans Carrington. She was raised in Harveyville, Kansas. She attended the Harveyville schools, and graduated from Harveyville High School in 1962, as the class valedictorian. She graduated from Emporia State Teachers College, and received a BS degree in Medical Technology in 1966, from Kansas University Medical Center, Kansas City, Kansas. She worked at KU Medical Center for a year, then moved to Seattle, Washington where she worked at Bellevue Hospital. She joined the USAF during the Vietnam War, and was biomedical laboratory officer at Whiteman AFB, MO for 18 months, then CCK Taiwan for 18 months, and Eglin AFB, FL, for five and one-half years.

She separated from the Air Force in 1979 and moved to Shreveport, LA where she worked as the Hematology/Immunohematology Supervisor at the VA Medical Center for six years, and continued her military career in Air Force Reserves as an IMA at Barksdale AFB, LA. During this time she received her MS in Psychology from the University of West Florida. She moved back to Ft. Walton Beach, Florida, where she acted as the Technical Supervisor/Hematology and Chemistry (1989) at Eglin Regional Hospital and continued in the USAFR

at Eglin APB, FL. After serving at England AFB, LA during Desert Storm she continued the USAFR at Keesler AFB, MS, Keesler Medical Center, as Tricare Region IV Reserve Liaison until her retirement in 2000. She retired from civil service in 2001.

She was a master gardener, and enjoyed boating, vacationing, sewing and quilting. She was married to Glen V. Kuhlmeier, CMSgt., USAF, retired, April 27, 1974, at Topeka, Kansas. Other survivors include two daughters, Catherine Elizabeth Sue Kuhlmeier and Glenda Louise Kuhlmeier, and two sons, Robert Kuhlmeier, Baton Rouge, LA, and Steven Kuhlmeier, Roanoke, VA; her mother, Mary Carrington, Harveyville, KS, a brother, David Carrington, Topeka, KS, and three grandchildren, Lauren, Michael, and Amy Kuhlmeier.

Col. Kuhlmeier's accomplishments include her significant involvement in the Region IV Laboratory Management Conferences and the contracts in Chemistry, Immunochemistry, Microbiology, and Hematology, and performed numerous Blood Bank audits. She worked extensively on laboratory projects as a Reservist and with SAFMLS. As a SAFMLS founding member she presented posters, papers and workshops and served on various Reserve committees and special events.

Organizations:

- * American Society Medical Laboratory Scientists: President/Florida 1991-1992
- * Society of Armed Forces Medical Laboratory Scientists; founding member of Air Force Clinical Laboratory Scientists, 1971 -2002

Promotion Dates: Capt. - 10 May 1970
Major - 20 Feb 1981
Lt. Col. - 20 Feb 1988
Col. - 1 Apr 1993

INVESTIGATING THE EFFECT OF STATIN DRUG CONVERSIONS ON PATIENTS AT WINN ARMY COMMUNITY HOSPITAL

Daniel H. Jimenez, Major, Medical Service Corps, U.S. Army
Laboratory Manager, Department of Pathology

INTRODUCTION: Despite mass media campaigns and aggressive screening programs to identify and address risk factors, such as, high cholesterol, coronary heart disease (CHD) remains the number one killer and the leading source of health care expenditures in the United States¹. As the practice of medicine, in both civilian and military health care systems, continues its paradigm shift due to a managed care approach, a greater emphasis on cost effective approaches to cardiovascular disease management is necessary for continued profitability. The b-hydroxy-b-methylglutaryl-coenzyme A reductase inhibitors, also known as statins, represent a major breakthrough in the prevention of CHD by lowering serum cholesterol levels. At Winn Army Community Hospital (WACH), statins are used in both the primary and secondary prevention of CHD. In Fiscal Year 2000 alone, the statin class of drugs accounted for over eight percent of total WACH pharmacy expenditures. These expenditures easily made statins one of the top three most costly drug classes dispensed at WACH at the time.

OVERVIEW: Due to double-digit inflation in the pharmaceutical market and an effort to control expenditures on statins, the Department of Defense (DoD) Pharmacoeconomic Center (PEC) implemented a statin contract that officially limited the statin drug class on the basic core formulary (BCF). In October 1, 1999 all military treatment facility formularies were limited to the statins cerivastatin and simvastatin. Cerivastatin and simvastatin were selected because of their established therapeutic effects and as a mechanism to improve uniformity of the pharmacy benefit for DoD beneficiaries as well as enhance the economic efficiency of the military health system². When Bayer AG voluntarily pulled cerivastatin from the market in August 2001, it resulted in the statin class of drugs being limited to simvastatin on the BCF. The purpose of this paper is to examine the WACH statin conversion patients to determine if a statistical difference exists in their LDL-C levels and their ability to reach LDL-C goal due to a limited BCF.

The following tables illustrate the results of this retrospective quantitative look at randomly selected statin conversion patients. Table 1 shows the effect of statin drug conversions on a patient's LDL-C level due to limiting the statin drug class to simvastatin. In general, conversion from pravastatin to simvastatin and conversion from cerivastatin to simvastatin resulted in more patients reaching LDL-C goal 4.23% and 1.17%, respectively, while the conversion from atorvastatin to simvastatin resulted in 4.35% fewer patients reaching LDL-C goal.

Table 1
Conversion Comparison of Statin Drugs on Reaching LDL-C Goals

	Atorvastatin to Simvastatin	Pravastatin to Simvastatin	Cerivastatin to Simvastatin
Subjects (n=)	23	86	71
Meeting Goal to Meeting Goal	16	57	40
% Meeting Goal to Meeting Goal	69.57	66.28	56.34
Meeting Goal to Not Meeting Goal	2	9	6
% Meeting Goal to Not Meeting Goal (A)	8.7	10.46	8.45
Not Meeting Goal to Meeting Goal	1	10	11
% Not Meeting Goal to Meeting Goal (B)	4.35	11.63	15.49
Not Meeting Goal to Not Meeting Goal	4	10	14
% Not Meeting Goal to Not Meeting Goal	17.38	11.63	19.72
% Overall Change (B – A)	-4.35	1.17	4.23

A comparison of the inferential statistics of the statin drug conversion on LDL-C results is illustrated in Table 2. A review of these results reveals that these conversions did not cause a significant difference in the LDL-C levels of patients

Effect of Statin Drug - continued on page 10

Effect of Statin Drug - continued from page 9

($p = .103$ for atorvastatin to simvastatin conversion, $p = .087$ for pravastatin to simvastatin conversion, and $p = .299$ for cerivastatin to simvastatin conversion).

Table 2
Inferential Statistics on Conversion of Statins on LDL-C Results

	Atorvastatin to Simvastatin	Pravastatin to Simvastatin	Cerivastatin to Simvastatin
Subjects (n=)	23	86	71
Mean Reduction	-3.87	4.46	3.02
Standard Deviation	17.83	28.82	23.97
Standard Error Mean	2.98	2.49	2.31
<i>t</i>	-1.62	1.82	.98
df	22	85	70
<i>p</i>	.103	.087	.299

A comparison of inferential statistics of the statin drug conversion on patients reaching LDL-C goal is presented in Table 3. Review of these results reveals that these conversions did not cause a significant difference in the ability of patients to reach LDL-C goal ($p = .567$ for atorvastatin to simvastatin conversion, $p = .582$ for pravastatin to simvastatin conversion, and $p = .073$ for cerivastatin to simvastatin conversion).

Table 3
Inferential Statistics on Conversion of Statins on LDL-C Goals

	Atorvastatin to Simvastatin	Pravastatin to Simvastatin	Cerivastatin to Simvastatin
Subjects (n=)	23	86	71
Mean Reduction	.031	-.028	-.078
Standard Deviation	.26	.45	.52
Standard Error Mean	.047	.042	.046
<i>t</i>	.56	-.58	-1.79
df	22	85	70
<i>p</i>	.567	.582	.073

CONCLUSION AND RECOMMENDATIONS:

The treatment modifications experienced by converted patients tends to suggest that comparable doses of all the statins studied have a similar effect when taken by patients who need to reduce their LDL-C level. This is consistent with the literature because in three previous studies in which lipid-lowering treatment was modified, no significant modification-related changes in serum lipid levels were observed.^{3,4,5} For WACH patients, the slight decrease in LDL-C observed after conversion from pravastatin to simvastatin and cerivastatin to simvastatin may be partially explained by regression to the mean. This explanation is also applicable to the slight increase in LDL-C observed in patients converted from atorvastatin to simvastatin. Although the proportion of patients who met the National Cholesterol Education Program’s therapeutic objectives increased after statin conversion, nearly 25% of them were still not meeting their LDL-C goal. These findings tend to add to the credibility of the DoD PEC directive limiting the statin class of drugs on the BCF.

Additionally, the realized cost savings on statin drugs utilizing the contract pricing negotiated by the DoD PEC along with the results of this study indicate that this formulary limitation was a sound management decision. For the laboratory manager, pharmacist and hospital administrator this retrospective investigation supports the ideal that sound business practices that simultaneously consider clinical outcomes can successfully maximize the utilization of scarce health care resources.

Effect of Statin Drug - continued from page 10

POC: MAJ Daniel H. Jimenez, (912) 370-6658 or DSN 454-6658.

REFERENCES

1. American Heart Association (1997). 1998 Heart and Stroke Statistical Update. Dallas, Texas: American Heart Association.
2. Richerson, M., DeGroff, D., & Remund, D. (1999). Implementation guidance for HMG-CoA reductase inhibitor contract. Pharmacoeconomic Center Implementation Packet, San Antonio, Texas: Pharmacoeconomic Center.
3. Rindone, J., Arriola, G., Hiller, D., & Achacoso, R., (1997). Changes in serum lipids when fluvastatin is substituted for lovastatin in the same doses. American Journal of Cardiology, 80 (3), 348-349.
4. Pearson, T., Laurora, I., Chu, H., & Kafonek, S., (2000). The lipid treatment assessment project (L-TAP): A multicenter survey to evaluate the percentages of dyslipidemic patients receiving lipid-lowering therapy and achieving low-density lipoprotein cholesterol goals. Archives of Internal Medicine. 160(4), 459-467.
5. Farnier, M., Portal, J., & Maigret (2000). Efficacy of atorvastatin compared with simvastatin in patients with hypercholesterolemia. Journal of Cardiovascular Pharmacology & Therapeutics, 5(1), 27-32.

What is P.A.C.E.®?

Donna S. Whittaker, Ph.D. LTC, MS
Chief, Blood Services
Brooke Army Medical Center

Professional Acknowledgement for Continuing Education (P.A.C.E.®) was established in 1977 as an administrative system serving as the quality assurance mechanism for educational programs offered to clinical laboratory professionals. Workshops offered at SAFMLS annual meeting are reviewed and approved through P.A.C.E.® so that participants of the SAFMLS annual meeting receive continuing education credits for attendance.

Why P.A.C.E.®? P.A.C.E.® Continuing Education Contact Hours satisfy continuing education requirements for: Federal, State licensure, Local (Employer), Regulatory Agencies recertification.

To meet P.A.C.E.® requirements each program must

- be a structured learning experience
- have a topic which appears in the American Society of Clinical Laboratory Scientist (ASCLS) Body of Knowledge or relates to clinical laboratory science
- have written measurable learning objectives (see below), stated in terms of what the participant will be able to do at the conclusion of the session; objectives are to correlate with the Level (also, see below) of Instruction
- have qualified faculty with the background and experience necessary to teach the subject
- include a method of evaluation of the program by participants
- have a set time schedule and be at least 50 minutes in length for the first hour of instruction.

BOTTOM LINE: Each workshop must have measurable learning objectives and each instructor must provide a brief curriculum vitae in order to qualify for P.A.C.E.® credits.

What is P.A.C.E.®? - continued on page 12

What is P.A.C.E.®? - continued from page 11

Writing Measurable Learning Objectives:

Four main parts of measurable learning objective:

Audience: for who is the program intended?

Action: what is the participant suppose to be able to do as a result of the program.

Conditions: what initial set of criteria is the participant given?

Degree: how well is the participant expected to be able to perform the action at the end of the program.

Steps for developing measurable learning objectives.

Step 1: Determine level of audience:

Basic—entry level no prior knowledge of the subject necessary

Intermediate—refresher course; some basic knowledge required; for the staff technologist with several years experience

Advanced—highly technical; for those with current skills/knowledge and at least five years of experience

Step 2: Identify what your audience should be able to do after the program.

Step 3: Write specific measurable learning objectives in terms of the four major parts of measurable learning objective: actions, conditions, degree, and correlate with level of instructions. See listing of verbs below to assist in writing objectives.

Step 4: Evaluate whether the program instruction satisfies the objectives.

Avoid non-measurable verbs: amplify, appreciate, be acquainted, be aware, be (come) familiar with, explore, gain insight, improve, increase, know, learn, realize, and understand. Below are verbs that will help to write good learning objectives.

Knowledge and Comprehension encompass cognitive processes of remembering or explaining. Application and Analysis are at a higher level and involve using knowledge to find new solutions, or in breaking a whole into component parts. Synthesis and Evaluation are problem solving cognitive processes, usually involving the creation of a new whole, or ability to judge the value of some thing(s).

KNOWLEDGE	COMPREHENSION	APPLICATION	ANALYSIS	SYNTHESIS	EVALUATION
Cite	Arrange	Adapt	Analyze	Arrange	Appraise
Choose	Associate	Apply	Appraise	Assemble	Approve
Define	Clarify	Catalogue	Audit	Build	Assess
Label	Classify	Chart	Break down	Combine	Choose
List	Convert	Compute	Calculate	Compile	Conclude
Locate	Describe	Consolidate	Categorize	Compose	Confirm
Match	Diagram	Demonstrate	Certify	Conceive	Criticize
Name	Draw	Develop	Compare	Construct	Critique
Recall	Discuss	Employ	Contrast	Create	Diagnose
Recognize	Estimate	Extend	Correlate	Design	Evaluate
Record	Explain	Extrapolate	Criticize	Devise	Judge
Repeat	Express	Generalize	Deduce	Discover	Justify
Select	Identify	Illustrate	Defend	Draft	Prioritize
State	Locate	Infer	Detect	Formulate	Prove
Write	Outline	Interpolate	Diagram	Generate	Rank
	Paraphrase	Interpret	Differentiate	Integrate	Rate
	Report	Manipulate	Discriminate	Make	Recommend
	Restate	Modify	Distinguish	Manage	Research
	Review	Order	Examine	Organize	Resolve
	Sort	Predict	Infer	Plan	Revise
	Summarize	Prepare	Inspect	Predict	Rule on
	Transfer	Produce	Investigate	Prepare	Select
	Translate	Relate	Question	Propose	Support

What is R.A.C.E.®? - continued from page 12

Sketch	Reason	Reorder	Validate
Submit	Separate	Reorganize	
Tabulate	Solve	Set up	
Transcribe	Survey	Structure	
Use	Test	Synthesize	
Utilize	Uncover		
	Verify		

The affective domain is concerned with changes (growth) in interests, attitudes and values. There are five major classes based on level of involvement.

RECEIVING	RESPONDING	VALUING	ORGANIZATION	CHARACTERIZATION BY A VALUE OR VALUE COMPLEX
Accept	Agree	Adopt	Anticipate	Act
Acknowledge	Allow	Aid	Collaborate	Administer
Attend (to)	Answer	Care (for)	Confer	Advance
Follow	Ask	Complete	Consider	Advocate
Listen	Assist	Compliment	Consult	Aid
Meet	Attempt	Contribute	Coordinate	Challenge
Observe	Choose	Delay	Design	Change
Receive	Communicate	Encourage	Direct	Commit (to)
	Comply	Endorse	Establish	Counsel
	Conform	Enforce	Facilitate	Criticize
	Cooperate	Evaluate	Follow through	Debate
	Demonstrate	Expedite	Investigate	Defend
	Describe	Foster	Judge	Disagree
	Discuss	Guide	Lead	Dispute
	Display	Initiate	Manage	Empathize
	Exhibit	Interact	Modify	Endeavor
	Follow	Join	Organize	Enhance
	Give	Justify	Oversee	Excuse
	Help	Maintain	Plan	Forgive
	Identify	Monitor	Qualify	Influence
	Locate	Praise	Recommend	Motivate
	Notify	Preserve	Revise	Negotiate
	Obey	Propose	Simplify	Object
	Offer	Query	Specify	Persevere
	Participate (in)	React	Submit	Persist
	Practice	Respect	Synthesize	Praise
	Present	Seek	Test	Profess
	Read	Share	Vary	Promote
	Relay	Study	Weigh	Promulgate
	Reply	Subscribe		Question
	Report	Suggest		Reject
	Respond	Support		Resolve
	Select	Thank		Seek
	Try	Uphold		Serve
				Solve
				Strive
				Tolerate
				Volunteer (for)

The Society of Armed Forces Medical Laboratory Scientists (SAFMLS) 2003 Annual Meeting and Exposition

I invite you to exhibit at our annual convention being held at the Silver Legacy Resort and Casino, Reno Nevada, 24 – 27 March 2003. Vendor exhibition is scheduled for 25 – 26 March 2003. SAFMLS is a non-profit professional society of medical scientists, technologists, technicians, managers and physicians in the Army, Navy, Air Force, Public Health and Department of Veterans Administration. Last year's meeting in Spokane registered just under 400 attendees. The purpose of the meeting is primarily educational. Topics presented include management, microbiology, toxicology, epidemiology, chemistry, coagulation, hematology, transfusion medicine, original research and military specific topics that have been commonly reported in the press such as Gulf War Syndrome, the DNA identification laboratory at the Armed Forces Institute of Pathology and Weapons of Mass Destruction detection. "Emerging Technologies" is this year's theme. Workshops will focus on clinical applications in Molecular Biology, and the continuing journey the Armed Services clinical and research laboratories have in supporting the evolving changes in military doctrine, strategy, operations and tactics. This meeting provides an opportunity for exhibitor interaction with military decision-makers, giving laboratory managers the best potential to fulfill the vision these leaders have for their services. This is the major scientific meeting of the year for most of these participants and they will travel from locations all over the world to meet with you. This will be the only opportunity many of them have to learn about your organization or product first hand.

Join US!

Although the Armed Forces are faced with many challenges in laboratory medicine, we are committed to a team effort to make military medicine succeed. Thanks to the devoted personnel in the Armed Forces and the vendors who make military medicine a reality, we will continue to thrive for many years. When you register to exhibit your product at this convention, you are showing your support for Military Medicine and ensuring the future meetings of this Society.

Why Reno?

Reno, NV is an old friend of SAFMLS. Located in the heart of downtown Reno, the Silver Legacy is an exciting world class hotel offering all the amenities in food and entertainment you have come to expect from the casino industry. The exhibition hall (City Center Pavilion) is located just across the street from the Silver Legacy. Transportation from the airport is easy and a short 15 minutes away.

Greyhound Exposition Services (GES) will be the decorator for the show.

Complete your booth application by using the attached form. Sign up early to ensure a prime location in the exhibit hall.

Samuel J.P. Livingstone, Lt Col, USAF, BSC
Exhibits Coordinator
Email: samuel.livingstone@arpc.denver.af.mil

Check Us Out on the Internet at www.safmls.org for current information about the meeting.



Invitation to Exhibit

SAFMLS '03
Society of Armed Forces Medical Laboratory Scientists
Booth Reservation Request
March 25 - 26, 2003
Silver Legacy Casino, City Center Pavilion
Reno, Nevada

Company Name: _____

Point of Contact: _____

Address: _____ City: _____ State: _____ Zip Code: _____

Phone: _____ Fax: _____

Your E-mail Address _____

Please reserve _____ booth(s) at \$1300.00 per 10' x 10' booth space

Purchase Order Number is requested or 50% Advance Deposit Payment.

Check or PO Number: _____ (Make checks out to "SAFMLS 2003")

Per attached preliminary floor plan:

1st Choice/Booth number(s) _____

2nd Choice/Booth number(s) _____

3rd Choice/Booth number(s) _____

Please note: SAFMLS reserves the right to make any changes to the SAFMLS preliminary floor plan and to make booth re-assignments that may be necessary for the overall benefit of the SAFMLS event, but will do their best to keep you in your originally requested/assigned booth location.

Would you be interested in a SAFMLS Sponsorship opportunity?

	Yes	No
Hospitality evening	_____	_____
Breakout session	_____	_____
Continental breakfast	_____	_____
Award	_____	_____
Other	_____	_____

If you have any questions about sponsorship, please call. Fax or mail booth/sponsorship request to:

Philip Livingstone, Lt Col	Phone: 303-676-7158/7159
9085 E. Mississippi Ave, F204	Fax: 303-676-7590
Denver CO 80247	

The Society of Armed Forces Medical Laboratory Scientists (SAFMLS) and the United States Military Medical facilities worldwide would like to take this opportunity to thank you all for your continued interest and support.

Check us out on the Internet at www.safmls.org

CALL FOR SAFMLS 2003 POSTER ABSTRACTS

To all SAFMLS members and prospective 2003 SAFMLS Meeting attendees, submitting a poster is an excellent way to participate and demonstrate your laboratory's accomplishments. Both clinical and research categories may be submitted. Many creative topics have been submitted during past meetings and have included, but are not limited to, the following:

- Correlation Studies
- Cost Analysis
- Management Issues
- Deployment Adventures
- Basic Science Research
- Applied Research
- New Method Development
- Collaboration Experiences

Awards for the best clinical and research posters will be selected during the meeting by members of the Awards Committee, and the winners will be recognized at the Awards Ceremony. Criteria for grading the posters include the following: Length and clarity of the hypothesis or purpose; clarity of methods, procedures, or applicable approaches in answering the hypothesis; clarity of the results and conclusions derived; use of graphs, photos, text and tables to assist in analysis of information presented, and the overall quality of the poster.

To submit your abstract(s), complete the following document. Abstracts must include a hypothesis or purpose, materials and methods, results, and conclusions. Please ensure that a one-page CV for only the first author accompanies each abstract submission.

SAFMLS 2003 ANNUAL MEETING POSTER APPLICATION

TITLE:

AUTHORS:

LOCATION:

ABSTRACT:

1st Author's e-mail address:

1st Author's mailing address:

1st Author's phone number:

E-mail completed submission forms to Maj Michael Dempsey at dempseym@afip.osd.mil or Maj Normita Bravo at bravon@afip.osd.mil. If you have questions you can e-mail us or call at (202) 782-1854/1847 (DSN: 662-XXXX).

Submission Deadline is 15 December 2002

SAFMLS 2003 ANNUAL MEETING WORKSHOP & SHORT TOPIC PRESENTATIONS

Please select between short topic presentations or workshop. Select the appropriate length of your presentation.

<input type="checkbox"/> SHORT TOPIC	<input type="checkbox"/> 20 minutes	<input type="checkbox"/> 40 minutes	<input type="checkbox"/> WORKSHOP	<input type="checkbox"/> 2 Hour	<input type="checkbox"/> 4 Hour
--------------------------------------	-------------------------------------	-------------------------------------	-----------------------------------	---------------------------------	---------------------------------

PRESENTER/SPEAKER

Name:	Rank:	Branch:
-------	-------	---------

Mailing Address:

e-mail:	Phone:	DSN:	Fax:
---------	--------	------	------

AUDIOVISUAL SUPPORT

35 mm Slide Projector:	Slides Carousels (<i>number</i>):
------------------------	-------------------------------------

Video Player and Monitor:	LCD (PowerPoint type) Projector:
---------------------------	----------------------------------

Other, Specify:

NOTE: Laptops will only be available for short topics sessions. Laser pointers will be available at the information desk .

PRESENTATION

Title:	Maximum enrollment:
--------	---------------------

Objectives: Please list 3 objectives participants will take from your presentation. This is required for CME accreditation.

Objective 1:

Objective 2:

Objective 3:

Mail, Fax, or e-mail to:

WORKSHOPS:

1Lt Jerome L. Vinluan
375 MDSS/SGSC
310 West Losey Street
Scott AFB, IL 62225

Voice: 618.256.7468
FAX: 618.256.7635
DSN 576
jerome.vinluan@medgrp.scott.af.mil

SHORT TOPICS:

Capt Maria Kohler, USAF, BSC
60th MDSS/SGSE
101 Bodin Circle
Travis AFB, CA 94535-1809

(707) 423-7422
FAX (707) 423-7267
DSN 799
Maria.Kohler@60mdg.travis.af.mil

or email Lt Col Debra Niemeyer at debra.niemeyer@peocbd.army.mil

In addition to this completed form, please e-mail abstracts and presenter's curriculum vitae (CV) in Microsoft Word format to address above. CV's are limited to one page only. Abstracts will be published in 2003 SAFMLS Meeting Program. If you do not receive confirmation within 3 days please call to verify submission.

APPLICATIONS MUST BE RECEIVED BY 15 DEC 2002

Nominee Requirements For SAFMLS Awards 2003

- Nominees must be a regular member of SAFMLS (enlisted nominees may be associate members) with a minimum time of one year as a member of SAFMLS prior to nomination
- Must be in the appropriate pay grade at time of award receipt
- Accomplishments cited must be within three calendar years of nomination date
- Individual has not received the award for which they are being nominated in the past three years
- May be nominated for any accomplishments that advance the practice of clinical laboratory medicine at the laboratory, installation, or headquarters level to include but not limited to:
 - Leadership
 - Management
 - Job knowledge
 - Innovation
 - Resource savings
 - Training
 - Significant non-laboratory accomplishments will be considered, but only as they apply to the whole person concept
- Activities promoting SAFMLS are viewed in a positive manner. These may include but are not limited to:
 - Committee membership
 - Written contributions to the newsletter
 - Workshop/Short Topic presentations
 - Poster presentations
 - Annual meeting committee involvement
- Nominations for the award must include:
- Brief biographical sketch of nominee not to exceed one type written 8 ½” X 11” page
- Description of accomplishments **limited to two double spaced 8 ½” X 11” pages** with one-inch margins and type no smaller than 11 characters per inch

Submit nominations NLT 15 December 2002 to the Awards Committee Chairperson:

Major Robert Zajac (801) 777-7034/5130
75th Medical Group/SGSAL DSN: 777-7034/5130
7321 11th ST, Bldg 570 robert.zajac@hill.af.mil
Hill AFB, UT 84406-5012

AWARD DESCRIPTION

Each year SAFMLS members have the opportunity to nominate outstanding members for a variety of awards. Nominations are submitted to the awards chairperson. A committee of ex-officio board members select the awardees. If you are interested in nominating one or more individuals for any of the following awards, please read through the nomination criteria found on the front cover of this issue of Society Scope and submit your nomination packages by 15 December 2002 Maj Robert Zajac, 75th Medical Group/SGSAL, 7321 11th St, Bldg 570, Hill AFB, UT; 801-777-7034/5130; DSN: 777-7034-5130; robert.zajac@hill.af.mil.

OUTSTANDING CLINICAL SCIENTIST

Designed to recognize outstanding contributions by an association laboratory officer in pay grades 0-1 through 0-3 who has excelled in clinical laboratory operations, laboratory management or as a staff officer with special emphasis on advancing the growth and professional goals and objectives of SAFMLS and has demonstrated outstanding leadership in pursuit of excellence for their country and service.

OUTSTANDING LABORATORY MANAGER

Designed to recognize outstanding contributions by an association field grade officer in pay grades 0-4 through 0-5 who has excelled in laboratory management, either directly or as a staff officer with special emphasis on advancing the growth and professional goals and objectives of SAFMLS and the practice of laboratory medicine. They should have also demonstrated outstanding leadership in pursuit of excellence for their country and service.

OUTSTANDING ENLISTED SERVICE MEMBER

Designed to recognize outstanding contributions by an association enlisted service member who has excelled in clinical laboratory operations, laboratory management, or as a staff NCO with special emphasis on advancing the growth and professional goals and objectives of SAFMLS, the practice of clinical laboratory medicine. They should have also demonstrated outstanding leadership in pursuit of excellence for their country and service.

OUTSTANDING RESERVE/GUARD LABORATORIAN

Designed to recognize outstanding contributions by an association reserve/guard member who has excelled in clinical laboratory operations, laboratory management or as a staff officer/NCO with special emphasis on advancing the growth and professional goals and objectives of SAFMLS and the practice of clinical laboratory medicine. They should also have demonstrated outstanding leadership in pursuit of excellence for their country and service.

OUTSTANDING CLINICAL RESEARCH SCIENTIST

Designed to recognize outstanding contributions by an association member in pay grades E-1 through 0-5 who has been involved in clinical research activities promoting laboratory science with a special emphasis on advancing the growth and professional goals and objectives of SAFMLS and the practice of laboratory medicine. They should also have demonstrated outstanding leadership in pursuit of excellence for their country and service.

DISTINGUISHED SERVICE AWARD FOR EXCELLENCE

Designed to recognize substantial contributions above and beyond normal expectations by an association member who has promoted and advanced the growth and professional goals of SAFMLS and the practice of clinical laboratory medicine. They should have demonstrated outstanding leadership in pursuit of excellence for their country and service. All nominations will be forwarded to last year's president who will chair a selection committee for the recipient of the award.

SAFMLS 2003 ANNUAL MEETING SPECIAL MEETING ROOM REQUEST

Title/Function:

Date Required:

Time Range:

Maximum Enrollment:

Meeting Type (e.g., restricted workshop, breakout):

AUDIOVISUAL SUPPORT

Overhead Projector:

35 mm Slide Projector:

Slides Carousels (number):

Video Player and Monitor:

PowerPoint Projector: (workshops and short topics only)

Other, Specify:

NOTE: Laptops WILL NOT be available (except for short topics session). Laser pointers will be available at the information desk (advance request not required).

MEETING ROOM AND SUPPLY REQUIREMENTS

Paper (type/number):

Room Size:

Pencils/Pens:

Tables (type/number):

Flip Chart with Markers:

Arrangement of Tables:

Other, Specify:

PRESENTER/MODERATOR

Name:

Rank:

Branch:

Corps:

Address:

Phone:

Fax:

E-mail Address:

DSN:

If you need a room for a Special Meeting, please complete this application and forward to the Point of Contact below. Mail, Fax, or e-mail to:

1Lt Jerome L. Vinluan
375 MDSS/SGSC
310 West Losey Street
Scott AFB, IL 62225

Voice: 618-256-7468
FAX: 618-256-7635
DSN 576
jerome.vinluan@medgrp.scott.af.mil

For Audiovisual questions contact

Capt Erin K. Morris
Voice: 940-676-2806
DSN: 736
erin.morris@sheppard.af.mil

APPLICATIONS MUST BE RECEIVED BY 15 DEC 2002

CITY CENTER PAVILION

GES
GENERAL CONTRACTOR
1111 11th St, Suite 1000
San Francisco, CA 94103



SAFMLS
MARCH 25-26, 2003
161 10'X10' BOOTHS



MEMBERSHIP APPLICATION

Name	Rank/Grade	SSN
Br of Svc	Duty Status: Active _____ Reserve/NG _____ Civilian _____ Retired _____	
Duty/Business Address		Phone ()
Home Mailing Address		Phone ()
Send Mail to (Check only one): Home _____ Work _____		

EDUCATION

Institution, City, State	Dates Attended	Major	Degree	Laboratory Science* Credit Hours

*Biochemistry, Laboratory Management/Administration, Medical Technology, Anatomical Pathology, Clinical Pathology, Toxicology, Microbiology, Cytology, Biomedical Research, etc.

CERTIFICATIONS, REGISTRATIONS, LICENSURES (DATES)

MEDICAL LABORATORY WORK EXPERIENCE (Military/Civilian)

Location	Position Title	Dates

MEMBERSHIP APPLICATION

AGREEMENT: I hereby apply for membership in the Society of Armed Forces Medical Laboratory Scientists and agree to abide by its Constitution and By-Laws and to support its objectives. I understand that acceptance of my dues is contingent upon approval of my application by the Board of Directors.

ANNUAL DUES: \$15.00/year. Society dues are payable by 31 December of each year to maintain active membership and to continue receiving the Society Scope. Individuals requesting membership after 1 October will have their enclosed dues credited for the following calendar year.

NOTE: Application for membership **MUST** include a recommendation from a SAFMLS member, so indicated by entry of the member's printed name and signature in the space provided below.

SAFMLS Member's Name (please print) and Signature

Applicant's Signature

Send this application (with dues) to the Secretary"

LCDR Cynthia E. Wilkerson
SAFMLS Secretary
611 Hawkes Island Drive
Green Cove Springs, FL 32043

Check should be made payable to "Society of Armed Forces Medical Laboratory Scientists" (SAFMLS)

For Use of Board of Directors:

Board Actions

Date:

_____ Approved

_____ Disapproved

Membership Category: _____ Member _____ Honorary _____ Emeritus

Comments:

Secretary, SAFMLS

**Visit our
WEBSITE
at
www.safmls.org**



Calendar of *Events*

COURSE INFORMATION

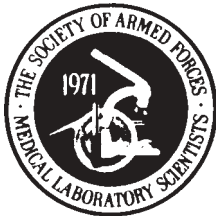
HIMSS 2003 Annual Conf & Exhibition
SAFMLS
ASCP Workshop for Laboratory Professionals
Molecular Virology Workshop & Symposium
American Society for Microbiology
CLMA/ASCP 2003 Conference & Exhibition
AACC 2003 Annual Mtng/Clin Lab Expo
Amer Society for Clin Lab Science Symposium
American Society for Microbiology
ASCP/CAP Annual Meeting
AABB
ASCP Workshop for Laboratory Professionals
ASCP Workshop for Laboratory Professionals
ASCP Workshop for Laboratory Professionals
American Society of Hematology

Location

San Diego, CA
Reno, NV
Baltimore, MD
Clearwater, FL
Washington, DC
Salt Lake City, UT
Philadelphia, PA
Philadelphia, PA
Chicago, IL
New Orleans, LA
San Diego
Phoenix, AZ
Kansas City, MO
Anaheim, CA
Philadelphia, PA

Dates

10 Feb - 13 Feb 03
24-27 March 2003
31 Mar - 3 Apr 03
25 Apr - 30 Apr 03
18 May - 23 May 03
21 June -25 June 03
20 Jul - 24 July 03
22 Jul - 26 Jul 03
14 Sept - 17 Sept 03
20 Sept -25 Sept 03
1-4 Nov 03
5 Nov -7 Nov 03
12 Nov - 14 Nov 02
4 Dec - 7 Dec 03
6 Dec - 10 Dec 03



SOCIETY SCOPE

P. O. Box 2549
Fairfax, VA 22031-0549
www.safmls.org

Presorted
FIRST CLASS
U.S. POSTAGE
PAID
PERMIT # 1112
MERRIFIELD

ADDRESS SERVICE REQUESTED