

SECTION OF EMERGENCY MEDICINE

Faculty

Associate Professor and Chief of Section

John A. Schriver, M.D. (S.U.N.Y. at Buffalo)

Associate Professor

Sandy Bogucki, M.D., PhD (Yale University, Texas A& M University)

David C. Cone, M.D. (College of Physicians & Surgeons, Columbia University)

Linda C. Degutis, DrPH (Yale University)

Gail D'Onofrio, M.D., MS (Boston University)

Seth Powsner, MD (Yale University)

Assistant Professor

Stephen M. Bowers, M.D. (Yale University)

Phillip A. Brewer, M.D. (University of Nice, France)

Leigh Evans, M.D. (Washington University School of Medicine)

Scott M. Jolin, M.D. (Tufts University)

Karen Jubanyik-Barber, M.D. (Yale University)

Edward P. Monico, M.D., J.D. (University of Maryland)

Christopher Moore, M.D., RDMS (University of Virginia School of Medicine)

Harry Moscovitz, M.D. (Mt. Sinai Hospital - NYU)

Allen Poma, M.D. (Bowman Gray)

John Sather, M.D. (Jefferson Medical College of Philadelphia)

Albert C. Wehl, M.D. (Yale University)

Assistant Clinical Professor

G. Bosker, M.D.

Keith Bradley, M.D. (Tulane University)

John Cacace, M.D. (Mount Sinai School of Medicine)

Janeane Flynn, M.D. (Albany Medical College)

Alyssa R. French, M.D. (George Washington University)

L. G. Graff, M.D.

Bryan Jordan, D.O. (University of Health Sciences, College of Osteopathic Medicine)

Guillermo Katigbak, M.D. (University of Philippines)

Paul Krochmal, M.D. (New York Medical College)

Joel Kunkel, M.D. (University of Arizona)

Thomas LaMonte, M.D. (Albany Medical College)

Jonathan Maisel, M.D. (S.U.N.Y. Downstate Medical Center)

Antonio Napolitano, M.D. (S.U.N.Y. Health Science Center at Brooklyn)

R. Nierenberg, M.D.

M. M. Perez, M.D.

Carolyn Rambus, M.D. (Michigan State University)

J. Razzak, M.D.

Karen M. Restifo, M.D. (Georgetown University)

J.E. Sather, M.D.

S. Shahabuddin, M.D.

J. A. Sirleaf, M.D.

J. M. Tan, M.D.

Asim Tarabar, M.D., M.S. (University of Sarajevo)

G. Terranova, M.D.

M. A. Wayne, M.D.

Michael Werdmann, M.D. (University of Cincinnati)

J. A. Wilkinson, M.D.

Clinical Instructor and EMS Fellow

Michelle Perez, M.D. (Ponce School of Medicine)

Visiting Professor

Paul E. Pepe, M.D., MPH (University of California)

Assistant Clinical Professor-Courtesy Appointments

Gideon Bosker, M.D. (Washington University)

Michael Carius, M.D. (University of Colorado)

Louis Graff, IV, M.D. (Harvard University)

Mark R. Prete, M.D. (Georgetown University)

Junaid Razzak, M.D. (Aga Khan University)

George Terranova, M.D. (Faculty of Medicine and Science, Italy)

Marvin Wayne, M.D. (University of Michigan)

Lecturer

Elizabeth Browne, P.A. (Yale University)

Nina Byorick, P.A. (Yale University)

Donald McMillan, P.A. (Yale University)

Andrew Meiman, P.A. (Rutgers University)

Overview

Dr. Sandy Bogucki is the Associate EMS Medical Director for the New Haven and Branford, Connecticut Fire Departments, and Fire Surgeon for Branford. She holds several positions of leadership in the Fire Service and EMS communities. She chairs the NFPA 1582 Task Group, is a member of the executive board of the NFPA Fire Service Section, serves on the Board of Visitors for the National Fire Academy, and conducts on-site investigations of fire fighter line-of-duty deaths for NIOSH. She serves on the editorial board of Pre-hospital Emergency Care, is a member of the Board of Directors of the National Association of EMS Physicians, and is presently the Treasurer of the National Registry of EMT Board of Directors. Dr. Bogucki is also an appointed member of the Inter-Agency Board for Equipment Standardization and Interoperability, and serves on a number of DoD advisory and review boards related to military R&D and domestic terrorism/WMD. Her current research interests include development of remote monitoring technology for environmental pathogen detection, studies of fire fighter physiology, and incident management theory. Her research has resulted in one patent award, numerous publications in the peer-reviewed literature as well as editorials, review articles and chapters in textbooks.

Dr. Stephen M. Bowers continues to work on his MPH at the Yale School of Public Health supported by the Section of Emergency Medicine Faculty Development Program. Dr. Bowers is enrolled in the Health Management Division and is focusing on health care delivery to underserved populations and health care administration.

Dr. Phillip A. Brewer, Director, Division of Global Emergency Medicine is medical director for the provider to the Disney Cruise Line. In addition to responsibility for onboard medical operations and telemedicine consultations, he developed a cruise medicine elective for senior residents in emergency medicine. Global Emergency Medicine comprises cruise ship medicine, travel medicine, international disaster relief, and international development of Emergency Medicine practice and training. He is investigating the impact of administrative reporting of impaired drivers. During the past year he has served as a National Highway Traffic Safety Administration (NHTSA) Medical Traffic Safety Fellow. During this academic year, he served as President of the Connecticut Chapter of the American College of Emergency Physicians (CCEP) and has represented CCEP nationally as a Councilor to the House of Delegates of ACEP.

Dr. David C. Cone, Director, Emergency Medical Services Division, is Deputy Editor of Prehospital Emergency Care, the journal of the National Association of EMS Physicians (NAEMSP), upon whose Board of Directors he sits. He also serves as Chair of NAEMSP's Membership Committee, and as Associate Editor of the third edition of Prehospital Systems and Medical Oversight, NAEMSP's textbook.

He received promotion to Senior Associate Editor of Academic Emergency Medicine, the journal of the Society for Academic Emergency Medicine. He is director for Yale's EMS Fellowship program, one of only twenty accredited programs in the country providing sub-specialty training in EMS.

Dr. Linda C. Degutis, Associate Research Director, continues her funded work in studying policies and clinical interventions that impact alcohol related injury. This includes evaluations of state and federal policy, as well as institutional policy. This year she was elected to the Executive Board of the American Public Health Association. She also serves on the Board of Directors of the American Trauma Society; the Advisory Committee for America's Health Together and is a member of the Technical Advisory Group for the implementation of the newly redesigned federal Drug Abuse Warning Network (DAWN). In addition, she is the Co-Chairperson of the Healthy People 2010 Task Force for the Society for Academic Emergency Medicine. She completed 2 years of service as a faculty mentor for Project MAINSTREAM, a HRSA/AMERSA/CSAT-SAMHSA sponsored fellowship training project, which is a model program to increase capacity for substance abuse education and research in academic settings. She is actively involved in community based efforts to prevent and decrease injury, as well as alcohol and other drug-related problems, serving as Co-Chair for the Connecticut Coalition to Stop Underage Drinking and as a member of the Board of Directors of the Connecticut Coalition for Education Against Gun Violence. Dr. Degutis holds a secondary faculty appointment in the Environmental Health Division in the Department of Epidemiology and Public Health, and teaches a course on Epidemiologic Methods in Injury Control, co-teaches a course on the Public Health Management of Disasters, and directs a seminar course in Disaster Management in addition to serving as a guest faculty member in other courses. During this year, Dr. Degutis has collaborated with faculty at EPH and in other departments to develop the Yale Center for Bioterrorism and Disaster Preparedness, which she directs.

Dr. Gail D'Onofrio, Research Director, is currently the principal investigator on two projects related to screening and intervention for ED patients with alcohol and other drug problems. Project ED Health is an R01 grant from the National Institute on Alcohol Abuse and Alcoholism (NIAAA) evaluating the effectiveness of a brief intervention for patients presenting with harmful and hazardous drinking performed by ED physicians/physician associates. Project ASSERT is funded by Robert Wood Johnson Foundation and the New Haven Office of Substance Abuse Policy and Prevention (OSAPP). This program uses health promotion advocates (HPAs) to screen ED patients and intervene with alcohol and other drug problems, other high risk health behaviors, and access to medical care. In collaboration with the Wellness Initiative Network (WIN) the HPA's enroll patients without insurance into community health centers or Yale Primary Care. She continues to work with community groups such as New Haven's OSAPP and state initiatives through the Department of Mental Health and Addiction Services. She serves on the Board of Directors for Association of Medical Education and Research for Substance Abuse (AMERSA). She also serves as a Mentor to three junior faculty at Vanderbilt University and Meharry Medical College for Project Mainstream, a faculty development program funded by HRSA/AMERSA/CSAT-SAMHSA. In addition, Dr. D'Onofrio is the Medical Director of the Women's Heart Advantage Program, working in collaboration with the Yale-New Haven Hospital Heart Center in developing and evaluating programs in an effort to increase women's awareness of heart disease.

Dr. Leigh Evans joined the faculty this year as a member of the research division. She serves as the liaison to the Trauma service, and represents the Section of Emergency Medicine on the Trauma QI committee. Her scholarly interests include the evaluation of abdominal pain and trauma intubations. In addition she has contributed significantly to the education division. She has developed and implemented a trauma curriculum for Emergency Medicine residents.

Dr. Scott W. Jolin is Program Director, Emergency Medicine Residency Program of the Yale-New Haven Medical Center. In the winter of 2002, the residency program received full accreditation from the American Council of Graduate Medical Education under his guidance. The program entered its sixth year and received nearly 500 applications for ten internship positions. Dr. Jolin continues to actively participate in activities sponsored by the Society of Academic Emergency Medicine Council of Residency Directors and internally as a member of the Yale-New Haven Hospital Graduate Medical Education Committee. Dr. Jolin also continues to serve as a trauma center site visitor for the American College of Surgeons Committee on Trauma.

Dr. Karen Jubanyik is Associate Program Director, Emergency Medicine Residency Program of Yale-New Haven Medical Center. She is an active member of the Education Committee in the Section of Emergency Medicine, which is responsible for overseeing the didactic education and clinical rotations in Emergency Medicine. She is a major contributor to the residency selection process, which includes reviewing applications, interviewing, and ranking the candidates. She is a collaborator in the evaluation the Women's Heart Advantage Program. With her training in Internal Medicine, she serves as a liaison between the Section of Emergency Medicine and the Department of Internal Medicine. In addition to scheduling and evaluating the Department of Medicine and Primary Care residents, she developed and oversaw a didactic series for these residents. She serves as an advisor for the Yale University Medical students applying for residencies in EM and supervised a PA student's thesis on the effect of ethnicity on waiting room times in patients with abdominal and chest pain.

Dr. Edward P. Monico provided clinical staffing of the adult ED and completed study at the School of Law at Quinnipiac University, earning his JD. He continues to function as CCEP's Research Director. His research focus is related to law and medicine.

Dr. Christopher L. Moore, Director, Division of Emergency Ultrasound Education. Over the last year he has established this division, which includes directing a one-year Emergency Ultrasound Fellowship as well as both required and elective rotations in emergency ultrasound for residents and as a medical student elective. He is a registered medical and cardiac sonographer, and serves as co-chair of the Industry Roundtable Committee of the American College of Emergency Physicians Emergency Ultrasound Section as well as Secretary of the American Institute of Ultrasound in Medicine Emergency Ultrasound Section. Over the last year he has lectured at the Connecticut and American Colleges of Emergency Physicians, the Connecticut Hospital Association, and the American Academy of Emergency Medicine. As a faculty member of Windy City Ultrasound, Chicago IL, he provides ultrasound instruction to community emergency departments nationally. He serves as a reviewer for *Academic Emergency Medicine*.

Dr. Harry Moscovitz, Medical Director of the Adult Emergency Department at Yale-New Haven Hospital, has led the Emergency Department in a variety of clinical improvements. In addition, he was instrumental in developing and implementing an institution-wide effort to improve the care of patients with acute myocardial infarction and stroke. He scholarly interests involve the comprehensive management of pain in the ED and smoking cessation in patients with asthma.

Dr. Allen Poma continues to be a member of the education division, and is working on the implementation of a resident feedback system incorporating the new ACGME core competencies for Emergency Medicine. He is the founding faculty mentor for the first Emergency Medicine Interest Group (EMIG) at Yale School of Medicine and continues in the role of mentor and Chief Editor of the EMIG publication, *Lifeline*. He is the medical director for the ACLS courses offered at Yale University.

Dr. Seth Powsner, Medical Director of the Crisis Intervention Unit (Emergency Psychiatry), continues his studies on graphical presentation of clinical data. He finished a term as membership committee chair for the Academy of Psychosomatic Medicine. He has been made a Fellow of the American Psychiatric Association. At the Association's annual meeting in San Francisco he presented talks on teaching emergency psychiatry, designing electronic medical records, using clinical algorithms, and using webcams for clinical education. The *Lancet* invited him to write commentary on medical compliance.

Dr. John Sather serves as Director of Medical Student Education for the Section, extensively restructuring the clerkship format over the last year. He has taken a leadership role in the provision of care to patients presenting with acute brain injury as a member of the Acute Stroke Team. Active in the CQI process, he oversees the monthly Morbidity and Mortality conference for the Section. His research interests focus on the interface between the Emergency Department and ICU and he currently is developing guidelines for the management of patients presenting with signs of early sepsis.

Dr. John A. Schriver, Chief of Section, performed the many responsibilities and assignments in the three components of his position: Section Chief, Physician Director of the Department of Emergency Services at Yale New Haven Hospital, and medical staff physician in the adult ED. He is currently reviewing methods

to decrease patient length of stay in the ED, and developing quality improvement strategies for emergency medicine. Dr. Schriver remains on the editorial board of *Emergency Medicine Reports*.

Dr. Albert C. Weihl, Director, Education Division, remains heavily involved in the residency accreditation process, application review, interviewing process, and selection of incoming residents for the Emergency Medicine residency program, and is actively involved in the teaching of Emergency Medicine Residents. Dr. Weihl also remains an active, inpatient attending on the Internal Medicine Service. He is an active member of six medical center-wide committees: the Pharmacy and Therapeutics Committee, the Bioethics Committee, the Clinical Advisory Committee on CCSS replacement, the Operations Committee in Internal Medicine, the Claims and Transfusion Committees. Dr. Weihl is an Oral Board Examiner for the American Board of Emergency Medicine, administering the national standard ABEM Oral Examination on a yearly basis in the fall. He serves as a member of the editorial board of *Emergency Medicine Reports*. His lectures and presentations have focused on the management of chest pain in the Emergency Department and medical-legal/risk management topics. He also continues to serve as a consultant to attorneys throughout the country on medical-legal issues and medical malpractice.

Research

Drs. Gail D'Onofrio and Linda C. Degutis direct the Research Division. Other Research Division faculty include Drs. Chris Moore and Leigh Evans. The Division is responsible for facilitating and providing support for faculty research, and overseeing EM resident scholarly activities. The research foci for faculty in the Division fall into the major categories of alcohol and other drug problems, injury control, health policy, ultrasound, and clinical decisions regarding the evaluation of abdominal pain. Other EM faculty focus their research efforts on areas related to their Division interests and needs. Students in medicine, public health, nursing, and the physician associate program, as well as undergraduate students with an interest in health care or emergency medicine work under the direction of the Research Directors. The 3rd Annual Emergency Medicine Research Day program included presentations of scholarly work by the 10 graduating EM residents. In addition, research has been presented by both faculty and residents at the Society for Academic Emergency Medicine national and regional meetings, the American College of Emergency Physicians Research Forum, the American Public Health Association meeting, the Kettil Bruun Society meeting, Alcohol Policy 13, and the Association for Medical Education and Research in Substance Abuse annual meeting. During this academic year, 4 student thesis projects were completed under the direction of emergency medicine faculty.

Funding for emergency medicine research projects has been received from various sources including the NIH (NIAAA), NIOSH, the U.S. Navy Office of Naval Research, the Robert Wood Johnson Foundation Substance Abuse Policy Research Program, the U.S. Department of Education, the Connecticut College of Emergency Physicians and the New Haven Office of Substance Abuse Policy and Prevention.

The Division of EMS is actively involved in research, and a number of the Section's emergency medicine residents have initiated research projects as well. Dr. Cone's primary focus is on EMS systems issues, with a number of studies currently underway including a multi-center trial of a proposed protocol for termination of resuscitation efforts for victims of cardiac arrest in the field. Dr. Bogucki's primary area of research is in technology development to enhance the health and safety of military personnel and emergency responders in the fire and rescue services. This work includes collaboration with U.S. Department of Energy National Labs, and other industrial and academic partners to develop an environmental pathogen detection system for the U.S. Navy. Dr. Bogucki worked on a model to apply the incident management structure to a public health response for events involving biological weapons agents.

Division of Emergency Medical Services (EMS)

The 2002-2003 academic year was the third year of our EMS fellowship program, which holds full accreditation from the Society of Academic Emergency Medicine (SAEM) through 2006. Michelle M. Perez, MD successfully completed the fellowship program during the 2002-2003 year, and Carin Van Gelder, MD was recruited as the 2003-2004 EMS Fellow. She was selected to receive the SAEM /

Medtronic Physio-Control Fellowship in EMS, a competitive grant awarded to one EMS fellow in the U.S. each year.

Other current members of the Division faculty are Dr. David Cone, who serves as Division Chief and Fellowship Director; Sandy Bogucki, MD, PhD, who serves as director of the Fire Rescue Technology Program; Donald MacMillan, PA, EMT-P, who serves as EMS Coordinator for both the Division and YNHH; and Nina Byorick, PA, EMT-P, who serves as ACLS Co-Director for the Section. All are actively involved in both initial training and continuing education for EMS field personnel through the New Haven Sponsor Hospital Program (NHSHP), which provides medical oversight to the EMS system of New Haven and eleven surrounding towns. The division also continues to host an Emergency Medical Technician – Basic course for Yale undergraduate students.

The Division has helped mentor Yale University EMS, a state-accredited first-responder EMS service providing medical coverage at Yale intramural athletic events. The Division also provides sideline medical coverage for home varsity football games, men's varsity hockey games, and men's varsity lacrosse games. All Division faculty are active field EMS providers and active volunteer firefighters, and all also serve as Medical Advisers to local EMS services through NHSHP, which Dr. Cone serves as MIC Medical Director. All Division faculty are actively involved in the Sponsor Hospital Area Response Physician (SHARP) Team, which provides 24/7 EMS physician coverage for field response to structural collapses, greater alarm fires, prolonged entrapments, mass casualty incidents, and other emergencies throughout the area.

In the past year, several EMS research projects generated by EM residents have reached completion. At the National Association of EMS Physicians (NAEMSP) annual meeting in January, Dr. Kate Kane made an oral presentation of a research project examining the epidemiology of out-of-hospital anaphylaxis. Dr. Philip Andrus presented a poster describing a large survey project that he and Dr. Bogucki have conducted through the National Registry of EMT's, examining the multiple commitments that EMS personnel have, a factor that may limit the ability of some agencies to adequately staff their operations during a disaster, or if there are significant military reserve call-ups. Dr. Carin Van Gelder presented a poster describing her environmental chamber project, examining heat storage in working firefighters. Finally, a multi-center cardiac arrest project, on which Dr. Cone served as first author and which Dr. Andrew Spackman joined as a co-investigator last summer, won the "Best Cardiac Arrest Research Paper," sponsored by the National Center for Early Defibrillation. Asa Margolis, EMT-I, a field provider from our area, worked with Dr. Bogucki on a study examining the knowledge and attitudes of political leaders in the south-central region regarding EMS and disaster management following the events of September 11, 2001. Dr. Bogucki was also last author on a poster describing the development and field-testing of a series of quality indicators for fire-based EMS systems.

Also at the NAEMSP meeting, Dr. Cone served as principal investigator of a one-day consensus conference on medical necessity in EMS. This project received grant funding from the National Highway Traffic Safety Administration. Dr. Bogucki began her two-year term as a member of the NAEMSP Board of Directors, having been elected to an at-large position by the Association's membership this fall. She also continues serving on the editorial board of *Prehospital Emergency Care*, NAEMSP's journal. Dr. Cone began a two-year term as Secretary/Treasurer of NAEMSP. He remains Deputy Editor of *Prehospital Emergency Care*, and received an "Editorial Excellence" award from the journal. He also continues to serve as Senior Associate Editor of *Academic Emergency Medicine*, SAEM's journal.

Division of Global Emergency Medicine

The goals of the Division of Global Emergency Medicine (GEM) are to improve emergency care internationally through research, program development, training, and professional relationships with foreign individuals and organizations that constitute the avante garde of Emergency Medicine in their respective countries. Over the past year, members of the division have been invited speakers at conferences in several foreign countries including France, Italy, South Africa, and Pakistan. The senior EM resident elective rotation in cruise medicine has been very successful. To date there have been over a dozen participants and all slots are filled through August 2004.

Educational Programs

The Section of Emergency Medicine supports the educational mission of the Yale School of Medicine through the sponsorship of two clinical clerkships in Emergency Medicine as well as participation in two courses in the core curriculum:

Medical Student Education

The Section of Emergency Medicine participated in multiple medical student educational activities, under the direction of Drs. John Sather and Allen Poma. They include:

Third Year Clerkship in Emergency Medicine/Trauma Surgery

Approximately 32 third year medical students per year enroll in this clerkship program. The course structure consists of a 2-week rotation in the YNHH Adult ED. Third year clerks work under the supervision of residents and ED attendings learning to evaluate patients presenting across the spectrum of emergency medicine with emphasis on development of history, physical exam, and oral/written presentation skills in the context of emergency medicine priorities and decision-making.

Senior Elective in Emergency Medicine

Approximately 32 senior medical students and physician associate students per year are enrolled in this course. The course structure is a 4 week rotation in the YNHH Adult ED. Senior medical students and PA students work under the direct supervision of the ED attendings as primary providers for patients presenting across the spectrum of emergency medicine; emphasis on further refinement of clinical skills, formulation of the differential diagnosis, development of a diagnostic/management strategy, efficient execution of the care plan, and clinical procedural skills experience; intended for students interested in applying to emergency medicine or primary care residency

Primary Care Clerkship: Emergencies in the Primary Care Setting

Required of all graduating Yale Medical students, this course is a monthly two hour workshop which includes case-based discussion of emergencies commonly encountered in the primary care setting with a focus on prehospital and outpatient diagnostic/management strategies and decision making.

Integrative Clinical Medicine: Preparation for Internship

Required of all graduating Yale Medical students, this course consists of nine, two-hour seminars over a three-week period. A module within the ICM course, focusing on preparing graduating medical students for internship; specifically aimed at increasing the young house officer's confidence and competence to deal with a wide range of in-hospital clinical emergencies.

Emergency Medicine Residency Training

The Emergency Medicine Residency Program is under the direction of Scott Jolin, M.D. assisted by associate directors Karen Jubanvik, M.D. and Jonathan Maisel, M.D. (Bridgeport Hospital). The mission of the program is to provide comprehensive state-of-the-art training to prepare academically oriented leaders in Emergency Medicine.

The four-year training program is affiliated with Bridgeport Hospital, and currently has 40 residents. Over 500 applications are received annually for 10 positions beginning at the intern level. In June 2002 the program welcomed its seventh class of residents and graduated its third. Graduates have accepted positions in the following locations:

Robert T. Benson, M.D.	Dixie Regional Medical Center, St. George, Utah
Placid A. Bone, M.D.	Maimonides Hospital, Brooklyn, New York
Josiah H. Child, M.D.	Sioux Valley Hospital, Sioux Falls, South Dakota
Brian M. de la Rosa, M.D.	St. Vincent's Medical Center, Bridgeport, Connecticut
Scot M. Depue, M.D.	Hospital of St. Raphael, New Haven, Connecticut
Kathleen E. Kane, M.D.	Lehigh Valley Hospital Network, Lehigh, Pennsylvania
Steven M. Kodama, M.D.	St. Joseph's Hospital, Tacoma, Washington
Henry Lin, M.D.	Ultrasound Fellowship, Yale New Haven Medical Center
Brian Malone, M.D.	Charlotte Hungerford Hospital, Torrington, Connecticut
Carin M. Van Gelder, M.D.	EMS Research Fellowship, Yale New Haven Medical Center

Advanced Cardiac Life Support (ACLS) and Basic Life Support (BLS)

Advanced Cardiac Life Support (ACLS) courses are offered monthly from September to May. They are jointly sponsored by the School of Medicine and Yale New Haven Hospital. They are mandatory for medical students, resident physicians of many YNHHS residency training programs, and certain faculty and medical staff, and are open to other students and personnel. Dr. Allen Poma serves as Medical Director, along with Nina Byorick, PA, EMT-P as the co-director, of the ACLS program. During the past academic year 606 participants completed the ACLS course and 100 completed the BLS course.

Paramedic Training

Rotation through the ED is mandatory for the students in the Paramedic Training Program of the Yale University, Gateway Community College and New Haven Sponsor Hospital Program. Donald MacMillan, P.A., coordinates the program.

Clinical Programs

YNHH - Adult Department of Emergency Services

The Yale-New Haven Hospital Department of Emergency Services had a total of 90,801 patient visits during the year. Of the total, 64,773 were seen in the adult emergency department and 26,028 in the pediatric emergency department. The adult ED was the source of 19 % of the hospital's adult admissions. Dr. John Schriver and Ms. Roberta Chuong are Co-Directors of the Department of Emergency Services at Yale New Haven Hospital. Dr. Harry Moscovitz serves as the adult ED medical director and Dr. Douglas Baker is the pediatric ED medical director.

Chest Pain Center

The four-bed chest pain center (CPC) serves the function of rapidly screening emergency department patients presenting with undifferentiated chest pain for evidence of ischemic heart disease, utilizing a nine-hour protocol. Patients in the CPC remain the responsibility of the ED attending physician throughout their stay and receive stress tests under the supervision of consulting Section of Cardiology faculty. The program provides a high level of safety for patients presenting with suspected coronary syndromes. In addition, the protocol has decreased the hospital admission of patients presenting to the ED with chest pain. The CPC is co-directed by Drs. Albert Wehl and Frans Wackers (Internal Medicine/Cardiology).

Adult Urgent Care

The five-bed adult urgent care unit operates twelve hours daily, is adjacent to the adult ED and is staffed by physician associates of the Department of Emergency Services (DES). Elizabeth Browne, PA, under the direction of Dr. Harry Moscovitz, coordinates the unit. Physician associates of the DES are assigned to both adult ED and urgent care units and thus maintain a broad base of clinical experience. The unit served 12,950 patients representing an 18% increase in patients served.

Crisis Intervention Unit

The eight-bed crisis intervention unit (CIU) served 4234 patients with acute psychiatric crisis and behavioral disorders, representing a significant increase over the previous year. Patients are either selected by triage criteria for direct admission to the unit or referred to the unit in consultation from the adult ED following medical evaluation. The CIU staff experienced a decrease in referral options for the continuing management of its patients, resulting in a longer average length of stay of its patients. Nevertheless its personnel continued to provide skilled and compassionate care to their patients. Medical director of the CIU is Dr. Seth Powsner.

Project ASSERT (Alcohol Substance Abuse Services Education, Referral, and Treatment)

Project ASSERT, an innovative program using community outreach workers in the ED to identify and provide early intervention for patients with alcohol and other drug problems, as well as other selected health risks such as domestic violence, smoking, depression, and lack of primary care services, is now fully integrated into the ED. It is a collaborative effort between the Emergency Department at Yale-New Haven Hospital, New Haven Office of Substance Abuse Policy and Prevention, and the Section of Emergency

Medicine. To date, the health promotion advocates have seen over 15,000 patients. They refer approximately 650 patients each year to specialized treatment centers. Of the 83% of patients with follow-up, 93% have enrolled in a program as a result of this direct linkage from the ED.

Women's Heart Advantage

Women's Heart Advantage is a cooperative effort of the Yale New Haven Heart Center, the Emergency Department, the VHA and the American Heart Association, designed to increase awareness among women about the importance of getting rapid and appropriate treatment when experiencing symptoms of a heart attack. A major public health media campaign has been under way since March 2001. Key elements of our educational efforts have been included in inserts in local papers such as the *New Haven Register*, *Norwich Bulletin*, *New London Day*, and *Hartford Courant*, and multiple educational opportunities have been offered for large groups of women in the greater New Haven area. In addition, information for providers has been distributed to those practicing in the community. The effectiveness of this media campaign is being evaluated by phone interviews of women who have presented to the ED with possible symptoms of heart disease, comparing pre-campaign responses with 6 month and 1-year post initiation responses. During the past year, the percentage of women presenting to the ED under 6 hours since onset of symptoms has increased from 36% to 50%. The program is the recipient of numerous awards including the 2002 Elwood Award from the Foundation for Accountability for its efforts to improve healthcare for consumers, and the New England Society of Healthcare 2002 Distinguished Communications Award for Overall Marketing Campaign.

Quinnipiac University Health Care Services

Section faculty provide medical direction and staffing for the Quinnipiac University Health Care Services during the academic year. Staffing is provided by Drs. Allen Poma, Phillip Brewer, Karen Jubanyik, Edward Monico, and John Schriver.

Active Grants

"Mandatory Substance Abuse Screening in Injured Patients: Implications for Policy Development and Implementation" Substance Abuse Policy Research Program, Robert Wood Johnson Foundation PI - LC Degutis, Co-Investigator - G D'Onofrio

"A Comparative Analysis of the Passage and Failure of Passage of DWI legislation and Regulation in the US and Canada" Robert Wood Johnson Substance Abuse Policy Research Program: PI - LC Degutis

"Emergency Department Based Brief Interventions for Alcohol Problems", NIAAA (NIH): PI - G D'Onofrio; Co-Investigator - LC Degutis

"Campus Community Partnerships to Decrease Campus Alcohol Problems", US Dept of Education: PI - LC Degutis

"Project ASSERT: A Program to Provide Screening and Intervention for substance abuse and other high risk behaviors and access to care. Funded by Robert Wood Johnson Foundation and New-Haven Fighting Back Initiative and partially funded by Wellness Information Network (WIN) HRSA: PI- G D'Onofrio, and Co-Investigator LC Degutis

Association of Medical Education and Research in Substance Abuse (AMERSA)/Health Research Services Administration (HRSA) and Substance Abuse and Mental Health Services (SAMSHA/CSAT) funded "Project Mainstream." An Interdisciplinary Program in Substance Abuse Education; Mentors: LC Degutis, G D'Onofrio

"Emergency Ultrasound Use by Community Emergency Departments", American College of Emergency Physicians Section Grant 2003-2004. PI - CL Moore.

Publications

Peer-Reviewed

Penner MS, **Cone DC**, **MacMillan DS**. A time-motion study of ambulance-to-emergency department radio communications. *Prehosp Emerg Care*. 2003; 7:204-208

Usatch BR, **Cone DC**. Automated external defibrillator training and skill retention at a ski patrol. *Prehosp Emerg Care*. 2002; 6:325-329.

D'Onofrio G, **Degutis LC**. Preventive care in the emergency department: Screening and brief intervention for alcohol problems in the emergency department: A systematic review *Acad Emerg Med*. 2002; 9:627-638.

D'Onofrio G, Nadel, E, **Degutis, LC**, Sullivan, L, Casper, K, Bernstein, E, Samet, J. Improving emergency medicine residents' approach to patients with alcohol problems: A controlled educational trial. *Ann Emerg Med*. 2002; 40:50-62.

Fiellen, DA, Butler R, **D'Onofrio G**. The physician's role in caring for patients with substance use disorders: Implications for medical education and training. *Sub Abuse*. 2002; 23:207-222.

Gombeski WR, Kramer RK, Wilson T, Krauss K, Taylor J, Colihan L, Parkosewich J, Caulin-Glasser T, Freed L, **D'Onofrio G**. Women's Heart Advantage Program: Motivation of Rapid and Assertive Behavior. *Journal of Cardiovascular Management*. 2002; 13:21-28.

McCausland JB, Linden JA, **Degutis LC**, Ramanujam P, Sullivan LM, **D'Onofrio G**. Nonoccupational postexposure HIV prevention (NPEP): Emergency physicians' current practices, attitudes and beliefs. *Ann Emerg Med* (In press)

Schrivier JA, Talmadge R, Chuong R, Hedges JR. Emergency Nursing: Historical, Current, and Future Roles. *Acad Emerg Med*. 2003; 10:798-804.

Chapters/Reports/Editorials

Bogucki S, Weir S. Pulmonary Manifestations of Intentionally Released Chemical and Biological Agents. In Redlich C, Pose C, editors. *Clinics in Chest Medicine* 2002; 23:777-794.

Bogucki S. The spirit of HIPAA. Is EMS there? *Newsletter of the National Association of EMS Physicians* 2003; 12(3):1, 4.

Bogucki MS, Rabinovitz P. Occupational Medical Programs for Fire and Law Enforcement Services. In Rosenstock L and Cullen M, (Eds). *Textbook of Clinical Occupational and Environmental Medicine*, in press 2003.

Bogucki MS, Heck J. Operational EMS. In Krohmer J and Brennan J, editors, *Principles of EMS, American College of Emergency Physicians*, in press 2003.

VanGelder, C., Pranger L.A., Urias A., Lo, R., Wiesmann, W.P., Winchell, R.J., Kolka, M.A., Stachenfeld, N., **Bogucki, S**. Physiologic monitoring in extreme environments: Application of micro-sensors and embedded processors to predict heat stress in fire fighters. In *Biomedical Diagnostic, Guidance, and Surgical-Assist Systems IV*, Tuan Vo-Dihn, David A. Benaron, Warren S. Grundfest, Editors, Proceedings of SPIE, 2002; 4615:71-81.

Brewer P. Commentary: open containers: open opportunity for disaster. *Ann. Emerg Med*. 2002 Dec; 40(6): 649-51.

Brewer P. Le triage aux urgencies: le point de vue nord-americain. *Reanimation*. 2002; 11:469-470.

MacMillan DS, Cone DC. Officer down. *Prehosp Emerg Care*. 2003; 402-404.

Swor RA, **Cone DC.** Emergency Medical Services Advanced Life Support Response Times: lots of light, little heat. *Acad Emerg Med*. 2002; 9:320-321.

Cone DC. Whither the fourth link? *Acad Emerg Med*. 2002; 9:717-719.

Cone DC, Lewis RJ. Should this study change my practice? *Acad Emerg Med*. 2003; 10:417-422.

Cone DC, Nedza SM, Augustine JJ, Davidson SJ. Quality in clinical practice. *Acad Emerg Med*. 2002; 9:10085-1090.

Cone DC, Weir SD, **Bogucki S.** Convergent volunteerism. *Acad Emerg Med*. 2003; 41:457-462.

Degutis LC. Need for Brief Interventions for Marijuana and Alcohol Use Related to Injuries. *Acad Emerg Med*. 2003; 10:62-64.

Degutis LC. Comments on implementing preventive interventions in emergency medicine: strategic considerations. In: Hungerford DW & Pollock DA. (eds) *Alcohol Problems among Emergency Department Patients*, Proceedings of a Research Conference on Identification and Intervention, Atlanta (GA). National Center for Injury Prevention and Control, Centers for Disease Control and Prevention, 2002:155-162.

D'Onofrio G. Comment on intervening with alcohol problems in emergency settings: In: Hungerford DW & Pollock DA. (eds) *Alcohol Problems among Emergency Department Patients*, Proceedings of a Research Conference on Identification and Intervention, Atlanta (GA). National Center for Injury Prevention and Control, Centers for Disease Control and Prevention, 2002:108-122.

Fiellin DA, **Degutis LC, D'Onofrio G.** Traumatic injuries related to alcohol and other drug use. In:Graham AW, Schultz TK, Mayo-Smith MF, Ries RK, Wilford BB, (eds.) *Principles of Addiction Medicine*, Third Edition. Maryland: American Society of Addiction Medicine, Inc. 2003; 1195-1204.

D'Onofrio G, Treatment for alcohol and other drug problems; Closing the gap. *Ann Emerg Med*. 2003; 41:814-817.

Moore CL and Tayal VS. Cardiac Ultrasound, In: Oh John Ma (ed) *Emergency Ultrasound*, McGraw Hill 2002; 89-129.

Moore CL, Lambert MJ. Emergency ultrasound: diagnosis of deep venous thrombosis. *Emerg Med Reports*. 2003; 24:11-27.