

Shaping the Future of Emergency Medicine Education

Emergency Medicine Residency Program • 2006 Annual Report



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Class of 2009

Letter from the Director



It's a pleasure to present the 2006 Regions Hospital Emergency Medicine Residency annual report to share our accomplishments over the past year.

Our mission, to provide and promote excellence in patient care and education, has remained firm since the residency's inception. We actively recruit resident applicants who wish to contribute to emergency medicine beyond clinical shifts. This year, we salute our residents who are involved in leadership activities, both locally and nationally. Sandy Fritzlar '07 was appointed to the board of directors of the HealthPartners Institute for Medical Education and was a guest speaker at a faculty development session in Washington, DC. Beth Wicklund '07 continues to serve as a member of the editorial board of EM Practice. Jon Shultz '08 was appointed to the board of directors of the resident section of AAEM. Lane Patten '07 and Kelly Barringer '08 continue to serve on the Graduate Medical Education and Undergraduate Education committees, respectively, of SAEM. Tara O'Connell '09 was named to the Alliance of Independent Academic Medical Centers Steering Committee for Improving Patient Care through GME.

Our residency continues to grow, and we are expanding our partnerships with others. We have added United Hospital and the University of Minnesota Medical Center as selective sites for our residents. With the assistance of Martin Klinkhammer '07 and Christopher Obetz '03, we formalized an EM elective opportunity with the Department of Emergency Medicine at Facultad de Medicina de la Universidad Central in Quito, Ecuador. We continue to co-sponsor joint conferences with the Mayo Emergency Medicine Residency and have expanded our EM resident rotation exchange with Hennepin County Medical Center's EM Residency. Our yearly combined EM/Trauma Update is now co-sponsored by the departments of EM and surgery at HCMC, North Memorial Medical Center, Mayo and Regions, all Level

I Trauma Centers in Minnesota. Our residency lecture series continues to grow with a visiting professorship and grand round series featured in this report. Our conference curriculum is designed by Jim Colletti, Associate Residency Director and recipient of the 2006 CORD Faculty Teaching award.

A goal of our residency is to offer residents the opportunity to individualize their educational experience within the confines of a three-year residency. We aspire to do this by mandating the least and offering the most. Residents with an interest in EMS can select to be an associate EMS director for their residency project. Residents interested in teaching have opportunities to teach EMS providers and medical students in workshops, procedure labs and simulation labs.

Our residency strives to complement the transfer of knowledge with the transfer of meaning. This transfer of meaning fosters an environment where connections occur - with patients, co-workers, the community and alumni. Our emergency medicine electronic discussion list, known as EMRES, continues to grow and serves as a forum for residents, faculty, alumni, nurses, physician assistants, outside consultants and many others to share and discuss new knowledge. We lead by example, manage by fact, and communicate by listening. Our goal is to incorporate the highest level of professionalism and humanism in our interactions with patients and other members of the healthcare team.

We are grateful for the support of so many residency partners and feel fortunate for the opportunity to train the next generation of emergency medicine practitioners. In 2006, we matched another competitive class of residents featured in this report. We look forward to shaping the future of emergency medicine education.

A handwritten signature in black ink, appearing to read 'Felix Ankel'.

Felix Ankel, MD

Director, Regions Hospital Emergency Medicine Residency Program

Department Head Update



2006 has been an outstanding year for the emergency medicine residency at Regions. The true test of any

emergency department is the care and experience that patients receive. We strive not only to deliver the best emergency and trauma care available today, but also to help design tomorrow's emergency care system through our training and research programs. The breadth and depth of experience among our faculty members is one of the keys to our residency program's success. I am honored to work with these dedicated professionals and I am proud of their accomplishments.

In June 2006 the Institute of Medicine (IOM) recommended a vision for the future of emergency care in the United States. The reports call for regionalized, coordinated and accountable emergency and trauma care systems. We are striving to make this vision a reality at Regions through our clinical, research and educational programs. Key examples include our research program on hospital operations and informatics, led by Dr. Brad Gordon, and our medical simulation program, which is focused on improving team communication and is led by Drs. Cullen Hegarty and Jessie Nelson. Our EMS program, under the direction of

Drs. RJ Frascone and Kory Kaye, is reaching out to the region to improve the coordination of prehospital care and critical care transfers.

In the spring of 2006, Dr. Jim Colletti was awarded the national CORD faculty teaching award, joining Dr. Felix Ankel as the second member of the Regions' faculty to receive this award. We also welcomed Dr. Michael Zwank to our faculty, who joined us after completing the Boston Medical Center's EM program. Another faculty highlight came from the founder of our EM residency program, Dr. Robert Knopp. He was a 2006 recipient of the HealthPartners Institute of Medical Education excellence in education award.

All of us are invested in the emergency care system. It is a part of our lives that we don't often think about using – we just want it to work well when we need it. As you read this

annual report, you will see many of the things that are working well at Regions today thanks to the dedication and talent of our emergency center staff. More importantly, I hope you will see that we envision an even stronger future for emergency care at Regions. To achieve this vision, we will continue to rely on the innovation and energy of our residency program's leadership, faculty, alumni and residents.

Best wishes for a safe and successful 2007.

A handwritten signature in black ink, appearing to read "B. Asplin".

*Brent Asplin, MD, MPH
Department Head, Emergency
Medicine*



Emergency Center Operations

The Regions Hospital Emergency Center is a Level I Trauma Center located in St. Paul, Minnesota, serving the east metropolitan Twin Cities area, including western Wisconsin. Today, the emergency department (ED) is comprised of almost 16,000 square feet of clinical space with 35 treatment rooms. There is also an additional 8,000 square feet that houses a library, conference space and support service offices.

The latest approximate Emergency Center figures are as follows:

- 67,000 patient visits per year
- 11 percent pediatric patients (age 16 or under)
- 2,500 trauma admissions
- 700 trauma team activations each year
- 21 percent admission rate
- 60 percent of all hospital admissions come from the ED

According to projected growth estimates, the Emergency Center will serve an additional 20,000 to 25,000 patients annually by 2015. Since the current operating space best serves about 60 percent of today's emergency need, a significant expansion of the Emergency Center is crucial. The ED, according to current plans, will have a 45,000-gross-square-foot area to serve the needs of an estimated 85,000 patients annually. The Emergency Center remodel will



be rolled out in several phases. In 2009, the Emergency Center will see the addition of a new ambulatory entrance, a welcome center/waiting room and a 12-bed treatment area.

When the expansion is complete, the Emergency Center will consist of up to 64 exam rooms, which will include a 12-bed treatment area, a 10-bed clinical decision unit (where it is determined whether the patient will be admitted or discharged elsewhere), a 12-bed behavioral health suite, four stabilization rooms and up to 40 exam rooms. Plans also include a dedicated general radiology room and CT imaging facilities.

*Richelle Jader, BSN, MHA
Director, Emergency Center*

*Jon Henkel, BSN, BHA
Nurse Manager, Emergency Center*

*Won Chung, MD, MS
Clinical Director and Assistant
Department Head*

*Jeff Fritz
Support Services Manager*

Didactic Curriculum

Regions Hospital offers residents a full spectrum of topics in emergency medicine based on the Model of the Clinical Practice of Emergency Medicine. The core curriculum is designed to repeat itself in its entirety on an 18-month basis.

As there are several modalities of learning, the didactic curriculum is set up to cover the entire scope of emergency medicine through traditional as well as innovative and interactive means.

Critical Case is a favorite of residents and faculty alike. Critical Case provides an interactive forum for discussion of a case of educational value. Case discussion is focused not only on the content of the eventual diagnosis but also on the decision-making process in evaluating critically-ill patients with limited immediate data.

Grand Rounds are presented by Emergency Medicine faculty and are targeted at advanced topics

in emergency medicine. Topics presented in 2006 included ALTE, Myths of Toxicology, Hand Trauma, Current & Future Uses of Simulation, and Malpractice.

Visiting Professor Series involve speakers who are external to the program, inviting them to speak on research or clinical topics. Those who participated in 2006 include Wyatt Decker, MD – Mayo Clinic, Michael Lutes, MD – Medical College of Wisconsin, Joseph Wood, MD – Mayo Clinic-Scottsdale, Marc Dorfman, MD – Resurrection Hospital, and Richard Levitan, MD – Albert Einstein HealthCare System.

Core Content Lectures reinforce knowledge, which is gained on clinical rotations as well as supplement the clinical experience. Faculty members who are experts in their core content areas provide the lectures.

Journal Club is held on a regular basis and three to four recent practice-changing articles are discussed. Journal Club is lead by an expert reviewer with the aid of a departmental research methodologist and statistician.

Joint Conferences are collaborative conferences held in conjunction with other departments such as radiology, trauma services, and critical care to discuss related areas of interest.

Board Review provides residents with a structured and focused written board review throughout the calendar year. Heavy weighted topics are presented in a lecture format where less weighted topics are presented in an interactive format with emphasis on high-yield information. Additionally, residents receive a yearly mock oral board exam administered by faculty.

Jim Colletti, MD
Associate Residency Director

Residency Presentations 2006

The Regions Hospital Emergency Medicine Residency supplements the clinical learning experience with lectures, workshops and procedural skills labs which are open (space permitting) to all residents, faculty, students, alumni, nurses, physician assistants, consultants and others from our residency community to share and discuss new knowledge.

Number of lectures: 232 conference hours

Hours of attendance: 5,301 resident hours of attendance

Number of workshops: 55 workshops were taught to 36 rotating residents and 110 medical and physician assistant students.

Number of labs: 27 residents participated in 18 procedural skills labs

Teri Gunnarson, MD
Assistant Residency Director

Simulation

The Emergency Medicine Residency Program continues to integrate simulation technology such as high-fidelity mannequins, part-task trainers, and hands-on haptics trainers in teaching residents. The majority of our simulation efforts take place at the HealthPartners Simulation Center for Patient Safety at Metropolitan State University. Through generous grant funding, the Emergency Department purchased a high-fidelity mannequin and three part-task trainers.

EM residents are learning, teaching, and researching with simulation. We developed regular pediatric critical care workshops for residents and continue to do fiberoptic airway training. Mock oral boards again took place at the Simulation Center, which allowed us to use a simulated scenario to evaluate PGY1s and PGY2s. PGY3s teach medical student resuscitation simulation



workshops at the simulation center. Two resident research projects investigated simulation-based education. Several times a year, we moved our weekly conference to the Simulation Center and incorporated simulation technology into our core content. We also took simulation “on the road”, developing a combined conference with the Mayo Clinic Emergency Medicine Residency focusing on communication skills in health care.

The remainder of the Emergency Medicine Department has jumped on the simulation bandwagon. The Toxicology Program now has frequent simulation workshops. A critical care skills day for physician assistants at the Simulation Center was taught by emergency medicine faculty and senior residents. Medical students and rotating residents continue to practice resuscitation at the Simulation Center. A workshop

in crisis resource management for emergency medicine that was developed with residents, nurses and technicians from our department is now being used in the training of community emergency departments in the non-clinical skills needed for successful resuscitation.

Jessie Nelson, MD
Senior Staff
Physician Faculty, HealthPartners Simulation Center for Patient Safety at Metropolitan State University

Cullen Hegarty, MD
Assistant Residency Director
Director, Emergency Medicine Simulation Program

Ultrasound

Ultrasound has proven invaluable to the emergency physician, and Regions Hospital Emergency Department (ED) is committed to training our residents how to use this important tool. Residents trained at Regions use ultrasound machines to help diagnose and treat critically ill patients who come to the ED for care. During the three-year residency, residents learn to use ultrasound in specific emergency applications, such as emergency echocardiography, assessment of the abdominal aorta, evaluating the trauma patient (FAST examination), and diagnosing and treating the patient with undifferentiated hypotension. In addition, ultrasound is used to aid in procedures such as vascular access, thoracentesis, paracentesis, foreign body identification, localization and extraction, abscess identification and treatment, among others.

Didactic experience: Ultrasound education is undertaken in several formats. Didactics are presented in a lecture series presented over 18 months. These lectures cover topics related to basic ultrasound physics and “knobology”, the Focused Assessment with Sonography in Trauma (FAST) exam, emergency echocardiography, abdominal aortic aneurysm evaluation, examination of undifferentiated hypotension, and procedural ultrasound. Prior to residency graduation, residents are given advice on setting up an ultrasound program in their new jobs.



Clinical experience: The didactic teaching is supplemented and reinforced through clinical teaching and direct application in the ED. This hands-on experience begins in the first year, where one-on-one tutorials with the ultrasound faculty focus on familiarization with the machine, how to obtain and recognize quality images, and the protocols utilized with the applications. These sessions allow the faculty to teach the basics, as well as more advanced techniques of the different ultrasound applications. This experience is enhanced by weekly teaching sessions that are open to all residents, but limited in number of participants to allow individualized instruction. Residents are also encouraged to perform ultrasounds on patients indicated by presentation while working their clinical shifts in the ED.

Evaluation process and feedback mechanisms: Residents receive immediate feedback on ultrasound technique, image quality, and trouble-shooting techniques by the supervising emergency department faculty. Additionally, ultrasound images are reviewed as part of the quality assurance initiative, and the ultrasound director provides feedback to the resident and faculty. Residents are given a quarterly report showing the number and type of ultrasounds they have performed in the ED, which is reviewed during the semi-annual resident evaluation meeting with the program director. At the completion of residency, documentation is provided from the program director for future emergency ultrasound credentialing.

Kurt Isenberger, MD

Peter Kumasaka, MD

Richard Lamon, MD

Michael Zwank, MD

Emergency Ultrasound Education

Toxicology

Regions Toxicology Service is dedicated to providing education on toxicology topics and consultations to the emergency department (ED), hospital units and clinics 24 hours a day, 365 days a year.

As a major educational partner in the Medical Toxicology Fellowship Program, the toxicology service is an active component in educating the program fellows through various formal and informal learning activities. The ongoing educational activities of the toxicology service include quarterly interdisciplinary conferences, a weekly toxicology journal club, adverse drug reaction and toxicology chapter reviews. To augment the education of residents, fellows, and students, the toxicology service weekly case simulations use a computer controlled mannequin. New cases for the weekly toxicology simulation case management are revised and developed throughout the year.

Several multidisciplinary conferences involving the renal service, cardiology, and psychiatry took place in 2006. Other educational endeavors during the year included monthly forensic toxicology case review, toxicology “field trips” to learn about toxic plants to the University of Minnesota Arboretum, and toxicology and forensics at the Bureau of Criminal Apprehension. Regions close relationship with the Hennepin Regional Poison Center allows us to share in the educational roles of the

Poison Center, participating in their weekly and monthly case conferences and toxicology didactic sessions.

Members of Regions toxicology service were involved in more than 20 formal presentations in 2006 at regional conferences, local schools and colleges, community hospital grand rounds in Minnesota, Wisconsin and Iowa, and at Regions Hospital. The service averages approximately 30 formal consultations a month, in addition to informal educational consults and telephone consults. Ten EM residents, five students, one physician assistant student and 20 PharmD candidates rotated on the toxicology service this year. Others who rotated on the service included pediatric emergency medicine fellows and family medicine residents.

In addition, the toxicology service members participate in toxicology-related clinical and animal research.

This past year Regions’ focus has been on projects involving management of toxin-induced shock and a multi-center study on cyanide’s role in smoke inhalation injury. Regions toxicology team, with other friends and colleagues involved in toxicology, published a handbook to manage commonly encountered overdoses and exposures, *The Toxicology Handbook for Clinicians*. The new toxicology website, ToxWeb, is in the beta stage and contains cases, pictures, links, tox trivia, and a portal for students and residents to access pre- and post-tests and other pertinent toxicology rotation information.

Carson Harris, MD
Director, Toxicology Consult Service

Kristin Engebretsen, PharmD
Clinical Toxicologist



Quito, Ecuador, 2006

CLASS OF 2009

Owen Anderson, MD



- Medical College of Wisconsin
- AOA
- Past employment includes delivering

papers, cleaning reptile cages and valet parking.

- Diverse volunteer experiences include tutoring students preparing for their GED, playing in a community band and working at a community clinic.
- Hobbies include yoga, cycling, hiking, Nordic skiing, and cooking

Christopher Dillon, MD



- University of Wisconsin
- Spent one year volunteering with the Andean Health & Development

in La Concordia, Ecuador prior to starting residency.

- Enjoys traveling, reading, golf, basketball, weightlifting, running, aquariums

Joseph Dolan, MD



- University of Iowa
- AOA
- President, Iowa State U Chapter of Habitat for Humanity

- Enjoys tennis, racquetball, traveling, hiking, camping, reading

Habits of Lifelong Learning

A major goal of the residency is to teach residents lifelong learning skills. The digital revolution has changed our ability to access medical knowledge. The Regions Emergency Medicine Residency continues to be on the edge of this digital revolution through its access to outside knowledge, archival of our residency's collective wisdom and translation of knowledge into clinical practice.

The residency program continues to expand its access to electronic information resources. To name a few: UpToDate, EM RAP, StatRef Online textbooks, micromedex, epocrates, eMedicine, emergency medical abstracts and full text access to 160 important medical journals. Our residents and staff have access to these online references at any time and in any location through the HealthPartners network.

The residency has a growing archive of digital video of educational conferences. The Emergency Medicine Residency Electronic Library (EMREL) archives conference videos from October 2003 to the present.

There are approximately 135 hours of content spanning 170 videos. This is particularly valuable with our expanded grand rounds lecture series.

The EMRes email distribution list continues to grow, with 137 members currently. The list provides current residents, alumni and staff members with a virtual connection to many cumulative years of wisdom. It is a frequent source of specialty related announcements and issues important to anyone in EM practice.

During 2006, Regions installed the final major component of our electronic medical record: Computerized Physician Order Entry. A major benefit of this function is the ability to use order sets in day-to-day clinical shifts. Our order sets have the ability to bring specific medical knowledge directly to patient care, making every shift a learning experience. Our residency is devoted to providing an environment of learning for its residents, alumni and medical staff.

Brad Gordon, MD
Director, Residency Technology

History of Program

Dr. Robert Knopp founded the Regions Hospital Emergency Medicine Residency in 1994. Before arriving in St. Paul, he served 17 years as the residency director at Valley Medical Center in Fresno, California. The first class of residents began their training in 1996. Felix Ankel, MD, has been

involved with the residency since its inception and became residency director in July 2000. As of July 2006, the EM residency has graduated 63 residents from 24 medical schools that now practice in 17 states. Regions faculty are graduates from 17 different EM residencies.

Medical Student Program

University of Minnesota and outstate students continue to enroll in our three rotations – the core rotation, the advanced EM rotation and the toxicology rotation. The University of Minnesota made the core rotation a required course in 2005. All students taking the core rotation in the east metro area, which includes Regions, St. John’s, St. Joseph’s, United and University of Minnesota hospitals, attend conferences and workshops at Regions.

Students	2003	2004	2005	2006
University of Minnesota	57	50	63	69
Out-of-state	16	22	14	12
Advanced	13	28	26	27
Toxicology	5	5	4	3

Cullen Hegarty, MD
Course Director, Emergency Medicine Clerkship
University of Minnesota Medical School

The HealthPartners Institute for Medical Education (IME)

The Regions Hospital Emergency Medicine Residency is a HealthPartners Institute for Medical Education (IME) residency training program. The IME was created in 1996 to provide an innovative structure to lead the organization’s educational efforts. Today, the IME partners with academic institutions, provides an innovative environment for health provider education, and is an advocate for education that measurably improves patient care. The IME focuses on five aspects of medical education: undergraduate and graduate medical education, nursing education, allied health professional education, continuing professional

development and medical library services. In addition, the IME partners with Metropolitan State University in the Simulation Center for patient safety. The Simulation Center uses computerized mannequins, virtual reality and other advanced teaching techniques to prepare health professionals for high intensity clinical experiences. The IME has a formal affiliation agreement with the University of Minnesota that guides the educational relationship between the two organizations. Regions emergency medicine staff enjoy faculty appointments within the department of emergency medicine at the University of Minnesota.

Danielle Jackson, MD



- University of Minnesota
- Arnold Gold Humanism Honor Society
- Born in the United Kingdom,

raised in Norway, speaks both German and Norwegian

- Enjoys the arts, Bikram yoga, jogging and training her black lab, Kiko

A. Duncan McBean, MD



- University of Minnesota
- Arnold Gold Humanism Honor Society
- Ironman tri-athlete,

collegiate lacrosse player

- Volunteer firefighter, EMT, ski-boot fitter
- Enjoys alpine skiing, hunting, fishing, sailing

Adina Miller, MD



- University of Minnesota
- Former EMT volunteer for sporting events, marathons and disaster drills

- Collegiate volleyball player and ballet dancer.
- Enjoys running, weight-training, camping and traveling, hunting, theatre and music, architecture/interior design.

Letter from the Chief Residents

Tara O'Connell, MD



- University of Minnesota
- Medical School Class President
- Native Californian
- Independent

filmmaker, surfer, Collegiate downhill mountain bike racer

- Enjoys skim boarding, volleyball, hiking, running, biking, rock climbing, snow boarding, yoga, photography, cooking

Charis Thatcher, MD



- Medical College of Wisconsin
- 2003 1st Runner up Mrs. Wisconsin Pageant

- Milwaukee President, International Women's Relief Society Organization and UJIMA Adolescent Victims of Violence mentor
- Enjoys classic guitar, acting, swing dancing/instructing

Scott Thielen, MD



- University of Minnesota
- AOA
- Native of New York
- Phillips Neighborhood

Champion award for volunteer service to a high-risk neighborhood in Minneapolis.

- Former physical therapist who enjoys biking, snorkeling, backpacking and playing the guitar.

It's been an exciting year as chief residents as we strive to continue the tradition of excellence in residency training while taking advantage of the numerous educational opportunities available to us. This past year we have especially focused on resident presence. We have been working to strengthen our presence not only in our own emergency department (ED), but also within Regions Hospital, within our community and even nationally. A few significant examples of how we have met these goals in 2006 include:

- Optimization of scheduling to ensure consistent resident presence in the department.
- Regular resident/faculty meetings to evaluate off-service rotations (e.g. orthopedics, OB/GYN, plastic and hand surgery, MICU and SICU) to ensure that residents are involved in experiences relevant to emergency care in an educational and supportive environment.
- Non-clinical shifts to allow residents to tailor their education to their individualized interests. Opportunities include leadership roles in teaching medical students, teaching procedural workshops at Regions, leading resuscitation simulations at the HealthPartners Center for Patient Safety, and teaching medical student workshops and procedure labs at the University of Minnesota.
- Increasing the variety of sites available in which to do a com-

munity emergency medicine (EM) selective rotation for senior residents. This rotation gives residents a diverse experience in a community-based setting. We have agreements with many Twin Cities hospitals including Abbott Northwestern Hospital, United Hospital, St. Joe's Hospital, St. John's Hospital and Fairview-University Medical Center.

- A resident switch program with the Hennepin County Medical Center Emergency Medicine Program, allowing interested residents to experience a month in a different academic setting.
- Regions EM residents presenting research at the national ACEP conference, residents serving on national committees within SAEM, EMRA, on the resident board of AAEM, and a resident editor of a national EM publication.

We are able to succeed with the strong support, encouragement and leadership of our residency program staff. We look forward to continuing to strengthen our presence and continuing to showcase excellence in emergency medicine training and patient care over the coming year.

Sandy Fritzier, MD

Martin Klinkhammer, MD

Lane Patten, MD

2006-2007 Chief Residents

Program Coordination

We continued to focus on staying connected with residents, alumni and colleagues in 2006. Numerous residency-sponsored events occurred throughout the year, keeping us in touch with alumni and allowing them to meet and network with our current residents. As members of the Emergency Medicine Association of Residency Coordinators, we attended the annual meeting in Las Vegas, where Lori and Dr. Ankel presented their method of collaborative residency management to other EM coordinators.

Our computerized systems continue to expand. Regions' residencies began tracking daily resident location using a web-based system designed for resident tracking throughout the Twin Cities metropolitan area. Once

this program was initiated, all of our on-line processes were moved into one residency management system that is now used for all of our tracking needs – conferences, procedures, evaluations, and duty hours.

We had a very good year hosting medical students in our core and advanced rotations. These rotations resulted in the generation of over 40 letters of recommendation for residency positions. We wish all of those applicants much success in their future residencies.

Lori Barrett
Manager, Residency & Education

Pat Anderson
Education Program Assistant



Lori Barrett and Pat Anderson

NEW FACULTY 2006

Michael Zwank, MD



- Hometown: Madison, WI
- Undergraduate: University of Wisconsin-Madison
- Medical

- School: University of Wisconsin
- Residency: Boston Medical Center
- Interests/Hobbies: Ultrasound, critical care, running, cross-country skiing, tennis and rock climbing
- Little known fact: former Bucky Badger mascot for UW

RESIDENT NATIONAL COMMITTEE AND ACADEMIC INVOLVEMENT 2006

EMRA Representative
Tara O'Connell, MD

SAEM-Graduate Medical Education Committee
Lane Patten, MD

SAEM-Undergraduate Education Committee
Kelly Barringer, MD

EM Practice Editorial Board
Beth Wicklund, MD

AAEM Resident Section Board of Directors
Jonathan Shultz, MD

AIAMC Steering Committee
Tara O'Connell, MD

SANE Program

The Regions Hospital Sexual Assault Nurse Examiner (SANE) Program began in August 2002 under the guidance of Mary Carr MD, medical director of the SANE Program. This program started with the help of grant dollars. There are currently 20 SANE nurses, under the supervision of Ellen Johnson, RN, who see an average of 200 patients each year.

The SANE program provides 24-hour coverage for the treatment of victims of sexual assault. The SANE on-call carries a pager and is required to respond to the ED to treat the sexual assault victim within 30 minutes of receiving the page. Each SANE nurse is responsible for assessing and treating minor injuries associated with sexual assault as

well as collection of forensic evidence. The SANE nurse administers antibiotics to prevent sexually transmitted diseases and Plan B to prevent pregnancy in the sexual assault victim. The nurse assesses the need and desire of the patient for prophylaxis for HIV and provides prescriptions for HIV prophylaxis with the assistance of the staff physicians in the ED.

Dr. Carr teaches emergency medicine resident education in which she oversees a one-month training program during the resident's obstetric and gynecology rotation. Residents learn how to perform the sexual assault exam and how to document medical issues from a forensic standpoint and, because many residents

will go on to practice at hospitals where there are no SANE programs, they will know how to provide care to the sexual assault patient.

Dr. Carr and Ellen Johnson co-chair a quarterly multidisciplinary meeting with the SANEs, local police agencies, Ramsey County Attorney's office, Bureau of Criminal Apprehension, Sexual Offense Services advocates, Regions lab, and the Ramsey County Sexual Assault Protocol Team in order to provide comprehensive care to victims of sexual assault.

Ellen Johnson, RN, CEN, SANE-A Supervisor, SANE

*Mary Carr, MD
Medical Director, SANE*

Crisis Program

The Crisis Program, a psychiatric crisis intervention service housed in the Emergency Center at Regions Hospital, provides psychiatric assessments, crisis counseling, and referrals for patients experiencing emotional crises, stressful situations or psychiatric problems. An experienced, committed group of clinical social workers staffs the program 24 hours a day, seven days a week. This innovative and

cost-effective program has been an integral part of the emergency department (ED) for more than 33 years and serves approximately 6000 patients yearly.

Patients are treated for a variety of mental health issues, including depression, psychosis, anxiety, substance abuse and domestic violence. The crisis staff works closely with ED physicians, physician assistants

and nurses to provide comprehensive psychiatric and psychosocial assessments, and to create discharge plans that maximize safety and stabilization in the community or within Regions. Fifty-eight percent of all patients who are evaluated by Crisis Social workers return to the community.

*Maddy Cohen, MSW, LICSW
Supervisor, Crisis Program*

Nursing Education

The Regions Hospital emergency department (ED) and its nurses show an impressive commitment to education. Thirty-seven percent of the RN staff have obtained a specialty certification in emergency nursing; five percent are master's prepared; and 10 percent are actively pursuing either their baccalaureate or master's degrees.

A clinical educator and clinical nurse specialist coordinate education for more than 100 nurses and 40 emergency room technicians. New staff complete a core course to establish a baseline knowledge of emergency nursing at Regions. Competencies and further education are done on an

annual basis, using many methods of education. All nurses have a current ACLS certification and have obtained a TNCC certification. More than 85 percent of nurses have obtained an ENPC certification.

Regions nurses also teach other professionals and the community. Ten RNs teach regularly for EMS; 12 RNs instruct paramedic students in both clinical and didactic courses; 10 RNs routinely precept nursing students in clinical rotations; two of those RNs are course instructors. Ten nurses also provide education on a routine basis to their peers in the emergency department. Our nurses also provide

education to children on injury prevention through the ENCare program.

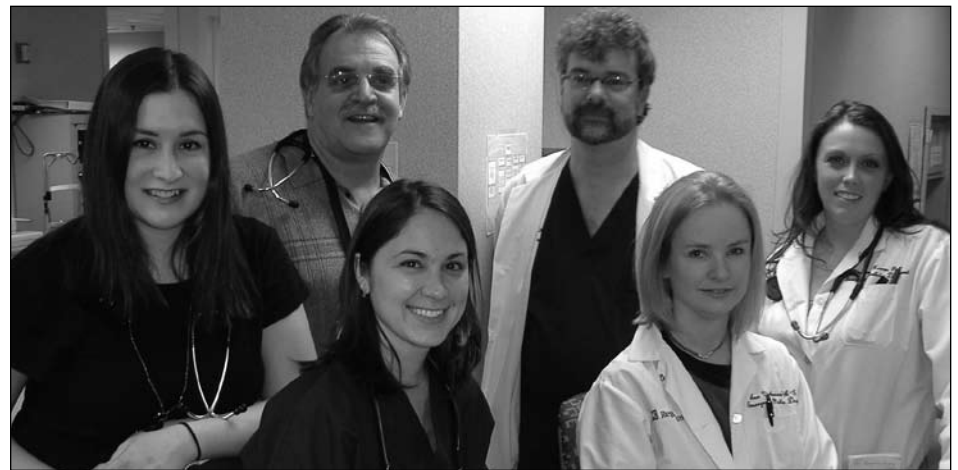
Our nurses are active in the community, as well. Three of the nursing staff members hold positions within the administration of the local chapter of the Emergency Nurses Association, including president, secretary and state representative. Additional nurses are involved with community outreach education opportunities at Hudson Hospital and St. Croix Falls Hospital, with plans for further education at other western Wisconsin hospitals.

*Karen Poor, RN, MN, CEN, CCNS
Clinical Nurse Specialist*

Physician Assistants

In 1984, two emergency department physician assistants (PAs) were hired to support the staffing needs of the ED. Currently, thirteen PA staff lend valuable clinical expertise in taking care of patients in both the urgent care setting as well as the main ED. The PAs work seamlessly with the EM residents in providing optimal care for our patients.

The PA staff also serve as preceptors for students from physician assistant programs throughout the country. In 2006, we hosted fourteen PA students, who participated in conferences and workshops with our medical students. This rotation is highly regarded in the PA community and serves



as a stepping stone for emergency medicine positions throughout the Twin Cities metropolitan area.

*Stephen Wandersee, PA-C
Physician Assistant Supervisor*

*From left to right: Mary Roy,
Steve Wandersee, Angela Knutson,
Ross Huelster, Ann Verhoeven,
Stephanie Kroon.*

EMS

Since 1997, the emergency medicine residents have participated in a rotation in Emergency Medical Services (EMS). Residents also have an opportunity to participate in an associate medical directorship or elective rotation in EMS.

Resident Rotation

Emergency medicine residents participate in a four-week rotation in EMS in their G1 year. Residents participate in ride-alongs with various services. For example, residents spend time with dual-role services (St. Paul Fire), single-tier services (Lakeview EMS), police/medic services (Cottage Grove Public Safety) and volunteer/paid on-call services (White Bear Lake Fire). Residents also spend time in the Medical Resource Control Center at Regions Hospital and the St. Paul Fire Communication Center. And, finally, many residents take part in helicopter ride-alongs with LifeLink III.

In addition to medical direction specific assignments, residents are integrated as active educators within our program and participate in a multitude of training events. Such events include Advanced Cardiac Life Support for hospital and pre-hospital providers, Pediatric Advanced Life Support, and ALS/BLS CME, and other teaching opportunities exist with the paramedic program at Inver Hills Community College.

Associate Medical Directorship

As part of a scholarly project, residents in the G2 or G3 year can choose an associate medical directorship with EMS. Residents interested in pursuing an EMS career may choose this project in order to experience the reality of dealing with various issues in medical direction under the guidance of the EMS medical directors. Residents are typically assigned to one service in order to allow them the opportunity to build a relationship with the service. Residents provide feedback on questions, quality assurance and critical case review education.

2006 Associate Medical Directors

- Dr. Jeff Geddes, Cottage Grove Public Safety
- Dr. Liz Godin, St. Paul Fire
- Dr. Heidi Lako, Lakeview EMS
- Dr. Jon Shultz, National Park Service - St. Croix National Scenic Riverway

Another type of associate medical directorship offered through EMS is with Inver Hills Community College's paramedic program. This resident participates in quality assurance for run reviews, creates and delivers curriculum and acts as an advisor to the paramedic students and the program itself.

2006 Associate Medical Directors/Inver Hills

- Dr. John Travnicek
- Dr. Jon Shultz

EMS Elective

Emergency medicine residents may elect a rotation in EMS during the G3 year. Components of this rotation are variable, based primarily on the resident's specific interest.

RJ Frascone, MD
EMS Medical Director

Koren Kaye, MD
EMS Co-Medical Director

Patrick L McCauley
EMS Program Director



Current Residents

Class of 2007

Roseann Ekstrom, MD, PharmD
 Sandy Fritzlar, MD
 Martin Klinkhammer, MD
 Heidi Lako-Adamson, MD
 Joseph Madigan, MD
 Emily Mason, MD
 Lane Patten, MD
 Kevin Smith, MD
 Beth Wicklund, MD

Undergraduate

University of Minnesota
 University of Minnesota-Duluth
 St. John's University
 North Dakota State University
 University of St. Thomas
 University of St. Thomas
 University of Minnesota
 Wartburg College
 Tufts University

Medical School

University of Minnesota
 Mayo Medical School
 Mayo Medical School
 University of North Dakota
 University of Minnesota
 University of Wisconsin
 University of Minnesota
 University of Iowa
 University of Minnesota

Class of 2008

Luke Albrecht, MD
 Kelly Barringer, MD
 Joey Charles, MD
 Mark Connelly, MD
 Ben Peake, MD
 Jonathan Shultz, MD
 Natasha Srb, MD
 Samuel Stellpflug, MD
 Paul Travnicek, MD

Undergraduate

University of Minnesota-Morris
 Brigham Young University
 University of North Dakota
 St. John's University
 North Dakota State University
 University of Wisconsin-Eau Claire
 University of Minnesota
 Marquette University
 South Dakota State University

Medical School

University of Minnesota
 Michigan State University
 University of North Dakota
 University of Minnesota
 Mayo Medical School
 University of Kansas
 University of North Dakota
 University of Wisconsin
 University of South Dakota

Class of 2009

Owen Anderson, MD
 Christopher Dillon, MD
 Joseph Dolan, MD
 Danielle Jackson, MD
 A. Duncan McBean, MD
 Adina Miller, MD
 Tara O'Connell, MD
 Charis Thatcher, MD
 Scott Thielen, MD

Undergraduate

University of North Dakota
 University of Notre Dame
 Iowa State University
 Macalester College
 University of Pennsylvania
 Gustavus Adolphus College
 California Polytechnic State U
 Brigham Young University
 Ithaca College

Medical School

Medical College of Wisconsin
 University of Wisconsin
 University of Iowa
 University of Minnesota
 University of Minnesota
 University of Minnesota
 University of Minnesota
 Medical College of Wisconsin
 University of Minnesota



Teambuilding 2006

Residency Awards/ Recognition/Honors

Star Award - resident teacher selected by medical students

- 2006 Nathan Anderson, MD, Martin Richards, Jr, MD, John Travnicek, MD, Melissa Tschohl, MD
- 2005 Keith Henry, MD
- 2004 Robert LeFevere, MD
- 2003 Lynn Howard, MD
- 2002 John Bonta, MD
- 2001 Cullen Hegarty, MD

Apple Award - faculty teacher selected by medical students

- 2006 Jeahan Hanna, MD
- 2005 Rachel Dahms, MD, Robert LeFevere, MD
- 2004 Cullen Hegarty, MD
- 2003 Kevin Kilgore, MD
- 2002 Felix Ankel, MD
- 2001 Paul Haller, MD

Nurse Educator Award - EM nurse teacher selected by residents

- 2006 Tom Peterson, RN, Karen Poor, RN
- 2005 Donovan Taylor, RN
- 2004 Mary Healy, RN



Faculty Teaching Award - EM faculty teacher selected by residents

- 2006 Robert Knopp, MD
- 2005 Felix Ankel, MD
- 2004 Karen Quaday, MD
- 2003 Carson Harris, MD
- 2002 Scott Cameron, MD
- 2001 Robert Knopp, MD
- 2000 Joel Holger, MD

Excellence in EMD Research

- 2006 Scott Donner, MD
- 2005 Sandy Fritzlar, MD
- 2004 Kurt Isenberger, MD
- 2003 S. Wade Barnhart, MD, Christopher Obetz, MD
- 2002 Randall Hofbauer, MD
- 2001 Frank Coughlin, MD
- 2000 Paul Satterlee, MD, Paul Jewett, MD
- 1999 Kevin Sipprell, MD, James Parker, MD

Ian Swatez Teaching Award - faculty teacher from outside EM selected by residents

- 2006 David Lee, MD
- 2005 Bruce Bennett, MD
- 2004 Raj Sarpal, MD
- 2003 William Mohr, MD
- 2002 Mari Goldner, MD
- 2001 David Dries, MD
- 2000 Ian Swatez, MD

Robert Knopp Humanism Award

- 2006 Martin Richards, Jr, MD
- 2005 Keith Henry, MD, Jon Hokanson, MD

Jim Colletti, MD receiving 2006 CORD Faculty Teaching Award

Scholarly Activity

Boldface: faculty
Boldface italics: residents

Articles

Manthey DE, Coates WC, Ander DS, **Ankel FK**, Blumstein H, Christopher TA, Courtney JM, Hamilton GC, Kaiyala EK, Rodgers K, Schneir AB, Thomas SH; Task Force on National Fourth Year Medical Student Emergency Medicine Curriculum Guide. Report of the Task Force on National Fourth Year Medical Student Emergency Medicine Curriculum Guide. *Ann Emerg Med.* 2006; 47(3):e1-7.

Asplin BR, Flottemesch TJ, Gordon BD. Developing models for patient flow and daily surge capacity research. *Acad Emerg Med.* 2006; 13(11):1109-13.

Bernstein SL, **Asplin BR:** Emergency department crowding: old problem, new solutions. *Emerg Med Clin North Am.* 2006; 24(4):821-37.

Asplin BR: Hospital-based emergency care: a future without boarding? *Ann Emerg Med.* 2006; 48(2):121-5.

Asplin BR: Measuring crowding: time for a paradigm shift. *Acad Emerg Med.* 2006; 13(4):459-61.

Mayo D, **Colletti J**, Kuo R: Brain Natriuretic Peptide Testing in the Emergency Department. *J Emerg Med* 2006; 31(2):201-210.

Doyle L, **Colletti J:** Pediatric Procedural Sedation and Analgesia. *Pediatr Clin N Am* 2006; 53(2):279-92.

Carson S, Woolridge D, **Colletti J, Kilgore K:** Pediatric upper extremity injuries. *Pediatr Clin N Am* 2006; 53(1):41-67.

Wegner S, **Colletti J**, Van Wie D: Pediatric Blunt: Abdominal Trauma. *Pediatr Clin N Am* 2006; 53(2):243-256.

Jones SS, Allen TL, **Flottemesch TJ**, Welch SJ: An independent evaluation of four quantitative emergency department crowding scales. *Acad Emerg Med.* 2006; (11):1204-11.

Henry K, Harris CR. Deadly ingestions. *Pediatr Clin North Am.* 2006;53(2):293-315.

Holger JS, Engebretsen KM, Obetz CL, Kleven TL, Harris CR: A Comparison of Vasopressin and Glucagon in Beta-Blocker Induced Toxicity. *Clinical Toxicology.* 2006; 44:45-51.

Johnson NC, Morgan MW: An unusual case of 4-aminopyridine toxicity. *J Emerg Med,* 2006; 30(2):175-17.

Knopp RK: The challenges of teaching professionalism. *Ann Emerg Med.* 2006; 48(5):538-9.

Knopp RK, Dries D: Analgesia in Acute Abdominal Pain: What's Next? *Ann Emerg Med.* 2006;48(2):161-3.

McBeth BD, Ankel FK: Don't Ask don't tell: Substance Use by resident physicians. *Acad Emerg Med.* 2006;13(8):893-5.

Scientific Presentations

Asplin BR, Flottemesch TJ, Rhodes KV, Camargo CA, Wears R, Hwang U, Richards C, Tiffany B, Bernstein S: Is this Emergency Department Crowded? A Real-Time Implementation of the Emergency Department Crowding Scale (EDCS). Presented at HMO Research Network Conference, Cambridge, MA. May, 2006.

Blanchard JC, Thomas T, Ogle K, **Asplin B,** Lurie N: Access to Primary Care in the District of Columbia *Acad Emerg Med.* 2006; 13(5) Suppl 1:130. Presented at Society for Academic Emergency Medicine Annual Meeting, San Francisco, CA. May, 2006.

Flottemesch TJ, Gunnarson TM, Whitebird RR, Martinson BC, Degelau JG: Sub-Acute/Transition Care and the Acute Care Episode: A Comparison and Episodic and Annual Medical Costs in Geriatric Population. Presented at HMO Research Network Conference, Cambridge, MA. May, 2006.

Gordon BD, Flottemesch TJ, Asplin BR: Evaluation of the Accuracy of Timestamps Created by an ED Operational Tracking System. Presented at HMO Research Network Conference; Cambridge, MA. May, 2006.

Gordon BD, Flottemesch TJ, Asplin BR: Accuracy Evaluation of Timestamps Created by an ED Operational Tracking System. *Acad Emerg Med.* 2006;13(5) Suppl 1:114-115. Presented at Society for Academic Emergency Medicine Annual Meeting, San Francisco, CA. May, 2006.

Frascone RJ, Jensen J, Salzman J, Kaye K: EZ-IO: A Field Study. Presented at National Association of Emergency Medical Services Physicians Annual Meeting, Tucson, AZ, January, 2006.

Frascone RJ, Jensen J, Salzman J, Heegaard W, Pippert G: The Use of the EZ-IO Intraosseous Device in the Helicopter: A Case Series. Presented at Air Medical Transport Conference, Phoenix, AZ, September, 2006.

Frascone RJ, Heegaard W, Pippert G, Dries D, Molinari P, Salzman J: The Use of the Intubating Laryngeal Mask Airway (ILMA) In Helicopter EMS: A Case Series. Presented at Air Medical Transport Conference, Phoenix, AZ, September, 2006.

Gunnarson TM, Flottemesch TJ, Whitebird RW, Martinson BC, Degelau JG: Sub-Acute/Transitional Care and the Acute Care Episode: A Comparison of Episodic and Annual Medical Costs in a Geriatric Population. *Ann Emerg Med.* 2006; 48(4) Suppl 1:72. Presented at American College of Emergency Physicians Scientific Assembly, New Orleans, LA. October, 2006.

Gunnarson TM, Flottemesch TJ, Whitebird RR, Martinson BC, Degelau JG: Sub-Acute/Transition Care and the Acute Care Episode: A Comparison and Episodic and Annual Medical Costs in Geriatric Population. Presented at American Geriatric Society Annual Scientific Meeting, Chicago, IL, May, 2006.

Volpe M, Adams A, **Holger J,** Marini J, Amato M. The Development of Lipopolysaccharide Induced Lung Injury in Swine Can Be Monitored by Electrical Impedance Tomography. *Resp Care J.* 2006. Presented at 52nd International Respiratory Congress, Las Vegas, NV, December, 2006.

Volpe M, Adams A, **Holger J**, Marini J. Lipopolysaccharide LPS Infusion over a 5-Hour Period Causes Lung Injury in Swine. *Resp Care J*. 2006. Presented at 52nd International Respiratory Congress, Las Vegas, NV, December, 2006.

Volpe M, Adams A, **Holger J**, Marini J, Amato M. Mucus Shifts According to Expiratory/Inspiratory Flow Ratio. *Resp Care J*. 2006. Presented at 52nd International Respiratory Congress, Las Vegas, NV, December, 2006.

Salzman J, Dillingham J, Kobersteen J, **Kaye K**, Page D: Is Paramedic Student Clinical Experience Associated with Performance on the National Registry Exam? Presented at National Association of Emergency Medical Services Educators Conference, Pittsburgh, PA, September, 2006.

McBeth BD, **Ankel FK**, Ling LJ, McNamara RM, **Flottesmesch TJ**, **Asplin BR** and **Mason E**: Substance Use in Emergency Medicine Training Programs *Ann Emerg Med*. 2006;48(4) Supp 1:32. Presented at ACEP Research Forum, New Orleans, LA. October, 2006.

McBeth BD, McNamara RM, **Ankel FK**, Ling LJ, **Flottesmesch TJ**, **Asplin BR** and **Mason E**: Modafinil and Zolpidem Use Among Emergency Medicine *Ann Emerg Med*. 2006;48(4), Supp 1:32-33 Presented at ACEP Research Forum, New Orleans, LA. October, 2006.

Morgan MW, **Hegarty CB**: High Fidelity Simulator Vs. Low Fidelity Manikin: A Simulator Did Not Improve Scores on a Multiple Choice Exam. *Ann Emerg Med*. 2006;48(4), Supp 1:32. Presented at ACEP Research Forum, New Orleans, LA. October, 2006.

Morgan MW, **Flottesmesch TJ**, **Ekstrom RE**: Medication Errors in the Emergency Department. *Ann Emerg Med*. 2006;48(4) Supp 1:3. Presented at American College of Emergency Physicians Research Forum, New Orleans, LA. October, 2006.

Nelson JG, **Hegarty CB**, **Gunnarson TM**: Simulator for Large Groups: A Novel Approach to Residency Conference. *Acad Emerg Med*. 2006;13(5) Suppl 1:207. Presented at Society for Academic Emergency Medicine Annual Meeting, San Francisco, CA. May, 2006.

Book Chapters

Ankel F: Aortic Dissection. In Marx, Hockberger, Walls et al (Eds.), *Rosen's Emergency Medicine, Concepts and Clinical Practice* 6th Edition (pp 1324-1330). Philadelphia PA: Mosby/Elsevier, 2006.

Benjamin MP. Digitalis Overdose and Toxicity in **Harris CR** (ed): *The Toxicology Handbook For Clinicians*. Mosby/Elsevier, Oct 2006.

Benjamin MP: Toxicity of Marijuana in **Harris CR** (ed): *The Toxicology Handbook For Clinicians*. Mosby/Elsevier, Oct 2006.

DeLisle CM: Pesticide Toxicity in **Harris CR** (ed): *The Toxicology Handbook For Clinicians*. Mosby/Elsevier, Oct 2006.

DeLisle CM: Methamphetamine Toxicity in **Harris CR** (ed): *The Toxicology Handbook For Clinicians*. Mosby/Elsevier, Oct 2006.

Engebretsen KM. Toxicology Laboratory in **Harris CR** (ed): *The Toxicology Handbook For Clinicians*. Mosby/Elsevier, Oct 2006.

Gordon BD: Beta Blocker Overdose in **Harris CR** (ed): *The Toxicology Handbook For Clinicians*. Mosby/Elsevier, Oct 2006.

Gordon BD: Calcium Channel Blocker Overdose in **Harris CR**(ed): *The Toxicology Handbook For Clinicians*. Mosby/Elsevier, Oct 2006.

Harris CR: Cocaine Toxicity and Management in **Harris CR** (ed): *The Toxicology Handbook For Clinicians*. Mosby/Elsevier, Oct 2006.

Harris CR: Drugs of Abuse Street Names in **Harris CR**(ed): *The Toxicology Handbook For Clinicians*. Mosby/Elsevier, Oct 2006.

Hernandez BS: Hydrocarbon Toxicity in **Harris CR** (ed): *The Toxicology Handbook For Clinicians*. Mosby/Elsevier, Oct 2006.

Hernandez BS: Gases (CO, HS, CN) in **Harris CR** (ed): *The Toxicology Handbook For Clinicians*. Mosby/Elsevier, Oct 2006.

Holger JS: Benzodiazepine Overdose in **Harris CR** (ed): *The Toxicology Handbook For Clinicians*. Mosby/Elsevier, Oct 2006.

Holger JS: Anticholinergic Toxicity and Overdose in **Harris CR** (ed): *The Toxicology Handbook For Clinicians*. Mosby/Elsevier, Oct 2006.

Kumasaka PG: Caustics in **Harris CR** (ed): *The Toxicology Handbook For Clinicians*. Mosby/Elsevier, Oct 2006.

Lamon RP: Salicylates and Acetaminophen Overdose in **Harris CR** (ed): *The Toxicology Handbook For Clinicians*. Mosby/Elsevier, Oct 2006.

Lamon RP: Useful Tox Mnemonics in **Harris CR** (ed): *The Toxicology Handbook For Clinicians*. Mosby/Elsevier, Oct 2006.

Wandersee SC: Toxic Foods in **Harris CR** (ed): *The Toxicology Handbook For Clinicians*. Mosby/Elsevier, Oct 2006.

Witt SA, **Delisle CM**: Methemoglobinemia in **Harris CR** (ed): *The Toxicology Handbook For Clinicians*. Mosby/Elsevier, Oct 2006.

Witt SA, **Delisle CM**: Drug-Induced Rhabdomyolysis in **Harris CR** (ed): *The Toxicology Handbook For Clinicians*. Mosby/Elsevier, Oct 2006.

Witt SA, **Delisle CM**: Drug-Induced QRS/Prolonged QT Effects in **Harris CR** (ed): *The Toxicology Handbook For Clinicians*. Mosby/Elsevier, Oct 2006.

Witt SA, **Delisle CM**: Drug-Induced Seizures in **Harris CR** (ed): *The Toxicology Handbook For Clinicians*. Mosby/Elsevier, Oct 2006.

Witt SA, **Delisle CM**: Management of Over-Anticoagulation in **Harris CR** (ed): *The Toxicology Handbook For Clinicians*. Mosby/Elsevier, Oct 2006.

Witt SA, **Delisle CM**: Chemical Warfare Primer in **Harris CR** (ed): *The Toxicology Handbook For Clinicians*. Mosby/Elsevier, Oct 2006.

Wood JE: Useful Antitoxins in **Harris CR** (ed): *The Toxicology Handbook For Clinicians*. Mosby/Elsevier, Oct 2006.

National & International Presentations

Ankel, Felix, Fritzlar, Sandy, McClain, Carolyn: Feedback in Medical Education. Faculty Development Grand Rounds. Washington Hospital Center Emergency Medicine Residency. Washington, DC. June, 2006.

Ankel, Felix: What is Faculty Development? (Panel Moderator) CORD Navigating the Academic Waters: Tools for Emergency Medicine. Las Vegas, NV. March, 2006.

Ankel, Felix: Letters of Recommendations/ Advising Medical Students. CORD Navigating the Academic Waters: Tools for Emergency Medicine. Las Vegas, NV. March, 2006.

Ankel, Felix and Barrett, Lori: Five Easy Pieces: Collaborative Residency Management. Emergency Medicine Association of Residency Coordinators Annual Meeting. Las Vegas, NV. March, 2006.

Asplin, Brent: The Future of Throughput: Dynamics of Change in a Complex Organization to Facilitate Patient Flow. World Research Group. Las Vegas, NV. March, 2006

Asplin, Brent: State of Research in Daily Surge. (Moderator) Society for Academic Emergency Medicine Annual Meeting, San Francisco, CA. May, 2006.

Asplin, Brent: Stop Measuring Crowding and Start Measuring Patient Flow: Optimizing Patient Throughput. McGill Research Workshop on Emergency Department Operations. Montreal, Quebec. May, 2006.

Asplin, Brent: Panel on Health Care Operations. Institute of Operations Research and Management Science International Meeting. Hong Kong, China. June, 2006.

Carr, Mary: Hyperglycemic, Hyperosmolar Coma in a Nine-month Old (case presentation). American Academy of Forensic Science Annual Meeting. Seattle, WA. February, 2006.

Colletti, James: Intelligent Slide and Handout Techniques. CORD Navigating the Academic Waters: Tools for Emergency Medicine. Las Vegas, NV. March, 2006.

Colletti, James: Effective Presentation of Knowledge (panel). CORD Navigating the Academic Waters: Tools for Emergency Medicine. Las Vegas, NV. March, 2006.

Colletti, James: Cardiovascular. AAEM Written Board Review Course. Newark, NJ. October, 2006.

Colletti, James: HEENT. AAEM Written Board Review Course. Newark, NJ. October, 2006.

Harris CR: Methamphetamine Use and Abuse. *Audio-Digest Psychiatry.* 2006; 35(22).

Harris CR: Meth Abuse: A Community Crisis. *Audio Digest Family Practice.* 2006; 54(4).

Harris CR: Efficient approach to the unknown poisoned patient. *Audio Digest Emergency Medicine.* 2006; 23(19).

Grants and Funded Studies

Asplin BR: Agency for Healthcare Research and Quality, K-08 Career Development Award: ER Crowding: Causes and Consequences. (2002-2007)

Ledray L, **Carr ME:** HCMC SARS and Regions SANE, Sexual Assault Comparison of Model of Two Methods of History Taking. (2004-2006).

Engebretsen KM (PI), Holger JS, Morgan M, Thorn T. HealthPartners Research Foundation Internal Grant: Determining Intracellular Mechanism of Insulin Inotropy In Myocardial Depression. (2006-2007)

Flottemesch TJ (PI), Asplin BR, Gordon BD: HealthPartners Research Foundation Internal Grant: Developing an Emergency Department Operational Toolkit. (2004-2006)

Lurie, KG, **Frascone, RJ, Kaye K, Dries D, Asplin BR, Hodgson D, Jensen J, Griffith K, Salzman J, Smith J:** National Heart, Lung and Blood Institute: The ResQ Trial: Comparison of conventional CPR to ACD-CPR plus an ITD and to conventional CPR plus an ITD on survival from out-of-hospital cardiac arrest. (2004-2008)

Jensen J, **Frascone RJ, Kaye K, Salzman J:** HealthPartners Research Foundation Internal Grant: EZ-IO A Field Study. (2005-2006)

Gordon BD: National Library of Medicine, K-22 Career Development Award: Real-Time Monitoring of Emergency Department Crowding. (2004-2007)

Harris CR (PI), Flottemesch TJ, Morgan MW, Ekstrom RM, Bruzek, R: HealthPartners Research Foundation Internal Grant: Medication Errors in the Emergency Department. (2004-2007)

Borron S, **Harris CR, Engebretsen KM, Morgan M:** EMD Pharmaceuticals: Cyanide's Role in Smoke Inhalation Study (CRISIS-1) (2006-present)

Holger JS (PI), Peake B, Barringer K, Marini J, Dries D, Fuerstenber J. HealthPartners Research Foundation Internal Grant: High Dose Insulin in Septic Shock. (2006-2007).

Holger JS, Frascone RJ, Richards M, Poor, K. U.S. Department of Defense: Evaluation of an Inspiratory Threshold Device (ITD) in the Emergency Department for the Treatment of Hypotension. (2004 - Present)

Biros MH, **Holger JS, Asplin BR, McGonigal M, Larkins, MV, Frascone, RJ, Snyder BD, Nelson, AF.** National Institute of Neurological Disorders and Stroke: Neurological Emergencies Treatment Trials (NETT) Network. (2006-2011)

Isenberger KM, Gordon BD: HealthPartners Research Foundation Internal Grant: Utilization of Lactate, BNP, and D-Dimer in Computerized Physician Order Entry Sets. (2006-2007)

McBeth BM (PI), Flottemesch TJ, Ling, L, McNamera, R, Ankel FA: HealthPartners Research Foundation Internal Grant: Substance Use in Emergency Medicine Training Programs by Resident Report. (2005-2007)

Travnicek PA, Hegarty CB: Institute of Medical Education Resident Grant: Using the Eschmann Through an ILMA for Airway Control. (2006-2007)

Graduates

Nathan Anderson, MD '06
Cheri Audrain-Schroeder, MD '01
Kendal Baker, MD '03
Stephen Wade Barnhart, MD '03
Bradley Barth, MD '00
Marny Benjamin, MD '02
Mark Bernas, MD '00
John Bonta, MD '02
Frank Coughlin, MD '01
Susan Zola Cullinan, MD '01
Laresa DeBoer, MD '02
Tanya Kleven Decker, MD '04
Chanah DeLisle, MD '99
Scott Donner, MD '06
Mary Fehringer Drake, MD '00
Jared Friedman, MD '05
Jon Fuerstenberg, MD '04
Jeffrey Geddes, MD '06
Elizabeth Godin, MD '06
Bradley Gordon, MD '02
Craig Grorud, MD '99
Theresa Gunnarson, MD '00
Cullen Hegarty, MD '01
Keith Henry, MD '05
Bradley Hernandez, MD '01
Randall Hofbauer, MD '02
Jonathan Hokanson, MD '05
Patrick Holland, MD '02
Lynn Howard, MD '03
Kurt Isenberger, MD '04
Paul Jewett, MD '00
Nicholas Johnson, MD '05
Phelps Johnson, MD, PhD '02
Todd Joing, MD '05
Cynthia Kelmenson, MD '03
Amy Kolar, MD '99
Robert LeFevere, MD '04
Karen Lushine, MD '01
Darren Manthey, MD '05
Hal Minnigan, MD, PhD '00
Matthew Morgan, MD '05
Jessie Gillund Nelson, MD '04
Christopher Obetz, MD '03
James Parker, MD '99
Kelly Rhone, MD '04
Martin Richards, Jr, MD '06
Jason Roth, MD '99
Christopher Russi, DO '03
Paul Satterlee, MD '00
Ann Schapiro, MD '05
John Seidner, MD '01
Kevin Sipprell, MD '99
Nicole Stethem, MD '05
Peter Tanghe, MD '03
Trenten Thorn, MD '06
John Travnicek, MD '06
Melissa Tschohl, MD '06
Jeffrey Vespa, MD '00
Joseph Wahlberg, MD '06
Clark Williams, MD '03
Stephanie Witt, MD '04
James Wood, MD '01
Jeffrey Young, MD '99
Robert Zeleznikar, MD, PhD '99

Medical School

University of Minnesota
University of Nevada
Indiana University
Indiana University
University of Minnesota
Loyola University
University of Minnesota
University of Nebraska
University of South Dakota
University of North Dakota
University of Minnesota
University of North Dakota
University of Minnesota
University of Kansas
University of Nebraska
University of South Dakota
Mayo Medical School
University of North Dakota
Medical College of Wisconsin
Creighton University
University of North Dakota
University of Minnesota
University of Minnesota
University of Arizona
University of Iowa
University of Minnesota
University of Minnesota
University of Hawaii
University of Minnesota
Medical College of Wisconsin
St. Louis University
Creighton University
Medical College of Wisconsin
University of Minnesota
University of Pennsylvania
Creighton University
Creighton University
University of Minnesota
University of Minnesota
University of Minnesota
Chicago Medical School
University of Minnesota
University of Minnesota
Mayo Medical School
University of South Dakota
University of Minnesota
University of Colorado
Des Moines University
University of South Dakota
SUNY - Buffalo
University of Vermont
University of Minnesota
University of South Dakota
University of Minnesota
University of Utah
University of South Dakota
University of Minnesota
Loyola University
University of Minnesota
University of Wisconsin
East Carolina University
Mayo Medical School
University of Minnesota
University of Minnesota

Current Location

United Hospital – St Paul, MN
Fairview-Southdale Hospital - Edina, MN
Hancock Regional Hospital - Greenfield, IN
North Memorial Medical Center - Robbinsdale, MN
St. Joseph's Hospital - St. Paul, MN
Methodist Hospital - St. Louis Park, MN
Deceased
Bryan LGH Medical Center - Lincoln, NE
Bryan LGH Medical Center - Lincoln, NE
Luther Midelfort Hospital - Eau Claire, WI
Ridgeview Hospital - Waconia, MN
St. Luke's Hospital - Cedar Rapids, IA
St. Francis Hospital - Shakopee, MN
University of Minnesota Medical Center – Minneapolis, MN
Bozeman Deaconess Hospital - Bozeman, MT
Avera McKennan Hospital – Sioux Falls, SD
Abbott Northwestern Hospital – Minneapolis, MN
Altru Hospital – Grand Forks, ND
University of Minnesota Medical Center – Minneapolis, MN
Regions Hospital - St. Paul, MN
Minneapolis, MN
Regions Hospital - St. Paul, MN
Regions Hospital - St. Paul, MN
St John's Hospital – Maplewood, MN
Regions Hospital - St. Paul, MN
Singing River Hospital System – Ocean Springs, MS
Abbott Northwestern Hospital – Minneapolis, MN
Madigan Army Medical Center -Seattle, WA
St. Joseph's Medical Center - Brainerd, MN
Regions Hospital - St. Paul, MN
University of Minnesota Medical Center – Minneapolis, MN
Abbott Northwestern Hospital – Minneapolis, MN
St. Mary's Hospital - Duluth, MN
Fairview-Southdale Hospital - Edina, MN
Medical Center of Aurora - Denver, CO
North Memorial Medical Center- Robbinsdale, MN
Regions Hospital - St. Paul, MN
St. Mary's Hospital - Duluth, MN
Sioux Valley Hospital – Sioux Falls, SD
Wishard Hospital - Indianapolis, IN
Toxicology Fellowship – Regions Hospital - St Paul, MN
Regions Hospital - St. Paul, MN
Abbott Northwestern Hospital - Minneapolis, MN
St. Francis Hospital - Shakopee, MN
Bryan LGH Medical Center - Lincoln, NE
United Hospital – St. Paul, MN
St. Anthony Hospital - Denver, CO
University of Iowa - Iowa City, IA
North Memorial Medical Center - Robbinsdale, MN
Catholic Health Systems – Buffalo, New York
Elliot Hospital - Manchester, NH
Ridgeview Hospital - Waconia, MN
Avera McKennan Hospital – Sioux Falls, SD
Fairview Ridges Hospital - Burnsville, MN
Lakeview Hospital – Bountiful, UT
Avera McKennan Hospital – Sioux Falls, SD
University of Minnesota Medical Center – Minneapolis, MN
North Memorial Medical Center- Robbinsdale, MN
St. John's Hospital – Maplewood, MN
Santa Clara Medical Center - San Jose, CA
MetroHealth Medical Center - Cleveland, OH
Kaiser Permanente Northwest - Portland, OR
Elmendorf Air Force Base - Anchorage, Alaska
University of Minnesota Medical Center- Minneapolis, MN

Faculty

Faculty	Medical School	Residency
Felix Ankel, MD	University of Wisconsin	University of Illinois
Brent Asplin, MD, MPH	Mayo Medical School	University of Pittsburgh
Scott Burry, MD	Indiana University	University of Virginia
Mary Carr, MD	University of Michigan	EM/IM Henry Ford Hospital - Detroit
Won Chung, MD	Albany Medical College	Harvard Affiliated
James Colletti, MD	Chicago Medical School	EM/Peds University of Maryland
Rachel Dahms, MD	University of Minnesota	Indiana University
Robert Dahms, MD	University of Minnesota	FP - St. Paul-Ramsey Medical Center
RJ Frascone, MD	University of Minnesota	FP - St. Paul-Ramsey Medical Center
Bradley Gordon, MD	Creighton University	Regions Hospital
Teri Gunnarson, MD	University of Minnesota	Regions Hospital
Paul Haller, MD	University of Minnesota	IM - University of Minnesota
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