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DEPARTMENT OF EMERGENCY MEDICINE

Thank you for your interest in the University of Rochester EMS Fellowship!

The two-year EMS Fellowship is administered by the Department of Emergency Medicine, Division of Prehospital Medicine, and advanced degree training is achieved through the University of Rochester. The focus of this program is to develop physicians who will actively participate in prehospital systems and become leaders at all levels of EMS. It utilizes the diversity of EMS in the Monroe-Livingston region to afford the Fellow numerous opportunities to learn in both didactic and experiential forums, the essentials of physician oversight of EMS systems. There is a strong emphasis on academic training, including research and advanced degree opportunities.

Specific goals for the fellow include:

- A thorough understanding of all aspects of prehospital medicine, including medical direction, administrative, and clinical responsibilities
- Becoming an excellent EMS educator
- Understanding how to develop and execute EMS research
- Developing skills to become a national and international leader in EMS
- Completing an advanced degree

The EMS Fellowship has two program tracks that in addition to the above goals, is further designed to best suit the interests and future aspirations of the fellow:

#### *Educational Program*

The Educational Program is designed to develop one's expertise as an EMS educator. This program capitalizes on our Division's oversight of regional public safety educational programs including a paramedic training program. There is a concentration on adult learning and education of emergency medicine residents and medical students with advanced training through graduate coursework at the University of Rochester Warner School of Education.

#### *Research Program*

The Research Program is designed to capitalize on the many research and mentoring opportunities at the University of Rochester. This program concentrates on developing the candidate to be a successful, funded, prehospital researcher. In addition to close mentorship with experienced researchers, the Fellow will obtain advanced training in the form of a Masters of Science in Clinical Investigation through the University of Rochester.

The attached information is offered to familiarize the potential EMS Fellow with the myriad of EMS opportunities at the University of Rochester and what they can expect while completing the program here. I hope that you find the information helpful, encourage you to contact our office with additional questions, and look forward to your application.



Jeremy T. Cushman, MD, MS, EMT-P  
Director, EMS Fellowship

# University of Rochester Emergency Medical Services Fellowship Program

## The Monroe/Livingston County Area

The City of Rochester has a population of 225,000 and Monroe County a total of 800,000. The greater referral area to the city composes a population of 2.2 million, most of which is in small towns and villages in eight surrounding counties. The City of Rochester is a typical urban population including several areas of low-income housing, high-rise living, and attached family housing. The remainder of Monroe County is primarily suburban, bedroom communities of 30-40,000 population, although one town, Greece, has over 100,000 people. There are several areas of industry, the largest of which is Kodak, which encompasses many square miles of factories and warehouses and is served primarily by its own EMS Service. Included in the suburbs are multiple nursing home facilities with roughly 20,000 residents, divided 2/3 - 1/3 in minimal and comprehensive care, respectively. Additionally, Monroe Community Hospital houses 435 chronic care patients and Rochester Psychiatric Center provides assisted care for mentally and psychologically handicapped persons.



Livingston County, which is directly south of Monroe County, is predominantly rural and has a population of 64,000 people. There is one primary care hospital, and one of the predominant industries is salt mining. Two major interstates run through the county and high-speed automobile crashes are frequent. The breakdown of population by age in the two county region shows a disproportionate level of elderly and college age people. There are five major colleges and one community college in the two county area, and the area is a haven for retirees.

The Monroe/Livingston area provides a wide variety of emergent and chronic care issues throughout urban, suburban, and rural settings. This provides the Fellow a diversified experience in EMS Medical Direction and numerous opportunities to impact the EMS system through clinical care, research, and policy.

## The Department of Emergency Medicine

The University of Rochester Medical Center/Strong Memorial Hospital (URMC) is a Level 1 Trauma and tertiary referral center. The emergency department has an annual volume of 95,000 and contains 120 beds including acute and non-acute areas, a critical care/trauma area, pediatric ED, psychiatric ED, and observation



The Department of Emergency Medicine consists of 42 faculty members, 36 EM residents, and 5 fellows. The Division of Prehospital Medicine has five core faculty physicians whose primary focus is prehospital care; there are an additional seven physicians who are involved in EMS activities. The Department is well established in both Emergency Medicine and EMS. The Division of Prehospital Medicine supports an active research program with significant federal and foundation grant funding from the NIH, HRSA, CDC, Hartford Foundation, and others.

## EMS Structure and Medical Direction

The Monroe/Livingston area is covered by two county enhanced 911 centers utilizing Emergency Medical Dispatch (EMD). Dispatch of EMS units may occur directly through the 911 centers, or the call may be transferred to an agency dispatch center for certain EMS agencies. The city of Rochester is served by two paid agencies with Rural/Metro Medical Service serving as the primary provider and Monroe Ambulance serving as the secondary provider. The remainder of the two county regions is served by a mix of volunteer and mixed paid/volunteer agencies. The Monroe/Livingston area handles approximately 150,000 EMS calls per year.



The Regional Emergency Medical Services Medical Director is a New York State Department of Health (DOH) statutory position, chosen locally by the Monroe and Livingston County's Departments of Health. This position is directly responsible for all aspects of EMS care in the Monroe/Livingston region and the medical director answers directly to the directors of the local DOH. Input, and in some cases direct approval is solicited from the local EMS physicians advisory board, the Regional Emergency Medical Advisory Council (REMAC) for clinical issues and through a multi-disciplinary council, Monroe-Livingston Regional Emergency Medical Services Council (MLREMS) for operational concerns.

Medical Direction takes two forms in the Monroe/Livingston region. Indirect medical direction consists of NYS BLS and Regional ALS Protocols, which provide standing orders for most patient complaints. The REMAC provides most of the oversight for these protocols and other medical care policies. The REMAC also has a QA Committee that provides recommendations for medical control issues. Individual QA audit projects are determined by the REMAC, concerning specific call types or patient complaints and are also available for system evaluation. The REMAC and the medical director use this data to revise training needs and protocol development. 911 data is used in system design to determine what calls are responded to by ALS vs. BLS, whether the response is hot or cold, and the accuracy of the EMD process. The Fellow is included in the process of protocol development and revision, as well as the regional QA process.

Direct medical direction is provided by cell phone transmission to base station physicians (Medical Control) at three hospitals, Strong Memorial Hospital, Rochester General Hospital, and Park Ridge Hospital. These physicians provide guidance by giving orders for medications, controlled substances, or treatments beyond the usual standing orders. All phone transmissions are recorded, and a written record compiled by the command physician is also kept.

### **The Office of Prehospital Care**

All EMS activities in the Monroe/Livingston Region are coordinated through the Office of Prehospital Care (OPC) housed within the Division of Prehospital Medicine in the Department of Emergency Medicine at the University of Rochester. The Director of the OPC is the EMS System Medical Director. The Director of Quality Assurance is a paramedic who is responsible for data collection and analysis. The QA Coordinator is a physician in charge of Quality Assurance and initial and ongoing EMS training. There is also a separate physician who serves as the TOXMedic physician and is responsible for all Hazardous Materials, Bioterrorism, and most mass gathering EMS activities. The EMS Medical Director and QA Coordinator serve as the regional representative to the State EMS Council and State EMS Advisory Committee (Physician's Advisory Board), which provide the NYSDOH with recommendations concerning EMS issues. In addition, representation is provided for all local EMS related committees, providing numerous opportunities for the Fellow to participate in policy development and QA.

Strong Memorial Hospital is also the site of the majority of hospital clinical time for paramedic training. Nurses as well as physicians serve as preceptors of the students in the Emergency Department, and students also rotate through the hospital departments. Clinical training at Strong Memorial Hospital also includes involvement with a high tech patient simulator, used for both assessment/treatment and procedure teaching. The University of Rochester Medical Center also provides the majority of physicians who serve as agency medical directors. Many of these physicians also serve on REMAC.

All data, including 911 and patient care records is sent to the OPC as a statutory requirement of New York State. This data is then analyzed by a number of methods

including reports to every individual and agency delineating performance as compared to predetermined standards. Continuing medical education classes (CME) are based on issues uncovered in the data collection process, and this resource provides numerous unique research opportunities.

## **Fellowship Curriculum**

The EMS Fellowship follows a set curriculum and is primarily self-directed with readings chosen by the faculty which are then followed by discussion with the respective faculty content expert. Whenever possible, an experiential component augments the Fellow's training and education. The following are the main curricular areas that the Fellow is expected to complete during their program.

### **History of EMS**

Basic historical points will be covered through reading and discussion including: the military origin of EMS including historical perspective through modern warfare and principles; birth of national/public EMS – including a review of the 1966 white paper, demonstration projects and subsequent findings; the impact of television the public psyche of emergency medicine and EMS; the 1973 EMS act and subsequent amendments; the birth of cardiac care units and Pantridge's role in modern EMS; the birth of trauma care and the "golden hour" concept; current development of EMS and provider training levels; the genesis of the Emergency Medical Treatment and Active Labor Act (EMTALA) and its impact on EMS; the impact of 9/11 and bioterrorism response; and the 2006 IOM subcommittee report on EMS.

### **Legislation/Legal Issues**

Basic legislative points will be covered by reading, lectures, and discussion. Participation in local and regional meetings will afford the Fellow additional experience. Other content areas that will be specifically addressed include: COBRA/EMTALA and its effects on EMS transport and delivery; Good Samaritan laws and the linking of Public Access Defibrillation provisions; patient competency/refusal of care issues; DNR/Termination of Care in the field; physician care on scene; the impact and legal aspects of overcrowding and diversion; and various aspects of negligence, malpractice, and risk management as it pertains to prehospital care.

### **EMS System Design**

The Monroe/Livingston area has a tremendous diversity of EMS provider models allowing the Fellow a broad range of experience. The didactic curriculum specifically includes the following content areas: The historical aspects of EMS system design including the 15 points as outlined by the 1973 EMS act and seven clinical system models; current models including fire based, third service, and proprietary; ambulance placement, including fixed based deployment versus use of systems status management; new concepts in alternative destination and triage will also be covered, including expanded scope of care. The Fellow is strongly encouraged to visit other EMS systems outside the Monroe/Livingston Region during their fellowship to gain greater exposure to the wide variety of systems and medical oversight.

## **Personnel/Human Resources**

The Fellow will become familiar with the training requirements and scope of practice of all levels of EMS providers, from PAD/First Responder through EMT-P and Critical Care Transport Paramedic. Human resource issues such as communicable diseases, stress, occupational injury and medical concerns, certification, and discipline will be covered via time spent with the Director of the largest regional EMS Service, Dr. Erik Rueckmann, and Dr. Terry Fairbanks, the content expert for EMS safety. Rural/Metro Medical Services of Rochester will also be the source of training in labor relations, unions and contracts as the Fellow will attend ongoing discussions in these areas. The Fellow will also become familiar with expanding scope of practice initiatives including statutory regulations from both a state and national perspective.

## **Finance**

A packet containing information on reimbursement has been compiled including current Health Care Finance Administration opinions/policies for EMS reimbursement and will be reviewed with the Fellow. Billing principles, including documentation, will be reviewed through time spent with both Rural/Metro Medical Services of Rochester and an independent contractor specializing in EMS reimbursement (MedEx, Inc).

## **EMS Equipment**

The EMS Fellow will spend time with specific ambulance personnel and manufacturers to learn ambulance design and specifications including New York State requirements. This will include taking the EMT-B practical exam. Communications equipment and familiarity with different communication systems, including radio frequencies and regulations, will be obtained through time spent with the manager of Rural/Metro Dispatch. This will include system status management, the use of GPS and automatic vehicle locators, and system status boards. Medication use, benefit, and proper storage including satisfying security requirements will be discussed. Special equipment and training in such areas as water rescue, high angle rescue, and farm medic programs are available through enrollment in the specific programs.

## **Education/Training**

Classes in the basics of education theory and practices area available through the School of Nursing at the University of Rochester. These are designed to prepare the student in basic principles of teaching from a didactic as well as clinical perspective, and include training in learning at a distance, with an emphasis on computers. The Fellow will spend time with the Director of EMS Education at the Monroe County Public Safety Training Center, a state-of-the-art facility that covers all aspects and levels of EMS and public safety training. The Fellow will be expected to lecture to a diverse group of field providers, from EMT-B to Critical Care Transport Paramedic, to further develop their didactic teaching skills.

Monroe Community College sponsors the local paramedic training program and the Fellow will receive an overview from the course coordinator, be placed on faculty, and be responsible for teaching at least one section of the class. BLS training is handled by a variety of local agencies; and the Fellow will participate in one class of his/her choosing. Participation in Certified First



Responder (CFR) and PAD courses will also be required. Initial training in Emergency Medical Dispatch, will also be available through the provided by Monroe County 911 center.

The Fellow will also provide didactic instruction and assist in coordinating the emergency medicine resident rotation in EMS. This will include reviewing lectures given by residents to field providers, and providing didactic instruction to residents during their core lecture series in EMS.

### **Community Education**

The Fellow will participate in a variety of activities related to community education. This first area will be exposure and participation in programs developed by the local American Heart Association. Other community education programs are handled through the Monroe County DOH, which has individuals responsible for producing and promoting programs for the public. This includes use of EMS and 911. The Fellow may participate in one of these programs and assist in their development and production, which may include the presentation of public service announcements on local TV and radio. The Fellow will also attend sessions of the local EMS recruitment and retention committee, which is sponsored through NYS DOH.

### **Field Operations**

The Fellow is expected to become intimately familiar with the provision of EMS care in the field through the following training and experience:

#### Field Experience

The Fellow will participate in shifts with multiple agencies, including the major proprietary services (Rural/Metro and Monroe Ambulances), volunteer (Henrietta and Gates Volunteer Ambulance Corps), and air medical transport (MercyFlight Central). This will include interfacility transfers on the Specialty Care Transport Unit, ALS units, BLS units and fly cars (ALS intercept). One shift will be spent with crews as well as supervisory personnel in both an observer and quality assurance role per week. Regular critiques in a structured format are performed by supervisory personnel with the involved providers, and the Fellow will participate in leading these sessions.

#### Emergency Vehicle Operations

The Fellow will successfully complete USDOT EVOC and/or CEVO courses taught by a local certified instructor prior to performing vehicle response.

#### Vehicle and Technical Rescue

The Rochester area has regular courses in wilderness EMS, farm rescue, and water rescue, are be available at no cost to the Fellow. Basic vehicle rescue will be covered as part of the BLS curriculum, and the Fellow will be required to pass the BLS practical exam.

#### Additional Training

Courses in Firefighting, Search and Rescue, Tactical Medicine, Hazardous Materials, and other specialties of interest to the special are available and can be arranged dependant upon the Fellow's interest.

### **Communications**

The Fellow, through both readings and didactic sessions with communications personnel at both the 911 center and individual agencies will understand the various communication systems in use and available, including radio, cell phone and mobile data terminals (MDT's) for EMS providers. Strengths and weaknesses of each type will be covered, this will include VHF, UHF, and trunked systems. An understanding of the 911 system, including enhanced 911 from both traditional and cellular phones will be reviewed, along with the fundamentals of EMD including classification and pre-arrival instructions. The basic tenants of medical command, including process, medical direction, documentation, triage, and QA will also be addressed. Communication in disasters/MCI/HAZMAT settings will be covered through field experience with the Monroe County Office of Disaster Preparedness.

### **Disaster Management**

The Fellow will successfully complete required National Incident Management System Coursework. Further instruction covering mass casualty/disaster plan components, implementations, drills and activities will be given, including oversight and integration of multiple mutual-aid agencies. In addition, Monroe County and Livingston County EMS coordinators will direct the Fellow in the basics of operations management for large-scale incidents. Specialty situations such as hazardous materials, chemical and biological agents, and mass trauma will be addressed, as well as Federal efforts such as the National Disaster Medical System (NDMS). The Fellow is expected to complete National Incident Management System Training within the first two months of their program to include IS-100, 200, 300, 800 and 900.



Rochester has two major disaster drills a year, for both generic MCI (plane crash at the airport) and one involving the local nuclear power plant. The Fellow will participate in the planning and execution of these drills, including on scene triage and medical command as a field physician. In addition, the local Kodak factory has an extensive HAZMAT team that deals with incidents of chemical release from their institution and the Fellow will spend time on scene with their director.

### **Mass Gathering Medicine**

The Fellow will participate in local mass gathering planning and care, through the local stadium medical coverage (class AAA baseball and A-league soccer) and the largest local festival, the Lilac Festival, which attracts over 500,000 people. These are covered by a local EMS agency (Monroe Ambulance) and the Fellow will be



directly included in both the planning and field care phases. Other events such as the Geneseo Air Show and Monroe County Fair provide additional opportunities for on-scene medical direction of mass-gathering events.

### **Prevention**

The role of prevention in EMS will be covered by having the Fellow interact with two of the EMS Fellowship faculty members who are intimately involved in projects in this area, Dr. Manish Shah and Dr. Lynn Babcock-Cimpello. Basic tenants will be covered, in addition to actual data analysis and use for prevention projects. Methods for linkage of data and providing for follow up with local agencies will be covered, including follow-up written reports with outcome. The role of screening in the home and workplace, and the concept of “teachable moments” will be targeted.

### **Medical Direction**

The Fellow will understand the principles of both on-line and off-line command by direct participation in the local EMS system.

#### **On-Line Medical Direction**

The Fellow will complete the standard local EMS base station course administered by the OPC. During clinical time at Strong Memorial Hospital, the Fellow will participate in the direct provision of medical command, as well as oversight and teaching of the residents. The Fellow will also be expected to help teach the base station course when offered to outside physicians. Development of Specialty Care Transport Units (SCTU) protocols and their medical direction will be monitored and directly participated in by the Fellow. This will include on-line medical direction for high-level interfacility transports.

#### **Off-Line Medical Direction**

This will include the statutory authority and structure as outlined through the local REMAC and state. Scope of practice issues will be covered for all EMS provider levels, and how this relates to the EMS medical director. Protocols and the issue of standing orders vs. medical command orders will be covered. Specialty situations, such as on scene medical control and authority and mass casualty will be addressed. QA complaint handling and discipline both from a conceptual framework through development of policies and procedures will also be covered through both assigned readings and discussion with the fellowship director.

#### **Agency Responsibilities**

The Fellow will serve as Assistant Medical Director of an EMS Agency during their training. Responsibilities will be assigned but are likely to include Quality Assurance, training, and personnel issues.

### **Quality Assurance**

The OPC serves as the central body for all EMS QA/QI activity in the region. QA reports, both from a general as well as specific perspective (complaint procedure, etc.) are generated and presented to the local as well as state EMS medical advisory committees.

The Fellow will attend and participate in those meetings. In addition, time will be spent at Rural/Metro Medical Services of Rochester to learn their QA/QI activities, as well as at the 911 Center for the same purpose. The Fellow will also attend meetings to the Medical Dispatch Review Committee (MDRC) for EMD, and directly participate in the generation of individual and agency QA reports, and how these reports are used for CME, system change, protocol revision, remediation, and accreditation.

### **Specialty Care and Air Medical Transport**

A ground Specialty Care Transport Unit has been designed for interfacility transfers and is operated by both Rural/Metro Medical Services and Monroe Ambulance. Their combined Specialty Care volume is approximately 1,500 per year. The Fellow will be involved in developing protocols for Specialty Care Transport, providing On-Line medical direction and participating in interfacility transports as crew.

There is one local aeromedical transport provider, Mercy Flight Central based in Canandaigua, NY. Mercy Flight flies approximately 700 missions (70% scene, 30% interfacility) per year. The didactic portion of the Fellowship includes the historical aspects of Air Medical transport including military applications. The Fellow will be provided with the Air Medical Physicians Association Medical Directors handbook, which will be required for reading and discussion with the fellowship content expert.



Clinical and administrative experience will be obtained through the local agency, MercyFlight Central, where the Fellow will fly as crew one shift per month. Training will include a scene safety course, landing zone preparation, and familiarization with the various rotor aircraft used by regional air medical providers. National and state criteria for air medical transport will be discussed, including cost and reimbursement issues. Down time at the air medical transport base will be used to instruct the Fellow in operations management and QA/QI procedures by the MercyFlight Central operations staff. The Fellow will also have the opportunity to observe and participate in an outside air medical program, if so desired.

### **EMS Research**

The EMS Fellow will be exposed to the basics of research via a broad group of didactic articles and direct instruction by the EMS Division Research Director. Both Education and Research Program Fellows will be expected to participate in this program.

The Educational Program Fellow is expected to complete a research project during their training which is suitable for poster/abstract presentation at a national meeting. The Fellow will also take selected graduate coursework at the University of Rochester Warner School of Education.

The Research Program Fellow is expected to complete a research project during their training which is suitable for peer-reviewed publication. Additionally, the Fellow will obtain

advanced training in the form of a Masters of Science in Clinical Investigation through the University of Rochester, Department of Community and Preventive Medicine.

Research projects are developed through a set procedure. The first step is to develop an idea and hypothesis. The Fellow will then work with one or more Division personnel to create a brief written proposal. This is then presented to the EMS research committee, consisting of the research director and academic faculty for the Division. Comments are then incorporated into the proposal and it is developed into a full document. Formal presentation is then performed in front of the Departmental Research Committee, and again necessary changes are made to the proposal. The study is then sent to the Institutional Review Board for formal approval. Upon completion, the study is presented to the faculty and residents of the Department of Emergency Medicine. Presentation at a national meeting is next. After the project is completed the Fellow is encouraged to submit the manuscript to a peer-review journal.

Statistical support for both methodology development and data analysis is supplied by a contracted PhD and the University of Rochester, Department of Biostatistics. Additional support for grant writing as well as research is available through the University of Rochester School of Community and Preventative Medicine. The medical school library is a full service academic library, with personnel able to develop and complete literature searches. Work-study students are then available to photocopy all articles requested by the Fellow. The Division also employs a full-time data entry/extrication person who will assist in pulling data when needed for research purposes. Additionally, the Department of Emergency Medicine employs patient enrollers who work in the Strong Memorial Hospital Emergency Department to assist with data collection, and are able to enroll patients into studies including administering consent.

There are numerous areas of ongoing investigation within the University of Rochester Medical Center, Department of Emergency Medicine and the Division of Prehospital Medicine. The general areas include accident prevention in geriatric and pediatric populations, alternative destination programs using EMD codes, traumatic brain injury, and triage of trauma patients. With further questions regarding the Division's active research, please contact us directly.

### **Advanced Degree**

The Research Program Fellow is expected to complete coursework towards a Master of Science in Clinical Investigation through the University of Rochester Department of Community and Preventive Medicine. The Fellowship is designed to afford the fellow the opportunity to complete this degree during their two-year program.

The Educational Program Fellow is expected to take relevant graduate coursework through the University of Rochester Warner School of Education towards their goal of becoming an accomplished educator. A Master's Degree is available, but is not required of the Fellow and coursework will be appropriately tailored to the Fellow's specific educational interests.

## EMS Leadership

The fellow will attend all meetings of the local EMS Advisory Committees (REMAC, MLREMS, ALS Committee, and Training Committee). Two members of the Division attend on the state advisory committees (SEMAC, SEMSCO and various subcommittees) and the Fellow will attend these. He/she will also attend the NAEMSP Annual meeting and attend the EMS Medical Director Course, SAEM annual meeting, and National ACEP as well as the NY State EMS Conference (Vital Signs), and the regional EMS Conference (STEP Conference). Participation in state and national committee's is encouraged.

## Clinical Responsibilities

The Fellow will work no more than 12 clinical hours per week at Highland Hospital, a University of Rochester affiliated community institution and EMS Base Station. The Fellow will also have privileges to work at Strong Memorial Hospital, a full-service tertiary care academic medical center.

## Evaluation

The Fellow will have constant feedback from Fellowship Faculty through biweekly meetings with the Fellowship Director, and written evaluations performed semi-annually. The Fellow will also be part of the Department's 360-degree evaluation process as part of his/her clinical practice in the emergency department.

## Sample Schedule

The following is a sample of the Fellow's expected time commitments during the academic year:

		Total Yearly Hours
Participation as field provider	8 hours/week	400
Participate as EMS Educator	30 hours	30
Participation in QI lectures	2 hours/week	100
Emergency Vehicle Operations	16 hours	16
Vehicle and Technical Rescue	24 hours	24
Disaster Drills	30 hours	30
EMS Coverage of Mass Gatherings	20 hours	20
Participate in local, state, and national EMS Organizations	2 hours/week	100
Air Medical Services	8 hours/month	96
Variance Investigation	1 hour/week	50
Clinical	12 hours/week	600
EMS Research	8 hours/week	400
Didactics	120 hours/year	120
Conferences	120 hours/year	120
Advanced Degree/Classroom	10 hours/week	360
		Total 2470

## **EMS Fellowship Faculty**

The University of Rochester Medical Center/Strong Memorial Hospital serves as the site of the Division of Prehospital Medicine which centralizes resources from the MLREMS Council, the Monroe and Livingston County Departments of Health, and Strong Memorial Hospital /University of Rochester Medical Center. Division staff includes the following who are core members of the Fellowship Faculty:

**Jeremy T. Cushman, MD, MS, EMT-P**, is the EMS Fellowship Director, Monroe County Medical Director and Associate Regional EMS Medical Director. Dr. Cushman completed medical school, emergency medicine residency, and an EMS Fellowship at the University of Maryland, and a Master's Degree in Emergency Health Services at the University of Maryland Baltimore County. He is medical director of numerous EMS and Fire Department agencies in Monroe County and is responsible for the RSI Program and regional protocol development. Dr. Cushman is also the Medical Director of the Monroe Community College Paramedic Program.

**Eric A. Davis, MD, FACEP**, is the former Regional EMS Medical Director. He remains active in EMS education and research. Dr. Davis completed medical school and emergency medicine residency at the Ohio State University, and an EMS Fellowship at the University of Pittsburgh.

**Rollin (Terry) Fairbanks, MD, MS, EMT-P**, is the Assistant Regional Medical Director and QA Coordinator. He also serves as Medical Director of Monroe Ambulance, the second largest EMS agency in the Rochester area. He is active in teaching the Specialty Care Transport curriculum to paramedics as well as safety in EMS. Prior to medical school, Dr. Fairbanks completed a Master's Degree in industrial and human factors engineering which has played a central role in his research into EMS safety. He then completed medical school at the Medical College of Virginia and emergency medicine residency at the University of Rochester.

**Erik A. Rueckmann, MD**, serves as Medical Director of Rural/Metro Ambulance, the largest EMS agency in the Rochester area. He also serves as Chair of the Specialty Care Transport Committee of REMAC and is actively involved in clinical education and research. Dr. Rueckmann completed medical school at SUNY Upstate Medical Center, emergency medicine residency and an EMS Fellowship at the University of Rochester. He is currently completing his MPH at the University of Rochester.

**Manish N. Shah, MD, MPH, FACEP**, is Chief of the Division of Prehospital Medicine and serves as the Regional EMS Medical Director and the Medical Director for the Monroe and Livingston County 911 Centers. Dr. Shah has primary medical oversight responsibility for EMS agencies and providers in the region, in addition to overseeing the interaction of various medical components of the EMS system. He is medical director of numerous local agencies. He currently serves as the EMS Research Director and has numerous grants

examining role of EMS in injury prevention, particularly in the elderly. Dr. Shah completed medical school at the University of Rochester, emergency medicine residency at the Ohio State University, a Robert Wood Johnson Fellowship at the University of Chicago, and an MPH at the University of Rochester.

**Sheri Strollo, BSN, EMT-P**, provides QA oversight, develops QI initiatives, and acts as a resource to the EMS community and others on additional issues, including NYS and local protocols and policies, public access defibrillation, and training issues. Ms. Strollo is the Division Manager and is responsible for compliance with and reporting of NYS DOH / MLREMS contract deliverables, as well as, local Q/A reports.

### **Associated Physicians**

University of Rochester Medical Center physicians provide Medical Command through the ED base station, act as EMS agency medical directors or advisors, or participate in EMS training, including ACLS, PALS, and BTLIS courses. Other faculty, while not members of the OPC, also participate in EMS related activities. Dr. John Benitez, Board certified in Toxicology, serves as Medical Director for Poison Control and is responsible for consulting with HAZMAT teams and on all Bioterrorism issues. Dr. Charles Maddow is medical director for a number of local agencies. Dr. Colleen Davis is a pediatric emergency physician active in EMS and EMS-C.

### **Salary and Benefits**

Annual salary is approximately \$70,000 with two weeks of paid vacation. Benefits include administrative support, a shared office and computer. Full medical and dental benefits, life and disability insurance, and occurrence malpractice insurance are provided. Funds are available for scholarly presentation at annual meetings, and tuition reimbursement programs are also available.

### **Application**

A letter of interest along with a current curriculum vitae and three letters of recommendation are required to apply for the fellowship. These may be sent to the attention of the fellowship director at the address below. There is a rolling application process, and you are strongly encouraged to discuss your interest in the program with the Fellowship Director prior to applying.

### **For More Information**

Please contact:

Jeremy T. Cushman, MD, MS, EMT-P  
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Division of Prehospital Medicine and Office of Prehospital Care  
Department of Emergency Medicine

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