

UNIVERSITY OF MINNESOTA

**GRADUATE MEDICAL  
EDUCATION**

**2016-2017  
FELLOWSHIP  
POLICY MANUAL**

**VASCULAR NEUROLOGY  
FELLOWSHIP**

**Sponsored by**

**Department of Neurology**

i. Introduction/Explanation of Manual

This fellowship addendum outlines policies and procedures specific to the Vascular Neurology Fellowship program. Please refer to the Neurology Residency Program Manual for further departmental policies and procedures. It can be found at <http://www.neurology.umn.edu/education/home.html>

The Institutional Policy Manual can be found on the GME website at:

<http://hub.med.umn.edu/graduate-medical-education/policies-governance/graduate-medical-education-institution-manual> . Should the policies in this Fellowship Addendum conflict with the Institution Manual, the Institution Manual takes precedence.

ii. Department Mission Statement

The University of Minnesota Neurology Residency Program has continuously graduated Neurology trainees since the 1940s. The program, initially developed under the guidance of Dr. A.B. Baker, the founder of the American Academy of Neurology, continues to provide an outstanding training experience designed to meet equally the needs of the future clinician or academician. The excellence of the training program is one of the highest priorities of the department. Among the significant strengths of the four-year program are the range and the depth of the clinical experience provided at several teaching hospitals, the devotion of the full-time faculty at each of these hospitals to teaching, patient care, and scholarship, and the focus on both clinical and basic research in the midst of a first-rank neuroscience community. The faculty includes over 60 clinical neurologists.

iii. Program Mission Statement

This vascular neurology subspecialty fellowship program provides one year of supervised graduate medical education experience with graded and progressive responsibility. Designed to comply with the institutional and ACGME program requirements of accredited fellowships in vascular neurology, the University of Minnesota Vascular Neurology training program is organized to provide the intellectual environment, formal instruction, peer interaction and broad supervised clinical experience necessary for fellows to master the knowledge, skills and attitudes essential to the practice of vascular neurology, research, or a teaching career in vascular neurology. Central to these goals is the fellows' attainment, at the level of a practitioner of vascular neurology, of the six ACGME core competencies in the areas of patient care, medical knowledge, practice-based learning and improvement, interpersonal and communication skills, professionalism, and systems-based practice, as described in Section II.

Prior to entering this program, trainees must have satisfactorily completed an ACGME or CCPSC-accredited residency program in neurology, and be eligible for American Board of Psychiatry and Neurology (ABPN) board examinations.

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## **SECTION 1 - STUDENT SERVICES**

### **CAMPUS MAIL**

Each trainee has a designated mailbox in the department. Trainees are expected to pick up their mail at least weekly. The address for receiving mail in the department is:

University of Minnesota  
Department of Neurology  
Attn: (name)  
420 Delaware St, S.E., MMC 295  
Minneapolis, MN 55455

### **E-MAIL AND INTERNET ACCESS**

Each trainee has been assigned his/her own University email account prior to the start of orientation. This corporate Gmail account is to be used for all program, department, and University business communications. The use of personal non-University email accounts is not permissible for business communications.

Announcements about important institution and program events or requirements are sent to your official University email account. Trainees are expected to check this account daily.

There are several computers available for use in the fellows' room. Each has internet access. University email can be accessed via a web browser at: [www.mail.umn.edu](http://www.mail.umn.edu).

### **BADGES**

All trainees and staff are required to have University of Minnesota badges, and to wear them. Your program coordinator will help you obtain your badge as part of your onboarding process. You will also be required to have badges for every hospital where you rotate and to always wear them when providing patient care.

### **HEALTH INSURANCE PORTABILITY AND ACCOUNTABILITY ACT (HIPAA) TRAINING**

Residents are required to complete the University Privacy Training and the Public Jobs: Private Data Security Training modules. The Academic Health Center has designed training programs that are located at [www.myu.umn.edu](http://www.myu.umn.edu) and are accessed via the trainee's University of Minnesota x500 Internet password. The University provides 90 days to complete your required training. For more information, ask your program coordinator to put you in touch with the department's privacy & security coordinator.

Compliance is mandatory. Failure to complete the required training could result in suspension of your participation. PLEASE REVIEW THE USE OF INFORMATION TECHNOLOGY

RESOURCES STANDARDS BELOW. If you need to review the rest of the HIPAA requirements please visit the website at <http://www.ahc.umn.edu/privacy/hipaa/home.html>

### **Using Information Technology Resources Standards**

#### Use of IDs and Passwords

- Do not share the password assigned to you.
- Select an obscure password and change it frequently.
- Understand that you are responsible for all activities on your username/account ID.
- Ensure that others cannot learn your password.
- If you have reason to believe that your username/account ID or password has been compromised, contact your System/Network Administrator immediately.

#### Use of Information/Data

- Access only accounts, files, and data that are your own, that are publicly available, or to which you have been given authorized access. Secure information that is in your possession.
- Maintain the confidentiality of information classified as private, confidential or data on decedents.
- Use University information for tasks related to job responsibilities and not for personal purposes.
- Never disclose information to which you have access, but for which you do not have ownership, authority, or permission to disclose. Keep your personal information/data current.
- Accurately update your own records through University self-service systems and other processes provided for you.

#### Use of Software and Hardware

- Use University e-mail, computers, and networks only for legal, authorized purposes. Unauthorized or illegal uses include but are not limited to:
  - harassment;
  - destruction of or damage to equipment, software, or data belonging to others;
  - unauthorized copying of copyrighted materials; or
  - conducting private business unrelated to University activities.
- Never engage in any activity that might be harmful to systems or to any information/data stored thereon, such as:
  - creating or propagating viruses;
  - disrupting services or damaging files; or
  - making unauthorized or non-approved changes.
- When vacating computer workstations, sign-off or secure the system from unauthorized use.
- Use only legal versions of copyrighted software on University of Minnesota owned computer or network resources, in compliance with vendor license requirements.
- Be aware of any conditions attached to or affecting the provision of University technology services:
  - Consult with the system administrator for any questions about system workload or performance.

- Refrain from monopolizing systems, overloading systems or networks with excessive data, or wasting computer time, connect time, disk space, printer paper, manuals, or other resources.

#### Consequences of Violations

Access privileges to the University's information technology resources will not be denied without cause. If in the course of an investigation, it appears necessary to protect the integrity, security, or continued operation of its computers and networks or to protect itself from liability, the University may temporarily deny access to those resources. Alleged policy violations will be referred to appropriate University investigative and disciplinary units. For example, alleged violations by students may be directed to the Student Judicial Affairs office. The University may also refer Women's Health Special listed violations of law to appropriate law enforcement agencies. Depending on the nature and severity of the offense, policy violations may result in loss of access privileges, University disciplinary action, and/or criminal prosecution.

#### **PAGERS**

The Department of Neurology assigns a pager to each resident and fellow for the duration of their program, at no cost to the trainee. Trainees are required to replace lost pagers at their own expense, and may do so at the Information Desk in the UMMC hospital main lobby. This is also the location for exchanging damaged pagers.

Program coordinators have batteries available.

**Trainees are required to carry their pagers, and have them turned on, when they are 'on call'.**

\*\*Always keep pagers at least 6 inches away from cell phones, otherwise some page messages are not received.

#### **TUITION AND FEES**

University Tuition and Fees are being waived at this time for residency and fellowship program training. However, any trainee who is enrolled in Graduate School must pay his/her own tuition and fees.

<h2><b>SECTION 2 - BENEFITS</b></h2>
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#### **EXERCISE ROOM**

The University of Minnesota Medical Center, Fairview (UMMC) Medical Executive Committee has graciously provided an exercise facility for use by University of Minnesota residents and fellows.

Location:

Room C-496 Mayo Memorial Building

(Locker rooms/showers are located directly across the hall)

#### Hours:

The facility is open 24 hours a day, 7 days a week

#### Access Code to Exercise Room and Locker Rooms:

9111 (Please do not share with anyone other than residents and fellows)

The space also includes a small kitchenette area with refrigerator, microwave, coffeemaker and hot/cold water dispenser. If you have any concerns about the facility, call 612-273-7482.

### **CALL ROOMS**

There are call rooms available at both UMMC and HCMC for fellows to use if they are too tired to drive home.

UMMC – on 4th floor of Mayo building, next to C-496 exercise room

Call 626-6330 for reservations; check-in time 2:00pm to 7:00 am

HCMC – walkin available at R5.302, door code 2354.

Reserve through Katie Dolan, 873-2595 x4 when need is known in advance

UMMC also has a general resident lounge on the 6th floor, which offers a TV, computer, telephone, and light refreshments (restocked twice a day).

### **HEALTH BENEFITS**

The University of Minnesota is pleased to offer a broad range of benefits to Medical School residents and fellows. The following benefits are administered by the Office of Student Health Benefits, 410 Church Street S.E., N323, Minneapolis, MN 55455. For more information, visit the **Office of Student Health Benefits website at [www.shb.umn.edu](http://www.shb.umn.edu)** or email [umshbo@umn.edu](mailto:umshbo@umn.edu).

Medical Coverage: HealthPartners Residents and Fellows Health Plan  
HealthPartners provides the health plan network and claims administration services for University of Minnesota Medical School residents and fellows. HealthPartners gives members access to 650,000 healthcare providers and 6,500 hospitals across the United States. You will have a choice of two plans, Basic or Basic Plus. All residents and fellows are required to enroll in one of the two plans for at least single coverage, or provide documentation of other comparable health benefit coverage. Medical School residents and fellows who enroll in the University-sponsored HealthPartners plan (and enrolled dependents) are automatically eligible for continuation of coverage through COBRA at the end of their residency or fellowship.

Dental Coverage: Delta Dental

Delta Dental of MN provides dental network and claims administration services for University of Minnesota Medical School residents and fellows. Delta Dental members have access to both PPO and Premier providers. Medical School residents and fellows who enroll in the University-sponsored Delta Dental plan (and enrolled dependents) are automatically eligible for continuation of care through COBRA at the end of their residency or fellowship.

Life Insurance: Minnesota Life

Medical School residents and fellows are automatically enrolled in a \$50,000 standard life Minnesota Life insurance policy. Enrollment is no cost to Medical School residents and fellows (the cost is covered by your department). In addition to the standard plan, residents and fellows have the option to purchase voluntary life insurance for themselves or their dependents at low group rates through Minnesota Life. Medical School residents and fellows are automatically eligible for continuation of life insurance coverage through COBRA at the end of their residency or fellowship.

Long and Short Term Disability Coverage: Guardian Life Insurance Company

Medical School residents and fellows are automatically enrolled in a long and short term disability insurance policy. Enrollment is no cost to Medical School residents and fellows (the cost is covered by your department). Guardian offers Medical School residents and fellows up to \$10,000 per month of individual coverage. In addition, Guardian offers a Student Loan Payoff benefit effective if you become disabled while you are a resident. Guardian also offers a unique Guaranteed Standard Issue Plan option. Residents and fellows have the option to purchase long term disability coverage that you can take with you upon completion of your residency/fellowship regardless of any pre-existing medical conditions—25-30 percent of residents and fellows would not otherwise qualify for this type of coverage due to pre-existing medical conditions.

Flexible Spending Accounts

Medical School residents and fellows are eligible to participate in two types of Flexible Spending Accounts (FSAs), the U of M Health Care Reimbursement Account and the Dependent Care Reimbursement Account. Both programs allow you to pay for related expenses using pre-tax dollars.

**LAUNDRY SERVICE**

Laundering of scrub suits is provided for residents at all sites. Scrubs should be used at the site they were obtained from. Wearing scrubs from different sites is discouraged at some sites and prohibited in others. See site coordinators for information.

**LEAVE POLICY**

Trainees must give notice, in writing, of intent to use leave (such as a medical or parental leave) to their program director at least four (4) weeks in advance, except under unusual circumstances. Holidays that occur during a leave of absence run concurrent with the leave and are not in addition to the leave.

\*\*\*Many leaves will likely necessitate that the trainee make up their time spent away from training, in order to meet American Board criteria for completion of the training program. Details regarding length of leave and its effect on program end date should be discussed with the program director and coordinator prior to the leave start date.

Parental Leave

The resident/fellow (trainee) as defined below must give notice, in writing, of intent to use parental leave and other leaves used in conjunction with parental leave to their program

director (and coordinator) at least four (4) weeks in advance, except under unusual circumstances.

**Birth mother:**

A birth mother shall be granted, upon request to the program director, up to six weeks parental (maternity) leave for the birth of a child. The maternity leave may begin at the time requested by the trainee, but no later than six weeks after the birth and no sooner than two weeks before the birth. The leave must be consecutive and without interruption.

Trainees on maternity leave will receive the first two weeks of their leave as paid parental leave. This paid parental leave may be charged against the trainees' vacation, or sick allocation. Note: The first two weeks of this paid parental leave covers the required fourteen day wait period before they are eligible to receive the short-term disability benefit, see Office of Student Health Benefits website. <http://www.shb.umn.edu/twincities/residents-fellows-interns/m-residents-fellows-health-plan.htm>. Department of Neurology program coordinator and the Clinical Neuroscience Administrative Center HR staff will assist with the paperwork details for taking a maternity leave.

Trainees that have vacation available may use it in conjunction with the short-term disability benefit during their maternity leave.

**Birth father:**

A birth father shall be granted, upon request to the program director, up to two weeks paid parental leave for the birth of a child. The leave may begin at the time requested by the trainee, but no later than six weeks after the birth and no sooner than two weeks before the birth. The leave must be consecutive and without interruption. This paid parental leave may be charged against the trainees' vacation, or sick allocation.

**Registered same sex domestic partner:**

Registered same sex domestic partner of someone giving birth shall be granted, upon request to the program director, up to two weeks paid parental leave. The leave may begin at the time requested by the trainee, but no later than six weeks after the birth and no sooner than two weeks before the birth. The leave must be consecutive and without interruption. This paid parental leave may be charged against the trainees' vacation, sick or PTO allocation.

Family Medical Leave Act (FMLA)

Medical Residents/Fellows are eligible to be part of the Family Medical Leave Act (FMLA) if they have worked at the University for at least 12 months (not required to be consecutive) and worked at least 1,250 hours in the 12 months preceding the commencement of the leave. Leave shall not exceed 12 weeks in any 12-month period. The 12-month period is based on an academic year (07/01-06/30). A resident/fellow may qualify for Short-Term and Long-Term Disability benefits, so check those sections also. The Department will review the trainee's appointment record to verify eligibility for FMLA when there has been a request for a Leave of Absence. If eligibility has been met, leaves will be entered into the trainee's record as FMLA. Also see the section on effects of leaves on the duration of training.

Vacation/Sick Leave

The Department of Neurology provides each trainee with three weeks of vacation and one week of sick leave. For all scheduled time off (e.g., vacations, personal business, interviews, conferences, etc) it is the trainee's responsibility to fill out a Time Away Request Form and

submit it to the appropriate coordinator. **Trainee must also inform the faculty and colleagues that would expect them in clinic or on the ward.**

A maximum of two weeks of vacation may be taken at a time. Vacation cannot be taken during the UMMC ward coverage rotations. Only one fellow may be gone at a time, since it is imperative to maintain the hospital services.

Do not make travel arrangements until you get the official approval from your program director.

### Holidays

The educational requirements and the 24 hour operational needs of the hospital are taken into consideration when scheduling holiday time off. The program coordinator will work with each of the trainees in determining that days off are spread among all trainees.

### Jury/Witness Duty Witness Duty

Upon request to the program director, leave is provided to trainees who are subpoenaed to testify before a court or legislative committee concerning the University or the federal or state government.

Jury Duty: Upon request to the program director, leave is provided to trainees who are called to serve on a jury. Trainees do not lose pay when serving on a jury or testifying as described above. The training program and the fellow may write a letter to the court asking that the appointment for jury duty be deferred based on hardship to the trainee and the program. The decision for deferment is made by the court.

### Medical Leave

A trainee shall be granted, upon request to the program director, a leave of absence for his/her serious illness/injury that requires an absence of greater than 14 days. The trainee may qualify for Short-Term and Long-Term Disability benefits. Refer to those sections. The trainee must give notice, in writing, of intent to use medical leave to their program director at least four weeks in advance, except under unusual circumstances. Trainees are expected to make every effort to find coverage for their call during their absence and must notify their sites of their absence.

### Bereavement Leave

Trainees shall be granted, upon the approval of the program director, up to 5 days off to attend the funeral of an immediate family member. Sick or vacation time must be used. Immediate family shall include spouse, cohabiters, registered same sex domestic partners, children, stepchildren, parents, parents of spouse, and the stepparents, grandparents, guardian, grandchildren, brothers, sisters, or wards of the trainee.

### Military Leave

Please refer to the Institutional Policy manual for the policy on military leave.

### Personal Leave of Absence

Only under unusual circumstances such as a personal or family emergency, will a personal leave of absence be considered. Trainees must give notice, in writing, of intent to use personal leave to the program director at least four weeks in advance, except under unusual circumstances. Residents are expected to make every effort to find coverage for their call/night float/shift and must notify their sites of their absence. If a trainee takes a leave, this will be considered when approving future vacation requests (especially when the request is for the same time period as a resident who has not taken a leave). A resident requesting a non-medical personal leave must use all remaining vacation and sick days, if the trainee does not have any vacation/sick time left, they will be required to use unpaid time.

### Professional Leave

Fellows may be approved to attend off site conferences. Time away for conferences must be requested and approved in the same manner as other leaves. Hospital coverage must be coordinated among the fellows; not all fellows may be gone at the same time. Check with the program director regarding availability of funds for reimbursing conference travel; funds are not available every year.

### Professional Liability Insurance

Professional liability insurance is provided by the Regents of the University of Minnesota. The insurance carrier is RUMINCO Limited. Coverage limits are \$1,000,000 each claim/\$3,000,000 each occurrence and form of insurance is claims made. "Tail" coverage is automatically provided. The policy number is currently RUM-1005-14.

Coverage is in effect only while acting within the scope of your duties as a trainee. Claims arising out of extracurricular professional activities (i.e. moonlighting) are not covered. Coverage is not provided during unpaid leaves of absence.

For further information about this coverage, visit the 'Resident and Fellow information and Resource Guide' at <http://www.med.umn.edu/residents-fellows/current-residents-fellows> and see the 'Medical Malpractice section.

### **MEAL TICKETS/FOOD SERVICE**

Trainees on duty have access to adequate and appropriate food services 24 hours a day at all institutions. HCMC adds funds to meal cards based on the number of days rotating at that hospital. The UMMC meal card policy is more restrictive and based on the number of night/weekend shifts worked in-hospital.

Your program coordinator will help find out if UMMC has granted this fellowship any meal cards. If they have, the coordinator will help you obtain meal cards, and provide you with a copy of the UMMC policy.

### **PARKING SERVICES**

Parking is provided at both UMMC and HCMC at no cost to the trainee. See Katie Dolan for

parking arrangements at HCMC, and Pat Bulgerin for parking arrangements at UMMC.

In the event that a UofM parking ramp card is lost, the trainee must visit the Parking Services office at 300 Washington Ave and pay \$15 for a replacement card. Parking Services will want to know the number on the lost card – the program coordinator has a master list and can help find that number. The trainee must also inform their Program Coordinator of the number on any new cards assigned to them.

All parking cards are the property of the University of Minnesota, and must be turned in at the end of the fellowship.

For a nominal fee (\$25), UMMC also offers residents/fellows off-hour parking in the hospital patient /visitor ramp. To get approved for this parking, and learn the related policies, visit the Fairview Parking/Security desk in Mayo B340.

### **SHUTTLE SERVICE, INTERCAMPUS**

A Fairview shuttle service is available between the Riverside and University campuses from 5:20 a.m. to 8:30 p.m. See the shuttle schedule near the boarding locations on each campus. The shuttle picks up and drops off at the Variety Club Research Center (VCRC) circle at 401 East River Pkwy on the University campus and in the West circle entrance outside Subway restaurant on the Riverside campus.

**FALL, SPRING & SUMMER SEMESTERS:**

**(No service during weekends, breaks and holidays.)**

Monday–Friday 7:00 am – 5 pm every 15 minutes

Monday–Friday 5:00 pm – 10 pm every 30 minutes (Fall and Spring Semester ONLY)

### **SHUTTLE SERVICE, CLINIC AND SURGERY CENTER**

There are shuttles running every 5-10 minutes from the UMMC lobby door to the new CSC clinic building.

### **STIPENDS and PAY DATES**

Trainee stipends are determined centrally by the Graduate Medical Education office. For Academic Year 2016-2017, the stipend rate relevant to this fellowship is:

Level 5 \$59,967 annually

The University of Minnesota pays employees on a delayed biweekly pay period basis, with each pay period starting on a Monday and ending on a Sunday. Employees are paid every other Wednesday, 10 days after the end of the pay period.

Trainees will receive paychecks in one of two ways: a paper paycheck or Direct Deposit. Paper checks are mailed to each fellow's home address.

Whether receiving a paper paycheck or Direct Deposit, fellows can view their pay statements online, through the MyU website.

Direct Deposit is very strongly encouraged and can be submitted or updated by visiting the My Pay tab of the 'MyU' website ([www.myu.umn.edu](http://www.myu.umn.edu), x500 login required.) At the bottom of the page are links for direct deposit set up, viewing pay statements, declaring W-4 tax information, etc.

## **VISA SPONSORSHIP**

The J-1 alien physician visa sponsored by ECFMG is the preferred visa status for foreign national trainees in all UMN graduate medical education programs; therefore, the vascular neurology fellowship in the Department of Neurology sponsors only J-1 visas. We do not sponsor H-1B visas except under very unusual circumstances. More information on the J-1 visa can be found on the UMN-GME webpage.

## **WORKERS' COMPENSATION**

The University is committed to providing trainees with comprehensive medical care for on-the-job injuries. Under Minnesota statute, medical trainees are considered employees of the University of Minnesota for Workers' Compensation insurance purposes. When a trainee is injured during training, he/she must take immediate steps to report injury to the University. The University cannot pay bills for trainee treatment unless an injury report is on file. The medical resident/fellow must complete the following steps in case of a work related injury:

1. Report any work related injury to your supervisor on the day or shift that it occurs. You must complete an Injury Report form at the rotation site where the injury occurred and follow the site's protocol for the specific injury (e.g. needle sticks, surgical injuries, etc.).
2. You **MUST** also complete and sign a University of Minnesota "Employee Incident Report" as soon as possible following the injury. To obtain the Employee Incident Report form contact your program coordinator. Complete the form and return to your coordinator for forwarding to Workers' Compensation. Also forward any medical bills that you have received regarding the injury. The University of Minnesota Workers' Compensation Department will review for payment.

## **NEEDLE STICKS AND BLOOD BORNE PATHOGEN EXPOSURE (BBPE) MANAGEMENT**

**24 Hour Help Line: 612-339-3663**

### **Quick Steps – What to Do First!**

1. Clean it.
2. Get treated. (**VERY IMPORTANT!!! – Identify yourself as a UMN medical fellow so that the site understands this will be a worker's compensation claim.**)
3. ID the source patient.
4. Report it. Contact the faculty on service. (ALSO within 24 hours contact your program coordinator to obtain an Employee Incident Report).
5. Get a follow-up exam.  
Contact Occupational & Environmental Medicine at 952-883-6999.

**IMPORTANT: The Centers of Disease Control and Prevention recommend that the exposed person seek treatment within 1-2 hours after initial exposure.**

Note: If you are a resident/fellow, it is your responsibility to learn facility-specific exposure protocols when you begin your rotation. Please see employee health at your facility to learn procedures.

The [detailed steps](#) to manage an exposure are listed several places, including the GME Resident & Fellow Resources website at [www.gme.umn.edu/residents](http://www.gme.umn.edu/residents), and on the Occupational Health and Safety website, as well information on the [Bloodborne Pathogen Training Program](#).

The GME contact for residents/fellows injuries is Carol Sundberg via email at [sundb001@umn.edu](mailto:sundb001@umn.edu) or by phone at 612-626-3317.

If you are on rotation at one of our major affiliated sites, their [Occupational Health and Safety \(OHS\) offices](#) are available to help you during their regular business hours.

After you have completed the steps listed above, please make sure that a First Report of Injury (FROI) form is **completed within 8 business hours (1 work day)**. This is required by the Department of Labor and Industry and is also necessary to pay the bills that are incurred as a result of the injury.

The preferred method of completing a First Report of Injury (FROI) form is via the on-line [e-FROI](#). In order to access the e-FROI, you must log-in with the employee ID or the x500 of the injured party. The e-FROI guides you through the process of completing the required information. Upon submission, the completed e-FROI goes directly to Sedgwick Claims Management and Peggy Handt, your area contact, at 612-624-6019. **Be sure to choose "Twin Cities All Other" in the drop-down for the campus in the e-FROI.**

If the e-FROI is not available for accessing online, it is possible that the system is temporarily down; instead, you can submit a fillable [First Report of Injury](#) (FROI) form. Complete all required information in the fillable FROI, save as a PDF, and email the completed FROI to [211@sedgwickcms.com](mailto:211@sedgwickcms.com).

If you print off the FROI and complete it manually, fax the completed form directly to Sedgwick Claims Management (SCM) at 952-826-3785.

You should hear from an adjuster at Sedgwick Claims Management (SCM) within 3 business days of submission of the completed e-FROI. If you do not hear from SCM within 3 business days, contact Peggy Handt at 612-624-6019 to make sure that your e-FROI was received at Sedgwick.

A Supervisor Incident Investigation Report is also required and must be completed within 24 business hours (3 work days). This form can be found at: <http://policy.umn.edu/Policies/hr/Benefits/WORKERSCOMP.html>. It is located under "forms/instructions". Fax the completed form directly to Sedgwick Claims Management at 952-826-3785.

Further instructions can be found in the [Reporting Workers Compensation Related Injuries policy](#) on the Uwide Policy Library.

**If you receive a bill as a result of the injury, please retain the bill and fax it to Sedgwick Claims Management at 952-826-3785.**

**\*\*If you receive initial treatment for a BBPE at a training site Employee Health Office or Emergency Room, please identify yourself as a UM resident/fellow.**

**\*\*The cost of testing the source patient is the responsibility of the site at which the needlestick/blood borne pathogen exposure occurred.**

### **SECTION 3 - INSTITUTION RESPONSIBILITIES**

*Please refer to the Institution Policy Manual located on the GME website at: <http://hub.med.umn.edu/graduate-medical-education/policies-governance/graduate-medical-education-institution-manual> for University of Minnesota GME specific policies. Should the policies in the Program Policy Manual or Fellowship Addendum conflict with the Institution Manual, the Institution Manual takes precedence.*

### **SECTION 4 - DISCIPLINARY AND GRIEVANCE PROCEDURES**

*Please refer to Institution Policy Manual located on the GME website at <http://hub.med.umn.edu/graduate-medical-education/policies-governance/graduate-medical-education-institution-manual>*

There are no vascular neurology policies that are more specific than the institutional policies.

## SECTION 5 - GENERAL POLICIES AND PROCEDURES

*(Please refer to Institution Policy Manual at <http://hub.med.umn.edu/graduate-medical-education/policies-governance/graduate-medical-education-institution-manual> for Medical School Policies).*

### VASCULAR NEUROLOGY PROGRAM OVERVIEW

Each rotation includes experiences and evaluation of outcomes to ensure the development of competent graduates in vascular neurology. Required rotations include neurocritical care/stroke at University of Minnesota Medical Center (UMMC), stroke at Hennepin County Medical Center (HCMC), and neurorehabilitation. Elective rotations include endovascular surgical neuroradiology, vascular neurosurgery, neurosonography, neuroradiology, additional vascular stroke/neurocritical care or neurorehabilitation, or dedicated research. Longitudinal experiences include stroke clinic, research, and stroke call.

### FELLOWSHIP GOALS AND OBJECTIVES - CORE COMPETENCIES

Trainees will master advanced knowledge and skills regarding neurological disorders involving the central nervous system due to ischemia or hemorrhage, including their assessment, monitoring, treatment and prevention using a combination of clinical evaluation, imaging, interventional techniques, and medication.

Attainment of requisite knowledge, skills, and attitudes will prepare trainees to practice vascular neurology, an interdisciplinary specialty that incorporates aspects of epidemiology, basic science, clinical neurology, neuroimaging, critical care, endovascular surgical neuroradiology, vascular surgery, neurosurgery, neurosonology, cerebral blood flow and metabolism, neurobehavior, and neurorehabilitation. Vascular neurology encompasses both inpatient and outpatient practice. Stroke is a serious and life threatening condition and many patients with stroke are managed in a critical care unit. The inpatient rotation will include direct management of stroke inpatients on the vascular neurology service and consultation for stroke inpatients on other clinical services. Patients will be seen in the critical care units, step-down or stroke units, and medical-surgical beds. The subspecialist in vascular neurology is familiar with all of these patient care environments in the context of the ACGME competencies. The goal of the vascular neurology fellowship is for its graduates to attain the core competencies at a level of a practicing vascular neurologist and to take the American Board of Psychiatry and Neurology board examination in vascular neurology.

The following ACGME core competencies are integrated into the curriculum:

#### **1. Patient Care and Procedural Skills**

Fellows must be able to provide patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health.

- Fellows must demonstrate competence in managing stroke patients in outpatient and inpatient settings, including critical care units. This must include developing comprehensive plans for the management of stroke patients.

- Fellows must demonstrate competence in integrating information obtained from patient history, physical examination, imaging study results, and biochemical and molecular test results to arrive at an accurate and timely diagnosis and treatment plan.
- Fellows must demonstrate understanding of the indications and potential limitations of invasive management options in the context of the clinical situation. These management options must include:
  - Cranial and spinal magnetic resonance imaging (MRI) and computed tomography;
  - MRI, cerebral angiography; and
  - Carotid and cranial Doppler studies.
- Fellows must demonstrate competence in biochemical and molecular testing for strokes in patients of different age groups.
- Fellows should demonstrate competence in the temporal profile of the clinical, biochemical, and radiological changes that accompany vascular insults of the nervous system.

Fellows must be able to competently perform all medical, diagnostic, and surgical procedures considered essential for the area of practice.

- Fellows must demonstrate competence in the evaluation and treatment of patients with a wide range of diseases resulting in vascular insults of the nervous system, including:
  - aneurysmal subarachnoid hemorrhage
  - aortic arch brain and spinal embolism
  - cardiogenic brain embolism
  - cerebral venous thrombosis
  - complications of vascular disease, including raised intracranial pressure, sepsis, and venous thrombosis
  - genetic and metabolic disorders
  - hematological clotting disorders
  - hemodynamic brain ischemia
  - hypertensive encephalopathy
  - intracerebral hemorrhage
  - large vessel cerebral atherosclerosis
  - migraine
  - small cerebral artery occlusive disease
  - spinal cord infarction
  - substance abuse and drug toxicities
  - subdural hematomas
  - vascular malformations
  - vasculopathies, including inflammatory, infectious, Moyamoya and arterial dissection.

## **2. Medical Knowledge**

Fellows must demonstrate knowledge of established and evolving biomedical, clinical, epidemiological and social-behavioral sciences, as well as the application of this knowledge to patient care. Fellows must demonstrate competence in the knowledge of:

- epidemiology, basic science, clinical neurology, neuroimaging, critical care, endovascular surgical neuroradiology, neurological vascular surgery, neurosonology, cerebral blood flow and metabolism, neuro-behavior,

neurorehabilitation and the vascular supply of the central nervous system and its alteration by disease;

- the indications for intubation and extubation/ weaning, the general principles of ventilator management, and the placement of catheters for the supportive care and pharmacological treatment of stroke; and
- the fundamental mechanisms of stroke and other nervous system vascular disorders, including:
  - clinical manifestations
  - diagnostic strategies
  - epidemiologic issues
  - etiopathogenic characterization; and
  - treatment strategies.

### **3. Practice-based Learning and Improvement**

Fellows are expected to develop skills and habits to be able to meet the following goals:

- systematically analyze practice using quality improvement methods, and implement changes with the goal of practice improvement;
- locate, appraise, and assimilate evidence from scientific studies related to their patients' health problems; and
- fellows should use quality improvement methodology to ensure that acute stroke management is conducted within recommended time frames, as specified in national guidelines.

### **4. Interpersonal and Communication Skills**

Fellows must demonstrate interpersonal and communication skills that result in the effective exchange of information and collaboration with patients, their families, and health professionals.

Fellows must teach residents, medical students, nurses, and other health care personnel.

### **5. Professionalism**

Fellows must demonstrate a commitment to carrying out professional responsibilities and to adhering to ethical principles.

### **6. Systems-based Practice**

Fellows must demonstrate an awareness of, and responsiveness to, the larger context and system of health care, as well as the ability to call effectively on other resources in the system to provide optimal health care.

## **FELLOWSHIP GOALS AND OBJECTIVES - BLOCK EXPERIENCES**

There are three required block experiences during the year of training. Goals and objectives for each experience are listed below. The initials following each objective refer to the ACGME core competency addressed (PC=patient care, MK=medical knowledge, Prof=professionalism, PBLI=practice-based learning and improvement, SBP=systems-based practice, CS=communication skills).

- A. Stroke Rotation at HCMC
- B. NeuroICU/Stroke Rotation at UMMC
- C. Neurorehabilitation rotation
- D. Elective rotations

**A. Stroke Service Rotation at HCMC**

The stroke rotation at HCMC takes place over a combined total of one-two months. During the months on this service, fellows are supervised by the stroke service faculty attendings. Site director is David C. Anderson, M.D.

Stroke service rotations at this site are predominantly about the emergency management and outpatient followup of acute stroke patients.

1. Upon completion of the inpatient service fellows are expected to practice best care of stroke patients during the acute hospitalization. They will:
  - a. use relevant diagnostic modalities in cost effective manner (PC, MK, PBLI),
  - b. manage blood pressure and fluid status (PC, MK),
  - c. know possible medical complications (PC, MK),
  - d. prevent medical complications (PC, MK),
  - e. perform ICP monitoring (PC, MK),
  - f. deploy early rehabilitation services (PC, SBP),
  - g. monitor ventilatory and respiratory function (MK, PC),
  - h. know indications for tracheal intubation and deployment of monitoring (MK, PC).
2. Develop skill in managing neurocritical care issues that complicate stroke and will (MK, PC):
  - a. detect and manage increased intracranial pressure,
  - b. recognize and treat seizure activity,
  - c. detect and treat secondary brain ischemia,
  - d. treat hypertensive crises,
  - e. treat cardiac dysfunction, and
  - f. become familiar with principles of neuroprotection and their application.
3. Develop skills and attitudes necessary for providing acute stroke care through an integrated team approach with providers from nursing, the critical care team, rehabilitative services, other physician consultants, and social services and will (PC, CS, SBP):
  - a. communicate effectively with members, including the critical care team,
  - b. develop necessary skills to provide effective leadership of the critical care team and manage consultations to ensure optimal care,
  - c. understand when and how to access social and chaplaincy services,
  - d. develop an understanding of the rehabilitative process for stroke and plan course of treatment to optimize rehabilitation.
4. Gain familiarity with demographic, social, financial and other factors that impact stroke patients and the services and systems that address them, enabling fellows to (MK, PC, Prof, SBP):
  - a. effectively discuss patient status and prognosis with family members and designated others,

- b. recognize the impact of health insurance and payment mechanisms on available rehabilitative services and work with other team members to provide optimal care,
  - c. develop an appreciation for the impact of culture and demographic factors on health status and use of health care services in stroke patients and their families.
5. A stroke care booklet is provided to all care givers dealing with stroke patients. The booklet includes suggestions, guidelines and information to help guide in the care of stroke patients. This includes protocols for acute ischemic stroke, intracerebral hemorrhage, and subarachnoid hemorrhage, and also guidelines for ultrasound interpretation and hypothermia treatment. (PC, PBLI, SBP, MK).

## **B. NeuroICU/ Stroke Service Rotation at UMMC**

The neuroICU/stroke rotation at UMMC takes place over a combined total of four to six months. During the months on this service, fellows are supervised by the site director, Rwoof Reshi, M.D.

Because UMMC is a tertiary care referral center for complicated cases, this rotation is predominantly a neuroICU rotation with fewer acute stroke cases.

1. Upon completion of the inpatient service fellows are expected to practice best care of stroke patients during the acute hospitalization including:
  - a. use relevant diagnostic modalities in cost effective manner (PC, MK, PBLI),
  - b. effectively manage blood pressure and fluid status (PC, MK),
  - c. know possible medical complications (PC, MK),
  - d. prevent medical complications (PC, MK),
  - e. performance ICP monitoring (PC, MK),
  - f. deploy early rehabilitation services (PC, SBP),
  - g. monitor ventilatory and respiratory function (MK, PC),
  - h. know indications for tracheal intubation and deployment of monitoring (MK, PC).
2. Develop skill in managing neurocritical care issues that complicate stroke, including (MK, PC):
  - a. detect and manage increased intracranial pressure,
  - b. recognize and treat seizure activity,
  - c. detect and treat secondary brain ischemia,
  - d. treat hypertensive crises,
  - e. treat cardiac dysfunction, and
  - f. become familiar with principles of neuroprotection and their application.
3. Develop skills and attitudes necessary for providing acute stroke care through an integrated team approach with providers from nursing, the critical care team, rehabilitative services, other physician consultants, and social services and will (PC, CS, SBP):
  - a. communicate effectively with members of the critical care team,
  - b. develop necessary skills to provide effective leadership of the critical care team and manage consultations to ensure optimal care,
  - c. understand when and how to access social and chaplaincy services,

- d. develop an understanding of the rehabilitative process for stroke and plan course of treatment to optimize rehabilitation.
4. Gain familiarity with demographic, social, financial and other factors that impact stroke patients and the services and systems that address them (MK, PC, Prof, SBP) enabling them to:
    - a. effectively discuss patient status and prognosis with family members and designated others,
    - b. recognize the impact of health insurance and payment mechanisms on available rehabilitative services and work with other team members to provide optimal care,
    - c. develop an appreciation for the impact of culture and demographic factors on health status and use of health care services in stroke patients and their families.
  5. A stroke care booklet is provided to all care givers dealing with stroke patients. The booklet includes suggestions, guidelines and information to help guide in the care of stroke patients. It includes protocols for acute ischemic stroke, intracerebral hemorrhage, and subarachnoid hemorrhage, and also guidelines for ultrasound interpretation and hypothermia treatment. (PC, PBLI, SBP, MK).

### **C. Neurorehabilitation rotation**

While rotating for one month on neurorehabilitation at HCMC, under Steven Lockman, MD, the fellow will:

1. develop familiarity and expertise with a team approach to rehabilitation including an appreciation of the roles of physical therapy, occupational therapy, communication and swallowing services (PC, SBP);
2. gain expertise in management of cognitive deficits, spasticity, pain, incontinence, and other common complications of acute stroke (PC, MK);
3. become proficient in determining the appropriate rehabilitation venue for stroke patients (e.g. acute rehabilitation, subacute rehabilitation, skilled care, outpatient rehabilitation) (PC, MK, SBP).

### **D. Elective Rotations**

In conjunction with the program director, at the start of each year, fellows will elect additional block experiences in clinical areas such as neurorehabilitation or neurocritical care. Electives in endovascular surgical neuroradiology, neuroradiology, or vascular neurosurgery and select others may be arranged. He or she may also elect to devote a portion of one of these blocks to a research project.

## 1. Endovascular Surgical Neuroradiology Elective (MK, PC, PBLI)

During the one-month rotation on neurointervention, under Ramu Tummala, MD, the fellow will (MK, PC, PBLI):

- a. learn the indications and limitations of endovascular approaches to the treatment and prevention of ischemic and hemorrhagic brain conditions, including:
  - carotid angioplasty
  - vertebral angioplasty
  - intracranial angioplasty
  - use of stents to assist angioplasty
  - aneurysm coiling
  - avm embolism
  - intraarterial chemical thrombolysis and mechanical thrombectomy
  - transvenous catheter thrombolysis of sinovenous occlusions
  - wada testing
  - tumor embolism
  - intraarterial chemical and mechanical treatments of cerebral vasospasm,
- b. participate in endovascular procedures to treat and prevent ischemic and hemorrhagic brain conditions,
- c. participate in the pre- and post-procedural care of patients treated by endovascular techniques,
- d. learn basic arterial and venous access techniques,
- e. learn to interpret diagnostic angiography.

**Important: Dosimeters must be worn whenever in the angio suite. Before the first day, each fellow should work with the program coordinator to get a dosimeter. During the first week of this elective, the fellow must complete the Radiation Safety module and written examination. Contact the program coordinator for access to these.**

## 2. Neuroradiology Elective

During the one-month elective rotation on neuroradiology, under Alex McKinney, MD, the fellow will (MK, PC, PBLI):

- a. learn the indications and limitations of cranial imaging of vascular diseases of the brain by computed tomography (CT) and magnetic resonance (MR),
- b. learn the indications and limitation of vascular imaging techniques (ultrasound, CT angiography, MR angiography, selective catheter angiography),
- c. become familiar with, and proficient in using modalities that measure brain perfusion and or metabolism in the clinical setting (e.g. CT and MR perfusion, radionuclide studies),
- d. become familiar with the practical interpretation of computed tomographic and magnetic resonance imaging of vascular diseases of the brain necessary for the acute management of stroke.

**Important: Dosimeters must be worn whenever in the angio suite. Before the first day, each fellow should work with the program coordinator to get a**

**dosimeter. During the first week of this elective, the fellow must complete the Radiation Safety module and written examination. Contact the program coordinator for access to these.**

#### **4. Vascular Neurosurgery Elective**

During the one month elective on vascular neurology, under Ramu Tummala, MD, the fellow will:

- a. become familiar with early evaluation and postoperative management of primary intracranial hemorrhage (patient care, medical knowledge);
- b. observe key vascular neurosurgery procedures such as (patient care), e.g.
  - i. clipping of berry aneurysms
  - ii. carotid endarterectomies
  - iii. obliteration of arteriovenous malformations;
- c. participate in decisions about treatment options for carotid stenosis and intracranial aneurysms (PC, PBLI); and
- d. develop attitudes conducive to working effectively with the stroke team (PC, CS, SBP).

### **FELLOWSHIP GOALS AND OBJECTIVES – LONGITUDINAL EXPERIENCES**

- A. Stroke Clinics
- B. Stroke Code Call (from home)

#### **A. Stroke Clinics**

HCMC clinics are held twice monthly (1<sup>st</sup> and 3<sup>rd</sup> Tuesday AMs of each month). UMMC clinic attendance will depend on inpatient vs outpatient volume.

By participating in stroke clinics, the fellow will:

1. practice best care of patients who have had a stroke including expertise with the following issues (PC, MK, PBLI, SBP), e.g.
  - a. mechanism diagnosis,
  - b. secondary prevention,
  - c. late complications (depression, shoulder dislocation, spasticity),
  - d. continuing need for rehabilitative services,
  - e. use of appropriate community services,
  - f. use of appropriate hospital services, such as patient and caregiver support groups;
2. be exposed to, and manage difficult diagnostic and management challenges in primary and secondary stroke prevention, including (PC, MK), e.g.
  - a. complicated degenerative vascular conditions,
  - b. nondegenerative vasculopathies,
  - c. hypercoagulable states, thrombopathies, hyperviscosity states,
  - d. hereditary and genetic conditions germane to stroke risk,
  - e. cardiac conditions germane to stroke risk,
  - f. vascular malformations;

3. develop skills and attitudes necessary for providing follow-up stroke care through an integrated team approach (PC, CS, SBP, Prof), e.g.
  - a. communicate effectively with members of the treatment team through referrals, consultations and written orders,
  - b. develop an understanding of the rehabilitative process for stroke and plan course of treatment to optimize rehabilitation,
  - c. effectively communicate diagnostic impressions and treatment planning in a manner patients and families understand;
4. gain familiarity with demographic, social, financial and other factors that impact stroke patients and the services and systems that address them (PC, MK, CS, SBP), e.g.
  - a. recognize the impact of health insurance and payment mechanisms on available rehabilitative services and work with other team members to provide optimal care,
  - b. develop a basic understanding of billing and coding for physician services.

#### **B. Stroke Code Call (from home)**

As a member of the stroke code team, the fellow will (PC, MK, SBLI):

1. be directly involved in the selection of ischemic stroke patients for reperfusion treatments such as intravenous or intra-arterial thrombolytic therapies as well as mechanical treatments;
2. be involved in other hyperacute vascular neurology management issues, such as treatment of hypertension and hyperglycemia in acute ischemic stroke patients, surgical and other interventions for intraparenchymal hemorrhage, and treatment options for aneurysmal subarachnoid hemorrhage;

Call will be divided evenly among the VN and NCC fellows in such a way that, on average, each fellow will be on call one third of the time. The oncall VN fellow is also responsible for rounding at UMMC on weekend mornings. The ESN junior fellow rounds at HCMC on weekends.

Call rooms are available at each hospital. For details, see section 2.

Monthly call schedules are distributed by Coordinator Pat Bulgerin.

#### **SITUATIONS THAT REQUIRE CONTACTING FACULTY**

Each institution has specific situational requirements mandating that a trainee contact the supervising physician immediately. Examples of these situations are:

UMMC requirements are:

- when patients are behaviorally disordered or threatening

- when there is need for a CODE team activation
- unexpected transfer to ICU or higher level of care
- unanticipated intubation or ventilator support
- change in CODE status
- major neurologic change
- major medical problem (e.g. cardiac arrest, a CODE, new or rapidly worsening respiratory distress, PE)
- clinical intervention due to medication or treatment errors
- development of any new clinical problem requiring an invasive procedure or operation for treatment
- patient, family, or clinical staff request for attending notification
- death.

## **PROCEDURE LOG**

Each fellow must maintain a personal log of all procedures they perform – whether line placement, angiograms, etc. This log will be reviewed with the program director before graduation.

## **LABORATORY/PATHOLOGY/RADIOLOGY SERVICES**

Inpatient clinical support services are available on a 24-hour basis at University of Minnesota Medical Center, Hennepin County Medical Center, and the Minneapolis VA Health Care System, to meet reasonable and expected demands, including intravenous services, phlebotomy services, messenger/transporter services, Inpatient Radiology services including laboratory and radiologic information retrieval systems that allow prompt access to results.

## **TEACHING AND DELIVERY OF EDUCATIONAL PROGRAMS**

Fellows are expected to take an active role in the teaching and training of residents in neurology as well as residents in other disciplines, medical students, nurses, and other health-care personnel. Fellows will also participate in patient and public education about stroke through the American Heart Association/American Stroke Association. Participation in clinical conferences dealing with stroke will be of particular importance.

## **CONFERENCES AND JOURNAL CLUB**

Fellows will be offered a unique lecture series appropriate to their level and the goal of training subspecialists in vascular neurology. This will include multiple formats: case-based discussions, didactic lectures, journal club discussions, and morbidity and mortality discussions. The following conferences are available during the various rotations.

1. Required conferences for all rotations:

Clinical Neuroscience Conference  
(when at UMMC)

7:30am Tuesdays, 12-109 PWB

Vascular neurology/NeuroCritical Care conference	4:00 pm Tuesdays, 12-109 PWB 1 <sup>st</sup> Tue – M&M 2 <sup>nd</sup> Tue – Lecture 3 <sup>rd</sup> Tue – Journal Club/Research 4 <sup>th</sup> Tue – Lecture 5 <sup>th</sup> Tue – Case discussion
Didactic conference	8:00 am Wednesdays, 12-109 PWB
Stabilization Room Conference (when at HCMC)	7:30am Thursdays, HCMC, RLL 110
Neurology/Neurosurgery/Neuroradiology (when at HCMC)	11:00am Fridays, HCMC, P5.310 case conference
Multi-disciplinary Team Conference	at UMMC: 2:00 pm on 3 <sup>rd</sup> Mondays at HCMC: 1:00pm 4 <sup>th</sup> Wednesdays

2. Recommended conferences:

Neurosurgery/Neurointervention M & M Conf	7:30am (2nd Fridays), UMMC, Mayo D417
Multi-Disciplinary Vascular Conference	7:00am UMMC Radiology, Rm 2-359, 2 <sup>nd</sup> and 4 <sup>th</sup> Mondays
Neurology Grand Rounds	Noon Fridays, UMMC

3. Additional available conferences:

Critical care radiology	7:30am Thursdays, HCMC, RLL.110
Critical care conference	2:00-3:30pm Thursdays, HCMC, O-5
Rehabilitation lecture series	Wednesday AM, UMMC PM&R
Metro Rehabilitation conference	Quarterly, HCMC
Neurosurgery clinical conference	6:30am Fridays, UMMC
Vascular surgery imaging	12:00pm Wednesdays (1st), HCMC, O5.131
Autopsy gross neuropathology conference	11:00am Wed (2nd/4th), Ettinger Conf Rm, HCMC
Cardiology Catheterization conference	weekly

Cardiology/ER case conference	monthly
Vascular medicine conference	monthly
Neuropathology gross brain conference	9:30am Tuesdays, UMMC, C-145 Mayo

4. Regional/national conferences:

Fellows are encouraged to submit posters/oral presentations to the following national conferences:

- American Academy of Neurology Annual Meeting
- International Stroke Conference
- Others

The program will reimburse partial travel expenses to one of these conferences. (Exact amount varies by year.)

**LIFE SUPPORT CERTIFICATION**

Upon entering an accredited GME training program, such as the VN fellowship, all trainees who have direct contact with patients must be certified in Basic Life Support (BLS). Certification is typically valid for two years. Once the initial certification expires, the trainee must take a recertification class. VN fellows are also required to maintain ACLS certification.

For those trainees required by the hospital to have BLS or any other life saving certification, recertification will take place at the teaching hospital, free of charge. Contact your fellowship coordinator or tnelson1@fairview.org to get scheduled for training or re-training.

**SECURITY/SAFETY**

Security and personal safety measures are provided to trainees at all locations, including but not limited to parking facilities, on-call quarters, hospital and institutional grounds, and related clinical facilities (e.g. medical office buildings).

Contact Information:

University of Minnesota Medical Center Security Office: 612-273-4544

University of Minnesota Security Monitor Program: 612-624-WALK

VA Medical Center Security Office: 612-467-2007 / office located on the first floor, in room 1U-162

Hennepin County Security Office 612-873-2359 / office located at RL150

## **RESEARCH**

Fellows are required to participate in at least one research project of his/her choosing under the supervision of a faculty member. The fellows will also be involved in ongoing clinical trials in acute stroke, stroke prevention, and stroke neurorehabilitation.

### Timeline

Narrow the scope of your research project and discuss with a faculty mentor by September. Complete all IRB and other regulatory paperwork, plus take online training modules by December. Be under way with research by January.

Fellows will provide updates on their personal project(s) during the monthly research topic at the VN/NCC weekly conference.

### Presentation

Fellows are expected to briefly present their research project at the end-of-year fellowship research symposium, in late May/early June of each year.

## **ELECTRONIC MEDICAL RECORDS**

As part of the onboarding process at each site, every VN fellow receives logon instructions for accessing that hospital's electronic medical records system. For most hospitals, off-site EMR access is also possible. For example, the UMH EPIC can be reached via the [securegateway.fairview.org](https://securegateway.fairview.org) website.

## **REFERENCE MATERIALS**

All VN fellows also have access to several electronic sources for reference materials.

### **UMMC Hospital**

There is access to the Fairview Medical Library both from hospital/clinic computers and using mobile devices. Visit [https://intranet.fairview.org/Resources/Information/MedicalLibrary/S\\_095521](https://intranet.fairview.org/Resources/Information/MedicalLibrary/S_095521) for details about which applications are available and how to access them with your mobile device.

### **Bio-Medical Library**

All residents and fellows have access to full facilities of the University of Minnesota Bio-Medical Library, which is physically located in Diehl Hall (just south of Phillips Wangenstein). Through the Bio-Medical library website <https://hsl.lib.umn.edu/biomed> and with an x500 login, hundreds of online journals, textbooks, databases, etc. can be accessed. Reference sites, such as UpToDate, PubMed, ClinicalKey, Micromedex, Ovid Medline and more. And to E-Books and journals such as NEJM, JAMA, Neurology, Lancet, etc. (Some of these are accessible only from hospital computers.)

Library subject specialist Jonathan Koffel, [jbkoffel@umn.edu](mailto:jbkoffel@umn.edu), 612-626-5454, is available for help researching a topic or for tips on using library resources.

### **Moodle**

The cerebrovascular programs maintain a Moodle site exclusively for the fellows. It currently contains many reference articles and can be customized to increase usefulness. Work through Coordinator Pat Bulgerin for major changes.

<https://moodle.umn.edu>

### **American Heart Association guidelines**

The latest American Heart Association statements and guidelines for care can be found at:

[http://my.americanheart.org/professional/StatementsGuidelines/Statements-Guidelines\\_UCM\\_316885\\_SubHomePage.jsp](http://my.americanheart.org/professional/StatementsGuidelines/Statements-Guidelines_UCM_316885_SubHomePage.jsp)

### **Others**

Other sites, like the American Academy of Neurology website, NIH website, etc, also have news articles, practice guidelines.

## **FACULTY**

(Vascular Neurology faculty in bold):

HCMC: **David C. Anderson, M.D.**, Neurology  
Scott Bundlie, M.D., Neurology  
Tenbit Emiru, M.D., Ph.D. (stroke attending; Dept Head, HCMC Neurology)  
**Mustapha Ezzeddine, M.D.** (VN Assoc Pgm Dir; Stroke attending)  
Jennifer Gerckens, M.D., PM&R  
Fred Langendorf, M.D., Neurology  
Steve Lochman, D.O, PM&R  
**Ben Miller, M.D.** (Stroke attending)  
Ahmed Reshi, M.D. (Pgm Dir, NCC fellowship; Stroke attending, VN Site director at HCMC)  
**Chris Streib, M.D.** (VN Program Director, stroke attending)  
Andrew Grande, M.D. (Neurointerventional attending)  
Bharathi Jagadeesan, M.D. (Neurointerventional attending)  
Ramu Tummala, M.D. (Neurointerventional attending, Pgm Dir, ESN fellowship)

MHealth: **David C. Anderson, M.D.**, Neurology  
Martin Birch, M.D. (anesthesiology, NeuroICU attending)  
**Kamakshi Lakshminarayan, M.D., Ph.D.**  
**Ben Miller, M.D.** (Stroke / NeuroICU attending)

**Mustapha Ezzeddine, M.D.** (VN Site Director at UMMC; VN Assoc Pgm Director; stroke / NeuroICU attending; Cerebrovascular Section Head)  
Ahmed Reshi, M.D. (NCC fellowship Pgm Dir; stroke/NeuroICU attending)  
**Christopher Streib, M.D.** (VN Program Director, stroke attending)  
Andrew Grande, M.D. (Neurointerventional attending)  
Bharathi Jagadeesan, M.D. (Neurointerventional attending)  
Ramu Tummala, M.D. (Neurointerventional attending, Pgm Dir, ESN fellowship)

## **DUTY HOURS**

VN and NCC fellows will take stroke code call from home overnight and on weekends in such a way that each fellow covers an average of one third of the call. Fellows can expect to be on duty approximately 65 hours/week, on average.

Exact hours worked must be reported daily into the web-based RMS reporting system. Fellows are expected to log into the RMS online system and report their duty hours daily. Accurate duty hour reporting is extremely important. Among other uses, your time is used to track compliance with the duty hour limitations set by the ACGME and this institution, and to obtain reimbursement from the hospitals towards your salary and benefits. To this end, it is important to log hours frequently – daily reporting is strongly encouraged. All hours worked and all moonlighting (external and internal) hours must be reported. The combined total of hours worked should not exceed 80 hrs per week except in very unusual circumstances. Fellows will have an average of 1 day off per week, averaged over a 4-week period.

The fellowship coordinator will work with each fellow to ensure that reporting is up-to-date before each monthly cut-off; and that the appropriate activity codes are being used for duties at each site.

Fellows that become aware of recurring duty assignments that exceed 80 hours per week, or that do not allow at least 10 hours of rest/personal time overnight, or do not allow at least four days off per month, are encouraged to bring the matter to the attention of not only the fellowship coordinator, but also to the program director, so issues can be addressed and corrected.

## **MOONLIGHTING**

Fellows interested in moonlighting must discuss it with the program director. If moonlighting is approved, a letter will be written formally approving moonlighting. No moonlighting can be performed without an approval letter. All moonlighting hours must be reported via the RMS duty hours, and will be counted towards the 80 hour per week duty hour limit. No moonlighting of any kind is allowed for trainees on a J1 visa.

## **RESIDENT WELL-BEING**

Program directors and teaching staff will be sensitive to the need for timely provision of confidential counseling and psychological support services to fellows. Training situations that consistently produce undesirable stress on fellows or residents will be evaluated and modified.

Details about the support resources available to all residents/fellows can be found on the Graduate Medical Education web site <http://www.med.umn.edu/gme/residents/home.html>. These include Needle Sticks and Blood Borne Pathogen Exposure Mgmt instructions, a Dispute Resolution Process, Well-Being Tools, a Resident Assistance Program (RAP) at 651-430-3383, and an on-site consultant (Scott Slattery, Ph.D., at 612-626-7196.), among others.

## **READINGS LISTS (BIBLIOGRAPHY)**

Reading lists are prepared for various rotations. Fellows are expected to read from Mohr JP, et al. *Stroke: Pathophysiology, Diagnosis, and Management*. Fifth Edition. Elsevier. 2011; and from Caplan, LR, et al. *Uncommon Causes of Stroke*, Second Edition. Cambridge University Press 2008. We will also do journal club sessions covering selected classic articles.

## **OTHER EDUCATIONAL RESOURCES TO BE USED**

Fellows have at their disposal a learning area in the department, which includes several computers, computer-based teaching tools covering neurology, neuroradiology and pathology, and the most frequently used, up-to-date textbooks. The computers provide Medline searches. In addition, as described above, fellows have access to the hospital and biomedical libraries, which include a sizeable collection of neurology journals and classic textbooks.

## **EVALUATION METHODS**

### **Evaluation by faculty, of faculty, of rotations**

Each quarter, fellowship faculty are asked to evaluate each fellow's performance, via evaluations in the New Innovations RMS web-based system.

Also each quarter, fellows are asked to evaluate the program faculty, as well as the various rotations they have completed.

### **Vascular Neurology Milestones**

One of the ACGME program requirements is that all trainees be rated using the Milestones twice a year. The fellowship's Clinical Competency Committee (CCC) rates each fellow in early December and early June. The results will be shared at the semi-annual meeting with the program director (see below).

### **Semi-annual meeting with PD**

One of the ACGME program requirements is a meeting between each trainee and the program director on a semi-annual basis.

At these meetings, the PD will review each trainee's ratings and evaluations submitted by himself and other faculty. Also summarized is feedback from the milestone ratings, the 360 degree evaluations, and conference attendance. The fellow's research project is discussed. A written evaluation summary will be prepared and signed by both the PD and the trainee.

### **360 Degree Evaluation**

There is a semi-annual "360-degree" assessment of the trainees by the clinic and neuroICU technical and nursing staff, as well as patients.

### **Semi-annual meetings with the faculty**

Information from the quarterly faculty evaluations, the 360 evaluations, conference attendance, research project status, milestones, and the breadth of categories in the fellow procedure log all are discussed during a semi-annual meeting between fellows and program faculty. At that time, faculty and fellows have an opportunity to make suggestions for program improvement in a group setting; then faculty give each fellow, individually, suggestions for improvement.

### **Annual Meetings**

Annually, the Program Director completes a slightly more extensive evaluation of each fellow that summarizes their performance during the full year and indicates whether the fellow is ready to assume increased responsibility or whether he/she has demonstrated sufficient competence to enter vascular neurology practice without direct supervision.

Also annually, fellows and faculty are encouraged to complete confidential written evaluations of the program itself. These are also scheduled and completed through the New Innovations RMS system. Anonymous, aggregated information from all rotation and program evaluations are used in an ACGME required annual, formal, fellowship evaluation meeting.

The results of the above annual evaluations, the rotation evaluations, and other evaluations all become part of the material considered in the formal, ACGME-required, semi-annual Program Evaluation meeting. All faculty and fellows are invited to attend.

## **SECTION 6 - ADMINISTRATION**

### **IMPORTANT PHONE NUMBERS**

\*\*Refer to the Gold Standards cerebrovascular service booklet for the full list of hospital and clinic contacts

HCMC Neurology Office	(612) 873-2595
Katie Dolan (Site Coordinator)	
HCMC clinic	(612) 873-2515
HCMC stroke coordinator	
Donna Lindsay Pager 336-0761	(612) 873-8712
UMMC Neurology Office main line	(612) 625-9900
Pat Bulgerin (Fellowship Coordinator)	(612) 625-9110
MHealth Neurology Clinic main line	(612) 626-6688
MHealth hospital main line	(612) 273-3000
MHealth stroke coordinator	
Angi Heyer Pager 612-899-3899	(612)273-4102
CSC Neurology Clinic	(612) 626-6688
Neurology clinic fax line (includes refills)	(612) 676-5058

## **HOLIDAYS**

Maintaining the hospital services is a 24/7/365 endeavor. While there will always be someone on service – either in the hospital or on call from home, the VN fellowship endeavors to adjust schedules so that all trainees can take several holidays during the year. We encourage the fellows to work out a plan between/among themselves, so that as many fellows as possible can take off the holidays that are most important to them. Communicate preferences and agreements to the fellowship coordinator and program director.

The Department of Neurology staff holiday schedule can be found at:

<http://www1.umn.edu/ohr/benefits/leaves/holiday/tcroc/index.html>

## **FELLOW CONTACT INFORMATION**

Fellows are expected to keep both their program coordinator and the University Payroll department informed of any changes to their contact information. Address and phone number changes for Payroll can be completed online by visiting MyU and selecting the My Info tab. Please update your program coordinator via email or in person.

## **CONFIRMATION OF RECEIPT OF FELLOWSHIP ADDENDUM**

All fellows must complete a form indicating that they have received and reviewed the program manual. The form to complete is on the next page.

**University of Minnesota  
Department of Neurology**

**VASCULAR NEUROLOGY FELLOWSHIP**

**Confirmation of Receipt of your Fellowship Addendum  
for Academic Year 2016-2017**

By signing this document you are confirming that you have received and reviewed your Fellowship Addendum for this academic year. This policy manual contains policies and procedures pertinent to your training program.

This receipt will be kept in your personnel file.

Fellow Name (Please print) \_\_\_\_\_

Fellow Signature  
\_\_\_\_\_

Date \_\_\_\_\_

Coordinator Initials \_\_\_\_\_

Date \_\_\_\_\_