



Resident
Physician
Council

Roadmap to a Fellowship

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Physicians Adding Quality to Life™

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Roadmap to a Fellowship

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Introduction

Physical medicine and rehabilitation (PM&R) is an exceptionally diverse field. The wide array of clinical practice settings can be overwhelming to residents as they investigate career options.

The AAPM&R's Resident Physician Council (RPC) created this document for residents wishing to pursue post-graduate fellowship training. It serves as a guide to introduce and summarize many of the subspecialties available within PM&R. In addition, the Roadmap provides useful information on board certification with links to many other organizations and web pages. This guide has two primary sections: a timetable for consideration of post-graduate fellowship training, and a description of PM&R subspecialty fellowship fields.

This document is not intended to be an all-inclusive source of information on postgraduate fellowship opportunities. Those who are interested in pursuing sub-specialized training are also encouraged to talk with attending physicians, other residents, and review other websites and databases before deciding on a career path.

Looking Ahead During Residency

Post-Graduate Year-2

During the PGY-2 year, most residency programs are designed to expose residents to the fundamentals of PM&R; Residents should focus on the philosophy of PM&R and begin to explore aspects of the field that interest them. Attending physicians are a tremendous source of information regarding their practices, and residents should use the opportunity to query them about details. However, it is uncommon that a PM&R resident in his or her PGY-2 year will have a full understanding of the diversity of the field or the potential options to make an effective career choice. Residents should not feel pressured to choose one setting and should recognize this during their job search ([fig. 1](#), PDF download).

PGY-2 Fellowship Timeline

- Obtain a broad exposure to the philosophy of PM&R
- Build on experiences and consider practice options:
 - Inpatient vs. outpatient
 - Research
 - Teaching
- Consider practice setting:
 - Academic

- Veterans Administration
- Community hospital – urban vs. rural
- Private practice
- Single vs. multi-specialty
- Consider geographic location
- Attend conferences on topics of interest and begin networking
- Explore national organizations which can provide valuable information for fellowships and career opportunities. These organizations may provide discounted memberships and conference rates for residents.

Post-Graduate Year-3

By the third post-graduate year, residents should have a fundamental understanding of the common philosophy of PM&R regardless of subspecialty – maximizing function. With that in mind, a PGY-3 resident, comfortable with the fundamentals of outpatient and inpatient rehabilitation can begin to consider interests and disinterests. The PGY-3 year presents an opportunity to participate in research, gather knowledge about areas of interest and hone presentation skills. It is also the time to create a record of interests and skills that may prove valuable when competing for fellowship positions.

PGY-3 Fellowship Timeline:

PGY-3 (Early)

- Consider elective rotations in areas of interest.
- Participate in journal clubs and resident lectures on topics of interest. This is a great opportunity to formulate research ideas
- Develop research on a topic of interest.
- Begin preliminary research on fellowship opportunities – use the internet, and query attending physicians, current fellows, and senior residents.

PGY-3 (Mid)

- Take advantage of opportunities to rotate in different practice settings
- Submit poster presentations to conferences, and publish finished or ongoing research
- Decide on what type of fellowship to pursue.
- Collect information on fellowship programs. Use the AAPM&R's Fellowship Database, as well as other national organizations' resources. Contact programs and collect the necessary application materials.
- Ask attending physicians for letters of recommendation, and ask them early.

PGY-3 (Late)

- Apply early, and be diligent in noting application deadlines, as they may vary significantly.
- Compose a personal statement and have at least one other person review it.
- Gather official documents necessary for fellowship application. Board score reports, medical school diploma, dean's letters, medical school transcripts, and copies of medical licenses may be needed for the application process
- Prepare an updated CV and have at least one other person review it.

Post-Graduate Year-4

By the time the PGY-4 year has started, the fellowship application process should be in full swing. Fellowship programs often need to make their decisions early to allow for credentialing of their fellows, so the selection process can begin as early as the first month of the PGY-4 year and generally is complete by the late fall. Frequently, fellowship programs use the AAPM&R Annual Assembly as an opportunity to interview prospective fellows. This is a great way to save money and interview with multiple programs at one location, but programs will often expect an immediate decision of applicants as the Annual Assembly is held late in the year.

PGY-4 Fellowship Timeline:

- Prepare for interviewing by requesting time off to travel
- Fellowship applications should be submitted by mid-summer at the latest.
- Interviews typically begin in summer and go through the fall
- Once a fellowship offer has been accepted, expect immediate pursuit of credentialing

Fellowship Opportunities and Board Subspecialty Certification

In order to organize the many opportunities available, this document will separate fellowships into two categories: fellowships that lead to certification by the American Board of Physical Medicine and Rehabilitation (ABPM&R), and fellowships that do not lead to ABPM&R board certification.

The ABPM&R is one of the 24 certifying boards that hold active membership in the American Board of Medical Specialties (ABMS), which functions in cooperation with the Council on Medical Education of the American Medical Association. Currently, the ABMS has granted the ABPM&R the right to offer subspecialty certificates to ABPM&R diplomates in the areas of hospice and palliative care, neuromuscular medicine, pain medicine, pediatric rehabilitation, spinal cord injury, and sports medicine.

The purpose of Board subspecialty certification is to provide assurance to the public that a medical specialist has successfully completed an accredited training program and an evaluation, including an examination process, designed to assess the knowledge, experience, and skills requisite to the provision of high quality patient care in that subspecialty. Certification is not the same as licensure, and the ABPM&R does not confer medical licenses.

Ultimately, the ABPM&R will only confer subspecialty certification to graduates of fellowship programs accredited by the American College of Graduate Medical Education (ACGME). Currently, the fields of pain medicine, pediatric rehabilitation and spinal cord injury require completion of an ACGME-accredited fellowship program in order to qualify to sit for subspecialty certification.

However, the hospice and palliative care, neuromuscular medicine, and sports medicine subspecialties are in a developmental phase that allows qualified diplomates of the

ABPM&R to sit for the subspecialty examination. This is a time-limited opportunity and is restricted to providers who can prove clinical expertise and experience. Eventually, that opportunity will be closed, and thereafter, Board certification in those subspecialty areas will only be conferred upon graduates of ACGME-accredited programs.

Board requirements are routinely updated. For current information on all ABPM&R recognized subspecialties and certification requirements, please refer to the ABPM&R website at www.abpmr.org/certification/subspecialties/index.html. Also, a list of all ACGME accredited programs by specialty can be found using the following link: <http://www.acgme.org/adspublic/default.asp>

It is important to note that choosing a fellowship requires consideration of many factors, the most important of which are educational content and educational experience. There are myriad excellent subspecialty training programs available to psychiatrists that are not ACGME-accredited. Fellowship accreditation is based on specific requirements of the ACGME and does not necessarily correlate with the ability of the fellowship to teach the skills you seek. Choosing a fellowship based solely on its accreditation status is not advised.

Fellowships That Lead to ABPM&R Subspecialty Certification

The following section will briefly describe some of the characteristics of the six subspecialty areas that may lead to certification by the ABPM&R. Individual subspecialty requirements will not be discussed because requirements for board certification are constantly changing.

Hospice and Palliative Care

Hospice and Palliative Medicine focuses on the comprehensive care of patients with life-limiting illness, including the relief of distressing symptoms and ethical decision making in end-of-life care. A psychiatrist who specializes in Hospice and Palliative Medicine possesses the expertise to minimize suffering experienced by patients with life-limiting illnesses. The psychiatrist works with an interdisciplinary team to maximize quality of life while addressing physical, psychological, social and spiritual needs of both the patient and the family. The demand for specialists in this area continues to increase with longer life expectancy and improved management of life-threatening illness in the general population.

Useful web sites and organizations for Hospice and Palliative Care Medicine:

- ACGME <http://www.acgme.org/adspublic/default.asp>
- American Academy of Hospice and Palliative Medicine www.aahpm.org/fellowship/directory.html
- The AGS Foundation for Health and Aging www.healthinaging.org
- The American Geriatric Society www.americangeriatrics.org

Neuromuscular Medicine

Neuromuscular Medicine includes the diagnosis and treatment of abnormalities of the motor neuron, nerve roots, peripheral nerves, neuromuscular junction, and muscle, including disorders that affect adults and children.

At least 6 months are spent in rotations that involve the clinical care of patients with neuromuscular disorders. The remaining 6 months may be spent in other clinical areas, such as electrodiagnosis, medical genetics, muscle pathology, research, etc. By the end of the fellowship, one should be comfortable in clinical care and assessment of patients with neuromuscular disease, including diagnostic evaluation, treatment, management, and counseling.

A list of ACGME accredited fellowship opportunities may be found on the American Association of Neuromuscular and Electrodiagnostic Medicine (AANEM) web site. In addition, the AANEM offers a Neuromuscular Medicine Self-Assessment Examination (NMSAE). This is a useful study guide for physicians in the practice of neuromuscular medicine, and it can serve as a teaching tool in a residency program.

It is important to note that certification in Neuromuscular Medicine by the ABPM&R is unrelated to the American Board of Electrodiagnostic Medicine's (ABEM) certification examination.

Useful web sites and organizations for Neuromuscular Medicine:

- American Academy of Neurology (AAN) www.aan.com
- American Association of Neuromuscular and Electrodiagnostic Medicine (AANEM) www.aanem.org
- American Board of Electrodiagnostic Medicine (ABEM) www.abemexam.org

Pain Medicine

Pain medicine is the medical discipline concerned with the diagnosis and treatment of the entire range of painful disorders. Because of the vast scope of the field, pain medicine is a multidisciplinary subspecialty. The expertise of anesthesiology, physical medicine and rehabilitation, neurology and psychiatry is brought together in an effort to provide the maximum benefit to each patient. Currently, accredited fellowships are offered through anesthesia, PM&R, and a few neurology departments. Programs must be aligned with institutions that have residencies in a least two of the four specialties in order to be recognized by the ACGME.

Although the ABMS has endeavored to homogenize pain medicine fellowships, residents should recognize that fellowships provide different experiences depending on the primary specialty designation. For example, anesthesia-based programs may focus heavily on pharmacology, acute/post-operative pain, cancer pain, and general pain management, in addition to interventional procedures. PM&R-based programs may have emphasize functional restoration, interventional spine, and include electrodiagnosis, musculoskeletal and sports medicine training.

Physiatrists must have completed an ACGME-accredited pain medicine residency program in order to become subspecialty certified by the ABPM&R. However, there are many excellent fellowship opportunities that are not ACGME accredited, and it is important to note that accreditation is not necessarily required in order to perform percutaneous interventions within the scope of pain medicine. However, some carriers, institutions and communities may require Board subspecialty certification as a condition of credentialing to perform percutaneous procedures. For more information, see the link to article below. (www.aapmr.org/resident/newsletttr/archive/060d.htm)

Useful web sites and organizations for Pain Medicine:

- American Academy of Pain Medicine (AAPM) www.painmed.org
- American Pain Society (APS) www.ampainsoc.org
- American Society of Interventional Pain Physicians (ASIPP) www.asipp.org
- American Society of Regional Anesthesia and Pain Medicine (ASRA) www.asra.com
- International Association for the Study of Pain (IASP) www.iasp-pain.org
- International Spine Intervention Society (ISIS) www.spinalinjection.com
- The International Society for the Study of the Lumbar Spine (ISSLS) www.issls.org
- North American Spine Society (NASS) www.spine.org
- North American Neuromodulation Society (NAMS) www.neuromodulation.org
- PainRounds www.painrounds.com
- The Student Doctor Network (SDN) pain medicine forum www.studentdoctor.net
- World Institute of Pain (WIP) www.worldinstituteofpain.org

Pediatric Rehabilitation

All pediatric rehabilitation fellowships are ACGME accredited and are either one or two years in duration, depending on the residency track. More information is available at the ABPM&R website. Clinical experiences include, but are not limited to, inpatient pediatric rehab units, outpatient pediatric clinics, pediatric subspecialty rotations (neurology, NICU, PICU, orthopedic surgery, genetic disorders, etc), consults, and research. Fellows will be involved in the comprehensive evaluation and care of children and adolescents with diseases such as cerebral palsy, spina bifida and other neural tube defects, brain injury, spinal cord injury, neuromuscular disease, developmental delay, genetic syndromes, musculoskeletal injuries, rheumatic disease, and chronic pain.

Most fellowship training programs are designed to prepare individuals for full-time academic careers in pediatric rehabilitation medicine. Graduates of these programs should be able to function independently as program directors, teachers, or laboratory investigators in university medical schools or medical centers.

Useful web sites and organizations for Pediatric Rehabilitation:

- American Academy for Cerebral Palsy and Developmental Medicine (AACPDM) www.aacpdm.org

- American Academy of Pediatrics (AAP) www.aap.org
- Association of Academic Physiatrist's Council on Children with Disabilities (open to pediatric physiatrists) www.medicalhomeinfo.org/about/CSOCWD.ht
- Developmental Behavioral Pediatrics Online www.dbpeds.org
- National Institute of Child Health and Human Development – Resources for research www.nichd.nih.gov/research/resources/
- Telability – Enhancing the lives of children with disabilities www.telability.org/index.pl
- The Society for Developmental and Behavioral Pediatrics (SDBP) www.sdbp.org

Spinal Cord Injury

Subspecialty certification in SCI medicine is offered in order to enhance the quality of care available to individuals with spinal cord dysfunction. A physiatrist with subspecialty certification in SCI should expect to be proficient in treating patients with traumatic and non-traumatic SCI, as well as managing rehabilitation needs in the acute and chronic setting. Training also focuses on prevention and treatment of potential secondary complications of SCI.

Currently all SCI fellowships are also ACGME accredited and 14 of the 18 SCI fellowships are designated by the NIDRR (National Institute on Disability and Rehabilitation Research) as a Model SCI System.

Fellowships are generally 12 months in duration and may be divided into inpatient rotations, consults and outpatient rotations. Outpatient months may include opportunities in research, PT/OT/Orthotics, pulmonary, as well as rotations in orthopedic, neurosurgery, spasticity, and pediatric clinics.

Interested candidates should consider several electives prior to starting a fellowship. Urology (preferably with exposure to urodynamic studies), neurosurgery, occupational therapy, and clinics in MS, post-polio, pulmonary critical care/ventilator management, wound care, prosthetics and orthotics, wheelchair prescription, sports medicine and pain medicine, might enhance the skills of an SCI subspecialist.

Useful web sites and organizations for Spinal Cord Injury Medicine:

- American Paraplegia Society (APS) www.apssci.org
- American Spinal Injury Association (ASIA) www.asia-spinalinjury.org
- International Spinal Cord Society - www.iscos.org
- National Spinal Cord Injury Statistical Center <http://main.uab.edu/show.asp?durki=10766>
- Paralyzed Veterans of America (PVA) www.pva.org
- United Spinal Association www.unitedspinal.org

Sports Medicine

Sports Medicine is a clinical subspecialty that is concerned with physical fitness and the diagnosis and treatment of injuries sustained in sports activities.

Within PM&R, musculoskeletal, sports medicine, and sports and spine medicine fellowships are available. Fellowships are primarily based in the outpatient setting and are designed to supplement the musculoskeletal exposure received in residency. They are intended to build expertise in the areas of biomechanics and management of the injured athlete. Fellowships may teach a wide variety of techniques, including musculoskeletal ultrasound and percutaneous joint and spinal procedures, or they may be completely non-interventional. Also, many fellowships provide educational experiences in electrodiagnostic medicine and some may expose fellows to manual therapy techniques.

Candidates should also look into specific training opportunities that involve treating athletes. For example, be aware of the level of athletic competition offered by the fellowship. Is there access to athletic teams and athletes? What are the responsibilities of the fellow for event coverage? What are the opportunities for the fellow to become a team physician?

Other medical specialties, including family medicine, internal medicine, emergency medicine, and pediatrics offer fellowship training in sports medicine. The majority of ACGME accredited fellowships are currently offered through family medicine programs. The most comprehensive listing of sports medicine fellowships in all disciplines is on the *Physician and Sportsmedicine* web site. Also, PASSOR created a document entitled, *Musculoskeletal Practice After Residency* which is an indispensable resource for any resident wishing to pursue post-graduate training in musculoskeletal medicine or deciding on job opportunities available in MSK medicine. In addition, PASSOR has a fellowship directory, released annually, that are 'PASSOR recognized,' meaning they have met the minimum standards set out by the PASSOR board of governors. Currently PASSOR is being reintegrated into the Academy infrastructure. However, this document will still be updated and released annually on the AAPM&R website.

As of 2008, there are no PM&R-based ACGME accredited sports medicine fellowships. Several PM&R programs have submitted applications for ACGME accreditation in sports medicine, and with time, the number of PM&R accredited fellowships should grow. Currently there are specific criteria that need to be satisfied in order to sit for the American Board of Family Practice exam in sports medicine. This information is available on the ABPM&R website. With successful completion of the exam, subspecialty certification in sports medicine can be obtained through the ABPM&R.

Useful web sites and organizations for Sports Medicine:

- American Academy of Physical Medicine and Rehabilitation www.aapmr.org
- American Board of Physical Medicine and Rehabilitation www.abpmr.org
- American College of Sports Medicine (ACSM) www.acsm.org
- American Medical Society for Sports Medicine (AMSSM) www.newamssm.org
- *The Physician and Sportsmedicine* www.physsportsmed.com

Fellowships Without ABPM&R Certification

The following section will briefly describe characteristics of several subspecialty areas that do not lead to subspecialty certification by the ABPM&R. These fellowships are not accredited by ACGME, but may be more tailored to an individual candidate's career goals.

Not all fellowship opportunities are created with the intent of leading to a particular certification. Within PM&R, a fellowship can be created in just about any subspecialty by single individuals, group or multi-specialty practices, private organizations, or public institutions that have no affiliation with ACGME or a certifying board. For example, there are a number of excellent pain, interventional spine, musculoskeletal, and sports fellowships listed in the PASSOR fellowship directory that are not accredited by ACGME, nor do they allow a candidate to sit for the certification exam in pain or sports medicine. This may also be true for SCI, neuromuscular medicine, pediatric rehab, and hospice and palliative care. These fellowships may offer a wide variety of valuable training opportunities to interested candidates. The paragraphs that follow list other post-graduate fellowships that are unaffiliated with ACGME and the ABPM&R.

Electrodiagnostic Medicine

Fellowships are generally available to PM&R or neurology residents who have successfully completed ACGME accredited residencies. Fellowships are designed to build on the electrodiagnostic concepts and skills acquired during residency. Programs usually offer didactics in neurophysiology, pathology, and clinical neurophysiological features of disease. Most fellows will perform electrodiagnostic studies on adults and children with a wide range of neuromuscular diseases. In addition, many fellowships offer training opportunities using special techniques, including single fiber EMG; somatosensory, visual, and auditory evoked responses; and intraoperative monitoring. Also, some programs may provide rotations in sensory, autonomic, and movement disorder laboratories. Clinical requirements and research requirements vary by program. The fellowship program should exceed the requirements for electrodiagnostic training as defined by the American Board of Electrodiagnostic Medicine for fellows to be eligible to sit for the ABEM certification exam.

The AANEM website offers a listing of available fellowships in electrodiagnostic medicine. Also, the AANEM offers a Training Program Self-Assessment Examination (TPSAE) that is a useful study guide for physicians in the practice of electrodiagnostic medicine.

Useful web sites and organizations for Electrodiagnostic Medicine:

- American Academy of Neurology (AAN) www.aan.com
- American Association of Neuromuscular and Electrodiagnostic Medicine (AANEM) www.aanem.org
- American Board of Electrodiagnostic Medicine (ABEM) www.abemexam.org

Multiple Sclerosis

Specialized training in the care of patients with multiple sclerosis is scarce. There are a few PM&R programs that offer MS fellowship training, but most post-graduate opportunities are offered by neurology-based programs. Nevertheless, interested PM&R applicants have been accepted into neurology MS programs. MS fellowships involve participation in MS outpatient clinics, inpatient consultation, electrodiagnostic medicine, radiology, research, and formal didactics or journal clubs.

Useful web sites and organizations for Multiple Sclerosis:

- American Academy of Neurology (AAN) www.aan.com
- Multiple Sclerosis Association of American (MSAA) www.msassociation.org
- The National Multiple Sclerosis Society www.nationalmssociety.org/index.aspx
- The University of Washington
<http://depts.washington.edu/rehab/fellowship/index.html>

Neurorehabilitation

Neurorehabilitation fellowships may combine elements of TBI, stroke, SCI and neuromuscular training programs into one program, while others may not. The fellowship experience is variable between programs, and residents should become familiar with each program's design before deciding which opportunity best fits his or her career goals.

Fellowship training may introduce the clinician to advanced techniques for spasticity and dystonia management, including neurolytic procedures and intrathecal pump management. Programs may also include additional training in clinical and dynamic EMG, and involvement in motion analysis laboratories.

Useful web sites and organizations for Neurorehabilitation Medicine:

- American Academy of Neurology (AAN) www.aan.com
- National Institute of Neurological Disorders and Stroke www.ninds.nih.gov
- North American Brain Injury Society www.nabis.org
- The American Society of Neurorehabilitation www.asnr.com
- The American Stroke Association
<http://strokegroup.americanheart.org/strokegroup/public/zipFinder.jsp>
- The National Aphasia Association (NAA) www.aphasia.org
- The National Stroke Association www.stroke.org

Occupational and Environmental Medicine

Occupational and Environmental Medicine is a mixture of clinical medicine and public health. This field is dedicated to promoting the health of workers through preventive medicine, clinical care, research, and education. Specialists in this field are knowledgeable and capable of treating job-related diseases, recognizing and resolving workplace hazards, instituting rehabilitation methods, and providing well-managed care within and outside the workplace.

Training provides a range of skills in population and preventive medicine, epidemiology and disease surveillance, toxicology, biostatistics, and health services administration. Programs may be 1 to 2 years in duration and many candidates receive credit towards a degree in public health. The American College of Occupational and Environmental Medicine (ACOEM) is the premier organization for learning more about the field and for finding lists of potential training programs.

Useful web sites and organizations for Occupational and Environmental Medicine:

- American College of Occupational and Environmental Medicine (ACOEM) www.acoem.org
- American Journal of Industrial Medicine (journal) www.wiley.com/WileyCDA/WileyTitle/productCd-AJIM.html
- Association of Occupational and Environmental Clinics (AOEC) www.aoec.org
- IndustrialMedicine.com www.industrialmedicine.com
- Occupational Medicine (journal) <http://occmed.oxfordjournals.org/>
- Occupational Health and Industrial Medicine (journal) www.elsevier.com/wps/find/journaldescription.cws_home/506004/description#description

Research

The AAPM&R Research Committee has posted a “Resident’s Research Packet” on the Academy web site to introduce residents without prior exposure to research. Everything one would need to get started on a research project is available at this link (see below). Also, the Academy web site has additional links for research funding and research guidance in the resident section.

Fellowship opportunities in research are often funded via research grants. Research fellowships may be offered by individual institutions, so interested applicants should contact individual programs and visit their websites to learn more about available opportunities. The Association for Academic Physiatrists web site includes links for programs, such as the rehab medicine scientist training program (RMSTP K-12 grant). The RMSTP K-12 fellowship is 75% research and 25% clinical work. Successful applicants will engage in rehabilitation research from inception (e.g., study formulation, grant-writing, etc.) to manuscript publication.

Some programs may also provide training on developing grant-writing skills. However, for those who are not interested in applying for a full research fellowship, there are intensive grant writing workshops in rehabilitation research that are offered throughout the country. Senior level trainees, as well as junior and mid-level faculty are encouraged to attend. Attendees receive guidance in grant writing, clinical trial design, biostatistics, informatics, collaboration, budgeting, and career development through lectures and individual consultation. Interested applicants must apply for these workshops and come prepared with protocols and/or grant applications in draft form.

Useful web sites and organizations for research:

- AAPM&R Resident's Research Packet
www.aapmr.org/resident/resrchpac/respacka.htm Association for Academic Physiatrists (AAP) RMSTP K-12 fellowship
http://www.physiatry.org/Research_RMSTP_K12.cfm
- National Institute on Disability and Rehabilitation Research (NIDRR)
<http://www.ed.gov/about/offices/list/osers/nidrr/index.html?src=mr>
- NIH web site Career Development Awards:
- K awards: <http://grants.nih.gov/training/careerdevelopmentawards.htm>
- T awards: <http://grants.nih.gov/training/careerdevelopmentawards.htm>
- F awards: http://grants.nih.gov/training/F_files_nrsa.htm
- ERRIS Enhancing Rehabilitation Research in the South (example of a grant writing workshop) <http://erris.med.virginia.edu/index.htm>

Stroke

Stroke fellowships are designed to expose the trainee to all aspects of clinical care of stroke patients from acute hospitalization and acute rehabilitation, to long term care. Fellowships are available in both PM&R and neurology-based programs. Fellows gain strong skills in the treatment of major stroke syndromes, cognitive disability and spasticity. Fellows rotate through stroke and brain injury services and may have the opportunity to learn botulinum toxin injection and other techniques for managing spasticity and dystonia. Research may be a part of the fellowship requirement and some programs may provide 2 years of training for those interested in pursuing research and/or academic pursuits.

Useful web sites and organizations for Stroke Rehabilitation:

- American Academy of Neurology (AAN) www.aan.com
- American Heart Association
www.americanheart.org/presenter.jhtml?identifier=1200000
- National Center for Neurogenic Communication Disorders
<http://cnet.shs.arizona.edu/>
- National Institute of Neurological Disorders and Stroke www.ninds.nih.gov
- The American Stroke Association
<http://strokegroup.americanheart.org/strokegroup/public/zipFinder.jsp>
- The American Society of Neurorehabilitation www.asnr.com
- The National Aphasia Association (NAA) www.aphasia.org
- The National Stroke Association www.stroke.org

Traumatic Brain Injury (TBI)

Traumatic brain injury fellowships typically involve 12 months of training after residency. Some fellowships have the option to extend the fellowship to 24 or even 36 months for research purposes. TBI fellows may be exposed to neurotrauma consults, acute inpatient neurorehabilitation, neuroradiology, neuropathology and neuropharmacology, baclofen

pump management, botox and spasticity clinics, but each program is different so interested applicants should research programs for specifics regarding their curriculum.

Eligibility for fellowship training requires completion of a PM&R residency, although some programs may accept neurology residents as well. Research specific to TBI is usually encouraged but may not be required. At the end of fellowship training, the specialist should be qualified to run a TBI inpatient unit and/or work in outpatient TBI/neurorehabilitation clinics. Fellowship training is not absolutely required to work with the brain injury population, nor does it require further board certification to practice; however fellowship training is encouraged and may be required in some academic settings.

Useful web sites and organizations for Traumatic Brain Injury Medicine:

- Brainandspinalcord.org www.brainandspinalcord.org
- Brain Injury Association of America www.biausa.org
- Brain Injury Resource www.brain-injury-resource.com
- North American Brain Injury Society www.nabis.org
- The American Society of Neurorehabilitation www.asnr.com
- The National Aphasia Association (NAA) www.aphasia.org

Other Fellowship Opportunities

The scope of PM&R is unique in that residents are exposed to a variety of medical specialties and types of practices. Thus, many physiatrists may not choose just one particular specialty area. In fact, many PM&R physicians incorporate different philosophies and techniques into their clinical practice and focus their career goals on areas of personal interest.

For example, residents have gone on to pursue post-graduate training in areas such as cancer rehabilitation, cardiopulmonary rehabilitation, geriatrics, osteoporosis, neuropsychology, informatics and outcomes research, clinical neuropsychology, and clinical neurophysiology among others.

Residents interested in a focused career in a particular area are encouraged to do their own background research, and talk with attendings in their own departments, other clinical departments, or in their community. Information may also be obtained by rotating at the fellowship programs in consideration, reading available literature, contacting program directors, and talking to former or current fellows and residents who have had some experience with the programs under consideration.

Conclusion

The AAPM&R's Resident Physician Council is committed to serving the interests of all resident members of the AAPM&R. We hope that you find this document valuable and that you are more informed about the many opportunities available for post-graduate training. If you have questions that are not answered within this document, or if you have information about additional fellowship opportunities that are not listed above, please send

your comments to info@aapmr.org and direct your email to the RPC.