

Neurotransmitter

Department of Neurological Surgery, OHSU School of Medicine

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June 2002



Kim J. Burchiel, M.D., F.A.C.S.
John Raaf
Professor and Chairman

Neurotransmitter is published biannually by the Department of Neurological Surgery, Oregon Health & Science University, School of Medicine for colleagues, alumni and friends of the department. For inquiries, submissions, suggestions, please contact Shirley McCartney, Ph.D., 503 494-7469 (mccartns@ohsu.edu) www.ohsu.edu/som-neurosurgery

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Message From the Chairman

HIPAA, EMTALA, CMS: The contemporary scrabble of acronyms makes my head spin! In many ways, these are both the best and worst of times. These are certainly times when we all reflect on our personal and professional goals. All neurosurgeons feel the constant and increasing pressure of regulation and oversight. Despite this, our specialty is experiencing an era of renewed growth and prosperity, a welcome respite from the gloom and dire predictions of the mid-1990s. For patients, access and choice are “in.” Specialty care is in demand. Community and academic practices are expanding, as are our diagnostic and surgical capabilities.

Advances in cerebrovascular/endovascular neurosurgery, functional neurosurgery, spinal surgery, neuro-oncology, and pain surgery are redefining our specialty. Still, we must be wary of professional provincialism. In my experience, when the environment is improving for our specialty, our focus narrows, sometimes to a limited repertoire of procedures. Paradoxically, in harsher times, patients become a “scarce resource,” and neurosurgeons are forced to populate novel practice niches. It is evolutionary biology in microcosm, but this process can limit the vision of our discipline.

I do believe that to some extent this is what differentiates our mission at OHSU from that of our statewide colleagues in neurosurgery. Our goal at OHSU is to promote the development of subspecialty care, which complements that in the practice community. That is exemplified by two recent additions to our staff: Steve Toms, M.D., surgical neurooncologist, will bring to our region both knowledge and a research effort in the field of gliomas; Susan Durham, M.D., will be our second pediatric neurosurgeon, with a research interest in pediatric head injury. My hope is that both will be a resource for our region.

Fundamentally, I see our role as continuing to develop new knowledge, and to push the boundaries of neurosurgical practice and expertise.

The alphabet soup of 2002 will surely give way to new regulations and regulatory acronyms, but the immutable reality is that only by research and expansion of our specialty will we be ready to meet the unpredictable, but inevitable, next wave of change in neurological surgery.

Kim J. Burchiel, M.D., F.A.C.S.

HIPAA —The Kassebaum-Kennedy Act, also known as the Health Insurance Portability and Accountability Act of 1996. HIPAA was signed into law in 1996; however only the “portability” aspect of the law (which protects the ability of people with current or pre-existing medical conditions to get health insurance) has been fully implemented. The “accountability” aspects of the law are now beginning addressed. Among its many provisions: stringent codes for the uniform transfer of electronic data, including billing and other routine exchanges; and new patient rights regarding personal health information, including the right to access this information and to limit its disclosure: www.ohsu.edu/cc/hipaa/

EMTALA —The Emergency Medical Treatment and Active Labor Act. EMTALA is a statute which governs when and how a patient may be: (1) refused treatment, or (2) transferred from one hospital to another when he/she is in an unstable medical condition.

CMS — Centers for Medicare and Medicaid Services, a division of the Department of Health and Human Services. Responsible for the Medicare program, and the development and enforcement of regulations on EMTALA.

New Employees

Assistant Professor

Susan R. Durham, M.D., will be joining neurological surgery as an assistant professor in July 2002. Durham studied behavioral neuroscience as an



Durham

undergraduate at the University of Pittsburgh, earning her bachelor's in 1990. Durham completed her medical degree at the University of Pittsburgh School of Medicine in 1994. Durham then began her neurosurgical residency at the Hospital of the University of Pennsylvania, School of Medicine, Department of Neurological Surgery. She completed her residency in 2001, receiving several awards including the Research Award, Philadelphia Neurologic Society in 1999 and the Schulman

award, American Association of Neurological Surgeons, Congress of Neurological Surgeons, Pediatric Section, in 2000.

In 2002 Durham completed a fellowship in pediatric neurosurgery at the Children's Hospital Los Angeles, University of Southern California, School of Medicine, Division of Pediatric Neurosurgery, Los Angeles, Calif.

Durham will continue her clinical practice in pediatric neurological surgery, in addition to continuing clinical research into pediatric head and spinal cord injury, and will assume the title of director, pediatric neurotrauma and co-director with Wayne Ozaki, M.D., D.M.D., of the Cranial Synostosis Program. Durham will attend a combined practice of pediatric neurological surgery with Nathan Selden, M.D., Ph.D. Please feel free to contact either physician with new consultations or with questions about any existing patients, at 503 494-0872. ♦

Research Assistant Professor

Priya Chaudhary, Ph.D., was appointed research assistant professor of neurological surgery in June 2002. Chaudhary completed a bachelor's and a master's in



Chaudhary

Microbiology, a master of philosophy and a doctorate in Biotechnology, all while attending the University of Poona, Pune, India. In 1996 Chaudhary moved to the Department of Ophthalmology, New York Medical College, Valhalla, NY and completed a postdoctoral fellowship in 1999. Later that year she

joined neurological surgery, OHSU, as a postdoctoral fellow. As a fellow in neurological surgery, Chaudhary was the principal investigator on a two-year grant (March 2000- Feb. 2002) funded by the National Institute of Neurological Disorders and Stroke (NINDS). The goal of this proposal was to understand the neural mechanisms involved in trigeminal neuralgia pain and to answer which neuropeptides modulate excitability of trigeminal ganglion neurons. Chaudhary studied the possible role of pituitary adenylate cyclase activating polypeptide (PACAP) and vasoactive intestinal polypeptide (VIP) as mediators in cross excitation. ♦

appointed clinical instructor of neurological surgery in June 2002.

Clinical Instructor

Richard Kolbell, Ph.D., A.B.P.P., neuropsychologist and forensic psychologist, began patient consults with the OHSU neurosurgical pain service in March 2002. Kolbell's practice is located at 1923 NE Broadway St., Portland, Ore. 97232, Ph:503 284-2372. Kolbell was

appointed clinical professor of neurological surgery, in December 2001. ♦

Clinical Professor

Donald R. Olson, M.D., M.B.A., F.A.C.S., was appointed clinical professor of neurological surgery, in December 2001. ♦

Instructors 2002-2003

Skull Base

Vijayasbalan Balasingam, M.D., Ph.D. will be joining neurological surgery as an instructor in skull base surgery in July 2002. Balasingam is presently chief neurosurgery resident at Montreal Neurological Institute & Hospital. He received his undergraduate degree at Texas A&M University in 1988. Balasingam then attended McGill University, Canada where he received his medical and doctoral degrees in 1996. Balasingam's thesis work examined cytokines and astroglial reactivity.

Balasingam maintains a wide spectrum of hobbies/interests, including aeronautics, community work, world religions and mountaineering.

Functional and Stereotactic

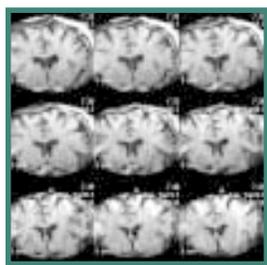
Joseph Christiano, M.D., will be joining neurological surgery as an instructor in functional and stereotactic surgery in July 2002. Christiano is presently a neurosurgical resident at the University of Louisville Hospital. He received his undergraduate degree at Amherst College in 1991. Christiano then attended Hahnemann University School of Medicine where he received his medical degree in 1995. Christiano completed an internship in general surgery at Georgetown University before moving to Louisville Hospital to complete his residency training. In 2001, Christiano completed a one-month elective rotation in the functional and stereotactic division of neurological surgery, OHSU.

Louis Whitworth, M.D. will be joining neurological surgery as an instructor in functional and stereotactic surgery in July 2002. Whitworth is presently a neurosurgical resident at the University of Tennessee School of Medicine, Memphis, Tenn. He received his undergraduate degree at the University of California, Berkeley, Calif. in 1991. Whitworth then attended Tulane University, School of Medicine, New Orleans, La. where he received his medical degree in 1996.

(cont. on Page 6 ...)

Intraoperative MR Imaging

Intraoperative Magnetic Resonance Imaging sets a new standard in neurological surgery at OHSU. Oregon Health & Science University neurosurgeons are among the first in the United States to use a new intraoperative imaging device. Neurosurgeons now have access to a new MR imaging suite and a new small semi-portable MR imaging intraoperative device. The ODIN Intraoperative MR Imaging



Device- PoleStar N-10 system can provide images of the brain before, during and after surgery. This allows the

surgeon to better plan their approach, evaluate their progress during surgery, and verify results.

With this intraoperative MRI device, gone is the need for a technician in another room to operate the imager; the neurosurgeon operates the device with an infrared remote control. Magnets rise into position and obtain detailed images of the brain; magnets can then be lowered to facilitate surgery. Magnetic fields are lower and many conventional surgical instruments and equipment can still be used. The intraoperative system is compact and mounts to a standard operating room table. And when not in use, can be stored, freeing up operating room space for conventional neurosurgical procedures. While modifications to the neurosurgical operating room were extensive, the benefits are nearly real-time, picture-quality images, several different kinds of MRI scans, enhanced operative safety, improved accuracy and reduced hospital costs.

OHSU neurosurgeons anticipate using this MR Imaging intraoperative device not only for the majority of brain tumor surgeries in the future, but also for recently FDA approved deep brain stimulation procedures. ♦

Neurosurgery Operating Room Staff

The following group of individuals work with OHSU neurosurgeons daily and are essential members of the neurosurgery operating team:



Reeves, Brown, Richardson, Iverson and Cady

Marge Brown, surgical technician; Jade Cady, surgical technician/materials management; Jana Iverson, surgical nurse; Jesse Richardson, surgical technician; Debbie Reeves, R.N., service coordinator.

Debbie Reeves, R.N., is the service coordinator/perioperative nurse in the OHSU hospital operating room. Reeves has worked at OHSU since 1986, initially as a research assistant in pulmonary and critical care. At the same time Reeves attended Portland State University and obtained a bachelor's in Psychology. Reeves then changed course and graduated from the OHSU School of Nursing in 1995. She then began a postgraduate, unpaid "clinical rotation" in the OR while still holding down a research position. In 1996, while waiting for a position to open in the OR, she accepted a position on the trauma stepdown unit for three months, and later that same year, was able to transfer to the OR. Reeves was attracted to neurosurgery from the beginning of her OR career and soon became "positively



Reeves



ODIN Intraoperative MR Imaging Device

addicted." In January 1997 Reeves was asked, to be the service coordinator for neurosurgery. She didn't hesitate to say, "Yes!" The rest, as they say is history ...

What does a service coordinator do? "I coordinate **everything** relating to neurosurgery from the instruments and equipment to the implants and procedures. Among my many responsibilities are the following: primary neuro-educator of the nursing and surgical technical staff; precept new technicians and nurses; provide in-service presentations on an on going basis; orient new staff to the neuro-equipment and instruments; work with the surgeons to develop new procedures; integrate the use of new equipment and instruments into existing procedures, and implement research protocols; assist with Leksell headframe placement; prepare the annual capital-equipment budget; and "troubleshoot" OR staff with equipment or instrument malfunctions, user error problems, procedure card selections, charging and documentation issues, etc., (at all hours, even on my day off)." ♦

The least gratifying part of her job?

"Working very hard in a position with lots of responsibility and no authority. Also hearing more about the things that go wrong than all the things that go right."

The most gratifying part of her job?

"Being able to indulge my passion for neuroanatomy and physiology while being constantly challenged, and, most importantly, being able to feel that in some small way, I can make a difference!" ♦

Academic Neurosurgeon

The Department of Neurological Surgery in the School of Medicine, Oregon Health & Science University is expanding its clinical services. Recruitment has begun for BC/BE candidates in the areas of:

Spine Surgery

Vascular Neurosurgery

Please submit a curriculum vitae to:

Kim J. Burchiel, M.D.

John Raaf Professor and Chairman

Phone: 503 494-6207

Fax: 503 494-7161

E-mail: burchiek@ohsu.edu

Research News

Stanley Barnwell, M.D., Ph.D.

Snagging a stroke: Barnwell successfully uses a Neuronet, to remove a clot in a pediatric patient. Neuronet, a tiny collapsible wire-mesh tool approved by the FDA for removing small platinum coils that physicians sometimes implant in aneurysm patients, had not previously been used for clot removal in humans.

Kim J. Burchiel, M.D., F.A.C.S.

Kim J. Burchiel, M.D., has been elected director of the American Board of Neurological Surgery. The aim of the ABNS is to encourage the study, improve the practice, elevate the standards, and advance the science of neurological surgery, and thereby to serve the cause of public health. The primary purposes of the ABNS are to conduct examinations of eligible candidates who seek certification by the board and to issue certificates to those who meet the Board's requirements and satisfactorily complete its examinations, thereby conferring Diplomate status. Certification by the board is based upon its approval of an applicant's educational and training qualifications, as supported by statements from his or her program director; review of the applicant's professional practice, including opinions as reflected in the statements of his or her colleagues; and the passage of written and oral examinations.

The ABNS consists of 14 directors, each serving for six years. Members are elected after nominations are received from the following societies: American Association of Neurological Surgeons, Society of Neurological Surgeons, Congress of Neurological Surgeons, American Academy of Neurological Surgery, American College of Surgeons, and Neurosurgical Society of America.

Priya Chaudhary, Ph.D.

A \$30,000 dollar grant from the Medical Research Foundation for a one-year study of "*The effect of diabetes on gene expression pattern in rat dorsal root ganglia.*"

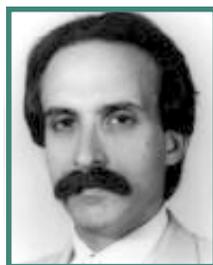
Visiting Professor Lecture Series

The Visiting Professor Lecture Series features some of the most outstanding medical professionals in the field of neurological surgery. Guests are invited to present cases of interest for discussion. The Department of Neurological Surgery and its faculty were pleased to invite the following visiting professors.

Johnny B. Delashaw Jr., M.D.

Saturday, March 9, 2002 *Endovascular Options in Cerebrovascular Disease*

Robert H. Rosenwasser, M.D., is a



professor of neurosurgery and director of cerebrovascular surgery and interventional neuroradiology, where his areas of expertise include: the treatment of cerebral aneurysms; arteriovenous malformations of the brain and spinal cord, and occlusive cerebrovascular disease

As one of a handful of neurosurgeons in this country versed in both surgical and endovascular approaches to neurovascular disease, he provides residents a uniquely balanced exposure to the management of patients with aneurysms, arteriovenous malformations and other neurovascular disorders. His research program is focused on developing methods of protecting the brain against cerebral ischemia. ♦

Saturday, June 1, 2002 *Current Concepts in the Management of Rheumatoid Cervical Spine Disease*

Michael Fehlings, M.D., Ph.D., is a



professor of neurosurgery and research director, Division of Neurosurgery University of Toronto director of the Krembil Neuroscience Centre and Head of the Spinal Program

at the University Health Network; as well as the Krembil Chair in Neural Repair and Regeneration at the Toronto Western Hospital Research Institute. He combines a focused clinical interest in spinal cord injury and complex spinal disorders with a basic and clinical research program focused on the cellular and molecular mechanisms underlying spinal cord injury. ♦

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Johnny Delashaw, M.D., Gary Nesbit, M.D., et al

OHSU, VAMC researchers reveal the benefits of iron particles in brain tumor imaging. Iron oxide particles, called ferumoxtran, may also be a useful tool for tumor pathology and gene therapy research.

Mary Heinricher, Ph.D.

In May 2002 Heinricher was elected to serve (July 1, 2002 through June 30, 2005) as a member of the Integrative, Functional and Cognitive Science (4) Study Section, Center for Scientific Review, National Institutes of Health.

Debbie Reeves, R.N.

Reeves, recently was invited to participate as part of a delegation of professionals specializing in neurological surgery, participating in bilateral exchanges with their counterparts in the People's Republic of China. The delegation is being coordinated by People to People Ambassador Programs. The purpose of this delegation is to exchange ideas, information and knowledge concerning the role of neurological surgeons, and recent advances in neurological surgery. The delegates will be prepared to participate in formal and informal discussions with host professionals. It is intended that these exchanges will facilitate increased cross-cultural

(cont. on Page 7 ...)

John Raaf Day 2002

The Department of Neurological Surgery is proud to recognize the accomplishments of John Raaf, M.D., (1905 - 2000), widely regarded as the father of neurosurgery in the state of Oregon. Raaf advanced the profession during his years as chairman of neurosurgery at Good Samaritan Hospital by creating an outstanding resource for the neurosciences community in the Pacific Northwest.

The 12th John Raaf Lecturer

Charles B. Wilson, M.D., is professor emeritus of neurological surgery at the University of California, San Francisco.



Wilson

Wilson began his medical training at Tulane University School of Medicine. Wilson also completed his neurosurgery residency at Tulane and joined the university faculty there with joint appointments in pathology and neurosurgery. Wilson's work then took him to Louisiana State University School of Medicine and University of Kentucky School of Medicine, where he pursued a research interest in malignant gliomas. In 1968 Wilson joined the faculty of U.C.S.F. as professor and chairman of neurological surgery. In 1971 he was

involved in establishing a laboratory for the study of brain tumors, the Brain Tumor Research Center (BTRC), which the NIH has funded since 1971. The center treats more than 500 patients annually, and contributes immeasurably to basic and applied research in neuro-oncology. Wilson has a special interest in pituitary tumors and has performed more than 3,300 transphenoidal procedures.

In 1997 Wilson became a director at the Institute for the Future, where he specializes in the future of emerging medical technologies, and the impact of genetics and genomics on health and health care. *The New Yorker Magazine* summed it up best perhaps, "*Charlie is a rare superstar ... with talents the likes of Wayne Gretzky and Yo-Yo Ma.*"

We are pleased to welcome him as the 2002 Raaf Lecturer.

Saturday, October 26, 2002

8 a.m. - noon

**Doernbecher Children's Hospital
Vey Conference Center - 11th Floor**

Please RSVP to:

Joanie Mastrandrea,
mastrand@ohsu.edu 503 494-6207

Past John Raaf Lecturers:

Lawrence F. Marshall, M.D.	1991
John A. Jane, M.D., Ph.D.	1992
Julian T. Hoff, M.D.	1993
Albert L. Rhoton Jr., M.D.	1994
Martin H. Weiss, M.D.	1995
Robert H. Wilkins, M.D.	1996
John M. Tew Jr., M.D.	1997
Donlin M. Long, M.D., Ph.D.	1998
Robert Grossman, M.D.	1999
William A. Buchheit, M.D.	2000
Russel Hugo Patterson Jr., M.D.	2001

Community Outreach

Did you know that the Department of Neurological Surgery had a display at Brain Awareness Week 2002: The Life of the Brain this year?

What is Brain Awareness Week 2002: The Life of the Brain?

Brain Awareness Week is the creation of the Dana Alliance for Brain Initiatives and the Society for Neuroscience, national organizations dedicated to finding the cause and cure for neurological diseases and disorders. A chapter of the Society for Neuroscience has recently been formed in Oregon at OHSU. This year in Portland the many activities associated with this Brain Awareness Week built on the theme of the brain throughout its lifetime, with a variety of opportunities for different groups/ages to



interact with brain science, brain scientists and brain science educators.

How was neurological surgery represented?

The Department of Neurological Surgery, collaborated with other OHSU departments in support of Brain Awareness Week 2002. On the day of the event

there was a display board describing the Department of Neurological Surgery, which was prepared by Shirley McCartney, Ph.D., and very kindly "maintained" Saturday and Sunday by Angela Howard, Bryce Helgerson, Beth Fee and Debra Reeves. Many thanks to them for volunteering their time. Many thanks also to Open Advanced MRI and CT of Portland who provided "freebie" jelly beans for any one who stopped by the display.

It was also a time to meet with old friends. McCartney, who organized the Brain Fair 2002, spoke with Mary Ellen Marmaduke before Richard Restak, M.D.'s keynote address. Marmaduke, daughter of the late Walter



Marmaduke and McCartney

(cont. on Page 7 ...)

FDA Approves Deep Brain Stimulation for Parkinson's Disease

There is no cure for Parkinson's disease. However on January 14, 2002, the Federal Food and Drug Administration (FDA) approved deep brain stimulation of the subthalamic nucleus and globus pallidus for the treatment of Parkinson disease. Deep brain stimulation, an effective surgical treatment for such Parkinson symptoms as tremor, slowness of movement, dyskinesia, and difficulty with balance and walking (gait), is now recognized as the standard of care for the treatment of medically refractive Parkinson disease.

The FDA initially approved deep brain stimulation to treat Parkinson's disease in 1997 for use in one side of the brain to help control tremors on one side of the body. The technique is now approved for use in both sides of the brain to help reduce some of the other symptoms of advanced Parkinson's that cannot be adequately controlled with medication.

Utilizing tiny electrodes, precisely implanted in specific locations in the brain, and connected to leads, or wires, that run under the skin to pulse generators implanted in the chest or abdomen, these adjustable "brain pacemakers" can substantially improve Parkinson's symptoms. Since the stimulation is adjustable, reprogramming, which is quick, painless, and done in a doctor's office, can modify the therapy to address an individual's symptoms if they change over time. To turn the stimulator on and off, the patient holds a magnet over the



pulse generator. The generator must be replaced every three to five years, the life of the battery.

Kim J. Burchiel, M.D., chairman of neurological surgery in the School of Medicine, OHSU, was the first person in the United States to implant the deep brain stimulator. *"In improving a Parkinson's patient's quality of life, the brain stimulation system is as great a breakthrough as the drug levodopa, or L-dopa, a standard medication for treating Parkinson's was 30 years ago"* Burchiel said, *"although more research is needed."*

Burchiel's functional and stereotactic group in collaboration with the Portland Veterans Affairs Medical Center (VAMC) and the Department of Neurology in the School of Medicine at OHSU is one of six groups of investigators in the United States designated to participate in a cooperative study financed by VAMC and the National Institutes of Health. It constitutes a complete study exploring deep brain stimulation technology, its operation and long-term effects. ♦

For more information about deep brain stimulation surgery, please call 503 494-4314.

(New Employees cont. from Page 2 ...)

Interns 2002

Kiarash Golshani, M.D., joins neurological surgery in July 2002 as an intern in general surgery. In May 2002 he completed his medical degree at OHSU. In 1997 he completed a bachelor's in molecular biology at University of California, Irvine.



Golshani

His hobbies are varied, including tennis, racquet ball, basket ball and running. He also plays piano and classical guitar.

Justin S. Cetas, M.D., Ph.D. joins neurological surgery in July 2002 as an intern in general surgery.

In May 2002 he completed his medical degree at University of Arizona, Tucson. In 2000 he completed a doctorate in neuroscience also at University of



Cetas

Arizona, studying neuronal architecture and functional organization of the rabbit auditory thalamus. His particular interests include functional neurosurgery and epilepsy surgery. He enjoys many outdoor activities, including rock climbing and sailing. ♦

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Visiting Professors

Edwin Bellis, M.D., is a visiting neurosurgeon from Salisbury, Md. Bellis is training at OHSU for the next six months in pain management, as authorized by Kim Burchiel, M.D. Bellis received his medical degree and completed his neurosurgical residency at the University of Maryland School of Medicine, Baltimore, Md. Bellis was on faculty at the University of Maryland until 1989; he then entered private practice in Salisbury.

Hyoung Ihl Kim, M.D., (pictured on the right) is a visiting neurosurgeon from Korea. Kim is the department head of neurosurgery and director of the Epilepsy Surgery Program at Homan Medical Center Chonuck National University Hospital, Seoul, South Korea. Kim presented grand rounds on Wednesday - May 1, 2002, on the subject of *"Intracranial EEG Recordings: Indications, Methods and Pitfalls."* Kim visited neurological surgery as an observing physician for three months. ♦



Moo Kim, Kim Burchiel and Hyoung Kim

understanding both personally and professionally.

Subramaniam Seetharaman, M.D.

Subramaniam Seetharaman, M.D., was appointed research associate in neuro-logical surgery in March 2002. Seetharaman earned his medical degree in 1984 at the University of Madras, Stanley Medical College, Madras, India. Seetharaman then joined, as a resident/ staff physician, the H.M. Hospital, Acute Care Center and the Raju Nursing Home, Asthma & Allergy Clinic & Cardiac Care Center, Madras, India. In 1988 Seetharaman moved to Mahe, Seychelles, where he was employed by the Ministry of Health as a primary care physician and was later in charge of Baie St. Anne Hospital in Praslin, Seychelles until 1997. In 1998, after clearing his USMLE exams, Seetharaman started work in biochemistry and molecular biology at OHSU as a postdoctoral fellow and later a research associate, working on mitochondrial ATP-dependent potassium channels in cardiac ischemia and preconditioning. He also worked on nonalcoholic steatohepatitis - incidence and co morbidities. Seetharaman was involved as a preceptor with the AIDS educational training center at the Multnomah Mid-County Clinic, Portland, Ore., and in interventional cardiology at St. Vincent Hospital, Portland, Ore.

As part of the clinical research group in neurological surgery, Seetharaman will be coordinating clinical research projects of implanted bioprosthetic devices from initial design of the research study to patient recruitment, data collection and analysis.

Nathan Selden, M.D., Ph.D.

A \$750,000 five - year, career development award from the National Institute for Neurological Disorders and Stroke (NIH) and an additional \$75,000 two-year, supplemental grant from the NIH-Children's Research Foundation to study the anatomy, pharmacology and physiol-

Farewells

Sue Cullinan, R.N., has joined the Oregon State Public Health Department, Office of Community Services, as a consultant and liaison with county PH departments.

W. Jeff Elias, M.D. has been appointed assistant professor of neurosurgery at the University of Virginia, specializing in functional neurosurgery and spinal disorders. Elias was the functional and stereotactic fellow in 2001-2002.

Frank P.K. Hsu, M.D., Ph.D., will be leaving for the Barrow Neurological Institute for a one - year fellowship in neurovascular and skull base surgery.

Christopher Aho, M.D., will be leaving for Los Angeles to continue his neuro-surgical residency training. ♦



ogy of pain modulation circuits in the brainstem.

Neurotrauma Research Group

Four critical care physicians and one researcher from Argentina (part of the Argentina Project, funded by NIDDR), visited the neurotrauma research group in January 2002. The group of investigators spent one week training at OHSU. The group then traveled to Washington, D.C. and presented their research project to funders and researchers all engaged in similar research in the U.S.

Currently, Lippincott Williams & Wilkins (LWW) is working with the neurotrauma research group and other contributing authors to publish the *Guidelines for the Acute Medical Management of Severe Brain Injury in Children and Adolescents* concurrently in three (potentially four) journals. ♦

Submit your information news, articles and ideas for the December 2002 issue of OHSU *Neurotransmitter* to Shirley McCartney, Ph.D. mccartns@ohsu.edu

Congratulations

The Department of Neurological Surgery would like to extend its congratulations to the following employees:

- ✦ Christopher and Christie Aho on the birth of their daughter Megan in June 2002.
- ✦ Priya Chaudhary, Ph.D. and Anil Kumar on the birth of their daughter Anika in February 2002.
- ✦ Debbie Reeves, R.N., Perioperative Nurse of the Year, nominated and voted by surgery department managers/directors, peers and colleagues. ♦

Community Outreach ... (cont. from page 5)

E. Dandy, M.D., 1886-1946, is a health education consultant living in Portland Ore.

Keep your eyes open for Marmaduke's book based on "Family Correspondence" with their father, due to be published late 2002. Dandy's contributions to the field of neurosurgery



Dandy

include 159 articles and five books, among them a classic text on neuro-surgery, "**Surgery of the Brain**" (1935). The discovery of ventriculography was considered his greatest contribution.

He performed more than 2000 operations, among them operations for hydrocephalus, brain abscesses, subdural hematoma, trifacial neuralgia, and intervertebral discs.

Dandy's letters are also available on the Congress of Neurological Surgeons Web site at www.neurosurgery.org/cns/dandy/index.asp ♦

ALUMNI
Neurological Surgery would like to hear from YOU!



Department of Neurological Surgery, L-472

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You Can Help the Department of Neurological Surgery Meet Its Mission

The Department of Neurological Surgery has a variety of programs that support research and resident/fellow education. Listed below are brief descriptions of the different activities supported by these funds:

- ❑ **Raaf Chair:** This endowed chair supports research in neurological surgery and neurosciences.
- ❑ **Paxton Fellowship:** This endowed professorship will support the development and implementation of the most advanced and innovative methods in neurological surgery education. This special professorship will be filled by an academic neurologist surgeon with a national reputation for education, innovation and state-of-the-art approaches to neurosurgical teaching techniques.
- ❑ **Neurosurgical Educational Gifts:** These gifts provide support for numerous endeavours, in keeping with the Department of Neurological surgery’s mission statement. Emphasizing innovation and the dissemination of new knowledge; development of curricula and an environment that stimulates the spirit of inquiry; and research into the prevention and cure of neurological disease and disability.
- ❑ **Campagna Professorship:** This professorship provides support for a pediatric neurosurgical professorship and promotion of research in pediatric neurosurgery, and maintenance of the highest level of care for children with neurosurgical problems.

If you would like to make a tax-deductible contribution to any of these funds, please make your check payable to “OHSU-Dept. of Neurological Surgery” and submit it to **Bryce Helgerson at the address above, along with a copy of this page and the fund(s) you wish to contribute to checked off.** You will receive a letter stating that you have made a tax-deductible donation as proof of your charitable giving.

John Raaf, Department Chairman

Kim J. Burchiel, M.D. 503 494-7978

Faculty

Stanley L. Barnwell, M.D., Ph.D. 503 494-0371
 Johnny B. Delashaw, M.D. 503 494-7737
 Randall M. Chesnut, M.D. 503 494-3217
 Susan R. Durham, M.D. 503 494-0872
 Edmund H. Frank, M.D. 503 494-0371
 Nathan R. Selden, M.D., Ph.D. 503 494-0872
 Steven A. Toms, M.D., M.P.H. 503 494-4425

Valerie A. Anderson, Ph.D. 503 494-6393
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