Your 2016 guide to adult patient referral

To refer a patient or consult with our team, please call 503 494-4567 or toll-free 800 245-6478.

To transfer a patient to OHSU, call 503 494-7000.

www.ohsubrain.com
Message from department chairs

Dear colleague,

We are committed to partnering with you to provide the finest care for your patients with musculoskeletal, mental health and neurological disorders ranging from the straightforward to the most complex.

The OHSU Brain Institute is a national leader in neuroscience patient care, research and education. We provide the most comprehensive care for neurological conditions in the Pacific Northwest, and consider it a privilege to share in the care of your patients to help provide the best outcomes possible.

Our focus on research and clinical trial opportunities can make a difference in providing earlier detection, accessing new treatments and therapies, and improving the quality of life for your patients of every culture and background. OHSU’s Telemedicine Network is also improving health care access to OHSU Brain Institute specialists throughout Oregon and southwestern Washington.

For questions about OHSU’s referral process, our Telemedicine Network or to consult with a specialist, please call our Physician Consult & Referral Service at 503 494-4567 or toll-free at 800 245-6478.

Sincerely,

Dennis Bourdette, M.D., F.A.N., F.A.N.A.
Chair, Department of Neurology

Nathan R. Selden, M.D., Ph.D., F.A.C.S., F.A.A.P.
Chair, Department of Neurological Surgery

George Keepers, M.D.
Chair, Department of Psychiatry

Jung Yoo, M.D.
Chair, Department of Orthopaedics and Rehabilitation
Table of Contents

Quick reference of provider teams ................................................................. 4
Clinics and programs ................................................................................ 8
  Aging, Alzheimer's Disease and Dementia .................................................. 8
  Amyotrophic Lateral Sclerosis (ALS) and Neuromuscular ......................... 9
  Brain and Central Nervous System .......................................................... 10
  Cerebrovascular Disease/Stroke .............................................................. 11
  Epilepsy ........................................................................................ 12
  Facial Pain ...................................................................................... 13
  Multiple Sclerosis ............................................................................. 14
  Nerve .......................................................................................... 15
  Neurology – Comprehensive Adult .......................................................... 16
  Neurosciences Critical Care and Neurohospitalist Program ..................... 17
  Parkinson's Disease and Movement Disorders ........................................ 18
  Pituitary ........................................................................................ 19
  Psychiatry ...................................................................................... 20
  Sleep Disorders ............................................................................... 21
  Spine ........................................................................................... 22
Provider profiles ..................................................................................... 24
Services and information ........................................................................... 52
  Clinical Trials .................................................................................. 52
  Neurodiagnostics ............................................................................. 55
  Neuroradiology ................................................................................ 54
  OHSU Telemedicine Network ............................................................... 56
  Pediatric Neurological Disorders .......................................................... 55
  Traveling Continuing Medical Education (CME) ...................................... 57
Quick reference of provider teams

To refer a patient or consult with our team, call Physician Consult & Referral Service at 503 494-4567 or toll-free at 800 245-6478, or fax 503 346-6854.

AGING, ALZHEIMER’S DISEASE AND DEMENTIA
Karen Dellinger, M.D. ................................................................. 31
Deniz Erten-Lyons, M.D. ............................................................. 32
Jeffrey Kaye, M.D. ........................................................................ 36
Barry Oken, M.D. .......................................................................... 42
Lisa Silbert, M.D. .......................................................................... 45

AMYOTROPHIC LATERAL SCLEROSIS (ALS) AND NEUROMUSCULAR
Chafic Karam, M.D. ........................................................................ 36

BRAIN AND CENTRAL NERVOUS SYSTEM
Prakash Ambady, M.D. ................................................................. 24
Peter Andersen, M.D., F.A.C.S. ..................................................... 24
Justin Cetas, M.D., Ph.D. .............................................................. 28
Jeremy N. Ciporen, M.D. .............................................................. 29
Aclan Dogan, M.D. ........................................................................ 31
Julie Falardeau, M.D. .................................................................... 32
Maria Fleseriu, M.D., F.A.C.E. ...................................................... 33
Christine M. Li, PA-C, M.P.A.P .................................................... 38
Edward Neuwelt, M.D. ............................................................... 41
Anh Nguyen-Huynh, M.D. .......................................................... 41
Dara M. Ono, M.S., PA-C ............................................................. 42
Ahmed Raslan, M.D. ..................................................................... 44
Janette K. Remling, M.S., PA-C ................................................... 44
Nathan Sautter, M.D. .................................................................... 45
Timothy Smith, M.D., M.P.H, F.A.C.S. ....................................... 46
Katie Thompson, PA-C, M.P.T. .................................................. 47
Frank Warren, M.D. ..................................................................... 49
Chris Yedinak, D.N.P, F.N.P.-B.C., M.N. ..................................... 51

CEREBROVASCULAR DISEASE/STROKE
Noah Beadell, M.D. ................................................................. 25
Hormozd Bozorgchami, M.D. .................................................... 26
Justin Cetas, M.D., Ph.D. ............................................................ 28
Wayne Clark, M.D. ..................................................................... 30
Aclan Dogan, M.D. ..................................................................... 31
Helmi Lutsep, M.D. ..................................................................... 39
Gary Nesbit, M.D. ....................................................................... 41
Dara Ono, M.S., PA-C ................................................................. 42
Ryan Priest, M.D. ....................................................................... 41
Janette K. Remling, M.S., PA-C .................................................. 44
QUICK REFERENCE
503 494-4567 or 800 245-6478 toll-free, or fax 503 346-6854.

NEUROSCIENCES CRITICAL CARE AND NEUROHOSPITALIST PROGRAM
Noah Beadell, M.D. ................................................................. 25
Ansgar Brambrink, M.D., Ph.D. .................................................. 26
Julia Durrant, M.D. ................................................................. 31
Mindy French, A.C.N.P.-B.C. .................................................... 33
Holly Hinson, M.D. ................................................................. 35
Craig Hutto, A.C.N.P. ............................................................. 36
Katharine J. Keranen, PA-C. .................................................... 37
Ines Koerner, M.D., Ph.D. ......................................................... 38
Miriam Treggiari, M.D., Ph.D. ................................................... 48
Tarvez Tucker, M.D. .............................................................. 48
Kamila Vagnerova, M.D. ......................................................... 49
Ed Whorrall, PA-C. ............................................................... 50
Ann Wood, M.S., PA-C. .......................................................... 50

PARKINSON’S DISEASE AND MOVEMENT DISORDERS
Shannon Anderson, M.P.A.S., PA-C. .............................................. 25
Matthew Brodsky, M.D. .......................................................... 27
Kim Burchiel, M.D., F.A.C.S. ..................................................... 27
Julie Carter, R.N., A.N.P. .......................................................... 28
Kathryn Chung, M.D. ............................................................. 29
Marian Dale, M.D. ................................................................. 30
Lia Ernst, M.D. ....................................................................... 32
Antonia Gragg, M.S., PA-C. ..................................................... 33
Amie Hiller, M.D. ................................................................. 34
Jeff Kraakevik, M.D. ............................................................. 38
John Nutt, M.D. ................................................................. 42
Ronald Pfeiffer, M.D. ............................................................ 43
Joseph Quinn, M.D. ............................................................. 44
Ahmed Raslan, M.D. ........................................................... 44
Katie Thompson, PA-C., M.P.T. ................................................ 47
Vivek Unni, M.D., Ph.D. .......................................................... 48

PITUITARY
Peter Andersen, M.D., F.A.C.E. .................................................. 24
Justin Cetas, M.D., Ph.D. ......................................................... 28
Jeremy N. Ciporen, M.D. ......................................................... 29
Aclan Dogan, M.D. .............................................................. 31
Julie Falardeau, M.D. ........................................................... 32
Maria Flesneriu, M.D., F.A.C.E. ............................................... 33
William Hills, M.D., O.D. ....................................................... 35
Christine M. Li, PA-C., M,PA.P ................................................ 38
Gary Nesbit, M.D. ............................................................... 41
Dara S. Ono, M.S., PA-C. ....................................................... 42
Janette K. Remling, M.S., PA-C. .............................................. 44
Timothy L. Smith, M.D., M.P.H., F.A.C.S. ................................. 46
Chris Yedinak, D.N.P., F.N.P.-B.C., M.N. ................................. 51

To refer a patient for a consult, call:

503 494-4567 or 800 245-6478 toll-free, or fax 503 346-6854.
### PSYCHIATRY

<table>
<thead>
<tr>
<th>Name</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whitney Black, M.D.</td>
<td>26</td>
</tr>
<tr>
<td>Neisha D’Souza, M.D.</td>
<td>30</td>
</tr>
<tr>
<td>Esther Freeman, Psy.D.</td>
<td>33</td>
</tr>
<tr>
<td>James Hancey, M.D.</td>
<td>34</td>
</tr>
<tr>
<td>George Keepers, M.D.</td>
<td>36</td>
</tr>
<tr>
<td>Amy Mee-Ran Kobus, Ph.D.</td>
<td>37</td>
</tr>
<tr>
<td>Paul Leung, M.D.</td>
<td>38</td>
</tr>
<tr>
<td>David Mansoor, M.D.</td>
<td>39</td>
</tr>
<tr>
<td>Leeza Maron, Ph.D.</td>
<td>39</td>
</tr>
<tr>
<td>Dmitriy Rakhlin, M.N., P.M.H.N.P.-B.C.</td>
<td>44</td>
</tr>
<tr>
<td>Sara Walker, Ph.D.</td>
<td>49</td>
</tr>
</tbody>
</table>

### SLEEP DISORDERS

<table>
<thead>
<tr>
<th>Name</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gopal Allada, M.D.</td>
<td>24</td>
</tr>
<tr>
<td>Chad Hagen, M.D.</td>
<td>34</td>
</tr>
<tr>
<td>Kim Hutchison, M.D.</td>
<td>35</td>
</tr>
<tr>
<td>Akram Khan, M.D.</td>
<td>37</td>
</tr>
<tr>
<td>Asha Singh, M.D.</td>
<td>46</td>
</tr>
</tbody>
</table>

### SPINE

<table>
<thead>
<tr>
<th>Name</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Joanna K. Adams, M.S., P.A.-C.</td>
<td>24</td>
</tr>
<tr>
<td>Micah Bates, M.S., P.A.-C.</td>
<td>25</td>
</tr>
<tr>
<td>Kara L. Berent, M.S., P.A.-C.</td>
<td>25</td>
</tr>
<tr>
<td>Hans Carlson, M.D.</td>
<td>27</td>
</tr>
<tr>
<td>Nels Carlson, M.D.</td>
<td>28</td>
</tr>
<tr>
<td>Jason Chang, M.D.</td>
<td>29</td>
</tr>
<tr>
<td>Grace Chen, M.D.</td>
<td>29</td>
</tr>
<tr>
<td>Caitlin DeDeaux, M.S., P.A.-C.</td>
<td>30</td>
</tr>
<tr>
<td>Tannia Flemming, P.A.-C.</td>
<td>32</td>
</tr>
<tr>
<td>Robert Hart, M.D.</td>
<td>34</td>
</tr>
<tr>
<td>Jayme Hiratzka, M.D.</td>
<td>35</td>
</tr>
<tr>
<td>Clifford Lin, M.D., M.A.Sc, F.R.C.S. (C).</td>
<td>39</td>
</tr>
<tr>
<td>Paolo Punsalan, M.D.</td>
<td>43</td>
</tr>
<tr>
<td>Donald Ross, M.D.</td>
<td>45</td>
</tr>
<tr>
<td>David Sibell, M.D.</td>
<td>45</td>
</tr>
<tr>
<td>Khoi D. Than, M.D.</td>
<td>47</td>
</tr>
<tr>
<td>Jung Yoo, M.D.</td>
<td>51</td>
</tr>
</tbody>
</table>
Aging, Alzheimer’s Disease and Dementia

In Oregon, more than 76,000 adults have Alzheimer’s disease or a related disorder. These types of dementias are especially common with increasing age. Up to half of octogenarians — the fastest-growing segment of the population — will develop cognitive impairment or dementia.

The Layton Aging and Alzheimer’s Disease Center at OHSU is dedicated to providing an integrated program of diagnosis, treatment and research. As one of only 29 Alzheimer’s Disease Centers for research in the U.S., a designation bestowed by the National Institute on Aging, the center is truly one of a kind in Oregon.

Staff members are focused on research aimed at detecting and preventing cognitive decline at its earliest stages, even prior to developing symptoms. At the same time, research directed toward managing symptoms of dementia in those already affected is also an important focus. Accordingly, priority is placed on patients participating in clinical trials.

Services offered by the team include:

- Assessment for Alzheimer’s disease and dementia.
- Experts experienced in initial evaluations.
- Second opinions.
- Clinical treatment trials for Alzheimer’s disease.

**Clinic location:**
OHSU Center for Health & Healing, 8th Floor
3303 S.W. Bond Ave.
Portland, OR 97239

**Clinic providers:**
Karen Dellinger, M.D. …………………… 30
Deniz Erten-Lyons, M.D. ………………. 32
Jeffrey Kaye, M.D. …………………….. 36
Barry Oken, M.D. ……………………… 42
Lisa Silbert, M.D. …………………….. 45
Amyotrophic Lateral Sclerosis (ALS) and Neuromuscular

The OHSU ALS multidisciplinary clinic coordinates appointments and disease management for patients with ALS and other motor neuron diseases. Services include medical, physical, occupational, swallowing and speech therapies.

Additional services provided include:

- Treatment for amyotrophic lateral sclerosis (Lou Gehrig's disease).
- Focus on relief of symptoms, such as muscle twitching, cramps and sialorrhea.
- Opportunities to enroll in clinical trials.

The neuromuscular team operates under the Neuromuscular Disease Center at OHSU, which provides diagnostic evaluations, specialty care services and electrodiagnostic studies for patients with disorders of the peripheral nerve, neuromuscular junction and muscle.

We treat:

- Inflammatory myopathies (such as polymyositis, dermatomyositis and inclusion body myositis)
- Mitochondrial myopathies
- Metabolic myopathies (such as Pompe, Debrancher and McArdle's diseases)
- Muscular dystrophies (FSH, Duchenne, Becker, limb-girdle and oculopharyngeal)
- Myasthenia gravis and Lambert-Eaton syndrome
- Myotonic dystrophies
- Polyneuropathies (hereditary, inflammatory, metabolic, toxic and others)
- Spinal muscular atrophy
- Plexopathies, mononeuropathies and polyradiculopathies
- Myasthenia gravis and Lambert-Eaton syndrome
- Myotonic dystrophies
- Polyneuropathies (hereditary, inflammatory, metabolic, toxic and others)
- Spinal muscular atrophy
- Plexopathies, mononeuropathies and polyradiculopathies

We also perform in-office open muscle biopsies. Additional services include nerve conduction studies and electromyography, including single-fiber EMG, autonomic function testing and skin biopsies to assess for small fiber/autonomic neuropathy.

Clinic location:
OHSU Center for Health & Healing, 8th Floor
3303 S.W. Bond Ave.
Portland, OR 97239

Clinic providers:
Chafic Karam, M.D. .......................... 37
Brain and Central Nervous System

The Neuro-Oncology and Skull Base Neurosurgery Program includes neurosurgical therapies for skull base tumors, acoustic neuromas and vascular lesions (aneurysms, arteriovenous malformations).

Our multidisciplinary team is comprised of specialists from the following areas:

- Endocrinology
- Endovascular neurosurgery
- Head and neck surgery
- Neuro-ophthalmology
- Neuro-otology
- Neurological surgery
- Neuroradiology
- Otolaryngology (ear, nose and throat)

Frequent collaborators also include specialists from the following:

- Audiology and physical medicine
- Medical oncology
- Neurology
- Neuropathology
- Neurophysiology
- Occupational therapy
- Ophthalmology
- Physical therapy
- Plastic surgery
- Speech therapy
- Radiation oncology
- Rehabilitation

Clinic location:

OHSU Center for Health & Healing, 8th Floor
3303 S.W. Bond Ave.
Portland, OR 97239

Clinic providers:

Prakash Ambady, M.D. ......................... 24
Peter Andersen, M.D., F.A.C.S. ............. 24
Justin Cetas, M.D., Ph.D. .................... 28
Jeremy Ciporen, M.D. ......................... 29
Aclan Dogan, M.D. .......................... 31
Julie Falardeau, M.D. ......................... 32
Maria Fleseriu, M.D., F.A.C.E. ............. 33
Christine M. Li, PA-C., M.P.A.P. .......... 38
Edward Neuwelt, M.D. ...................... 41

Anh Nguyen-Huynh, M.D. .................. 41
Dara S. Ono, M.S., PA-C. ................... 42
Ahmed Raslan, M.D. ......................... 44
Janette K. Remling, M.S., PA-C. .......... 44
Nathan Sautter, M.D. ....................... 45
Timothy Smith, M.D., M.P.H., F.A.C.S. ... 46
Katie Thompson, PA-C., M.P.T. .......... 47
Frank Warren, M.D. ........................ 49
Chris Yedinak, D.N.P., F.N.P.-B.C., M.N. 51

To refer a patient for a consult, call:

503 494-4567 or 800 245-6478 toll-free, or fax 503 346-6854.
Cerebrovascular Disease/Stroke

The OHSU Stroke Center was the first comprehensive stroke center in Oregon designated by The Joint Commission and offers a full range of services including advanced therapies for strokes and aneurysms. The center offers a specialized team that is available 24/7 for the treatment of acute strokes, led by stroke neurologists working in collaboration with neurological surgery, interventional neuroradiology, neurocritical care and vascular surgery.

Surgical and interventional therapies include carotid stenting and endarterectomy, aneurysm coiling and clipping, arteriovenous malformation (AVM) embolization and resection, intra-arterial thrombolysis and bypass surgery. Risk evaluations and innovative stroke prevention treatments are also available for patients who may be at increased risk for stroke. The OHSU Telemedicine Network provides patients throughout Oregon and southwest Washington immediate access to stroke neurologists 24/7.

Clinic location:
3181 S.W. Sam Jackson Park Rd.
Hatfield Research Center, 13th Floor
Portland, OR 97239

Clinic providers:
Noah Beadell, M.D. ......................... 25
Hormozd Bozorgchami, M.D. ............. 26
Justin Cetas, M.D., Ph.D. ................. 28
Wayne Clark, M.D. .......................... 30
Aclan Dogan, M.D. .......................... 31
Helmi Lutsep, M.D. .......................... 39
Gary Nesbit, M.D. ............................ 41
Dara Ono, M.S., PA-C. ..................... 42
Ryan Priest, M.D. ............................ 43
Janette K. Remling, M.S., PA-C.......... 44

For acute stroke patient transfers to OHSU, please call the Transfer Center at 503 494-7000.
Epilepsy

The OHSU Comprehensive Epilepsy Center is a multidisciplinary group of physicians, nurses, psychologists and neuroscientists dedicated to the evaluation and treatment of epilepsy. As the only university-based epilepsy program in Oregon, the center has become a state and national resource, providing comprehensive clinical care, innovative research and consultation to referring physicians throughout the region.

The center is recognized by the National Association of Epilepsy Centers as the only Level 4 epilepsy center in Oregon. Level 4 epilepsy centers have the professional expertise and facilities to provide the highest level of medical and surgical evaluation and treatment for patients with complex epilepsy.

Services offered include:

- Epilepsy Monitoring Unit.
- Expert consultations regarding seizures or spells resembling seizures.
- Innovative new treatments such as resective epilepsy surgery, the first FDA-approved closed-loop responsive brain stimulation system, in which OHSU was a key enroller for the clinical trial.
- Medical and neurosurgical treatment options.

Clinic location:
OHSU Center for Health & Healing, 8th Floor
3303 S.W. Bond Ave.
Portland, OR 97239

Clinic providers:
Kim Burchiel, M.D., F.A.C.S. ............... 27
James Cereghino, M.D. ................... 28
Lia Ernst, M.D. ............................. 32
Antonia Gragg, M.S., P.A.-C. ............... 33
Justin Meuse, M.D. ........................ 40
Paul Motika, M.D. .......................... 40
Ahmed Raslan, M.D. .................. 44
W. Brewster Smith, M.D. .............. 46
David Spencer, M.D. .......................... 47
Katie Thompson, P.A.-C., M.P.T. ............ 47
Victoria Wong, M.D. .................. 50

To refer a patient for a consult, call:
503 494-4567 or 800 245-6478 toll-free, or fax 503 346-6854.
Facial Pain

OHSU’s Facial Pain Program offers hope for people with facial pain and disorders such as trigeminal neuralgia (tic douloureux). Over the past five years, the program has successfully treated more than 1,000 patients with this disorder.

The program offers the best available medical and surgical techniques, including:

- Microvascular decompression (MVD).
- Radiofrequency gangliolysis/neurolysis.
- Subcutaneous trigeminal nerve branch stimulation.
- Trigeminal rhizotomy.

The program also has developed a unique computer survey that allows patients to learn if they may be suffering with trigeminal neuralgia. To access the questionnaire, visit www.ohsu.edu/facialpain.

Clinic location:
OHSU Center for Health & Healing, 8th Floor
3303 S.W. Bond Ave.
Portland, OR 97239

Clinic providers:
Kim Burchiel, M.D., F.A.C.S. ............... 27
Antonia Gragg, M.S., P.A.-C. ............... 33
Ahmed Raslan, M.D. ...................... 44
Katie Thompson, P.A.-C., M.P.T. ........... 48
Multiple Sclerosis

The OHSU Multiple Sclerosis Center is one of the nation’s premier MS research and treatment centers dedicated to helping people with MS lead better lives through state-of-the-art medical research, the latest treatments and a full range of services. The center is a member of the Nancy Davis Center Without Walls, a network of the nation’s top seven MS institutions and the Consortium of MS Centers.

Our team of neurologists, nurses and research staff works closely with physical, occupational and speech therapists, along with other specialists experienced in treating MS patients. We often join forces with experts from around the world to find new cures and improve the quality of patients’ lives.

The OHSU Multiple Sclerosis Center provides:
- One of the largest treatment clinics in the Pacific Northwest.
- Opportunities to participate in internationally recognized research.
- Experts in the diagnosis and treatment of MS.
- Rehabilitation services.

Clinic location:
OHSU Center for Health & Healing, 8th Floor
3303 S.W. Bond Ave.
Portland, OR 97239

Clinic providers:
Dennis Bourdette, M.D., F.A.A.N., F.A.N.A.  26
Michelle Cameron, M.D. ..................  27
Edward Kim, M.D. .........................  37
Michele Mass, M.D. .......................  40
Rebecca Spain, M.D., M.S.P.H. ............  47
Ruth Whitham, M.D. ......................  49
Vijayshree Yadav, M.D., M.C.R., F.A.N.A. ...  50
Nerve

The OHSU Nerve Center provides diagnosis and treatment for most types of nerve injuries, nerve disorders and diseases. We offer comprehensive clinical care, innovative research and treatment options for patients, and consultation to physicians throughout the region.

Our goal is to collaborate closely with you, partnering for the best possible patient care and outcomes. Your patients with nerve conditions will benefit from our comprehensive, multidisciplinary approach. Each patient is unique and will receive an individualized care plan with input from the team.

Our team includes specialists in:

- Neurodiagnostics.
- Neurology.
- Neurosurgery.
- Orthopaedics.
- Pain management.
- Physical medicine.
- Plastic surgery.
- Rehabilitation.

By focusing on early intervention, we can help maximize patient outcomes, allowing for improved function and minimized pain.

Clinic locations:

OHSU Center for Health & Healing, 8th and 12th Floors
3303 S.W. Bond Ave.
Portland, OR 97239

Cornell West
1500 N.W. Bethany Blvd., Suite 195
Beaverton, OR 97006

Clinic providers:

Kim Burchiel, M.D., F.A.C.S. ............... 27
Hans Carlson, M.D. ....................... 27
Nels Carlson, M.D. ....................... 28
Antonia Gragg, M.S., PA-C.................. 33
Chafic Karam, M.D. ..................... 37
Adam Mirarchi, M.D. ..................... 40
Omar Nazir, M.D. ......................... 41
Robert Orfaly, M.D. ..................... 42
Joel Solomon, M.D. ..................... 46
Neurology – Comprehensive Adult

The Comprehensive Adult Neurology Clinic cares for patients with diseases of the brain, spinal cord, nerves and muscles. We also provide sleep medicine services, and can provide initial assessment and streamline patients’ future appointments with other neurology or neurosurgery specialists. The Comprehensive Adult Neurology Clinic is a good place to start if you are unsure where to refer your patient.

Clinic location:
OHSU Center for Health & Healing, 8th Floor
3303 S.W. Bond Ave,
Portland, OR 97239

Clinic providers:
Karen Dellinger, M.D. .................. 31
Alexandra Dimitrova, M.D., M.A. ....... 31
Kim Hutchison, M.D. .................. 35
Justin Meuse, M.D. .................... 40
Juliette Preston, M.D. ................. 43
Julie Solomon, A.R.N.P. ............... 47
Neurosciences Critical Care and Neurohospitalist Program

Our Neurosciences Intensive Care Unit is the cornerstone of a well-integrated and cohesive program for the treatment of critically ill patients with neurological diseases. We are the only Neurosciences ICU in Oregon to offer 24/7 coverage by nationally recognized neurocritical care specialists. Additionally, we offer a neurohospitalist program that provides specialized neurologic care for inpatients that do not require the ICU.

These specialists include:

- Case managers.
- Cerebrovascular and functional neurosurgeons and interventional neuroradiologists.
- Intensivists specializing in neurocritical care.
- Neuro-oncologists.
- Neurology hospitalists.
- Nurse practitioners and physician assistants specializing in neurocritical care.
- Nutritionists.
- Palliative care team.
- Pharmacists.
- Physical and occupational therapists.
- Respiratory therapists.
- Social workers.
- Specialized neurology consult services (including epilepsy, neuromuscular disease, and neuroimmunology).
- Stroke/vascular neurologists.

The program provides exceptional critical care nurses with training and expertise in neurocritical care.

Our 24/7 capability for advanced neuromonitoring includes:

- Video electroencephalography (EEG).
- Intracranial pressure monitoring.

Clinic providers:

Noah Beadell, M.D. ......................... 25
Ansgar Brambrink, M.D., Ph.D. ............ 26
Julia Durrant, M.D. .......................... 31
Mindy French, A.C.N.P.-B.C. ............... 33
Holly Hinson, M.D. .......................... 35
Craig Hutto, A.C.N.P. ........................ 36
Katharine J. Keranen, PA-C. ............... 37
Ines Koerner, M.D., Ph.D. ................. 38
Miriam Treggiari, M.D., Ph.D. ............ 48
Tarvez Tucker, M.D. ....................... 48
Kamila Vagnerova, M.D. ................... 49
Ed Whorrall, P.A.-C. ....................... 50
Ann Wood, M.S., P.A.-C. ................. 50
Parkinson’s Disease and Movement Disorders

The OHSU Parkinson Center and Movement Disorders Program is the largest clinic of its kind in the Pacific Northwest and is a National Parkinson Foundation Center of Excellence.

Services provided include:

- Chemodenervation with botulinum toxin by movement disorder-trained physicians to treat dystonia, spasticity, sialorrhea and other movement disorders.
- Consultations to help explain and treat neurological symptoms.
- Innovative and minimally invasive procedures.
- Neurosurgical interventions for Parkinson’s disease, tremor and dystonia under general anesthesia using an innovative intraoperative targeting system (e.g., deep brain stimulation).
- Second opinions regarding an existing diagnosis (Parkinson’s disease, essential tremor, dystonia Huntington’s disease, ataxia and others).

Clinic location:
OHSU Center for Health & Healing, 8th Floor
3303 S.W. Bond Ave.
Portland, OR 97239

Clinic providers:

Shannon Anderson, M.P.A.S., PA-C ........ 25
Matthew Brodsky, M.D. .................. 27
Kim Burchiel, M.D., F.A.C.S. ............... 27
Julie Carter, R.N., A.N.P. .................. 28
Kathryn Chung, M.D. ..................... 29
Marian Dale, M.D. ......................... 30
Lia Ernst, M.D. ......................... 32
Antonia Gragg, M.S., PA-C ............... 33

Amie Hiller, M.D. ......................... 34
Jeff Kraakevik, M.D. ...................... 38
John Nutt, M.D. ......................... 42
Ronald Pfeiffer, M.D. ..................... 43
Joseph Quinn, M.D. ...................... 44
Ahmed Raslan, M.D. ...................... 44
Katie Thompson, PA-C., M.P.T. .......... 47
Vivek Unni, M.D., Ph.D. .............. 48
Pituitary

The OHSU Northwest Pituitary Center is a leader in pituitary care, performing more pituitary diagnoses, second opinions and procedures of all types and complexities than any other medical center in the region. Each year, the center treats more than 500 new patients from across the country. Treatment options include medical therapy, surgery and radiation. The center also provides patients with the option of enrollment in a large number of clinical trials.

Neuroendocrine

Services include evaluations and individualized treatments for:

- Functional tumors (prolactinomas, Cushing’s syndrome and acromegaly).
- Nonfunctional lesions (adenomas, craniopharyngiomas, meningiomas, gliomas, chordomas and Rathke’s cleft cysts).
- Pituitary hormone deficiencies affecting the thyroid, adrenal glands, water balance, reproductive organs and growth hormone (GH) secretion.

Neurosurgery

Our multidisciplinary team evaluates patients with either known lesions of the pituitary gland or other brain tumors in the adjacent area. We employ the latest therapeutic approaches, which include:

- Microscopic transsphenoidal surgery.
- Minimally invasive endoscopic surgery.
- Open skull base surgery.

Clinic location:

OHSU Center for Health & Healing, 8th Floor
3303 S.W. Bond Ave.
Portland, OR 97239

Clinic providers:

Peter Andersen, M.D., F.A.C.E. ............ 24
Justin Cetas, M.D., Ph.D. ................. 28
Jeremy N. Ciporen, M.D. ............... 29
Aclan Dogan, M.D. ..................... 31
Julie Falardeau, M.D. .................... 32
Maria Fleseriu, M.D., F.A.C.E. ............ 33
William Hills, M.D., O.D. ............... 35
Psychiatry

We provide a range of services to children, adolescents and adult patients, treating people with various psychiatric conditions, including sleep disturbances. Our specialists care for people of every culture, background and gender identity.

The psychiatry team members who treat patients are researchers, teachers, community volunteers and most importantly, doctors and therapists with the advanced knowledge and skill to treat all types of mental and emotional conditions.

- **Adult Psychiatry Clinic** – Provides services to adult patients including comprehensive psychiatric evaluations, individual psychotherapy, medication management, coordination with primary care physicians, consultations to other providers and referrals for hospitalization.

  **Clinic location:**
  Sam Jackson Hall
  6th Floor, via elevator C
  3181 S.W. Sam Jackson Park Rd.
  Portland, OR 97239

- **Child Psychiatry Clinic** – Provides consult services to children and adolescents (and their families), including comprehensive psychiatric evaluations, individual psychotherapy, medication management, coordination with primary care physicians and consultations to other providers as well as referrals for hospitalization.

  **Clinic location:**
  Doernbecher Children’s Hospital
  7th Floor, under the butterfly
  3181 S.W. Sam Jackson Park Rd.
  Portland, OR 97239

- **Avel Gordly Center for Healing** – A multicultural mental health center focused on the needs of the diverse communities of Oregon. This center offers culturally based services, including African-American services and lesbian, gay, bisexual and transgender (LGBT) counseling.

  **Clinic location:**
  621 S.W. Alder St., Suite 520
  Portland, OR 97205

- **Intercultural Psychiatric Program** – Provides culturally sensitive mental health services for immigrant, refugee and ethnic communities with an emphasis on individuals and families whose first language is not English.

  **Clinic location:**
  3633 S.E. 35th Pl.
  Portland, OR 97202

**Clinic providers:**

<table>
<thead>
<tr>
<th>Name</th>
<th>Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whitney Black, M.D.</td>
<td>26</td>
</tr>
<tr>
<td>Neisha D’Souza, M.D.</td>
<td>30</td>
</tr>
<tr>
<td>Esther Freeman, Psy.D.</td>
<td>33</td>
</tr>
<tr>
<td>James Hancey, M.D.</td>
<td>34</td>
</tr>
<tr>
<td>George Keepers, M.D.</td>
<td>36</td>
</tr>
<tr>
<td>Amy Mee-Ran Kobus, Ph.D.</td>
<td>37</td>
</tr>
<tr>
<td>Paul Leung, M.D.</td>
<td>38</td>
</tr>
<tr>
<td>David Mansoor, M.D.</td>
<td>39</td>
</tr>
<tr>
<td>Leeza Maron, Ph.D.</td>
<td>39</td>
</tr>
<tr>
<td>Dmitriy Rakhlin, M.N., P.M.H.M.H.P.-B.C.</td>
<td>44</td>
</tr>
<tr>
<td>Sara Walker, Ph.D.</td>
<td>49</td>
</tr>
</tbody>
</table>
Sleep Disorders

The OHSU Sleep Disorders Program is the only university-based sleep center in the region.

We assess and treat patients for:
- Narcolepsy.
- NREM parasomnias.
- REM behavior disorder.
- Restless leg disorder.
- Sleep apnea.
- Sleep-related hypoventilation.

Our board-certified sleep medicine physicians collaborate with oral maxillofacial surgery, rhinology, otolaryngology and dentistry specialists to ensure patients have access to all potential sleep apnea treatments. We provide consultation for treatment-refractory insomnia and collaborate with psychology Ph.D.s and nurse practitioners who provide cognitive behavioral treatment for insomnia.

Our six-bed sleep laboratory is located in the Residence Inn at Riverplace, about a half mile north of the Center for Health & Healing, and provides comprehensive sleep testing services including overnight attended polysomnography, unattended home apnea testing, actigraphy and daytime assessments of hypersomnia or alertness.

Clinic location:
Hatfield Research Center, 13th Floor
3181 S.W. Sam Jackson Park Rd.
Portland, OR 97239

Sleep lab location:
2115 S.W. River Parkway, #528
Portland, OR 97201

Clinic providers:
Gopal Allada, M.D. ....................... 24
Chad Hagen, M.D. ....................... 34
Kim Hutchison, M.D. .................... 35
Akram Khan, M.D. ...................... 37
Asha Singh, M.D. ....................... 46
Spine

At the OHSU Spine Center, our multidisciplinary team of spine experts can partner with you to provide the broadest range of advanced treatments and therapies for back pain and spinal problems for your patients. No other program in the Pacific Northwest has more clinical and surgical services.

Our team specializes in:
- Cervical myelopathy.
- Cervical radiculopathy.
- Degenerative spine.
- Lumbar disk herniation.
- Scoliosis.
- Spinal column tumors.
- Spinal deformities.
- Spinal stenosis.
- Spine trauma.
- Spine reconstruction.
- Spondylolisthesis.

**Clinic locations:**

**Cornell West**
1500 N.W. Bethany Blvd., Suite 195
Beaverton, OR 97006

**Hermiston***
620 N.W. 11th St., Suite 201
Hermiston, OR 97838

**Longview**
625 9th Ave., Suite 210
Longview, WA 98632

**Clinic providers:**

Joanna K. Adams, M.S., P.A.-C. ............ 24
Micah Bates, M.S., P.A.-C. ............. 25
Kara L. Berent, M.S., P.A.-C. ............ 25
Hans Carlson, M.D. ..................... 27
Nels Carlson, M.D. ................. 28
Jason Chang, M.D. ..................... 29
Grace Chen, M.D. ..................... 29
Caitlin DeDeaux, M.S., P.A.-C. ......... 30
Tannia Flemming, P.A.-C. ............ 32

Robert Hart, M.D. .................... 34
Jayme Hiratzka, M.D. .............. 35
Clifford Lin, M.D., M.A.Sc, F.R.C.S. (C) .... 39
Paolo Punsalan, M.D. .............. 43
Donald Ross, M.D. ............. 45
David Sibell, M.D. ............. 45
Khoi D. Than, M.D. ............. 47
Jung Yoo, M.D. .............. 51

*Telemedicine location.
Provider profiles

Joanna K. Adams, P.A.-C.
Patient care emphasis: Neurosurgery
Specialty: Neurosurgery
P.A.-C.: Pacific University, Forest Grove, Ore.
Academic appointment: Instructor

Gopal Allada, M.D.
Patient care emphasis: Sleep medicine, sleep disorders
Specialty: Sleep medicine
M.D.: University of Michigan, Ann Arbor, Mich.
Residency: Internal medicine – University of Wisconsin, Madison, Wis.
Fellowships: Sleep disorders medicine; pulmonary and critical care medicine – Oregon Health & Science University, Portland, Ore.
Board certification: American Board of Internal Medicine
Academic appointment: Assistant professor

Prakash Ambady, M.D.
Patient care emphasis: Neuro-oncology
Research interests: Tumor imaging, early-phase clinical trials, immunotherapy
Specialty: Neuro-oncology
M.D.: Pondicherry University, Vinayaka Mission's Medical College, Pondicherry, India
Fellowships: Neuro-oncology – Johns Hopkins University School of Medicine, Baltimore, Md., and National Cancer Institutes of Health, Bethesda, Md.
Board certifications: American Board of Psychiatry and Neurology; United Council for Neurologic Subspecialties in Neuro-oncology (board-eligible)
Academic appointment: Assistant professor

Peter Andersen, M.D., F.A.C.S.
Patient care emphasis: Malignant and benign tumors of the head, neck, throat, mouth, larynx, thyroid gland and skin, salivary problems, minimally invasive treatments for salivary infections and stones, sialoendoscopy, endoscopic surgery for tumors of the nasal cavity, sinuses and pituitary gland, melanoma, transoral robotic surgery (TORS) for oropharyngeal tumors
Research interests: Outcomes of treatment for head and neck cancer
Specialty: Head and neck surgery/otolaryngology
M.D.: Washington University School of Medicine, St. Louis, Mo.
Residencies: Otolaryngology; head and neck surgery – Oregon Health & Science University, Portland, Ore.
Fellowships: Head and neck surgery; oncology – Memorial Sloan-Kettering Cancer Center, New York, N.Y.
Board certification: American Board of Otolaryngology
Academic appointment: Professor

To refer a patient for a consult, call:

503 494-4567 or 800 245-6478 toll-free, or fax 503 346-6854.
Shannon Anderson, M.P.A.S., P.A.-C.
Patient care emphasis: Caring for patients with movement disorders
Research interests: Surgical and pharmacological therapies for movement disorders, surgical outcomes, non-motor symptoms in Parkinson’s disease
Specialty: Neurology
M.P.A.S.: Oregon Health & Science University, Portland, Ore.
Board certification: National Commission on Certification of Physician Assistants
Academic and clinical appointments: Assistant professor; clinical coordinator, Deep Brain Stimulation Program

Micah Bates, M.S., P.A.-C.
Patient care emphasis: Neurological spine
Specialty: Neurological spine
P.A.-C.: University of St. Francis, Joliet, Ill.
Board certification: National Commission on Certification of Physician Assistants
Academic appointment: Instructor

Noah Beadell, M.D.
Patient care emphasis: Diseases and disorders of the brain, spinal cord and nerves; patients hospitalized with neurological disease and patients with other diseases that affect the nervous system
Specialty: Neurology
M.D.: University of Nebraska Medical Center, Omaha, Neb.
Residency: Neurology – Oregon Health & Science University, Portland, Ore.
Fellowship: Cerebrovascular neurology – Oregon Health & Science University, Portland, Ore.
Board certification: American Board of Psychiatry and Neurology
Academic and clinical appointments: Assistant professor; director, Neurohospitalist Program

Kara L. Berent, M.S., P.A.-C.
Specialty: Orthopaedic spine
M.S.: Pacific University, Forest Grove, Ore.
P.A.-C.: Pacific University, School of Physician Assistants, Forest Grove, Ore.
Board certification: National Commission on Certification of Physician Assistants
Academic appointment: Instructor
Whitney Black, M.D.

Patient care emphasis: Adult outpatient psychiatry with special focus on mood disorders, anxiety disorders and adult development
Research interest: Quality improvement in psychiatric care
Specialty: Psychiatry
M.D.: University of Missouri, Kansas City School of Medicine, Kansas City, Mo.
Residency: Adult psychiatry – Oregon Health & Science University, Portland, Ore.
Board certification: American Board of Psychiatry and Neurology (board-eligible)
Academic appointment: Assistant professor

Dennis Bourdette, M.D., F.A.A.N., F.A.N.A.

Patient care emphasis: Multiple sclerosis, neuroimmunology
Research interests: Multiple sclerosis, neuroimmunology
Specialty: Neurology
M.D.: University of California at Davis Medical School, Davis, Calif.
Residencies: Medicine – Santa Clara Valley Medical Center, San Jose, Calif.; neurology – Oregon Health & Science University, Portland, Ore.
Fellowship: Neuroimmunology – Portland VA Medical Center, Portland, Ore.
Board certification: American Board of Psychiatry and Neurology
Academic and clinical appointments: Roy & Eulalia Swank Family Research Professor; chair, Department of Neurology; executive director, Multiple Sclerosis and Neuroimmunology Center

Hormozd Bozorgchami, M.D.

Patient care emphasis: Ischemic stroke, cerebral atheromatous disease, carotid artery stenosis, intracranial stenosis, cerebral hemorrhage, cerebral aneurysms
Research interests: Gender differences in stroke and endovascular stroke therapies
Specialties: Neurology, interventional neuroradiology
M.D.: New York Medical College, Valhalla, N.Y.
Residency: Neurology – University of California, Irvine, Calif.
Fellowships: Vascular neurology and interventional neuroradiology – Oregon Health & Science University, Portland, Ore.
Board certification: American Board of Psychiatry and Neurology
Academic appointment: Assistant professor

Ansgar Brambrink, M.D., Ph.D.

Patient care emphasis: Anesthesia and critical care for patients with disease of the nervous system; airway management, thoracic anesthesia
Research interests: Neurotoxic effects of anesthetics, post-stroke repair and functional recovery
Specialty: Neuroanesthesia, neurocritical care medicine
M.D.: Westfalische Wilhelms-University, Muenster, Germany
Residency: Johannes Gutenberg University, Mainz, Germany
Fellowships: Clinical anesthesiology and experimental research – Johns Hopkins Medical Institutions, Baltimore, Md.; specialized intensive care medicine – University Hospital, Johannes Gutenberg University, Mainz, Germany; emergency medicine – University Hospital, Johannes Gutenberg University, Mainz, Germany
Board certifications: German Board of Anesthesiology; German Board of Specialized Intensive Care Medicine; German Board of Emergency Medicine
Academic and clinical appointments: Professor; vice-chair, Faculty Development, Department of Anesthesiology and Perioperative Medicine

To refer a patient for a consult, call:

503 494-4567 or 800 245-6478 toll-free, or fax 503 346-6854.
Matthew Brodsky, M.D.

**Patient care emphasis:** Parkinson's disease, dystonia, REM sleep behavior disorder, deep brain stimulation

**Research interests:** Preclinical biomarkers of Parkinson's disease, neuroprotective strategies for Parkinson’s disease, new treatments for dystonia

**Specialty:** Neurology

**M.D.:** Mount Sinai School of Medicine, New York, N.Y.

**Residency:** Neurology – Mount Sinai Hospital, New York, N.Y.

**Fellowship:** Movement disorders – Mount Sinai Hospital, New York, N.Y.

**Board certification:** American Board of Psychiatry and Neurology

**Academic and clinical appointments:** Associate professor; medical director, Deep Brain Stimulation Program; director, Neurotoxin Injection Program

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

**Patient care emphasis:** Functional neurosurgery, pain surgery, epilepsy surgery, stereotactic surgery, movement disorder surgery, radiosurgery, peripheral nerve surgery

**Research interests:** Physiology of nociception and neuropathic pains including trigeminal neuralgia, neurosurgical treatment of movement disorders, image-guided neurosurgery

**Specialty:** Neurosurgery

**M.D.:** University of California, San Diego, Calif.

**Residency:** Neurosurgery – University of Washington, Seattle, Wash.

**Board certifications:** American Board of Neurological Surgery; American Board of Pain Medicine

**Academic and clinical appointments:** Professor; chair emeritus, Department of Neurological Surgery

Michelle Cameron, M.D.

**Patient care emphasis:** Multiple sclerosis

**Research interest:** Multiple sclerosis

**Specialty:** Neurology

**M.D.:** University of California, San Francisco, Calif.

**Residencies:** Internal medicine – Kaiser Medical Center, Oakland, Calif.; neurology – Oregon Health & Science University, Portland, Ore.

**Fellowship:** Multiple sclerosis – Oregon Health & Science University, Portland, Ore.

**Board certification:** American Board of Psychiatry and Neurology

**Academic appointment:** Assistant professor

Hans Carlson, M.D.

**Patient care emphasis:** Nonsurgical management of spinal conditions, sports medicine, electrodiagnostics

**Research interests:** Spinal stenosis, cervical stenosis, lumbar stenosis, relationship of imaging abnormalities to functional impairments

**Specialty:** Orthopaedics and rehabilitation

**M.D.:** Oregon Health & Science University, Portland, Ore.

**Residency:** Physical medicine and rehabilitation – Harvard Medical School/Spaulding Rehabilitation Hospital, Boston, Mass.

**Fellowship:** Sports medicine – University of Illinois, Chicago, Ill.

**Board certification:** American Board of Physical Medicine and Rehabilitation

**Academic appointment:** Associate professor
Nels Carlson, M.D.

**Patient care emphasis:** Nonsurgical management of spinal conditions, sports medicine, electrodiagnostics

**Research interests:** Spinal stenosis, cervical stenosis, lumbar stenosis and relationship of imaging abnormalities to functional impairments, degenerative spine, spine arthritis, exercise-based management of spine pain

**Specialty:** Orthopaedics and rehabilitation

**M.D.:** Oregon Health & Science University, Portland, Ore.

**Residency:** Physical medicine and rehabilitation – Harvard Medical School/Spaulding Rehabilitation Hospital, Boston, Mass.

**Fellowship:** Neurophysiology – Brigham & Women’s Hospital, Boston, Mass.

**Board certification:** American Board of Physical Medicine and Rehabilitation

**Academic appointment:** Associate professor

Julie Carter, R.N., M.S., A.N.P.

**Patient care emphasis:** Movement disorders, educational outreach, comprehensive care for Parkinson’s disease, palliative care and care of the newly diagnosed

**Research interests:** Neuroprotective and neurorestorative strategies, family caregiving, palliative care for Parkinson’s disease

**Specialty:** Neurology

**A.N.P.:** Oregon Health & Science University, Portland, Ore.

**Academic appointment:** Professor

James Cereghino, M.D.

**Patient care emphasis:** Treatment of seizure disorders and epilepsy

**Research interests:** Clinical trials for epilepsy

**Specialty:** Neurology

**M.D.:** Oregon Health & Sciences University, Portland, Ore.

**Residencies:** Neurology – Good Samaritan Hospital and Medical Center, Portland, Ore.; University of California, San Francisco, Calif.; University of Washington, Seattle, Wash.

**Academic appointment:** Professor

Justin Cetas, M.D., Ph.D.

**Patient care emphasis:** Pituitary, skull base and vascular disorders

**Research interests:** Effects of subarachnoid hemorrhage on the brainstem and central nervous system

**Specialty:** Neurosurgery

**M.D.:** University of Arizona, Tucson, Ariz.

**Ph.D.:** University of Arizona, Tucson, Ariz.

**Residency:** Neurological surgery – Oregon Health & Science University, Portland, Ore.

**Fellowship:** Skull base surgery – Oregon Health & Science University, Portland, Ore.

**Board certification:** American Board of Neurological Surgery

**Academic and clinical appointments:** Assistant professor; chief of neurosurgery, Portland Veterans Medical Center

To refer a patient for a consult, call:

503 494-4567 or 800 245-6478 toll-free, or fax 503 346-6854.
Jason J. Chang, M.D.
Patient care emphasis: Degenerative diseases of the cervical spine
Research interests: Myelopathy, spinal cord tumors
Specialty: Neurosurgery, spine
M.D.: University of Kentucky College of Medicine, Lexington, Ky.
Residency: Neurological surgery – University of Washington, Seattle, Wash.
Fellowship: Complex spine neurosurgery – Washington University, St. Louis, Mo.
Board certification: American Board of Neurological Surgeons (board-eligible)
Academic appointment: Assistant professor

Grace Chen, M.D.
Patient care emphasis: Nonsurgical treatment of back pain and spinal pain not alleviated by surgery
Research interests: Techniques, psychological approaches and physical therapy in non-opioid treatment of chronic back pain
Specialty: Pain management
M.D.: University of Michigan, Ann Arbor, Mich.
Residency: Anesthesiology – Oregon Health & Science University, Portland, Ore.
Fellowship: Pain management – Oregon Health & Science University, Portland, Ore.
Board certification: American Board of Anesthesiology
Academic appointment: Assistant professor

Kathryn Chung, M.D.
Patient care emphasis: Balance and gait disorders, hyperkinetic disorders, Parkinson’s disease
Research interests: Medications that may alter levodopa response in patients with Parkinson’s disease, balance and gait abnormalities in Parkinson’s disease, neuroprotective strategies, pharmacotherapies in tremor, dystonia, tic disorders
Specialty: Neurology
M.D.: University of Alberta, Canada
Residency: Internal medicine – University of Toronto, Canada
Fellowship: Movement disorders – Portland VA Medical Center, Portland, Ore.
Board certification: American Board of Internal Medicine
Academic appointment: Assistant professor

Jeremy N. Ciporen, M.D.
Patient care emphasis: Cerebrovascular and skull base surgery, pituitary tumors, neuro-endoscopy, primary brain tumors and metastatic disease
Specialty: Neurosurgery
M.D.: George Washington School of Medicine, Washington, D.C.
Residencies: Neurosurgery – Emory University School of Medicine, Atlanta, Ga.; otolaryngology – Mount Sinai School of Medicine, New York, N.Y.
Fellowship: Cerebrovascular/skull base – University of Washington Harborview Medical Center, Seattle, Wash.
Board certification: American Board of Neurological Surgery
Academic and clinical appointments: Assistant professor; director, Surgical Neuro-oncology
Wayne Clark, M.D.
Patient care emphasis: Acute treatment of stroke, including the investigation of new potential stroke therapies
Research interests: Inflammatory response in stroke, therapeutic potential of antioxidants
Specialty: Neurology
M.D.: Oregon Health & Science University, Portland, Ore.
Residency: Neurology – University of California, San Diego, Calif.
Fellowship: Stroke – University of California, San Diego, Calif.
Board certification: American Board of Psychiatry and Neurology
Academic and clinical appointments: Professor; director, OHSU Stroke Center

Neisha D’Souza, M.D.
Patient care emphasis: Mental health care for adults
Specialty: Psychiatry
M.D.: University of Texas Medical Branch at Galveston, Galveston, Texas
Residency: Psychiatry – Oregon Health & Science University, Portland, Ore.
Board certification: American Board of Psychiatry and Neurology
Academic appointment: Assistant professor

Marian Dale, M.D.
Patient care emphasis: Parkinson’s disease, atypical parkinsonism and other movement disorders
Specialty: Neurology
M.D.: The Medical University of South Carolina, Charleston, S.C.
Residency: Neurology – University of Maryland Medical Center, Baltimore, Md.
Fellowship: Movement disorders – Oregon Health & Science University, Portland, Ore.
Board certification: American Board of Psychiatry and Neurology
Academic appointment: Assistant professor

Caitlin DeDeaux, M.S., P.A.-C.
Patient care emphasis: Disorders of the central and peripheral nervous system and spinal column in inpatient and outpatient settings
Specialty: Neurosurgery
P.A.-C.: Louisiana State University Shreveport School of Allied Health Professions, Shreveport, La.
Board certification: National Commission on Certification of Physician Assistants
Academic appointment: Instructor

To refer a patient for a consult, call:
503 494-4567 or 800 245-6478 toll-free, or fax 503 346-6854.
Karen Dellinger, M.D.
Patient care emphasis: General and geriatric neurology
Specialty: Neurology
M.D.: Northwestern University, Chicago, Ill.
Residency: Neurology – Oregon Health & Science University, Portland, Ore.
Fellowship: Geriatric neurology – Portland VA Medical Center, Portland, Ore.
Board certification: American Board of Psychiatry and Neurology
Academic appointment: Assistant professor

Alexandra Dimitrova, M.D., M.A.
Patient care emphasis: General neurology, headache and neuropathic pain, acupuncture and integrative treatments
Research interests: Acupuncture, neuropathy, headache and pain
Specialty: Neurology
M.D.: Boston University School of Medicine, Boston, Mass.
M.A.: Boston University School of Medicine, Boston, Mass.
Residency: Neurology – Columbia University/New York Presbyterian Medical Center, New York, N.Y.
Fellowship: T32 CAM research training in neuroscience and stress – Oregon Health & Science University, Portland, Ore.
Board certification: American Board of Psychiatry and Neurology
Academic appointment: Assistant professor

Aclan Dogan, M.D.
Patient care emphasis: Cerebrovascular, interventional neuroradiology, skull base neurosurgery
Specialties: Neurosurgery, interventional neuroradiology
M.D.: Ankara University School of Medicine, Ankara, Turkey
Residencies: Neurological surgery – Ankara University School of Medicine, Ankara, Turkey; Oregon Health & Science University, Portland, Ore.
Fellowships: Cerebrovascular neurosurgery – Nagoya University School of Medicine, Nagoya, Japan; cerebrovascular neurosurgery – Louisiana State University Health Sciences Center, Shreveport, La.; skull base surgery, neurointerventional – Oregon Health & Science University, Portland, Ore.
Board certification: American Board of Neurological Surgery
Academic and clinical appointments: Associate professor; division head, Cerebrovascular and Skull Base Surgery

Julia Durrant, M.D.
Patient care emphasis: Neurocritical care, traumatic brain injury, stroke and hypothermia after cardiac arrest
Research interests: Critical care management of post-anoxic brain injury from cardiac arrest, neurological prognostication
Specialty: Neurointensive care
M.D.: University of Utah School of Medicine, Salt Lake City, Utah
Residency: Combined internal medicine, neurology – Medical College of Wisconsin Affiliated Hospitals, Milwaukee, Wis.
Fellowship: Neurological critical care – University of California, San Francisco, Calif.
Board certification: American Board of Internal Medicine
Academic appointment: Assistant professor
Lia Ernst, M.D.
Patient care emphasis: Comprehensive epilepsy diagnosis and treatment, video EEG monitoring
Specialty: Neurology
M.D.: NYU School of Medicine, New York, N.Y.
Residency: Neurology – NYU School of Medicine, New York, N.Y.
Fellowship: Neurophysiology – NYU School of Medicine, New York, N.Y.
Board certification: American Board of Psychiatry and Neurology
Academic appointment: Assistant professor

Deniz Erten-Lyons, M.D.
Patient care emphasis: Dementia and geriatric neurology
Research interests: Alzheimer’s disease and other dementias, cognitive reserve, genetics of healthy brain aging
Specialty: Neurology
M.D.: Hacettepe University School of Medicine, Ankara, Turkey
Residency: Neurology – Oregon Health & Science University, Portland, Ore.
Fellowship: Dementia and geriatric neurology – Oregon Health & Science University and Portland VA Medical Center, Portland, Ore.
Board certification: American Board of Psychiatry and Neurology
Associate appointment: Associate professor

Julie Falardeau, M.D.
Patient care emphasis: Optic neuritis, ischemic optic neuropathy, compressive optic neuropathy, idiopathic intracranial hypertension, brain tumor affecting vision (vision loss, visual field loss, double vision), ocular myasthenia gravis
Research interests: Optic nerve imaging techniques, idiopathic intracranial hypertension, treatment of optic neuritis
Specialty: Neuro-ophthalmology
M.D.: University of Montreal, Montreal, Canada
Residency: Ophthalmology – University of Montreal, Montreal, Canada
Fellowship: Neuro-ophthalmology – University of Iowa Hospitals and Clinics, Iowa City, Iowa
Board certification: American Board of Ophthalmology
Academic appointment: Associate professor

Tannia Flemming, P.A.-C.
Specialty: Orthopaedic spine
Board certification: National Commission on Certification of Physician Assistants
Academic appointment: Instructor
Maria Fleseriu, M.D., F.A.C.E.

Patient care emphasis: Pituitary, neuroendocrine tumors, adrenal disorders
Research interests: Cushing’s disease, acromegaly, pathophysiology, new medical treatments for pituitary tumors, pituitary deficiencies
Specialties: Endocrinology, diabetes, metabolism
M.D.: The University of Medicine and Pharmacy of Timisoara, Romania
Residencies: Internal medicine – University Hospital Sibiu, Romania; internal medicine – Case Western Reserve University, Cleveland, Ohio
Fellowships: Endocrinology – University Hospital Sibiu and National Institute of Endocrinology, Romania; endocrinology, diabetes and metabolism – Cleveland Clinic, Cleveland, Ohio
Board certification: American Board of Internal Medicine: Endocrinology
Academic and clinical appointments: Professor; director, OHSU Northwest Pituitary Center

Esther Freeman, Psy.D.

Patient care emphasis: Adult psychiatry
Specialty: Working with health care providers and families on the psychological aspects of medical illness
Fellowship: Health psychology – Eastern Virginia Medical School, Norfolk, Va.
Board certification: American Board of Psychiatry
Academic appointment: Associate professor
Specialty: Neurocritical care
N.P.: Vanderbilt University; Nashville, Tenn.
Board certification: American Nurses Credentialing Center
Academic appointment: Instructor

Mindy French, A.C.N.P.-B.C.

Specialty: Neurocritical Care
P.A.-C.: Vanderbilt University, Nashville, Tenn.
Board certification: American Nurses Credentialing Center
Academic appointment: Instructor

Antonia Gragg, M.S., P.A.-C.

Patient care emphasis: Functional and stereotactic neurosurgery
Specialty: Neurosurgery
P.A.-C.: Duke University, Durham, N.C.
Board certification: National Commission on Certification of Physician Assistants
Academic appointment: Instructor
Chad Hagen, M.D.

**Patient care emphasis:** Sleep-disordered breathing (obstructive sleep apnea, central sleep apnea, upper airway resistance syndrome) and hypersomnias (narcolepsy, cyclic hypersomnias, idiopathic hypersomnia)

**Research interests:** Technology for sleep disorder detection, definition and classification of sleep disorders, sleep apnea, sleep-disordered breathing, fatigue, hypersomnia

**Specialty:** Sleep medicine

M.D.: University of Washington, Seattle, Wash.

Residency: Psychiatry – Oregon Health & Science University, Portland, Ore.

Fellowship: Sleep disorder medicine – Stanford University, Stanford, Calif.

Board certification: American Board of Psychiatry and Neurology

**Academic and clinical appointments:** Assistant professor; co-director, Sleep Disorders Program

James Hancey, M.D.

**Patient care emphasis:** Obsessive-compulsive disorder and related disorders

**Specialty:** Adult psychiatry

M.D.: Oregon Health & Science University, Portland, Ore.

Residency: Psychiatry – Oregon Health & Science University, Portland, Ore.

Board certification: American Board of Psychiatry and Neurology

**Academic and clinical appointments:** Associate professor; director, Adult Outpatient Psychiatry Clinic

Robert Hart, M.D.

**Patient care emphasis:** Scoliosis and adult spinal deformity, surgical treatment of spinal conditions (cervical, thoracic, lumbar), revision spine surgery

**Research interests:** Biomechanics of spinal implants, psychological impacts of spine surgery, impacts of stiffness following spinal fusion, performance standards for structural allograft bone and outcomes, complication avoidance in adult spinal deformity surgery

**Specialties:** Orthopaedic surgery, spine

M.D.: University of California, San Diego, San Diego, Calif.

Residency: Orthopaedic surgery – University of Iowa, Iowa City, Iowa

Fellowship: Spine and spinal cord injury – Case Western Reserve University, Cleveland, Ohio

Board certification: American Board of Orthopaedic Surgery

**Academic and clinical appointments:** Professor; program director, Adult Spine Fellowship

Amie Hiller, M.D.

**Patient care emphasis:** Parkinson’s and movement disorders

**Research interests:** Gait and balance, vitamin D and stress, all in relationship to Parkinson’s disease

**Specialty:** Neurology

M.D.: Medical College of Georgia, Augusta, Ga.

Residency: Neurology – Brown University, Providence, R.I.

Fellowships: Movement disorders – Oregon Health & Science University, Portland, Ore.; health policy – Office of Jack Reed, Washington, D.C.

Board certification: American Board of Psychiatry and Neurology

**Academic appointment:** Assistant professor
William Hills, M.D., O.D.
Patient care emphasis: Neuro-ophthalmology
Research interests: Using neuro-ophthalmic findings to differentiate between Parkinson’s disease and progressive supranuclear palsy; detecting neuro-ophthalmic visual field defects in patients with Alzheimer-type dementia
Specialty: Neuro-ophthalmology
M.D.: University of Nevada, Reno, Nev.
O.D.: Pacific University, Forest Grove, Ore.
Residency: Neurology – Oregon Health & Science University
Fellowship: Neuro-ophthalmology – Moran Eye Center, University of Utah, Salt Lake City, Utah
Board certification: American Board of Psychiatry and Neurology
Academic appointment: Professor

Holly Hinson, M.D.
Patient care emphasis: Traumatic brain injury, subarachnoid hemorrhage, stroke
Research interests: Traumatic brain injury, subarachnoid hemorrhage, autonomic dysfunction
Specialties: Neurology, neurocritical care medicine
M.D.: University of Texas Health Science Center, San Antonio, Texas
Residency: Neurology – University of Maryland School of Medicine, Baltimore, Md.
Fellowship: Neurologic critical care – Johns Hopkins School of Medicine, Baltimore, Md.
Board certification: American Board of Psychiatry and Neurology
Academic appointment: Assistant professor

Jayme Hiratzka, M.D.
Patient care emphasis: Surgical treatment of spinal conditions (cervical, thoracic, lumbar), scoliosis, arthritis, minimally invasive spine fusion
Research interests: Adult deformity/sagittal balance, spondylolisthesis, spine trauma/spinal cord injury
Specialties: Orthopaedic surgery, spine
M.D.: University of Cincinnati College of Medicine, Cincinnati, Ohio
Residency: Orthopaedic surgery – Oregon Health & Science University, Portland, Ore.
Fellowship: Spine surgery – University of Utah, Salt Lake City, Utah
Board certification: American Board of Orthopaedic Surgery
Academic appointment: Assistant professor

Kim Hutchison, M.D.
Patient care emphasis: General neurology, headache, sleep disorders including sleep apnea, restless legs, narcolepsy, insomnia, parasomnias
Research interests: Global neurology, insomnia, sleep deprivation, telemedicine
Specialties: Neurology, sleep medicine
M.D.: University of Kansas, Kansas City, Kan.
Residency: Neurology – Medical University of South Carolina, Charleston, S.C.
Fellowship: Sleep disorders medicine – Vanderbilt University Medical Center, Nashville, Tenn.
Board certifications: American Board of Psychiatry and Neurology; American Board of Sleep Medicine
Academic appointment: Assistant professor
Craig Hutto, A.C.N.P.
Specialty: Neurocritical care
N.P.: Vanderbilt University, Nashville, Tenn.
Board certification: American Nurses Credentialing Center
Academic appointment: Instructor

Chafic Karam, M.D.
Patient care emphasis: ALS, inflammatory neuropathies, inherited neuropathies and electrodiagnostics
Research interests: Motor neuron disease, inflammatory neuropathies
Specialty: Neurology
M.D.: St. Joseph University, Beirut, Lebanon
Residency: Neurology – Beth Israel Medical Center, Albert Einstein College of Medicine, New York, N.Y.
Fellowships: Neuromuscular medicine and EMG – Massachusetts General Hospital, Harvard University, Boston, Mass.; peripheral nerve pathology, Mayo Clinic, Rochester, Minn.
Board certifications: American Board of Psychiatry and Neurology; United Council for Neurologic Subspecialties
Academic appointment: Assistant professor

Jeffrey Kaye, M.D.
Patient care emphasis: Geriatrics, neurology and dementia
Research interests: Aging and technology and early detection of cognitive impairment
Specialty: Neurology
M.D.: New York Medical College, Valhalla, N.Y.
Residency: Neurology – Boston University, Boston, Mass.
Fellowship: Brain aging – National Institute on Aging, Bethesda, Md.
Board certification: American Board of Psychiatry and Neurology
Academic and clinical appointments: Professor; director, Layton Aging and Alzheimer’s Disease Center; director, Oregon Center for Aging and Technology

George Keepers, M.D.
Patient care emphasis: Adult psychiatry
Specialty: Neuropsychiatry
M.D.: Baylor College of Medicine, Houston, Texas
Residency: Psychiatry – Oregon Health & Science University, Portland, Ore.
Board certification: American Board of Psychiatry
Academic and clinical appointments: Chair, Department of Psychiatry; director, Complex Neuropsychiatry Clinic and Adult Attention Deficit Disorder Clinic

To refer a patient for a consult, call:
503 494-4567 or 800 245-6478 toll-free, or fax 503 346-6854.
Katharine J. Keranen, P.A.-C.
**Specialty:** Neurocritical care  
**P.A.-C.:** Saint Francis University, Loretto, Pa.  
**Board certification:** National Commission on Certification of Physician Assistants  
**Academic appointment:** Instructor

Akram Khan, M.D.
**Patient care emphasis:** Critical care, pulmonary vascular disease, sleep medicine  
**Research interests:** Endobronchial ultrasound and sleep apnea  
**Specialty:** Sleep medicine  
**M.D.:** Maulana Azad Medical College, New Delhi, India  
**Residency:** Internal medicine – St. Louis University School of Medicine, St. Louis, Mo.  
**Fellowships:** Critical care medicine – St. Louis University School of Medicine, St. Louis, Mo.; pulmonary medicine – Oklahoma University Health Sciences Center, Oklahoma City, Okla.; sleep medicine – Mayo Clinic, Rochester, Minn.  
**Board certification:** American Board of Internal Medicine  
**Academic appointment:** Assistant professor

Edward Kim, M.D.
**Patient care emphasis and research interests:** Multiple sclerosis and neuroimmunology  
**Specialty:** Neurology  
**M.D.:** Indiana University School of Medicine, Indianapolis, Ind.  
**Residencies:** Preliminary medicine; neurology – Brown University School of Medicine, Providence, R.I.  
**Fellowships:** Neuroimmunology – Oregon Health & Science University, Portland, Ore.; neuroimmunology – Veterans Administration Medical Center, Portland, Ore.  
**Board certification:** American Board of Psychiatry and Neurology  
**Academic and clinical appointments:** Assistant professor; director, Neurology Residency Program

Amy Mee-Ran Kobus, Ph.D.
**Patient care emphasis:** Health psychology and consultation-liaison  
**Research interests:** Chronic pain and mental and substance abuse co-morbidity, primary care psychology, health disparities, community-based participatory research  
**Specialties:** Clinical psychology, adult, diversity  
**Ph.D.:** University of Iowa, Iowa City, Iowa  
**Internship:** Clinical psychology – Portland VA Medical Center, Portland, Ore.  
**Fellowship:** Health services research – Oregon Health & Science University, Portland, Ore.  
**Board certification:** Oregon State Board of Psychologist Examiners  
**Academic appointment:** Assistant professor
Ines Koerner, M.D., Ph.D.

**Patient care emphasis:** Neurocritical care

**Research interests:** Ischemic brain injury and neuroinflammation, brain injury after cardiac arrest, subarachnoid hemorrhage

**Specialty:** Anesthesiology

**M.D.:** Albert Ludwigs University, Freiburg, Germany

**Ph.D.:** Johannes Gutenberg University, Mainz, Germany

**Residency:** Anesthesiology and intensive care medicine – Johannes Gutenberg University, Mainz, Germany

**Fellowship:** Critical care – Oregon Health & Science University, Portland, Ore.

**Board certifications:** American Board of Anesthesiology; United Council of Neurologic Subspecialties Certification in Neurocritical Care

**Academic and clinical appointments:** Assistant professor; medical director, Neurosciences Intensive Care Unit

---

Jeff Kraakevik, M.D.

**Patient care emphasis:** Movement disorders, medical education

**Research interests:** Issues of gait and balance with a focus on Parkinson’s disease

**Specialty:** Neurology

**M.D.:** University of Iowa, Carver College of Medicine, Iowa City, Iowa

**Residency:** Neurology – University of Iowa Hospitals and Clinics, Iowa City, Iowa

**Fellowship:** Movement disorders – Oregon Health & Science University, Portland, Ore.

**Board certification:** American Board of Psychiatry and Neurology

**Academic appointment:** Associate professor

---

Paul Leung, M.D.

**Patient care emphasis:** Adult and intercultural psychiatry

**Research interests:** Cross-cultural mental health and PTSD with Asians

**Specialty:** Cross-cultural psychiatry and addictions

**M.D.:** Virginia Commonwealth University, Richmond, Va.

**Residency:** Psychiatry – Oregon Health & Sciences University, Portland, Ore.

**Board certification:** American Board of Psychiatry and Neurology

**Academic and clinical appointments:** Professor; medical director, Psychiatry; director, Indochinese Psychiatry Program

---

Christine M. Li, P.A.-C., M.P.A.P.

**Patient care emphasis:** Neurosurgery

**Specialty:** Neurosurgery

**P.A.-C.:** Keck School of Medicine, University of Southern California, Los Angeles, Calif.

**Board certification:** National Commission on Certification of Physician Assistants

**Academic appointment:** Instructor
Clifford Lin, M.D., M.A.Sc, F.R.C.S. (C)

**Patient care emphasis:** Surgical treatment of spinal disorders (cervical, thoracic, lumbar) including degenerative conditions, scoliosis, revision surgery and minimally invasive techniques

**Research interests:** Complications and outcomes of spine surgery

**Specialties:** Orthopaedic surgery, spine

**M.D.:** Queen’s University, Kingston, Ontario, Canada

**Residency:** Orthopaedics – University of Toronto, Canada

**Fellowship:** Complex spine surgery – University of Toronto, Canada

**Board certification:** Fellow of the Royal College of Physicians and Surgeons of Canada

**Academic appointment:** Assistant professor

---

Helmi Lutsep, M.D.

**Patient care emphasis:** Stroke prevention, acute stroke treatment

**Research interests:** Stroke prevention, acute stroke treatment, stroke rehabilitation

**Specialty:** Neurology

**M.D.:** Mayo Medical School, Rochester, Minn.

**Residency:** Neurology – Mayo Graduate School of Medicine, Rochester, Minn.

**Fellowships:** Behavioral neurology – University of California, Davis, Calif.; cerebrovascular disease – Stanford University, Stanford, Calif.

**Board certification:** American Board of Psychiatry and Neurology, Neurology and Vascular Neurology

**Academic and clinical appointments:** Professor; associate director, OHSU Stroke Center; chief of neurology, Portland Veterans Medical Center

---

David Mansoor, M.D.

**Patient care emphasis:** Geriatric psychiatry and electroconvulsive therapy (ECT)

**Research interests:** Schizophrenia and aging and musical hallucinations

**Specialty:** Psychiatry

**M.D.:** Oregon Health & Science University, Portland, Ore.

**Residency:** Psychiatry – Oregon Health & Science University, Portland, Ore.

**Fellowship:** Geriatric psychiatry – Oregon Health & Science University, Portland, Ore.

**Board certification:** American Board of Psychiatry and Neurology

**Academic appointment:** Assistant professor

---

Leeza Maron, Ph.D.

**Patient care emphasis:** Neuropsychological evaluation of adults with a wide range of diagnoses including attention deficit disorder, traumatic brain injury, stroke, epilepsy and dementia as well as other psychiatric and medical illnesses

**Research interests:** Investigation of neuropsychological mechanisms underlying thought disorder in psychiatric populations using both functional neuroimaging (fMRI) and novel cognitive paradigms

**Specialty:** Neuropsychology

**Ph.D.:** University of Florida, Gainesville, Fla.

**Fellowship:** Biological psychiatry and neuroscience – University of California, San Diego, Calif.

**Academic appointment:** Assistant professor

---

www.ohsubrain.com
Michele Mass, M.D.

**Patient care emphasis:** Multiple sclerosis and neuropathology  
**Research interests:** Multiple sclerosis and neuroimmunology  
**Specialty:** Neurology  
**M.D.:** Oregon Health & Science University, Portland, Ore.  
**Residency:** Neurology – Oregon Health & Science University, Portland, Ore.  
**Fellowship:** Neuropathology – University of Washington, Seattle, Wash.  
**Board certification:** American Board of Psychiatry and Neurology  
**Academic appointment:** Associate professor

Justin Meuse, M.D.

**Patient care emphasis:** Comprehensive neurology with a special interest in the treatment of epilepsy  
**Specialty:** Neurology  
**M.D.:** University of Texas Health Science Center, Houston, Texas  
**Residency:** Neurology – Oregon Health & Science University, Portland, Ore.  
**Academic appointment:** Assistant professor

Adam Mirarchi, M.D.

**Patient care emphasis:** Hand and upper extremity  
**Research interests:** Distal radio-ulnar joint problems, hand and upper extremity trauma, patient-reported outcomes and quality of life assessment  
**Specialty:** Orthopaedic surgery  
**M.D.:** Temple University School of Medicine, Philadelphia, Pa.  
**Residency:** University Hospitals of Cleveland, Cleveland, Ohio  
**Fellowships:** Research – University Hospitals of Cleveland, Cleveland, Ohio; hand and upper extremity – Harvard Brigham & Women’s Hospital, Boston, Mass.  
**Board certification:** American Board of Orthopaedic Surgery — Certificate of Added Qualifications in Surgery of the Hand  
**Academic appointment:** Assistant professor

Paul Motika, M.D.

**Patient care emphasis and research interests:** Epilepsy and EEG  
**Specialty:** Neurology  
**M.D.:** University of Rochester School of Medicine and Dentistry, Rochester, N.Y.  
**Residency:** Neurology – University of Michigan, Ann Arbor, Mich.  
**Fellowship:** Neurophysiology and epilepsy – Rush University Medical Center, Chicago, Ill.  
**Board certification:** American Board of Psychiatry and Neurology  
**Academic and clinical appointments:** Assistant professor; medical director, Adult EEG

To refer a patient for a consult, call:  
503 494-4567 or 800 245-6478 toll-free, or fax 503 346-6854.
Omar Nazir, M.D.

Patient emphasis: Hand and upper extremity

Research interests: Functional recovery after hand and wrist surgery, Dupuytren’s Disease

Specialty: Orthopaedic surgery

M.D.: Northeast Ohio Medical University, Rootstown, Ohio

Residency: Orthopaedic surgery – Wake Forest University Baptist Medical Center, Winston-Salem, N.C.

Fellowship: Hand surgery – Oregon Health & Science University, Portland, Ore

Board certification: American Board of Orthopaedic Surgery (board-eligible)

Academic appointment: Assistant professor

Gary Nesbit, M.D.

Patient care emphasis: Diagnostic radiology

Research interests: Innovative imaging, new therapeutic techniques in acute stroke, intracranial atheromatous disease, cerebral aneurysms and arteriovenous malformations, including diffusion/perfusion imaging and magnetic resonance angiography (MRA) of atherosclerosis and aneurysms

Specialties: Interventional neuroradiology, radiology

M.D.: University of Minnesota, Minneapolis, Minn.

Residency: Radiology – Mayo Graduate School of Medicine, Rochester, Minn.

Fellowships: Neuroradiology – Mayo Graduate School of Medicine, Rochester, Minn.; interventional neuroradiology – Oregon Health & Science University, Portland, Ore.

Board certification: American Board of Radiology

Academic appointment: Associate professor

Edward Neuwelt, M.D.

Patient care emphasis: Neuro-oncology, including chemotherapy

Research interest: Blood-brain barrier procedure for brain tumor patients

Specialty: Blood-brain barrier

M.D.: University of Colorado Medical School, Denver, Colo.

Residency: Neurosurgery – University of Texas Southwest Medical School, Dallas, Texas

Fellowship: Neurosurgery – Queen Square Hospital, London, England

Board certification: American Board of Neurological Surgery

Academic appointment: Professor

Anh Nguyen-Huynh, M.D.

Patient care emphasis: Disorders of the ear including infection, hearing loss, vertigo, facial palsy and tumors of temporal bone and cerebellopontine angle

Research interests: Meniere’s disease, sudden hearing loss, cochlear implant, optical coherence tomography of middle ear and inner ear

Specialty: Head and neck surgery/otolaryngology

M.D.: Harvard Medical School, Boston, Mass.

Residency: Otolaryngology – Massachusetts Eye & Ear Infirmary, Boston, Mass.

Fellowship: Neurotology/skull base surgery – Stanford University, Templeton, Calif.

Board certification: American Board of Otolaryngology and Neurotology

Academic appointment: Assistant professor
John Nutt, M.D.

Patient care emphasis: Movement disorders, clinical neuropharmacology, neurogenetics
Research interests: Deep brain stimulation, neuroprotective and neurorestorative therapies for Parkinson’s disease, mechanisms of dopaminergic agents in Parkinson’s disease
Specialty: Neurology
M.D.: Baylor School of Medicine, Houston, Texas
Residency: Neurology – University of Washington, Seattle, Wash.
Fellowship: National Institute of Neurological and Communicative Disorders and Stroke, Bethesda, Md.
Board certification: American Board of Psychiatry and Neurology
Academic appointment: Professor

Barry Oken, M.D.

Patient care emphasis: General neurology and dementia
Research interests: Behavioral neurology, cognitive disorders, dementia
Specialty: Neurology/EEG/EMG
M.D.: Medical College of Wisconsin, Milwaukee, Wis.
Residency: Neurology – Boston University Medical Center, Boston, Mass.
Fellowships: Electroencephalography and evoked potentials – Massachusetts General Hospital, Boston, Mass.; neurology – Harvard Medical School, Boston, Mass.
Board certification: American Board of Psychiatry and Neurology
Academic and clinical appointments: Professor; medical director, Clinical Neurophysiology

Dara S. Ono, M.S., P.A.-C.

Patient care emphasis: Skull base surgery
Specialty: Neurosurgery
P.A.-C: George Washington University, Washington, D.C.
Residency: Surgery – Montefiore Medical Center, Bronx, N.Y.
Board certification: National Commission on Certification of Physician Assistants
Academic appointment: Instructor

Robert Orfaly, M.D.

Patient care emphasis: Upper extremity disorders, hand and upper extremity, arthroscopy of the wrist, elbow and shoulder, bone-sparing surgery
Research interests: Development of improved clavicle fracture fixation devices, rotator cuff tears
Specialty: Orthopaedic surgery
M.D.: McGill University, Montreal, Canada
Residency: Orthopaedic surgery – University of British Columbia, Vancouver, B.C., Canada
Fellowships: Hand and upper extremity surgery – University of British Columbia, Vancouver, B.C., Canada; shoulder and elbow/upper extremity – University of Texas Health Sciences Center, San Antonio, Texas
Board certification: American Board of Orthopaedic Surgery
Academic appointment: Associate professor
Ronald Pfeiffer, M.D.
Patient care emphasis: Parkinson’s disease and other movement disorders
Specialty: Neurology
M.D.: University of Nebraska Medical Center, Omaha, Neb.
Residency: Neurology – Walter Reed Army Medical Center, Washington, D.C.
Board certification: American Board of Psychiatry and Neurology
Academic appointment: Professor

Juliette Preston, M.D.
Patient care emphasis: Headache and pain management
Specialty: Neurology
M.D.: University of California, San Diego, School of Medicine, San Diego, Calif.
Residency: Neurology – Harbor-UCLA Medical Center, Los Angeles, Calif.
Fellowships: Headache medicine and interventional pain – UCLA Medical Center, Los Angeles, Calif.
Board certification: American Board of Psychiatry and Neurology
Academic appointment: Assistant professor

Ryan Priest, M.D.
Patient care emphasis: Interventional neuroradiology
Specialty: Interventional neuroradiology
M.D.: Oregon Health & Science University, Portland, Ore.
Residency: Diagnostic radiology – Oregon Health & Science University, Portland, Ore.
Fellowships: Interventional radiology, interventional neuroradiology – Oregon Health & Science University, Portland, Ore.
Board certification: American Board of Radiology, with CAQ in Interventional Radiology
Academic appointment: Assistant professor

Paolo Punsalan, M.D.
Patient care emphasis: Neck and back pain, diseases and disorders of the spine, scoliosis and spinal deformity
Research interests: Operative and nonoperative treatment of disorders of the spine
Specialty: Orthopaedics and rehabilitation
M.D.: University of the Philippines, Manila, Philippines
Residency: Orthopaedics – University of the Philippines, Philippine General Hospital, Manila, Philippines
Fellowships: Neurosurgical and orthopaedic adult spine – University of Calgary, Calgary, AB, Canada; pediatric spinal deformity – University of Calgary, Calgary, AB, Canada; orthopaedic adult spine – Oregon Health & Science University, Portland, Ore.
Academic appointment: Instructor
Joseph Quinn, M.D.
Patient care emphasis: Cognitive and movement disorders
Research interests: Prevention and treatment of cognitive disorders, including Parkinson’s, dementia and Alzheimer’s disease
Specialty: Neurology
M.D.: University of Southern California, Los Angeles, Calif.
Residency: Neurology – Oregon Health & Science University, Portland, Ore.
Fellowship: Geriatric neurology – Portland VA Medical Center, Portland, Ore.
Board certification: American Board of Psychiatry and Neurology
Academic and clinical appointments: Professor; director, OHSU Parkinson Center and Movement Disorders Program

Dmitriy Rakhlin, M.N., P.M.H.N.P.-BC.
Patient care emphasis: Clinical case management, individual and family psychotherapy, medication management, psychiatric assessments for clients from diverse ethnic, cultural and socioeconomic backgrounds
Research interests: Adult ADHD, mood and anxiety disorders
Specialties: Adult, intercultural and inpatient psychiatry
M.N.: Oregon Health & Science University, Portland, Ore.
Board certification: American Nurses Credentialing Center
Academic appointment: Instructor

Ahmed Raslan, M.D.
Patient care emphasis: Surgical management of pain, brain tumors, epilepsy, peripheral nerve, spasticity, psycho-affective disorders, movement disorders, normal pressure hydrocephalus
Research interests: Physiology of nociception and pain modulation in the brainstem and image-guided surgery and functional neurological localization during surgery using neuromonitoring
Specialty: Neurosurgery
M.D.: Ain Shams University, Cairo, Egypt
Residencies: Neurological surgery – Ain Shams University, Cairo, Egypt; neurological surgery – Oregon Health & Science University, Portland, Ore.
Fellowships: Stereotactic and functional neurosurgery – Oregon Health & Science University, Portland, Ore.; neurological surgery – University of British Columbia, Vancouver, Canada
Board certification: American Board of Neurological Surgery
Academic and clinical appointments: Assistant professor; director of quality, neuroscience service line

Janette K. Remling, M.S., P.A.-C.
Patient care emphasis: Cerebrovascular and skull base surgery
Specialty: Neurosurgery
P.A.-C.: Pacific University, Forest Grove, Ore.
M.S., CCC-SLP: Texas State University, San Marcos, Texas
Board certification: National Commission on Certification of Physician Assistants
Academic appointment: Instructor

To refer a patient for a consult, call:
503 494-4567 or 800 245-6478 toll-free, or fax 503 346-6854.
Donald Ross, M.D.
Patient care emphasis: Minimally invasive spine procedures
Research interests: Spine outcomes, brain tumors and brain tumor research
Specialties: Neurosurgery, spine
M.D.: Indiana University School of Medicine, Indianapolis, Ind.
Residency: Neurological surgery – University of California at San Francisco, Calif
Fellowship: Cranial base surgery – University of Pittsburgh Medical Center, Pittsburgh, Pa.
Board certification: American Board of Neurological Surgery
Academic appointment: Associate professor

Nathan Sautter, M.D.
Patient care emphasis: Rhinology, allergy and endoscopic skull base/sinus surgery
Research interests: Genetic mechanisms of sinusitis, tissue remodeling in chronic inflammatory disease, hereditary hemorrhagic telangiectasia (HHT)-related epistaxis and inverted papilloma
Specialty: Head and neck surgery/otolaryngology
M.D.: University of Michigan, Ann Arbor, Mich.
Residency: Cleveland Clinic Foundation – Head & Neck Institute, Cleveland, Ohio
Fellowship: Rhinology – Oregon Health & Science University, Portland, Ore.
Board certification: American Board of Otolaryngology
Academic appointment: Assistant professor

David Sibell, M.D.
Patient care emphasis: Management of spinal pain conditions, pain management
Research interests: Interventional pain medicine
Specialties: Anesthesiology, orthopaedics and rehabilitation
M.D.: University of Vermont, Burlington, Vt.
Residency: University of Virginia, Charlottesville, Va.
Fellowship: Pain management – University of Virginia, Charlottesville, Va.
Board certification: American Board of Anesthesiology; Additional Certification in Pain Management
Academic and clinical appointments: Associate professor; medical director, Ambulatory Informatics

Lisa Silbert, M.D.
Patient care emphasis: Dementia and geriatric neurology
Research interests: Identification of principal and contributory causes of cognitive decline in older individuals, with a focus on neuroimaging and vascular cognitive impairment
Specialty: Neurology
M.D.: Indiana University School of Medicine, Indianapolis, Ind.
Residency: Neurology – University of California, Los Angeles, Calif.
Fellowship: Geriatric neurology and clinical neurophysiology – Oregon Health & Science University, Portland, Ore.
Board certification: American Board of Psychiatry and Neurology
Academic appointment: Associate professor
Asha Singh, M.D.

Patient care emphasis: Sleep-disordered breathing (obstructive sleep apnea, central apnea, upper airway resistance syndrome) and hypersomnias (narcolepsy, cyclic hypersomnias, idiopathic hypersomnia)

Specialty: Sleep medicine

M.D.: University of Texas Medical School at Houston, Houston, Texas

Residency: Neurology – University of Texas Southwestern, Dallas, Texas

Fellowship: Sleep medicine – Beth Israel Hospital, Harvard Medical School, Boston, Mass.

Board certification: American Board of Psychiatry and Neurology

Academic appointment: Assistant professor

Timothy Smith, M.D., M.P.H., F.A.C.S.

Patient care emphasis: Nasal and sinus disease and surgery, endoscopic skull base surgery

Research interest: Outcomes of treatment for sinus disorders

Specialty: Head and neck surgery/otolaryngology

M.D.: University of Cincinnati, Cincinnati, Ohio

Residency: University of North Carolina Hospitals, Chapel Hill, N.C.

Fellowship: Rhinology and sinus surgery – Medical College of Wisconsin, Milwaukee, Wis.

Board certification: American Board of Otolaryngology

Academic and clinical appointments: Professor; director, Oregon Sinus Center at OHSU

W. Brewster Smith, M.D.

Patient care emphasis: Treatment of seizure disorders/epilepsy and general neurology

Specialty: Neurology

M.D.: University of Medicine & Dentistry of New Jersey, Newark, N.J.

Residency: Oregon Health & Science University, Portland, Ore.

Fellowship: Epilepsy – Epilepsy Center of Oregon, Portland, Ore.

Board certification: American Board of Psychiatry and Neurology

Academic appointment: Assistant professor

Joel Solomon, M.D.

Patient care emphasis: Nerve injuries, reconstructive surgery of the hand and upper extremity, reconstructive microsurgery, brachial plexus injuries

Research interests: Nerve regeneration and synapse formation

Specialty: Plastic surgery

M.D.: Washington University, St. Louis, Mo.

Residencies: General surgery – Emory University, Atlanta, Ga.; plastic surgery – Baylor College of Medicine, Houston, Texas

Fellowship: Hand surgery – Baylor College of Medicine, Houston, Texas

Board certifications: American Board of Plastic Surgery; ABPS CAQ Hand Surgery

Academic and clinical appointments: Associate professor; chief, Hand Surgery, Department of Surgery; director, Hand Fellowship
Julie Solomon, A.R.N.P.
Patient care emphasis: Pain, headache
Research interests: Migraine headaches, head injury and the biopsychosocial impacts of chronic pain
Specialty: Neurology
M.P.H., M.S.N.: University of South Florida, Tampa, Fla.
Board certification: American Association of Nurse Practitioners
Academic appointment: Instructor

Rebecca Spain, M.D., M.S.P.H.
Patient care emphasis: Multiple sclerosis and neuroimmunology
Research interest: Multiple sclerosis
Specialty: Neurology
M.D.: Case Western University, Cleveland, Ohio
Board certification: American Board of Psychiatry and Neurology
Academic appointment: Assistant professor

David Spencer, M.D.
Patient care emphasis: Treatment of seizure disorders/epilepsy, video EEG monitoring
Research interests: Magnetic resonance spectroscopy, imaging methods for epilepsy, electrical stimulation to treat epilepsy
Specialty: Neurology
M.D.: University of Minnesota, Minneapolis, Minn.
Residency: Neurology – Stanford University, Stanford, Calif.
Fellowship: Epilepsy – Stanford University, Stanford, Calif.
Board certification: American Board of Psychiatry and Neurology
Academic and clinical appointments: Professor; director, OHSU Comprehensive Epilepsy Center

Khoi D. Than, M.D.
Patient care emphasis: General neurosurgery, with an emphasis on the surgical treatment of patients with spinal disorders
Research interests: Clinical outcomes after spinal surgery and other neurological surgeries
Specialties: Neurosurgery, spine
M.D.: Johns Hopkins University School of Medicine, Baltimore, Md.
Fellowship: Minimally invasive and complex spine surgery – University of California, San Francisco, San Francisco, Calif.
Board certification: American Board of Neurological Surgery (board-eligible)
Academic appointment: Assistant professor
Katie Thompson, P.A.-C., M.P.T.

**Patient care emphasis:** Neurosurgery and spinal surgery

**Specialties:** Orthopaedic surgery, neurosurgery

**P.A.-C.:** Stanford University School of Medicine Foothill College, Palo Alto, Calif.

**M.P.T.:** University of California, San Francisco, San Francisco, Calif.

**Board certification:** National Commission on Certification of Physician Assistants

**Academic appointment:** Instructor

---

Miriam Treggiari, M.D., Ph.D., M.P.H.

**Patient care emphasis:** Critically ill patients with diseases and disorders of the brain, spinal cord and spine

**Research interests:** Subarachnoid hemorrhage, sedation and delirium in the ICU, ventilator-associated pneumonia

**Specialties:** Anesthesiology, critical care medicine

**M.D.:** University of Pavia, Italy

**Ph.D. and M.P.H.:** Epidemiology – University of Washington, Seattle, Wash.

**Residency:** Anesthesiology – Geneva University Hospitals, Geneva, Switzerland

**Fellowship:** Critical care medicine – Geneva University Hospitals, Geneva, Switzerland

**Board certification:** American Board of Anesthesiology

**Academic and clinical appointments:** Professor; director, Clinical Research Program

---

Tarvez Tucker, M.D.

**Patient care emphasis:** Neurocritical care, traumatic brain injury, headache and pain management, hypothermia after cardiac arrest

**Research interests:** Traumatic brain injury and advanced neuroimaging for prognosis

**Specialty:** Neurointensive care

**M.D.:** Case Western Reserve University, Cleveland, Ohio

**Residency:** Neurology – University of California, San Francisco, Calif.

**Fellowship:** Neurocritical care – University of Cincinnati, Cincinnati, Ohio

**Board certification:** American Board of Psychiatry and Neurology

**Academic appointment:** Associate professor

---

Vivek Unni, M.D., Ph.D.

**Patient care emphasis and research interests:** Parkinson’s disease, movement disorders and alpha-synuclein

**Specialty:** Neurology

**M.D.:** Columbia University College of Physicians and Surgeons, New York, N.Y.

**Residency:** Neurology – Massachusetts General Hospital and Brigham & Women’s Hospital, Boston, Mass.

**Fellowship:** Movement disorders – Massachusetts General Hospital and Brigham & Women’s Hospital, Boston, Mass.

**Board certification:** American Board of Psychiatry and Neurology

**Academic appointment:** Assistant professor
Kamila Vagnerova, M.D.
Patient care emphasis: Neurocritical care
Specialty: Anesthesiology
M.D.: Charles University, Czech Republic
Residencies: University Hospital, Hradec Králové, Czech Republic; Erasmus University Hospital, Rotterdam, the Netherlands
Fellowships: University Hospital, Hradec Králové, Czech Republic; Center for Research on Occupational & Environmental Toxicology; critical care medicine – Oregon Health & Science University, Portland, Ore.
Board certifications: Czech Republic: 95311-P; Oregon Board of Medical Examiners
Academic appointment: Assistant professor

Sara Walker, Ph.D.
Patient care emphasis: Neuropsychological evaluations (e.g., evaluations of cognitive and emotional functioning) in the context of psychiatric illness, substance use disorders, head injury, epilepsy and chronic systemic illnesses
Research interests: Neuropsychology of mood disorders, the role of mood states and personality traits in neuropsychological functioning and adjustment to illness and treatment
Specialty: Psychology
Ph.D.: Clinical psychology – University of California, Santa Barbara, Calif.
Residency: Clinical neuropsychology – University of Michigan Medical School, Ann Arbor, Mich.
Board certification: Oregon Psychology License
Academic appointment: Assistant professor

Frank Warren, M.D.
Patient care emphasis: Disorders of the ear and skull base surgery
Specialty: Head and neck surgery/otolaryngology
M.D.: Oregon Health and Science University, Portland, Ore.
Residency: Otolaryngology – Oregon Health and Science University, Portland, Ore.
Fellowship: Neurotology – The Otology Group of Vanderbilt, Nashville, Tenn.
Board certification: American Board of Otolaryngology and Neurotology
Academic appointment: Assistant professor

Ruth Whitham, M.D.
Patient care emphasis and research interests: Multiple sclerosis and neuroimmunology
Specialty: Neurology
M.D.: University of Chicago Pritzker School of Medicine, Chicago, Ill.
Residencies: Internal medicine; neurology – Oregon Health & Science University, Portland, Ore.
Fellowships: Multiple sclerosis and neuroimmunology – Oregon Health & Science University, Portland, Ore., and Portland VA Medical Center, Portland, Ore.
Board certification: American Board of Psychiatry and Neurology
Academic appointment: Professor
Ed Whorrall, P.A.-C.
Specialty: Neurocritical care
Board certification: National Commission on Certification of Physician Assistants
Academic appointment: Instructor

Victoria Wong, M.D.
Patient care emphasis: Epilepsy and EEG
Specialty: Neurology
M.D.: John A. Burns School of Medicine at the University of Hawaii, Honolulu, Hawaii
Residency: Neurology – University of California, Davis Medical Center, Sacramento, Calif.
Fellowships: Clinical neurophysiology/epilepsy – University of Michigan, Ann Arbor, Mich.
Board certification: American Board of Psychiatry and Neurology
Academic appointment: Assistant professor

Ann Wood, M.S., P.A.-C.
Specialty: Neurocritical care
P.A.-C.: Pacific University, Forest Grove, Ore.
Board certification: National Commission on Certification of Physician Assistants
Academic appointment: Instructor

Vijayshree Yadav, M.D., M.C.R., F.A.N.A.
Patient care emphasis and research interests: Multiple sclerosis and neuroimmunology
Specialty: Neurology
M.D.: Sarojini Naidu Medical College, Agra, India
Residencies: Internal medicine – Westlake Community Hospital, Melrose Park, Ill.; neurology – Oregon Health & Science University, Portland, Ore.
Fellowships: Neuroimmunology; multiple sclerosis – Oregon Health & Science University and Portland VA Medical Center, Portland, Ore.
Board certification: American Board of Psychiatry and Neurology
Academic appointment: Associate professor
Chris Yedinak, D.N.P., F.N.P.-B.C., M.N.

**Patient care emphasis:** Pre- and post-operative diagnosis and management of pituitary dysfunction, neuro-endocrine dynamic testing, patient education

**Research interests:** The relationship between pituitary pathology, quality of life and life functions

**Specialty:** Neurosurgery

**F.N.P.:** Oregon Health & Science University, Portland, Ore.

**D.N.P.:** Oregon Health & Science University, Portland, Ore.

**Board certification:** The American Association of Colleges of Nursing

**Academic appointment:** Assistant professor

---

Jung Yoo, M.D.

**Patient care emphasis:** Surgical treatment of spinal conditions (cervical, thoracic, lumbar) and revision spine surgery

**Research interests:** Stem cell and biomaterials in spine fusion, complications and outcomes of spine surgery

**Specialty:** Orthopaedic surgery

**M.D.:** University of Chicago, Chicago, Ill.

**Residency:** Orthopaedic surgery – Case Western Reserve University, Cleveland, Ohio

**Fellowship:** State University of New York Health Science Center, Syracuse, N.Y.

**Board certification:** American Board of Orthopaedic Surgery

**Academic and clinical appointments:** Professor; chair, Department of Orthopaedics and Rehabilitation; co-director, Spine Center
Services and information

Clinical trials

Physicians and scientists at the OHSU Brain Institute are involved in more than 100 current neurological research studies. Collectively, we are studying treatment, prevention, diagnosis and the underlying cause of neurological conditions that affect approximately 60 million Americans. At the OHSU Brain Institute, we provide your patients access to more treatments for brain and nervous system conditions than anywhere else in Oregon.

A sampling of our research studies and clinical trials include:

- Advanced imaging studies for Alzheimer’s disease, muscular dystrophy and inflammatory disease.
- Blood-brain barrier and chemotherapy studies and other conditions.
- Clinical outcome and laboratory studies of deep brain stimulation for tremors associated with Parkinson’s disease.
- Clinical studies of new therapies for pituitary disorders such as Acromegaly, Cushing’s disease, other pituitary tumors and GH deficiency.
- Seizure pattern studies in epilepsy.
- Minimally invasive surgical approaches to brain and spine.
- Studies to understand neuropathic, migraine and low back pain.
- Study of neural circuits.
- Efficacy and safety studies of novel stroke treatments.
- Outcome studies of traumatic brain injury and rehabilitation of spinal cord injury.
- Development of treatment guidelines for pediatric traumatic brain injury.

For more information on clinical trials at the OHSU Brain Institute, please visit www.ohsubrain.com/clinicaltrials.
Neurodiagnostics

The OHSU Brain Institute provides a wide assortment of advanced neurological testing to support the diagnosis of neurological disorders.

**Ambulatory electroencephalography (EEG)**
Ambulatory EEG can record up to 24 hours of EEG activity with a special recorder that allows patients to go about their normal routines while the EEG is being recorded. Typically, patients wear this device home for a 24-hour period and return to OHSU the following day, when the technician will download and analyze the data collected.

**Autonomics**
Autonomic testing is a series of safe, noninvasive tests that measure aspects of the nervous system such as blood pressure and flow throughout the body, sweating, bowel and bladder function and sexual function. These tests help determine how patients may respond to various courses of treatment.

**Biopsy**
We perform skin biopsies to test for small fiber neuropathy. Epidermal nerve fiber density testing is performed and interpreted by our neuropathologists. We also perform open muscle biopsies in our neuromuscular clinic under local anesthesia. Muscle biopsies are interpreted by OHSU neuropathologists, and pathology includes comprehensive testing for muscle disorders including inflammatory myopathies, muscular dystrophies and metabolic myopathies.

**Electromyography (EMG)**
EMG can detect abnormal muscle electrical activity; it is used to diagnose a number of neurological conditions including nerve dysfunction, peripheral neuropathy, myopathy and amyotrophic lateral sclerosis (ALS).

**Epilepsy Monitoring Unit (EMU)**
Patients who suffer from seizures that are difficult to diagnose and manage may be admitted to our EMU. Patients who are being considered for seizure surgery will also be admitted to the EMU for monitoring to identify where in the brain the seizures begin.

**Evoked potentials studies**
Evoked potential studies may be used to assess hearing or sight, diagnose disorders of the optic nerve and detect tumors or other problems affecting the brain and spinal cord. The tests may also be performed to assess brain function during a coma. They involve three major tests that measure response to visual, auditory and electrical stimuli:

- Visual evoked response (VER) test to diagnose optic nerve issues.
- Brainstem auditory evoked response (BAER) test to diagnose hearing ability and possibly indicate the presence of brainstem tumors and multiple sclerosis.
- Somatosensory evoked response (SSER) test to detect problems with the spinal cord and numbness and weakness of the extremities.

**Intraoperative monitoring (IOM)**
Intraoperative monitoring (IOM) is used to monitor the functional integrity of certain neural structures during complex surgical procedures. IOM is used to reduce a patient’s risk of iatrogenic damage to the nervous system and/or to provide functional guidance to the surgeon and anesthesiologist.
Neuroradiology

The neuroradiology section at the OHSU Brain Institute offers a comprehensive range of state-of-the-art computed tomography (CT) and magnetic resonance imaging (MRI) services for the brain, spinal cord, skull, orbits, sinuses, temporal bone and neck. Our neuroradiology team consists of leading national neuroradiology experts trained in the interpretation of routine and advanced imaging of the neuroaxis. Our neuroradiologists closely work with experts throughout the organization such as neurosurgery, neurology, interventional neuroradiology, ENT surgery and more.

Services include:
- Cervical, thoracic and lumbar myleography.
- CT angiography and venography.
- CT perfusion.
- Diamox perfusion studies.
- Diffusion tensor imaging and tractography.
- Dynamic pituitary imaging.
- Functional MRI.
- Intraoperative 3.0 Tesla MRI.
- Lumbar punctures.
- Magnetic resonance angiography (MRA) and venography (MRV).
- MRI DSC and DCE perfusion.
- MRI spectroscopy.
- Routine high-resolution CT and MRI imaging of the brain, spine, temporal bones, face, orbits and neck.
- Screening imaging of the brain and spine.
- Specialized rapid protocols for nonsedated pediatric imaging.
- Stereotactic surgical planning.
- Susceptibility weighted imaging.

Clinic locations:
OHSU Center for Health & Healing, 3rd Floor
3303 S.W. Bond Ave.
Portland, OR 97239

OHSU Hospital, 10th Floor
3181 S.W. Sam Jackson Park Rd.
Portland, OR 97239
Pediatric Neurological Disorders

OHSU Doernbecher Children’s Hospital is Oregon’s leading provider of pediatric neurology and neurosurgery services. Our programs are ranked among the nation’s best by U.S. News & World Report. Doernbecher specialists help you care for patients with all types of brain, spinal cord and nervous system conditions, including complex problems.

Comprehensive neurology and neurosurgery services include:

- Oregon’s only comprehensive programs for pediatric epilepsy and brain and spinal cord tumors: The only program in the state staffed by three full-time pediatric neurosurgeons, providing the only continuous pediatric neurosurgery specialty provider coverage.
- Access to OHSU Knight Cancer Institute and the latest clinical trials, including the Children’s Oncology Group and Pacific Pediatric Neuro-Oncology Consortium.
- The latest imaging and minimally invasive techniques, including intraoperative 3.0 Tesla MRI, new pediatric CT protocols, fetal MRI for neurologic disorders, and neuroendoscopy.
- Advanced diagnosis and treatment for craniofacial, spinal and neuromuscular disorders.
- Oregon’s only interdisciplinary neurosurgery-orthopedic joint clinic for scoliosis and complex spinal disorders.
- Leading-edge research: Our pediatric neurosurgeons performed the first transplant of human neural stem cells into the brain.

Doernbecher also has the Northwest’s only dedicated Down syndrome clinic and comprehensive services for children with attention deficit hyperactivity disorder (ADHD).

We coordinate all services to help you meet your patients’ needs, from medical and surgical consultation to inpatient and outpatient care. Our specialist teams include pediatric psychiatrists, neuropsychologists, nurse practitioners and social workers. We provide comprehensive patient- and family-centered care as we consult with you on the most appropriate and effective treatments.

To refer a patient or consult with our team, please call 503 346-0644 or 888 346-0644.
OHSU Telemedicine Network

The OHSU Telemedicine Network provides immediate access to stroke and other neurological care throughout Oregon and southwest Washington. Using secure videoconferencing technology, specialists at OHSU and Doernbecher Children’s Hospital connect with community hospitals, local providers in outpatient clinics, and in some cases, directly with patients in their own homes.

Benefits to network hospitals

We work with community hospitals to provide immediate access to specialists around the clock. Additionally, we work with outpatient clinics to provide follow-up care closer to home and, when appropriate, in the patient’s home.

OHSU ECHO connects primary care providers with OHSU specialists for live, weekly video teleconferences focused on psychiatric medication management. This virtual clinic helps primary care physicians throughout the state work more effectively with individuals seeking treatment for mood disorders, anxiety disorders, psychotic disorders, ADHD and other mental health challenges. Each one-hour session includes a didactic portion and participating physicians have the opportunity to present cases for review and discussion. CME is offered.

Benefits of telemedicine:

- Shortens the time-sensitive decision-making process by providing immediate access to OHSU specialists
- Provides assistance from OHSU specialists in timely diagnosis and development of optimal treatment plans
- Reduces costly and unnecessary transfers
- Reduces travel costs
- Improves clinical outcomes and enhances continuity of care
- Increases patient satisfaction
- Provides advanced training and case consultation for certain specialty providers

Neuroscience-related services available through the OHSU Telemedicine Network:

- Acute care telemedicine services
- Comprehensive neurology
- Outpatient telemedicine services
- Parkinson’s
- Psychiatry
- Spine
- Stroke
- Stroke follow-up care*

*Available through both outpatient and in-home telemedicine services.

For more information, please contact OHSU Telehealth Services at 503 418-3794 or visit www.ohsu.edu/telemedicine.
Traveling Continuing Medical Education (CME)

Our team strives to provide relevant education to fellow health care professionals; one way we do so is through our Neurosciences Traveling CME courses. These one-hour, CME-accredited sessions are facilitated by OHSU physicians and may take place at your clinic, allowing for required education credits to be earned in the convenience of your own office.

Topics offered include:
- Aging, Alzheimer’s disease and dementia.
- ALS and neuromuscular disorders.
- Cerebrovascular disease.
- Epilepsy.
- General wellness.
- Multiple sclerosis.
- Nerve.
- Neuro-oncology/skull base.
- Pain.
- Parkinson’s disease and movement disorders.
- Pediatrics.
- Pituitary/neuroendocrinology.
- Spine.

To get in touch with our provider relations staff for more information or to schedule a lecture, call 503 494-6535.
LOCATIONS

- **Cornell West**
  1500 N.W. Bethany Blvd., Suite 195
  Beaverton, OR 97006
  (Spine)

- **Hermiston**
  620 N.W. 11th St., Suite 201
  Hermiston, OR 97838
  (Spine)

- **Longview**
  625 9th Ave., Suite 210
  Longview, WA 98632
  (Brain and spine)

- **Marquam Hill**
  3181 S.W. Sam Jackson Park Rd.
  Portland, OR 97239
  (Brain and spine)

- **South Waterfront**
  3303 S.W. Bond Ave., 8th Floor
  Portland, OR 97212
  (Brain and spine)

*Telemedicine location.