

NEUROSURGERY NEWS

2014—A Brief Review

CLINICAL FACULTY

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Skull Base Neoplasms, Cavernous Sinus Tumors, Neuro-Oncologic Surgery in Eloquent Brain Regions

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Pituitary Tumors, Neurofibromatosis, Primary & Metastatic Brain and Spinal Tumors

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Holiday Letter to Our Colleagues and Friends



Raymond Sawaya

Happy New Year! Here's a rundown on the past year's events in the Department of Neurosurgery.

The year began with the **18th annual Milam E. Leavens Lecture**, honoring Dr. Leavens, the first chief of the M.D. Anderson Neurosurgery Service. Titled "Low Grade Gliomas, from Bench to Bedside," it was presented January 17, 2014 by Mitchel S. Berger, M.D., Professor and Chairman, Department of Neurological Surgery at the University of California at San Francisco.

The **19th annual Milam E. Leavens Lecture**, titled "Translational Neuro-Oncology: The Long March of the Translators" will be presented January 16, 2015 by Manfred Westphal, Prof. Dr. med., Director of Neurosurgery, at the University Clinic Hamburg-Eppendorf (UKE), Hamburg, Germany.

We welcome our newest clinical faculty member, **Dr. Shaan M. Raza**, a former summer trainee in our department who became a clinical skull base program fellow here after completing residency and a neurosurgical oncology fellowship at the Johns Hopkins University School of Medicine, followed by a skull base endoscopy fellowship at Weill Cornell Medical College in NY.

Dr. Franco DeMonte was the honored guest of the North American Skull Base Society at their 24th Annual Meeting in San Diego, CA, in February. And he was Visiting Professor at the Mayo Clinic, Rochester, MN, in April.

Dr. Amy Heimberger reviewed grant proposals at the NIH/CNBT Study Section in February, June, and October. In March, she participated in the GBM Think Tank II: Big Ideas and New Thinking to Transform the Research Agenda, a joint conference between Arizona State University, the Ludwig Institute for Cancer Research (CA), and M.D. Anderson. She was a mentor for Neurosurgery fellow, Edjah Nduom, MD, who received \$50,000 from the American Brain Tumor Assoc. as PI for "Evaluation of microRNAs 138, 124, and 142-3p as a multitargeted immunomodulatory treatment system." She also

mentored Felix Nwajei (PI), who obtained a Rosalie B. Hite Predoctoral Fellowship (\$31,400/year), from the Univ. of Texas Graduate School of Biomedical Sciences in August. And she mentored Nasser Yaghi, who received a \$40,000 Howard Hughes Medical Institute Research Fellowship to study "Reversal of glioma-mediated immune suppression using a nanovector delivery system of microRNA in vivo." In January, as PI, she was awarded \$250,000 by the Multidisciplinary Research Program of M.D. Anderson's Office of Translational Research to study "Targeting glioblastoma-mediated immune suppression." In August, as Co-PI with Daniel Yoshor, MD, she obtained a renewal of the NIH R25 grant of \$408,700 (over 5 years) for the "Baylor Research Education Program in Neurosurgery." Also in August, she became the lead PI (with Drs. Frederick Lang and John DeGroot as Co-PIs) for M.D. Anderson's "Brain tumor (GBM) moonshot: therapeutic targeting of glioblastoma," funded at \$1 million/year for 5 years.

Dr. Suyun Huang continued to review grant applications in the NIH Cancer Molecular Pathobiology Study Section in Bethesda, MD.

Dr. Frederick Lang cohosted M.D. Anderson's 2nd Quarterly Brain Cancer SPORE Mini-Retreat in March, chaired a SPORE Research Retreat in June, became Anderson's SPORE-in-Brain-Cancer representative on the NCI Brain Malignancies Steering Committee in July, and chaired the External/Internal Advisory Board Meeting for Brain Cancer SPORE Annual Review in December. From June through August, he served as research mentor for Houston high school students Joseph Kang (St. John's High School) and Kay Pantoja (George Ranch High School). He is serving on the M.D. Anderson Vice Provost Advisory Council—Clinical Research (VPAC-CR) Committee as of October. In May, he received \$46,851 for one year from the National Brain Tumor Society for the "Defeat GBM Collaboration Agreement." He also received \$2 million this year (of \$5 million awarded) from the Broach Foundation for Cancer Research to support his studies of Delta-24-RGD in treating recurrent malignant gliomas.

Dr. Nicholas Levine departed from M.D. Anderson to pursue outside opportunities. We wish him well.

Dr. Joseph McCarty reviewed grant proposals for the NIH Health Tumor Microenvironment Study Section in Seattle in October. In June, he received an NIH R21 grant to pursue "Genetic models to study glial regulation of angiogenesis," funded at \$436,881 over 2 years. In August, he was the 2014 Recipient of Knowledge Gap Seed Funding from M.D. Anderson at \$100,000 for one year to employ "Preclinical models to study the blood-

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Immunotherapy for Malignant Brain Tumors



brain barrier in human brain metastases." And in October, he secured an NIH RO1 grant of \$201,320 for 5 years to study "Signal transduction by alphaV β ," as well as \$180,112 for one year from the Cancer Prevention and Research Institute of Texas to study "Targeting tumor cell invasion."

Dr. Ian McCutcheon served as a panel member for "Clinical cases of low-grade gliomas," "Clinical cases of high-grade gliomas," and "Clinical cases of central nervous system metastases" at the 3rd International Congress of Neuro-Oncology, São Paulo, Brazil, in May. He was also Visiting Professor at The Ohio State University, Department of Neurological Surgery, Columbus, OH, in October.

Dr. Sujit Prabhu introduced and is evaluating the Nexstim Navigated Brain Stimulation system (NBS System 5) at M.D. Anderson. This is a noninvasive system for presurgical mapping of the motor cortex.

Dr. Ganesh Rao is serving as the treasurer of the Congress of Neurological Surgeons (CNS) Executive Committee (2014-2017). He mentored Loyola Gressot, MD, who won the Preuss Research Award at the 82nd AANS Annual Scientific Meeting in San Francisco, for the presentation titled "Signal Transducer and Activator of Transcription 5b Drives Malignant Progression in Proneural Glioma by Suppressing Apoptosis." He also mentored Arvind Rao, PhD, who received \$50,000 from the NIH/MDACC Brain Cancer SPORE as PI to study "Facilitating access to personalized interventions for glioblastoma via imaging genomics analysis." And he was Codirector of the CNS: PGY1 SNS Boot Camp Course, at Baylor College of Medicine in July.

Dr. Laurence Rhines was Visiting Professor at Upstate Medical University, Syracuse, NY, in March. He was moderator for the Sawbones Lab on Cervical Techniques (T1 Pedicle Screws; Anterior Cervical Plating; Posterior Occipitocervical; and C1-C2 Fixation Lateral Mass Screw) and for Thoracolumbar Techniques (Posterior Pedicle Screws; Anterior Fixation) at the AO Neuro Course on Management of Traumatic Brain and Spinal Cord Injuries, San Francisco, CA, in May. And in June, he moderated the Lumbar Session—Case Presentation & Discussion at the Stryker Tumor Course, in Las Vegas, NV.

Dr. Raymond Sawaya hosted the 6th Annual Philip L. Gildenberg Lectureship, presented in February by Dr. Tipu Z. Aziz at Baylor College of Medicine, a talk titled "Targeting the Affective Component of Pain, Deep Brain Stimulation of the Anterior Cingulate." He was honored in February at the 9th Biennial Ben Qurrah Award Gala, presented by the Houston Chapter of the Arab-American Medical Association. In March, he served on the G75 Special Emphasis Panel reviewing NIH/NINDS R25 grant applications. In July, he was an honored guest at the 1st Brain Tumor Update, San Salvador, El Salvador. And he was the honored guest of the

Korean Neurosurgical Society (in April) and of the Neurosurgical Society of Australia (in October).

Dr. Dima Suki was appointed Associate Chair of M.D. Anderson's Institutional Review Board IV, 2014-forward.

Dr. Claudio Tatsui's peer-reviewed article "Neurologic status at surgery affects metastatic spinal renal cell carcinoma survival" was featured in the online newspaper, *Spine Surgery Today*, vol. 1 (2), April 2014.

Dr. Jeffrey Weinberg became a permanent member of M.D. Anderson's Division of Surgery Executive Committee, in May. He was also elected to the Society of Neurological Surgeons (Senior Society) in July.

Residents for 2014 from Baylor Coll. of Medicine were Drs. George Al-Shamy (10/13-2/14), Jared Fridley (11/13-2/14), Eric Momin (11/13-2/14), Akash Patel (3/14-6/14), Ali Jalali (3/14-6/14), Rory Mayer (3/14-6/14), Jonathon Thomas (7/14-10/14), Jonathon Sellin (7/14-10/14), Visish Srinivasan (7/14-10/14), Vikas Rao (11/14-2/15), Loyola Gressot (11/14-2/15), Aditya Vedantan (11/14-2/15), and Daria Krivosheya (12/14-9/15). From the Foundation for Orthopaedic Athletic and Reconstructive Research—UTHSC, we had Drs. Heidi Hullinger (3/14-4/14), Jeffrey Ratusznik (5/14-6/14), plus James Alan Muns, MD, from UT Medical Branch (Galveston, TX) (5/14-6/14).

New Clinical Fellows this year (7/14-6/15) were Drs. Vincent DiNapoli (7/14-6/15)—Univ. of Cincinnati, OH, and Savatore Zavarella (7/14-6/15)—North Shore-Long Island Jewish Health System, Old Westbury, NY. Continuing his fellowship was Edjah Nduom, MD, (Emory Univ. School of Medicine, Atlanta, GA) (7/13-6/15). Finishing their fellowships in 2014 were Drs. Michael Dirks (Nat'l Capital Consortium, Walter Reed Army Med. Ctr., Washington, DC), Yan Michael Li (State Univ. of New York, Syracuse, NY), Shaan Raza, (Johns Hopkins Hospital, Baltimore, MD), and Rohan Ramakrishna (Univ. of Washington, Seattle, WA).

Visiting Scientists in 2014 were Yamei Wu, MD, Chen Yue, MD, and Sun-Ho Lee, MD, from the People's Republic of China; plus Roger Rotta Medeiros, MD; and there were 11 **Postdoctoral Fellows** in our department.

We thank our friends **Kyle C. and Elaine Brooks, Paul Orefice, the Dr. Marnie Rose Foundation, the Broach Foundation, the Nicholson Family, the Apache Corporation, and the Silverman Foundation.** We appreciate their support, which has been a great asset to brain tumor research in our department.

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