**Maryam Rahman, MD MS FAANS**

A close-up of a person smiling

Description automatically generated

Office: PO Box 100265 Gainesville FL 32610

[**https://braintumors.ufhealth.org/science/uf-brain-tumor-immunotherapy-program/principal-investigator-maryam-rahman-md/**](https://braintumors.ufhealth.org/science/uf-brain-tumor-immunotherapy-program/principal-investigator-maryam-rahman-md/)

**Employment**

**Associate Professor with Tenure University of Florida, Gainesville, FL**

Neurological Surgery 2021-current

**Assistant Professor University of Florida, Gainesville, FL**

Neurological Surgery 2013-2020

Tenure track

**Clinical Lecturer** **University of Florida, Gainesville, FL**

Neurological Surgery 2012

**Education**

**Fellowship Johns Hopkins University, Baltimore, MD**

Neurosurgical-oncology 2013

**Residency University of Florida, Gainesville, FL**

Neurological Surgery 2006-2012

**Fellowship University of Florida, Gainesville, FL**

Neural and Tumor Stem Cell Biology 2008-2010

**Postdoctoral M.S. with thesis University of Florida, Gainesville, FL**

Clinical Investigation Clinical and Translational Science Institute

2008-2010

**Internship University of Florida, Gainesville, FL**

General Surgery 2005-2006

**M.D. University of Florida, Gainesville, FL**

2001-2005

Cum Laude

**B.A. Johns Hopkins University, Baltimore, MD**

1997-2001, Chemistry

Phi Beta Kappa & Departmental Honors

**Licensure and Certification**

State of Florida Medical License and active DEA License

Passed American Board of Neurological Surgery Primary Examination for credit (March 2010)

Passed American Board of Neurological Surgery Oral Examination (April 2016)

Fellow of the American Association of Neurological Surgery (May 2016)

**Experience/Service**

**Academic Appointments**

* ***Graduate Faculty***, Department of Neuroscience, University of Florida, Gainesville, FL 2018-current
* ***Associate Professor***, Department of Neurosurgery, University of Florida, Gainesville, FL, 2021-present
* ***Assistant Professor***, Department of Neurosurgery, University of Florida, Gainesville, FL, 7/2013-2020
* ***Clinical Lecturer***, Department of Neurosurgery, Johns Hopkins University, Baltimore, MD, 1/2013-6/2013
* ***Clinical Lecturer***, Department of Neurosurgery, University of Florida, Gainesville, FL, 7/2012-12/2012
* ***Resident***, Department of Neurosurgery, University of Florida, Gainesville, FL, 7/2006-6/2012
* ***Intern***, Department of Surgery, University of Florida, Gainesville, FL, 7/2005-6/2006

**Administrative Appointments/Responsibilities**

* ***Vice chair,*** Lillian S. Wells Department of Neurosurgery, University of Florida, Gainesville, FL 2022-present
* ***Chair, Resource Utilization Committee*** (alots OR block-time for UF Health), UF Health, Gainesville, FL 2022-present
* ***Research director of the Neuro-oncology Disease specific group***, UF Health Cancer Center, Gainesville, FL 2022-present
* ***Clinical director of the Neuro-oncology Disease specific group***, UF Health Cancer Center, Gainesville, FL 2016-2022
* ***Surgical director of the Laser Interstitial Thermotherapy Program and the Intraoperative MRI Program***, University of Florida, Gainesville, FL, 2015-present
* ***Surgeon Leader***, UF Health OR Neuro College, University of Florida, Gainesville, FL 7/2013-2022
* ***Co-Chair, OR Quality and Safety Committee Costs/Efficiency subgroup***, UF Health 2020-2022
* ***Committee member, Cancer Therapeutics and Immuno-oncology***, University of Florida, Gainesville, FL 2015-present
* ***Faculty sponsor of the Neurosurgical Student Interest Group***, University of Florida, Gainesville, FL 2016-2018
* ***Clinical course director, Medical Neuroscience course***, University of Florida College of Medicine, Gainesville, FL 2011-2018
* ***Committee Member, UF OR Quality and Safety Committee***, University of Florida, Gainesville, FL, 2016-2018
* ***Co-director, NICAP Telemedicine Initiative***, Department of Neurosurgery, University of Florida, Gainesville, FL, 2014-2016
* ***Committee Member, UF Health New Tower Planning***, University of Florida, Gainesville, FL 2014-2017
* ***Committee Member, UF Health Cancer Committee***, University of Florida, Gainesville, FL, 7/2013-present
* ***Chief resident, Department of Neurosurgery***, University of Florida, Gainesville, FL, 7/2011-6/2012

**Honors and Awards**

* + - * Best Faculty Mentor – UF Department of Neurosurgery Residents – 2023
      * 2023 Top Tumor Paper of the Year – CNS Annual Meeting 2023
      * UF Bolster Bucks Research Award - 2021
      * Principal Investigator of the Year Award – UF Health Cancer Center - 2021
      * McKnight Brain Institute Career Enhancement Award - 2020
      * UF College of Medicine Exemplary Teacher Award – 2019, 2018
      * McKnight Brain Institute Leadership Award - 2019
      * American Association of Neurological Surgeons Preuss Research Award - 2019
      * UF College of Medicine Exemplary Teacher Award - 2018
      * UF Term Professorship - 2018
      * Outstanding Basic Science Teacher of the Year, UF College of Medicine – 2016
      * McKnight Brain Institute Travel Award - 2015
      * Outstanding Resident Educator Award, UF College of Medicine - 2013
      * CNS Tumor Fellowship Award - 2012
      * Course Director Teaching Award, UF Department of Neuroscience - 2011
* Resident High Board Score, UF Department of Neurosurgery – 2010
* First place in the Cerebrovascular section for research presentation, American Association of Neurological Surgeons Annual Meeting – 2010
* Chuck Shank Award for Excellence in Neurosurgery, UF Department of Neurosurgery - 2009
* Resident Research Award, UF Department of Neurosurgery – 2009
* Resident Teaching Award, UF College of Medicine – 2009
* Alpha Omega Alpha, UF College of Medicine – 2004 - present
* Chapman Humanism Society, UF College of Medicine – 2004 – present
* Unsung Hero, Varsity Womens Fencing Team, Johns Hopkins University – 1999
* Deans List for all semesters, Johns Hopkins University – 1997-2001
* Phi Beta Kappa, Johns Hopkins University – 1997-2001

**Leadership Positions**

* Vice chair of clinical operations, Lillian S. Wells Dept of Neurosurgery, UF (2022-present)
* Chair, Resource Utilization Committee (allocating OR blocktime), UFHealth (2022-present)
* Scientific program chair, AANS/CNS Joint Section on Tumor (2022-2023)
* Research co-chair, AANS/CNS Joint Section on Tumor (2022-2023)
* Inaugural Co-Chair, CNS Diversity, Equity, Inclusion Committee (2020-2023)
* Faculty, CNS Leadership in Healthcare (2017-2022)
* Course Director, CNS Tumor Complications course (2019-2021)
* Vice Chair of Education, Congress of Neurological Surgeons (2020-2021)
* Vice Chair of Leadership Institute, Congress of Neurological Surgeons (2019-2021)
* Captain of Practical Courses and Symposia, CNS Annual Meeting 2021
* Online Education Chair, Congress of Neurological Surgeons (2019-2020)
* Immunotherapy subsection co-chair, AANS/CNS Section on Tumors (2016-2022)
* Secretary, Women in Neurosurgery (2022-2023)
* Treasurer, Women in Neurosurgery (2021-2022)
* Member of Residency Selection Committee, University of Florida, Department of Neurosurgery (2013-current)
* Webinar Chair, Congress of Neurological Surgeons (2019-2021)
* Nexus Editor, Congress of Neurological Surgeons (2017-2021)
* Tumor Section Editor for Self Assessment in Neurological Surgery (SANS) in the CNS (2019-2021)
* CNS Bylaws Committee, Congress of Neurological Surgeons (2021)
* Co-Chair, CNS/SNO Brain Tumor Board Webinars (2020-2021)
* President, Florida Neurosurgical Society (2018-2019)
* Committee chair, CNS Case of the Month (Member 2013-2016, Chair 2016-2019
* Faculty sponsor, UF Neurosurgery Interest Group (2015-2018)
* Member at large, AANS/CNS Section Women in Neurosurgery (2017-2021)
* Co-chair, CNS Sergeant in arms committee (2017-2020)
* Member, CNS SANS committee (2017-2021)
* Committee member, UF OR Quality and Safety Committee (2016-2018, 2020-2022)
* Clinical director of the Neuro oncology disease specific group, UF Health Cancer Center (2016-present)
* President elect, Florida Neurosurgical Society (2017-2018)
* Program Chair, Florida Neurosurgical Society (2016-2017)
* Treasurer, Florida Neurosurgical Society (2015-2016)
* OR Neuro-College Surgeon Leader, University of Florida (2013-present)
* Laser Interstitial Thermotherapy Surgeon Leader, University of Florida (2016-present)
* Active member, AANS/CNS Section on Tumors (2013-present)
* Active member, Women in Neurosurgery (2015-present)
* Quality Officer, Department of Neurosurgery, University of Florida (2012-2013)
* Active member, UF Cancer Committee, University of Florida (2008-2012)
* Active member, American Association of Neurological Surgeons (2006-present)
* Active member, Congress of Neurological Surgeons (2006-present)
* Member, Society of Neuro-oncology (2009-2019)
* Member, Florida Neurological Society (2008-present)

**Professional Service**

* Grant reviewer NIH Cancer Biotherapeutics Development (CBD) SBIR/STTR – March 2023
* Grant reviewer NIH Cancer Immunopathology and Immunotherapy (CII) – June 2022
* DEI Editor (appointed by Dr. Doug Kondziolka), *Neurosurgery*, 2022-present
* Editor, Immunotherapy Special Issue, *Journal of Neuro Oncology* 2021
* Invited editor, Immunotherapy Special Issue, *Neurosurgical Focus* 2022
* Ad hoc reviewer, *Brain*
* Ad hoc reviewer, *European journal of Neurology*
* Ad hoc reviewer, *Neurological Research*
* Invited reviewer, *PlosOne*
* Invited reviewer, *Neurosurgery*
* Neurosurgery representative for American Society of Hematology VTE Guidelines Committee
* Mentor for Summer Health Professions Education Program at UF for under-represented minorities in medicine (2019-current)

**Professional Development**

* Surgical Leadership Webinar series. Harvard T.H. Chan School of Public Health Executive and Continuing Professional Education. (Summer 2022)
* Implicit Bias training. CNS Summer Executive Committee meeting lead by Goodstock Consulting. Sea Island, GA (June 2021)
* NRCDP/NIH Retreat for K-awardees. Virtual (Nov 2020)
* NRCDP/NIH Retreat for K-awardees. Park City, UT (Nov 2018)
* CNS Leadership in Healthcare Course, Chicago, IL (May 2016, May 2017, May 2021)
* American Association of Medical Colleges Early Women Career Development Course, Englewood, CO (July 2016)
* Academy of Neurological Surgeons Scholars Program, Jacksonhole, WY (Sept 2016)

**Quality Improvement**

These efforts have required assembling an interdisciplinary team, communicating challenges/goals, holding regular meetings, measuring outcomes and concluding once goals are met. These projects have been initiated and concluded by myself after identifying limitations within our healthcare institution.

* Improving integration of APPs into the department of neurosurgery (2021-current)
* Reducing waste in the OR (2021)
* Improving communication with referring physicians for outpatients and inpatient transfers (2019)
* Improving sterile processing for neurosurgery OR trays (2019)
* Improving preop and check-in process for neurosurgery patients on the day of surgery (2019)
* Improving infection control in the OR (2018)
* Increasing nursing coverage in the OR for afternoons/nights/weekends (2016)

**Research Funding**

* Florida Center for Brain Tumor Research: 2023

PI. $75,000 – 1 year

Laser interstitial thermotherapy to activate an anti-tumor immunity in murine models and patients with brain metastases.

* Florida Center for Brain Tumor Research: 2023

Co-PI. $75,000 – 1 year

Modulation of CCR5 expressing microglia in the glioma tumor microenvironment using an mRNA vaccine.

* ABTA Summer Research Award for Kyle McGrath: 2022

Mentor. $3,000 (student stipend) – 3 months

Role of natural killer cells in efficacy of a novel glioblastoma mRNA vaccine.

* Florida Center for Brain Tumor Research: 2021

Co-PI. $75,757 – 1 year

Novel hydrogel-based immunotherapy vaccine for the treatment of brain tumors

* UF Seed Funding: 2021

PI. $82,000 – 2 years

Hydrogel based immunotherapy vaccine for the treatment of high-grade glioma

* ABTA Summer Research Award for Yusuf Mekhri: 2021

Mentor. $3,000 (student stipend) – 3 months

The immune effects of a novel vaccine in combination with standard of care

* Monteris Medical: 2020

PI. $300,000 – 3 years

LITT and pembrolizumab in recurrent brain metastasis (TORCH study NCT: 04187872)

* McKnight Brain Institute Career Enhancement Award: 2020

PI. $10,000 – 1 year

* Florida Center for Brain Tumor Research (FCBTR): 2020

PI. $67,500 – 1 year

Immunomodulation with chemotherapy to enhance immunotherapy for the treatment of brain tumors

* ABTA Discovery grant: 2020

PI. $50,000 – 1 year

Vaccine strategy to overcome treatment induced immunosuppression in glioma

* NINDS K08NS099484: 2016 (2 supplements)

PI. $925,000 – 5 years

Leveraging temozolomide to improve treatment efficacy of immune checkpoint blockade in brain tumors

* University of Florida Cancer Therapeutics and Host Response Program Collaborative Team Grant: 2018

Co-PI. $50,000 – 1 year

Mechanisms of immune exhaustion in human patients and a murine glioma model

* University of Florida Health Cancer Center (UFHCC) Interdisciplinary Collaborative Pilot Award: 2018

Co-PI. $70,000 – 1 year

Mechanistic insights for synergistic interactions between CCR2 antagonists and immune checkpoint inhibitors in slowing glioma progression

* Florida Center for Brain Tumor Research and Accelerate Brain Cancer Cure (FCBTR/ABC2): 2017

PI. $87,500 – 2 years

Novel immune response algorithm to predict responders to immunotherapy

* Ocala Royal Dames for Cancer Research: 2016

PI. $50,000 – 2 years

Using SR233 for enhancing cellular migration in dendritic cell vaccine therapy for malignant brain tumors

* CNS Tumor Fellowship Award: 2012

PI. $15,000.00 – 1 year

Adaptive therapy for glioblastoma

* Musella Foundation Grey Ribbon Crusade Grant for Brain Tumor Research: 2010

PI. $40,000.00 – 2 years

BMP-4 and bevacizumab for glioblastoma

* Florida Center for Brain Tumor Research Hope Heals Grant: 2009

Co-PI. $2000.00 – 1 year

Evaluating bone morphogenetic protein-4 in low grade gliomas

* Musella Foundation Grey Ribbon Crusade Grant for Brain Tumor Research: 2009

Co-PI. $10,000.00 – 1 year

Evaluating bone morphogenetic protein-4 in low grade gliomas

**Research Experience**

* **Clinical Trials**
  + Phase II randomized, placebo-controlled trial testing dendritic cells (DCs) loaded with CMV pp65 mRNA for newly diagnosed GBM (ATTAC II, NCT 02465268) – completed enrollment of patients. **Role: PI**
  + Phase II study testing LITT and pembrolizumab for recurrent brain metastases (TORCH, NCT 04187872) – actively accruing. **Role: PI**
  + Florida Center for Brain Tumor Research (FCBTR) Biobank (Supported by Florida state legislature, NCT 00811148). Actively accruing. **Role: PI**
  + Immune monitoring of patients with gliomas. Actively accruing. Role: **Co-PI**
  + mRNA-lipid nanoparticle vaccines for high grade glioma in adult and pediatric patients (NCT 04573140). Actively enrolling. Role: **Co-PI**
* **Postdoctoral Research Fellow, University of Florida (2008-2010)**

Conducting translational research in the study of cellular pathways and novel treatments for brain

tumors under the direction of Dr. Brent Reynolds.

* **Education Fellowship, University of Florida (2004)**

Developed educational videos for neurosurgery residents under the direction of Dr. William Friedman.

* **Research Assistant, University of Florida (2002)**

Tested fluoroscopic image guidance systems for spinal surgery under the direction of Dr. Frank Bova.

* **Research Assistant, Johns Hopkins University (2000-2001)**

Genetic mutations involved in congenital heart disease were demonstrated by extracting mRNA from

mice hearts and using PCR techniques under the direction of Dr. Anne Murphy.

* **Research Assistant, Johns Hopkins University (2000-2001)**

Studied Respiratory Distress Syndrome in human patients and its association with TTF-1 gene under

the direction of Larry Nogee, MD.

**Invited Talks**

Course director. CNS Complications Symposium. CNS Annual Meeting Washington D.C. Sept 2023.

Moderator. DEI Breakfast: Mentoring 101. CNS Annual Meeting Washington D.C. Sept 2023.

Faculty. Leading the Pack. CNS Annual Meeting Washington D.C. Sept 2023.

Moderator. Introduction to tumor case discussion. Tumor Section Symposium Washington D.C. 2023.

Moderator. Case Discussion, Recurrent Gliomas. Tumor Section Symposium Washington D.C. 2023.

Moderator. How to Establish a Translational Research Effort as an Early Career Neurosurgeon. Tumor Section Symposium Washington D.C. 2023.

Faculty. Difficult patient conversations. SNS Intern Bootcamp. July 2023.

Surgical Management of Brain Tumors (CME). Ocala Outreach Lecture for Dept of NSG. June 2023.

LITT for Brain Tumors. Jacksonville Outreach Lecture for Dept of NSG CME. March 2023.

Course director. CNS Complications Symposium. CNS Annual Meeting San Francisco, CA Oct 2022.

Glioblastoma, Immunotherapy, and Overcoming Failure. MGH Grand Rounds. Dec 2022.

High grade gliomas – pseudoprogression versus progression. Society of Neuro Oncology webinar. Sept 2021.

Vaccines for glioblastoma. Mayo Visiting Professor. Jan 2021.

GBM: Modern diagnostic and therapeutic strategies. UF Department of Neurosurgery Grand Rounds. Oct 2020.

Awake mapping for gliomas, panelist. Miami Global Brain Tumor Symposium. Online. July 2020.

Management of cerebellopontine angle tumors. Florida Neurosurgical Society Annual Meeting. Palm Beach, FL, Aug 2019.

Panel discussant on Everyday Muslim Women Panel. Islam on Campus, University of Florida, Feb 2019.

Laser interstitial thermotherapy. UF Neuro Anesthesia Grand Rounds, University of Florida, Jan 2018.

Moderator for Immunotherapy session. AANS/CNS Joint Section on Tumors Satellite Symposium. Houston, TX, Oct, 2018.

Culturally competent care: caring for the Muslim patient. World Bioethics Day. University of Florida, Oct 2018.

Contemporary framework of language processing in the human brain. University of Florida Department of Neurosurgery Grand Rounds, Sept 2018.

Extending survival for patients with GBM: the Long Game. Mayo Clinic Neurosurgery Grand Rounds, Sept 2018.

Mapping for eloquent area brain tumors. Summer for Health Professions Education Program for under-represented minorities. UF College of Medicine, June 2018.

Leadership in healthcare: a participant’s perspective. CNS Leadership in Healthcare meeting, Chicago, IL. May 2018.

Is finding a cure for GBM a myth? Florida Center for Brain Tumor Research Annual Summit, Tallahassee, FL. Feb 2018.

Moderator for Educating neurosurgeons: the science and art of teaching surgery. CNS Annual Meeting, Boston, MA. Oct 2017.

Moderator for Section on tumors, session 2. CNS Annual Meeting, Boston, MA. Oct 2017.

Dendritic Cell Vaccines for Brain Tumors. CNS Lunch Session on Malignant Gliomas: Advances in Surgery and Adjuvant Therapy. CNS Annual Meeting, Boston MA. Oct 2017.

Cerebellopontine Angle Tumors. CNS Lunch Session on Acoustic Neuromas: Current Management Strategies. CNS Annual Meeting, Boston MA. Oct 2017.

Approach to Eloquent Area High Grade Gliomas – a Young Neurosurgeons’ Perspective. CNS Course on Surgical Management of Eloquent Area Tumors: Functional Mapping and/or Navigation. CNS Annual Meeting. Boston, MA. Oct 2017.

Improving outcomes for glioblastoma. Florida Neurosurgical Society Annual Meeting, Palm Beach, FL. Aug 2017.

Leadership in healthcare: a participant’s perspective. CNS Leadership in Healthcare meeting, Chicago, IL. May 2017.

A cure for brain cancer: fact or fantasy? UF Health Cancer Center Gatortalk, Ocala, FL. May 2017.

Awake craniotomy with cortical mapping for brain tumors. Department of Anesthesiology, Division of Neuroanesthesia. UF Health. Gainesville, FL. Nov 2016.

Approach to Caring for the Muslim Patient. Muslim Medical Student Association. UF Health. Gainesville, FL. Sept 2016.

Improving GBM Outcomes. Department of Anesthesiology, Division of Neuroanesthesia. UF Health. Gainesville, FL. July 2016.

Approach to Caring for the Muslim Patient. Authorized Interpreters Luncheon. UF Health. Gainesville, FL. April 2016.

Quality metrics in neuro-oncology. Society of Neuro-Oncology meeting. Houston TX, Nov 2015.

Immunotherapy for Brain Tumors. American Brain Tumor Association Patient and Family Meeting. Tampa, FL. April, 2015.

**PodCasts/Webinars/Online Content**

Melnick K, **Rahman M.** Trial effect in patients with glioblastoma: effect of clinical trial enrollment on overall survival. JNO Tumor Talk. Sept 2022.

**Rahman M**. Radiosurgery vs. surgical resection for meningiomas and schwannomas. CNS Podcasts. Dec 2022.

Goutnik M, Still M, **Rahman M**. Frontotemporal craniotomy for resection of meningioma. CNS Nexus case. Published Sept 2021.

Still M, Mehkri Y, Kurian L, **Rahman M**. Right parietal craniotomy for resection of multilobar high grade glioma. CNS Nexus, 2021. [https://cnsnexus.crowdwisdomhq.net/nexus/article/15079](https://urldefense.proofpoint.com/v2/url?u=https-3A__cnsnexus.crowdwisdomhq.net_nexus_article_15079&d=DwMFaQ&c=sJ6xIWYx-zLMB3EPkvcnVg&r=_rJIDUy27rhoxEMw07l271x2A4yRS4TkqH2lhzXjyuP8TMx2GO6dQL7WJxYMmBkK&m=KSx7rMrVo42uM1H0ctct2UprcUUiHxwFOYK7wNs6Rh4&s=oCdY0qWCw86bWbE40VCdFHSPjhwBsY67XdHxW2fsrKM&e=)

CNS Virtual Visiting Professor - Developed over 40 new, live webinars for the Congress of Neurological Surgeons in response to COVID pandemic with live attendance as high as 238 attendees and almost 12,000 views as of June 2020

CNS/SNO Virtual Brain Tumor Board – live, interactive webinars in collaboration with the Society of Neuro-Oncology with multi-disciplinary groups of faculty

GBM: Diagnostic and therapeutic strategies. Webinar for the University of Florida. Nov 2020. https://www.youtube.com/watch?v=-QUzdou5egw&feature=youtu.be

Treatment Options for Vestibular Schwannomas and Other CPA Tumors. Webinar for the University of Florida for CME. Oct 2020.

LITT for brain tumors. Podcost for University of Florida available for CME. Oct 2020.

Immunotherapy for GBM. Webinar for University of Florida available for CME. June 2020. <https://neurosurgery.ufl.edu/braincme/>

Brain Tumor Immunology Webinar series (4 webinars). AANS/CNS Joint Section on Tumor. June 2020. <https://www.tumorsection.org/webinars/>

Surgical and Non-Invasive Treatment Options for Vestibular Schwannomas. Acoustic Neuroma Association Webinar. Nov 2019. [https://vimeo.com/374505802](https://urldefense.proofpoint.com/v2/url?u=https-3A__vimeo.com_374505802&d=DwMFaQ&c=sJ6xIWYx-zLMB3EPkvcnVg&r=_rJIDUy27rhoxEMw07l271x2A4yRS4TkqH2lhzXjyuP8TMx2GO6dQL7WJxYMmBkK&m=Yb1UijTWddHKqYdVyYrWvAPW2WlQzZ4_G-n9kXRObJI&s=E_43YeJGhchpky6OdtMbLMpF3hTv8bWdNrimf5BkcqU&e=)

Women in Neurosurgery and Congress of Neurological Surgeons Webinar: Finding the Perfect Job, March 2019.

Barkley K, **Rahman M**. Congress of Neurological Surgeons Nexus Case: Awake mapping for temporal tumor. 2018.

Written Board Prep: Neurosurgery and neuroimaging: vascular, tumor, pediatrics. Congress of Neurological Surgeons Webinar. Feb, 2019.

Brain tumor clinical trials at the University of Florida. Webinar for the Musella Foundation. July 2018.

<https://www.youtube.com/watch?v=rJhT9pWKFxY&t=23s>

Written Board Prep: Neurosurgery and neuroimaging: vascular, tumor, pediatrics. Congress of Neurological Surgeons Webinar. March, 2018.

Immunotherapy: What neurosurgeons need to know. AANS/CNS Joint Section on Tumors. [www.tumorsection.org](http://www.tumorsection.org). April 2017.

Current and future therapeutic strategies for glioblastoma. American Brain Tumor Association. May, 2015.

Brain metastases: a treatment and care update. American Brain Tumor Association. March, 2014.

Direct thrombolysis for cerebral venous sinus thrombosis. Neurosurgical Focus. Nov, 2009.

Stereotactic radiosurgery and the linear accelerator: accelerating electrons in neurosurgery. Neurosurgical Focus. Sept, 2009.

**Invited Papers**

**Rahman M**, Murad GJ, Mocco J: The stereotactic apparatus in neurosurgery: early pioneers. Florida Medical Association. Sept, 2009.

Dastmalchi F, Karachi A, Mitchell DA, **Rahman M.** Dendritic cell therapy. eLS, John Wiley & Sons, Ltd (ed.). 2018. Doi:10.1002/9780470015902.a0024243.

**Rahman M**. Subspeciality symposia. Essential content and outstanding value. CNS Q. May 2021.

**Book Chapters**

Sacks P, **Rahman M**. Epidemiology of brain metastases. Neurosurgery Clinics of NA.Volume 31, Issue 4. 2020.

**Rahman M**, Kohler N, Bihorac A: Water and electrolyte management in neurological disease. Textbook of Neurointensive Care. Editors Layon JA, Gabrielli A, Friedman WA. Volume 2. 2013.

**Rahman M**, Bova F, Murad GJ, Friedman WA: Linac: past present and future of radiosurgery. Principles and practice of stereotactic radiosurgery. Editors Lawrence Chin and William Regine. Second Edition. Springer, 2015.

**Rahman M**, Bova F, Friedman WA: Frame based SRS. Controversies in Stereotactic Radiosurgery, Best Evidence Recommendations. Editors Jason Sheehan and Peter C. Gerszten. Thieme, 2014.

**Patents**

Rahman M, Mitchell DA, Lovaton R, Azari H. Methods, kit and compositions for enhancing cellular therapy. US Patent No. 11,674,120. Filing date 09/21/2018. Issue date 06/13/2023.

Dastmalchi F, Rahman M, Angelini T. Biocompatible nanocomposite hydrogel immunotherapy vaccine. US Provisional patient application serial no. 63/065,901, filed Aug 14, 2020.

**Service to Organized Neurosurgery**

1. Inaugural Co-Chair – CNS Diversity Inclusion Equity (2020-2023)

A group of people posing for a photo

Description automatically generated

**Pathways Program**. High school students in Austin, TX at the CNS Annual meeting in Oct 2021. In collaboration with Breakthrough, industry and Rosalind George

* 1. Implicit bias course at CNS 2021 Annual Meeting
  2. Implicit bias training at CNS 2021 Summer Executive Committee meeting
  3. Subcommittee on Private Practice Engagement
  4. Subcommittee on creating best practices for encouraging diversity in educational offerings and committee appointments
  5. Community Engagement program
  6. Pathways to Neurosurgery program
     1. High school students brought to the annual meeting for immersive experience in neurosurgery (Austin TX 2021, San Francisco CA 2022)

1. CNS Bylaws Committee – member (2021-2022)
2. Neurosurgery Editor in Chief Search Committee (2020)
3. CNS Scientific Program Committee – Practical courses and symposia for the 2021 Annual meeting
4. Vice Chair of Education (2020-2021)
5. Vice Chair of Leadership Institute (2019-2021)
   1. Developing online classroom material addressing strategic planning.
6. Online Education Chair
   1. Developed Online grand rounds and Virtual Visiting Professor series to address lack of conferences due to COVID. Coordinated almost 50 live webinars with esteemed faculty with large attendance numbers during the COVID shutdown.
   2. Overhauled recorded webinar curriculum. 2019
   3. Podcasts focused on Guidelines 2021
   4. New format for Neurosurgical Watch with Graphic abstracts 2021
7. Chair of CNS Case of the Month (Member 2013-2016, Chair 2016-2019)
   1. Oversaw/reviewed/edited monthly case vignette series
   2. Submitted 15 cases myself
8. CNS SANS Committee (Member 2016-present, Tumor Section editor 2019-2020, advisor 2020-2021)
   1. Oversee tumor related questions/content by soliciting new questions and retiring older questions, curating tumor exam
   2. Submitted several questions myself
   3. ABNS exam - recruited question writers, wrote critiques and edited critiques for several questions
9. CNS Nexus (Editor 2017-2021, Advisor 2021)
   1. Oversee generation of content, coordination of section editors. Increased cases from 200 to over 400 since I started as editor. Have also worked closely with medical illustrator to revise the online artwork to make the website more user friendly.
   2. Submitted several cases myself.
10. Sergeant in Arms Coordinator for the CNS 2017 and 2018 Annual Meeting – Coordinated the Sergeant in Arms for the sessions and ensured audience participation was functional for the breakout sessions (worked with Martina Stippler and David Berg)
11. Faculty Host for Jamie Holmes (Speaker at the CNS 2017 Annual Meeting) – escorted speaker to back stage and then to book signing after his presentation.
12. CNS Leadership in Healthcare (Faculty 2017-present, Vice Chair 2019-2021) – attended the course and subsequently served as faculty in 2017, 2018, 2021.
    1. Organized online classroom on Strategic planning 2021
    2. Organized Podcasts
13. CNS Online Education Chair (2019-2021)
    1. Oversee all CNS online education including Nexus, Case of the Month, Webinars, Neurosurgery Watch, Podcasts and SANS
    2. Curated webinar library
    3. Developed 20 new recorded webinars
    4. Developed Online grand rounds and Virtual Visiting Professor series in response to COVID pandemic. Organized over 30 live webinars with national and international speakers
    5. Overhauled Watch
14. AANS/CNS Joint Section on Tumors (Member 2013-present)

Co-chair of the Immunotherapy Section

* 1. Developed online educational content for the Tumor Section website (<https://www.tumorsection.org/knowledge-base/)> published in 2017
  2. Guest editor for special issue on immunotherapy for the Journal of Neuro oncology
  3. Developed 4 part webinar series for the website (June 2020)
  4. Scientific program chair for the Tumor Section Satellite meeting, AANS and CNS (2022-present)
  5. Research co-chair (2022-present)
     1. Developing research mentoring program

1. AANS/CNS Women in Neurosurgery (Member 2013-present)

Member at large (2017-2021), Treasurer (2021-2022), Secretary (2022-2023), President Elect (2023-2024)

* 1. Coordinated mentorship luncheon at the 2018 AANS Annual Meeting
     1. Paired residents/junior faculty with more senior faculty to review career goals
  2. Published Fall 2018 Newsletter that included interviews with Dr. Muraszko and Dr. Liau that I conducted (<http://www.neurosurgerywins.org/wp-content/uploads/2018/10/2018-Fall-WINS-Newsletter.pdf>)
  3. Coordinating Mentorship program
     1. Solicited applications through social media. Paired 87 medical students with 16 residents and paired 23 residents with 6 faculty. Created 1 year long curriculum for each group with surveys to monitor success of the program.

1. AANS (member 2013-present)
   1. Tumor abstract reviewer (2021-present)

**Service to Community**

1. Neurosurgery Monthly Volunteer Events – Since 2018 we have coordinated departmental monthly events to support a community cause. These have included Project Downtown (feeding homeless community members), Hoops for Hope (basketball tournament to raise money for families supporting someone with brain cancer), Food4Kids backpack program, Ronald McDonald house, Millcreek farm for retired horses, and more.
2. RAHMA Mercy Clinic physician volunteer

**Teaching Experience**

* Course director, UF Department of Neurosurgery Albert Rhoton Jr. Skull Base Course – Nov 2022
* Course director, Congress of Neurological Surgeons Tumor Complications course – Jan 2020 and May 2021, Oct 2022
* Course director, Congress of Neurological Surgeons Implicit Bias course - Oct 2021
* Course director, Clinical Neuroscience, University of Florida (2008-2011 and 2014-2018)
* Neuroanatomy teaching assistant, University of Florida (2007)
* Faculty sponsor of the Neurosurgery Student Interest Group (2015-2018)
* Faculty sponsor of the Muslim Medical Student Association (2015-current)
* Member of the UF Dept of Neurosurgery Education Steering Committee

**Mentorship**

**Participation on graduate committees (Masters or Ph.D.) –**

Michael Shang, Frank Bova Lab in Medical Physics - 2018

Alayna Ernster, Deidre Pereira Lab in Rehab Sciences and Quality of Life - 2022

Greg Takacs, Jeff Harrison Lab in Pharmacology and Therapeutics – 2022-current

Matthew Frain, Frank Bova and myself in Medical physics – 2022-current

Nickolas Diodati, Greg Sawyer Lab in Engineering – 2022-current

**Medical Students**

* Alexander Vlasak, 6/2015-2019
* Lauren Donnangello, 6/2013-12/2013
* Jorge Gil, 6/2013-8/2013
* Joseph Abbatamatteo, 6/2015-6/2018
* Edward DeLeo, 6/2015-6/2017
* Rachel Freedman 07/2016-2020
* Logan Cope 04/2016-2017
* John Mayfield 01/2016-2017
* Patricia Sacks 06/2017-06/2020
* Omar Awan 06/2018-06/2019
* Kevin Pierre 06/2019-06/2020
* Yusuf Mekhri (2019 – current)
* Claire Grady (2020-2022)
* Abeer Dagra (2020-current)
* Michael Goutnik (2020-current)
* Kyle McGrath (2020-current)
* Sai Sriram (2022-current)

**Other Students**

* Eman Shreteh, 06/2014-06/2015
* Sarah Shireen Gul, 06/2013-2020 – matched in general surgery
* Usma Baban 08/2016-8/2017
* Rachel Newsome (PhD student) 06/2018-01/2019
* Michael Shang (PhD student) 07/2016 – 06/2019
* Ghaidaa Ebrahim 06/2020-current
* Lisa Kurian 06/2018-06/2020 – matriculated into medical school
* Macaulay Tomdio 11/2021-current
* Oriana Otero 03/2021-current
* Grace Hey 06/2022 - current

**Residents**

* Kyle Fargen, 7/2014-6/2015 – Now neurosurgery faculty at Wake Forest
* Kris Hooten, 7/2013-6/2016 – Now neurosurgery faculty in the Army
* Kristin Weaver, 7/2014-current – Now neurosurgery faculty at U Miss
* Kelvin Wilson, 6/2015-6/2016 – Now neurosurgery faculty in the Army
* Matthew Decker, 7/2014-2020 - Now faculty at UF
* Timothy Lockney, 7/2013-2020 – In practice in Nashville, TN
* Stephanie Adamzcak, 7/2015-2020 – In practice in Sarasota, FL
* Sasha Vaziri, 7/2015-2022 – Spine fellowship in Miami, FL
* Dimitri Laurent 07/2016-current
* Carl Brophy 07/2017-2019
* Ken Porche 07/2017-current
* Kaitlyn Barkley 07/2017-current
* David Shin 07/2018-2022 (serving military service in Hawaii)
* Megan Still 07/2019-current
* Carlton Christie 07/2019-current
* Rasheedat Zakare 07/2019-current
* Rachel Moore 07/2020-current
* Arnold Obungu 07/2020-current
* Sandra Yan 07/2019-current

**Postdoctoral Graduate Students**

* Aida Karachi, DVM PhD, 07/2015-2019
* Anjali, PhD, 12/2022-current

**Publications (total of 103)**

\* Author is mentee

Peart R\*, Melnick K\*, Cibula J, Walbert T, Gerstner ER, **Rahman M**, Peters KB, Mrugala M, Ghiaseddin A. Neurooncol Adv. 2023 Jun 3:5(Suppl 1);i58-i66. PMID 37287578.

Mendez-Gomez HR, DeVries A, Castillo P, Stover BD, Qdaisat S, Von Roemeling C, Ogando-Rivas E, Weidert F, McGuiness J, Zhang D, Chung MC, Li D, Zhang C, Marconi C, Campaneria Y, Chardon-Robles J, Grippin A, Karachi A, Thomas N, Huang J, Milner R, Sahay B, Sawyer WG, Ligon JA, Silver N, Simon E, Cleaver B, Wynne K, Hodik M, Molinaro A, Guan J, Kellish P, Doty A, Lee JH, Carrera-Justiz S, **Rahman M**, Gatica S, Mueller S, Prados M, Ghiaseddin A, Mitchell DA, Sayour EJ. mRNA aggregates harness danger response for potent cancer immunotherapy. medRxiv. 2023 Mar 17:2023.03.12.23287108. PMID 36993772.

Castillo P, Ogando-Rivas E, Geffrard H, Pep A, Liu R, Nguyen DT, Pedro DI, Zhang D, DeVries A, Qdaisat S, Karachi A, **Rahman M**, Weidert F, Milner R, Huang J, Silver NL, Ligon J, Li D, Lee JH, Carrera-Justiz S, Mitchell DA, Mendez-Gomez H, Sawyer WG, Sayour EJ. mRNA challenge predicts brain cancer immunogenicity and response to checkpoint inhibitors. bioRxiv. 2023 Mar 23:2023.03.18.532056. PMID 36993158.

Melnick K, Yan S, Ghiaseddin A, Rahman M. In reply to the letter to the editor regarding “Histologic Findings at the Time of Repeat Resection Predicts Survival in Patients with Glioblastoma. World Neurosurg. 2023 Feb;170:258. PMID 36782416.

Silver A, Feier D, Ghosh T, **Rahman M**, Huang J, Sarkisian MR, Deleyrolle LP. Heterogeneity of glioblastoma stem cells in the context of the immune microenvironment and geospatial organization. Front Oncol. 2022 Oct 19:12:1022716. PMID: 36338705.

Melnick K\*, Miller P\*, Carmichael E\*, Wang Y, Tran D, Kresak JL, Ghiaseddin A, **Rahman M**. Histologic findings at the time of repeat resection predicts survival in patients with glioblastoma. World Neurosurg. 2022 Oct 4:S1878-8750. Online ahead of print. PMID: 36206964.

**Rahman M**, Eisenschenk S, Melnick K\*, Wang Y, Heaton S, Ghiaseddin A, Hodik M, McGrew N, Smith J, Murad G, Roper S, Cibula J. Duration of prophylactic levetiracetam after surgery for brain tumor: a prospective randomized trial. Neurosurgery. 2022 Sept 26. Online ahead of print. PMID: 36156532.

Moor R\*, Goutnik M\*, Lucke-Wold B, Laurent D, Chen S, Friedman W, **Rahman M**, Allen N, Rivera-Zengotita M, Koch M. Clival paraganglioma, case report and literature review. OBM Neurobiol. 2022;6(3):13. PMID: 35844205.

Melnick KF\*, Miller P\*, Carmichael E\*, McGrath K\*, Ghiaseddin A, Tran DD, **Rahman M**. The trial effect in patients with glioblastoma: effect of clinical trial enrollment on overall survival. J Neurooncol. 2022 Sep;159(2):479-484. PMID: 35840786.

Bilgili A, Tuna IS, **Rahman M**, Naney TD, Albayram MS. Visualization of the perivenous glymphatic efflux in human brain after laser interstitial thermotherapy. Magn Reson Imaging. 2022 Oct;92:96-99. PMID: 35764218.

Yang C, Tian G, Dajac M, Doty A, Wang S, Lee JH, **Rahman M**, Huang J, Reynolds BA, Sarkisian MR, Mitchell D, Deleyrolle LP. Slow cycling cells in glioblastoma: a specific population in the cellular mosaic of cancer stem cells. Cancers (Basel). 2022 Feb 23;14(5):1126. PMID: 35267434.

Chen D, Le SB, Hutchinson TE, Calinescu AA, Sebastian M, Jin D, Liu T, Ghiaseddin, Rahman MN, Tran DD. Tumor treating fields dually activate STING and AIM2 inflammasomes to induce adjuvant immunity in glioblastoma. J Clin Invest. 2022 Apr 15;132(8):e149258. PMID: 35199647.

Quinones-Hinojosa A, **Rahman M**, Lim M, Suarez-Meade P, Marenco-Hillembrand L. Introduction. Immunology of neurosurgical diseases. Neurosurg Focus. 2022 Feb;52(2):E1. PMID: 35104789.

Grady C\*, Melnick K\*, Porche K\*, Dastmalchi F, Hoh D, **Rahman M**, Ghiaseddin A. Glioma immunotherapy: advances and challenges for spinal cord gliomas. Neurospine. 2022 Mar;19)1):13-29. PMID:35130421.

Melnick K\*, Grady C\*, Cuneo M, **Rahman M**. In reply to the letter to the editor regarding “Academic accomplishments of female neurosurgeons currently in practice in the United States.” World Neurosurg. 2021 Oct;154:198. PMID 34583491.

Karachi A, Dastmalchi F, Nazarian S, Huang J, Sayour EJ, Jin L, Yang C, Mitchell DA, **Rahman M**. Optimizing T Cell-based therapy for glioblastoma. Front Immunol. 2021 Aug 5; 12:705580. PMID 34421912.

Morgano GP, Wiercioch W, Anderson DR, Brozek JL, Santesso N, ie F, Cuker A, Nieuwlaat R, Akl EA, Darzi AJ, Yepes-Nunez JJ, Eteandia-Ikobaltzeta I, **Rahman M**, Rajasekhar A, Rogers F, Tikkinen KAO, Yates AJ, Dahm P, Schunemann HJ. A modeling approach to derive baseline risk estimates for GRADE recommendations: Concepts, development, and results of its application to the American Society of Hematology 20198 guidelines on prevention of venous thromboembolism in surgical hospitalized patients. J Clin Epidemiol. 2021 Jul 18:140:69-78. PMID 34284102.

Melnick K\*, Shin D\*, Dastmalchi F, Kabeer Z\*, **Rahman M**, Tran D, Ghiaseddin A. Role of interstitial thermotherapy in the management of primary and metastatic brain tumors. Curr Treat Options in Oncol. (2021) 22:108. PMID: 34687357.

Khan AB, Matsuoka CK, Lee S, **Rahman M**, Rao G. Prolonged survival after laser interstitial thermotherapy in glioblastoma. Surg Neurol Int. 2021 May17;12:228. PMID 34221559.

Dastmalchi F, Deleyrolle LP, Karachi A, Mitchell DA, **Rahman M**. Metabolomics monitoring of treatment response to brain tumor immunotherapy. Front Oncol. 2021 Jun 3;11:691246. PMID 34150663.

Melnick K\*, Dastmalchi F, Mitchell D, **Rahman M**, Sayour EJ. Contemporary RNA therapeutics for glioblastoma. Neruomolecular Med. 2021 Jun 8:1-5. PMID 34101090.

Porche K\*, Vaziri S\*, Mehkri Y\*, Christie C\*, Laurent D\*, Wang Y, **Rahman M**. Patient satisfaction scores with telemedicine in the neurosurgical population. Clin Neurol Neurosurg. 2021 Mar 20;205:106605. PMID 33894681.

Melnick K\*, Grady C\*, Cuneo M, Brennan M, **Rahman M**. Academic accomplishments of female neurosurgeons currently in practice in the United States. World Neurosurg. 2021 Jun;150:20-25. PMID 33722726.

Donabedian P, Tuna I, **Rahman M**, Gregory , Kresak J, Rees JH. Glioblastoma with a primitive neuroectodermal component: two cases with implications for glioblastoma cell-of-origin. Clin Imaging. 2020 Dec 4:73:139-145. PMID 33406475.

Lazaro T, Srinivasan VM, **Rahman M**, Asthagiri A, Barkhoudarian G, Chambless LB, Kan P, Rao G, Nahed BV, Patel AJ. Virtual education in neurosurgery during the COVID-19 pandemic. Neurosurg Focus. 2020. Dec;49 (6):E17. PMID 33260121.

Dawoud F\*, Lucke-Wold B\*, Trejo-Lopez J, Yachnis A, **Rahman M**. An unusual cause of intracerebral hemorrhage: clinical pearls regarding primary angiitis of the central nervous system. Neurol Sci Neurosurg. 2020;1(2). PMID 33205146.

**Rahman M**, Parney I. Journal of Neuro Oncology: immunotherapy for brain tumors. J Neurooncol. 2021 Jan;151(1):1. PMID 33079343.

Sacks P\*, **Rahman M**. Epidemiology of brain metastases. Neurosurg Clin N Am. 2020 Oct;31(4):481-488. PMID 32921345.

Yepes-Nunez JJ, Rajasekhar A, **Rahman M**, Dahm P, Anderson DR, Colunga-Lozano LE, Ross S, Bhatt M, Orozco KE, Popoff F, Ventresca M, Barbara AM, Balduzzi S, Begum H, Agarwal A, Wiercioch W, Nieuwlaat R, Morgano GP, Schunemann HJ. Pharmacologic thromboprophylaxis in adult patients undergoing neurosurgical interventions for preventing venous thromboembolism. Blood Adv. 2020. Un 23:4(12):2798-2809. PMID 32574367.

**Rahman M**, Sawyer WG, Lindhorst S, Deleyrolle LP, Harrison JK, Karachi A, Dastmalchi F, Flores-Toro J, Mitchell DA, Lim M, Gilbert MR, Reardon DA. Adult Immuno-Oncology: Using past failures to inform the future. Neuro Oncol. 2020 May 11:noaa116 Online ahead of print. PMID 32391559.

Medikonda R, Dunn G, **Rahman M**, Fecci P, Lim M. A review of glioblastoma immunotherapy. J Neurooncol. 2020 Apr 6. Online ahead of print. PMID 32253714.

Vlasak AL\*, Shin DH\*, Kubilis PS, Roper SN, Karachi A, Hoh BL, **Rahman M**. Comparing standard performance and outcome measures in hospitalized pituitary tumor patients with secretory versus non-secretory tumors. World Neurosurg 2020 March;135:e510-e519. PMID 31863896.

Anderson DR, Morgano GP, Bennett C, Dentali F, Francis CW, Garcia A, Kahn SR, **Rahman M**, Rajasekhar A, Rogers FB, Smythe MA, Tikkinen KAO, Yates AJ, Baldeh T, Balduzzi S, Brozek JL, Ikobaltzeta IE, Johal H, Neumann I, Wiercioch W, Yepes-Nunez JJ, Schunemann HF, Dahm P. American Society of Hematology 2019 guidelines for management of venous thromboembolism: prevention of venous thromboembolism in surgical hospitalized patients. Blood Adv. Dec 10;3(23):3898-3944, 2019. PMID 31794602.

Dastmalchi F, Karachi A, Yang C, Azari H, Sayour EJ, Dechkovskaia A, Vlasak AL\*, Saia ME\*, Lovaton RE, Mitchell DA, **Rahman M**. Sarcosine promotes trafficking of dendritic cells and improves efficacy of anti-tumor dendritic cell vaccines via CXC chemokine family signaling. J Immunother Cancer. 2019 Nov 21;7(1):321. PMID 31753028.

Long Y, Tao H, Karachi A, Grippin AJ, Jin L, Chang YE, Zhang W, Dyson KA, Hou AY, Na M, Deleyrolle LP, Sayour EJ, **Rahman M**, Mitchell DA, Lin Z, Huang J. Dysregulation of glutamate transport enhances Treg function that promotes VEGF blockade resistance in glioblastoma. Cancer Res. 2020 Feb 1;80(3):499-509. PMID 31723000.

Jin L, Tao H, Karachi A, Long Y, Hou AY, Na M, Dyson KA, Grippin AJ, Deleyrolle LP, Zhang W, Rajon DA, Wang QJ, Yang JC, Kresak JL, Sayour EJ, **Rahman M**, Bova FJ, Lin Z, Mitchell DA, Huang CXCR1- or CXCR2-modified CAR T cells co-opt IL-8 for maximal antitumor efficacy in solid tumors. J. Nat Commun. Sept 5;10(1):4016. 2019. PMID 31488817

Laurent D\*, Freedman R\*, Cope L\*, Sacks P\*, Abbatematteo J\*, Kubilis P, Bova F, **Rahman M**. Impact of extent of resection on incidence of postoperative complications in patients with glioblastoma. Neurosurgery. 2020 May 1;86(5):625-630. PMID 31342060.

Awan O\*, Scott KW, Vaziri S\*, Porche K\*, Decker M\*, Dru AB, Chakraborty S, Khare K, Hoh B, **Rahman M**. Reimbursement patterns for neurosurgery: analysis of the NERVES survey results from 2011-2016. Clin Neurol Neurosurg. 2019 Sep;184:105406. PMID 31302381.

Dagan R, Bryant CM, Mendenhall WM, Amdur RJ, Morris CG, Lanza DC, Dziegielewski PT, Justice JM, Lobo BC, Silver NL, Fernandes R, Bunnell A, Guthrie T, Gopalan PK, **Rahman M**, Tavanaiepour D. Isolated leptomeningeal progression from sinonasal carcinomas: implications for staging workup and treatment. Head Neck. 2019 Aug;41(8):2647-2654. PMID 30908735.

Decker M\*, Sacks P\*, Abbatematteo J\*, De Leo E\*, Brennan M, **Rahman M**. The effects of hyperglycemia on outcomes in surgical high-grade glioma patients. Clin Neurol Neurosurg. 2019 Apr;179:9-13. PMID 30784896.

Karachi A\*, Yang C, Dastmalchi F, Sayour E, Huang J, Azari H, Long Y, Flores C, Mitchell DA, **Rahman M**. Modulation of temozolomide dose differentially affects T cell response to immune checkpoint inhibition. Neuro Oncol. 2019 June 10;21(6):730-741. PMID 30668768.

**Rahman M**, Dastmalchi F, Karachi A\*, Mitchell D. The role of CMV in glioblastoma and implications for immunotherapeutic strategies. Oncoimmunology. Oct 16:8(1) 2018. PMID 30546954

Sayour EJ, Grippin A, De Leon G, Stover B, **Rahman M**, Karachi A\*, Wummer B, Moore G, Castillo-Caro P, Fredenburg K, Sarkisian MR, Huang J, Deleyrolle LP, Sahay B, Carrera-Justiz S, Mendez-Gomez HR, Mitchell DA. Personalized tumor RNA loaded lipid-nanoparticles prime the systemic and intratumoral milleu for response to cancer immunotherapy. Nano Lett. Oct 10;18(10) 2018. PMID 30259750.

Karachi A\*, Dastmalchi F, Mitchell D, **Rahman M**. Temozolomide for immunomodulation in the treatment of glioblastoma. Neuro oncol. Nov 12:20(12) 2018. PMID 29733389.

Laurent D\*, Oliveria SF, Shang M, Bova F, Freedman R, **Rahman M**. Techniques to ensure accurate delivery of awake laser interstitial thermotherapy. Oper Neurosurg. Feb 10. 2018 Epub ahead of print. PMID 29444286.

Ahmed MM, **Rahman M**, Neal D, Aranda JM Jr, Klodell CT. Ventricular assist device patients have different clinical outcomes and altered patterns of bleeding with intracranial hemorrhage. ASAIO J. Feb 9, 2018 Epub ahead of print. PMID 29432298.

**Rahman M**, Kresak J, Yang C, Huang J, Hiser W, Kubilis P, Mitchell DA. Analysis of immunobiologic markers in primary and recurrent glioblastoma. J Neurooncol. Jan 4, 2018 Epub ahead of print. PMID 29302887.

Lockney DT\*, Kubilis P, **Rahman M**. In reply to the letter to the editor regarding “Prophylactic antiepileptic drug use in patients with brain tumors undergoing craniotomy”. World Neurosurg. Sept;105:1019, 2017. PMID 28847123.

Middlebrooks EH, Yagmurlu K, Szaflarski JP, **Rahman M**, Bozkurt B. A contemporary framework of language processing in the human brain in the context of preoperative and intraoperative language mapping. Neuroradiology. Jan;59(1):69-87, 2017. PMID 28005160

Lockney DT\*, Vaziri S, Walch F, Kubilis P, Neal D, Murad GJ, **Rahman M**. Prophylactic antiepileptic drug use in brain tumor patients undergoing craniotomy. World Neurosurg. Feb;98:28-33, 2017. PMID 27777152.

**Rahman M**, Abbatematteo J\*, De Leo EK\*, Kubilis PS, Vaziri S\*, Bova F, Sayour E, Mitchell D, Quinones-Hinojosa A. The effects of new or worsened postoperative neurological deficits on survival of patients with glioblastoma. J Neurosurg. Jul;127(1):123-131, 2017. PMID 27689459.

Dyson K, Rivera-Zengotita M, Kresak J, Weaver K, Stover B, Fort J, **Rahman M**, Pincus DW, Sayour EJ. FGFR1 N546K and H3F3A K27M mutation in a diffuse leptomeningeal tumor with glial and neuronal markers. Histopathology. Apr 9, 2016. PMID 27061725.

Weaver KJ\*, McCord M\*, Neal D, Bova F, Rajon D, Quinones-Hinojosa A, **Rahman M**. Do tumor and ventricular volume predict the need for postresection shunting in colloid cyst patients? J Neurosurg. Jan 29:1-6, 2016. PMID 26824370.

Mahanna E, Edwards DA, Tarante N, **Rahman M**, Petersen JW, Bihorac A. Variant neurogenic stunned myocardium in a young female after subarachnoid hemorrhage. AA Case Rep. Jan 1;6(1):10-3, 2016. PMID 26422453.

Fargen KM\*, **Rahman M**. Response. J Neurosurg. Apr;122(4):868-9, 2015. PMID 25996013.

**Rahman M**, Reyner K\*, Deleyrolle L, Millette S\*, Azari H, Day BW, Stringer BW, Boyd AW, Johns TG, Blot V, Duggal R, Reynolds BA. Neurosphere and adherent culture conditions are equivalent for malignant glioma stem cell lines. Anat Cell Biol. Mar;48(1):25-35, 2015. PMID 25806119.

Corliss BM\*, Hooten KG\*, Gul SS\*, Neal D, Murad GJ, **Rahman M**. Establishing standard performance measures in adult traumatic brain injury patients. Neurosurgery Jul;7(1):44-50, 2015. PMID 25790069.

**Rahman M**, Donnangelo LL\*, Neal D, Mogali K, Decker M\*, Ahmed MM. Effects of perioperative acetyl salicylic acid on clinical outcomes in patients undergoing craniotomy for brain tumor. World Neurosurg. Jul;84(1):41-7, 2015. PMID 25727304

Fargen KM\*, Neal D, Blackburn SL, Hoh BL, **Rahman M**. Health disparities and stroke: the influence of insurance status on the prevalence of patient safety indicators and hospital acquired conditions. J Neurosurg. Apr;122(4)870-5, 2015. PMID 25658779.

Hooten KG\*, Neal D, Lovaton Espadin RE\*, Gil JN\*, Azari H, **Rahman M**. Insurance status influences the rates of reportable quality metrics in brain tumor patients: a nationwide inpatient sample study. Neurosurgery. March;76(3):239-47, 2015. PMID 25603104.

**Rahman M,** Jusue-Torres I\*, Alkabbani A, Salvatori R, Rodriguez FJ, Quinones-Hinojosa A. Synchronous GH- and prolactin-secreting pituitary adenomas. Endocrinol Diabetes Metab Case Rep. 2014. PMID 25298881.

**Rahman M**, Neal D, Baruch W, Bova FJ, Frentzen BH, Friedman WA. The risk of malignancy anywhere in the body after LINAC stereotactic radiosurgery. Stereotact Funct Neurosurg. Sept 23;92(5):323-333, 2014. PMID 25277349.

Titsworth LW\*, Murad GJ, Hoh BL, **Rahman M**: Fighting fire with fire, the revival of thermotherapy for glioma. Anticancer Res. Feb;34(2)565-74, 2014.

Chaichana KL, Cabrera-Aldana EE, Jusue-Torres I, Wijesekera O, Olivi A, **Rahman M**, Quinones-Hinojosa A: When gross total resection of a glioblastoma is possible, how much resection should be achieved? World Neurosurg. Feb 6, 2014.

**Rahman M**, Neal D, Fargen KM\*, Hoh BL: Establishing standard performance measures for adult brain tumor patients, a Nationwide inpatient sample database study. Neuro Oncol. Nov;15(11):1580-8, 2013.

**Rahman M**, Neal D, Fargen KM\*, Hoh BL: Establishing standard performance measures for adult stroke patients: a nationwide inpatient sample database study. World Neurosurg. Dec;80(6):699-708, 2013.

Fargen KM\*, Neal D, **Rahman M**, Hoh BL: The prevalence of patient safety indicators and hospital-acquired conditions in patients with ruptured cerebral aneurysms: establishing standard performance measures using the nationwide inpatient sample database. J Neurosurg. Dec;119(6):1633-40, 2013.

**Rahman M**, Azari H, Deleyrolle L, Millette S\*, Zeng H, Reynolds BA: Controlling tumor invasion: bevacizumab and BMP4 for glioblastoma. Future Oncol. 9(9):1389-96, 2013.

Fargen KM\*, **Rahman M**, Neal D, Hoh BL: Prevalence of patient safety indicators and hospital acquired conditions in those treated for unruptured cerebral aneursyms, establishing standard performance measures using the Nationwide inpatient sample database. J Neurosurg. Oct;119(4):966-73, 2013.

Sudhyadhom A, Okun MS, Foote KD, **Rahman M**, Bova FJ: A three-dimensional deformable brain atlas for DBS targeting. I. Methodology for atlas creation and artifact reduction. Open Neuroimag J. 6:92-8, 2012.

**Rahman M,** Whiting JH, Fauerbach LL, Archibald L, Friedman WA: Reducing ventriculostomy-related infections to near zero: the eliminating ventriculostomy infection study (ELVIS). Jt Comm J Qual Patient Saf. Oct;38(10):459-64, 2012.

**Rahman M,** Hoh B, Kohler, N, Dunbar EM, Murad GJ: The future of glioma treatment: stem cells, nanotechnology and personalized medicine. Future Oncol. Sep;8(9):1149-56, 2012.

Harbaugh RE, Raghavan, ML, Ramachandran M, **Rahman M**, Hoh BL: Comment on ruptured status discrimination performance of aspect ratio, height/width, and bottleneck factor is highly dependent on aneurysm sizing methodology. Neurosurgery. Jul;71(1):45-6, 2012.

**Rahman M**, Hoh BL: Impending federal cuts in graduate medical education funding: an urgent threat to neurosurgery training and manpower. World Neurosurg. May;77(5-6):597-9, Mar 16, 2012.

Azari H, Millette S\*, Ansari S, **Rahman M**, Deleyrolle LP, Reynolds BA: Isolation and expansion of human glioblastoma multiforme tumor cells using the neurosphere asay. J Vis Exp. Oct 30;(56):e3633, 2011.

Morishita T, **Rahman M**, Foote KD, Fargen KM, Jacobson CE, Fernandez HH, Rodriguez RL, Malaty IA, Bowers D, Hass CJ, Katayama Y, Yamamoto T, Okun MS: DBS candidates that fall short on a levodopa challenge test: alternative and important indications. Neurologist. Sep 17(5):263-8.

Levy El, **Rahman M**, Khalessi AA, Beyer PT, Natarajan SK, Hartney ML, Fiorella DJ, Hopkins LN, Siddiqui AH, Mocco J: Response to Gonzalez et al. “Letter to the Editor re: Midterm Clinical and Angiographic Follow Up for the First FDA-approved Prospective, Single-arm Trial of Primary Stenting for Stroke”. Neurosurgery. Oct:69(4):915-20, 2011.

Azari H, Osborne GW, Yasuda T, Golmohammadi MG, **Rahman M**, Deleyrolle LP, Esfandiari E, Adams DJ,Scheffler B, Steindler DA, Reynolds BA: Purification of immature neuronal cells from neural stem cell progeny. PLoS One 6(6):e20941. 2011.

Ross HH, **Rahman M**, Levkoff LH, Millette S, Reynolds BA, Laywell ED: Ethynyldeoxyuridine impedes in vitro proliferation and in vivo tumor progression of human glioblastoma cells. J Neurooncol Dec;105(3):485-98, 2011.

**Rahman M**, Hoh BL: Glioblastoma multiforme tumor stem cells form endothelium. World Neurosug Mar-Apr; 75(3-4):338-9. 2011.

Levy EI, **Rahman M**, Khalessi AA, Beyer PT, Natarajan SK, Hartney ML, Fiorella DJ, Hopkins LN, Siddiqui AH, Mocco J: Midterm clinical and angiographic follow up for the first FDA-approved prospective, single-arm trial of primary stenting for stroke: SARIS (stent-assisted recanalization for acute ischemic stroke). Neurosurgery. Oct;69(4):915-20, 2011.

Deleyrolle LP, Harding A, Cato K, Siebzehnrubl FA, **Rahman M**, Azari H, Olson S, Gabrielli B, Osborne G, Vescovi A, Reynolds BA: Evidence for label-retaining tumour-initiating cells in human glioblastoma. Brain May;134 (Pt 5): 1331-43, 2011.

**Rahman M**, Hoh BL: Avastin in the treatment for radiation necrosis: exciting results from a recent randomized trial. World Neurosurg Jan;75 (1): 4-5, 2011.

**Rahman M**, Bidari SS, Quisling RG, Friedman WA: Spontaneous intracranial hypotension: dilemmas in diagnosis. Neurosurgery Jul;69(1):4-14, 2011.

Azari H, Sharififar S, **Rahman M**, Ansari S, Reynolds BA: Establishing embryonic mouse neural stem cell culture using the neurosphere assay. J Vis Exp 11(47). Pii2457, 2011.

Abd-El-Barr MM, **Rahman M**, Rao G: Investigational therapies for brain metastases. Neurosurg Clinics N Am (22) 2011, 87-96.

Ansari S, **Rahman M**, Waters M, Hoh BK Mocco J: Recanalization therapy for acute ischemic stroke, part 1: surgical embolectomy and chemical thrombolysis. Neurosurg Rev 34 (1):1-9, 2011.

Saeed A, **Rahman M**, McConnell, Waters M, Hoh BK, Mocco J. Recanalization therapy for acute ischemic stroke, part 2: mechanical intra-arterial technologies. Neurosurg Rev 34 (1):11-20, 2011.

**Rahman M**, Cox BJ, Chi YY, Carter JH, Friedman WA: Radiographic response of brain metastasis after linear accelerator radiosurgery. Stereotact Funct Neurosurg. Jan 27;90(2):69-78, 2012.

Azari H, **Rahman M**, Sharififar S, Reynolds BA: Isolation and expansion of adult mouse neural stem cells using the neurosphere assay. Journal of Visualized Experiments. 20 (45). 2010.

**Rahman M**, Ogilvy CS, Zipfel GJ, Derdeyn CP, Siddiqui AH, Bulsara KR, Kim LJ, Mocco J, Hoh BL: Unruptured cerebral aneurysms do not shrink when they rupture: multi-center collaborative aneurysm study group. Neurosurgery. 68 (1): 155-60. 2011.

Abd-El-Barr MM, **Rahman M**, Eisenschenk S, Yachnis AT, Roper SN: Atypical Rasmussen’s encephalitis treated with temporal lobectomy. J Clin Neurosci. 18 (2):287-90, 2010.

**Rahman M,** Deleyrolle L, Vedam-Mai V, Azari H, Abdel-Barr M, Reynolds BA: The cancer stem cell hypothesis: failures and pitfalls. Neurosurgery. Feb;68(2):531-45. 2011.

**Rahman M,** Abd-El-Barr MM, Vedam-Mai V, Foote KD, Murad GJ, Okun MS, Roper SN: Disrupting abnormal electrical activity with deep brain stimulation: is epilepsy the next frontier? Neurosurg Focus. 29 (2): E7, 2010.

**Rahman M,** Smietana J, Hauck E, Hoh B, Hopkins N, Siddiqui A, Levy EI, Meng H, Mocco J: Size ratio correlates with intracranial aneurysm rupture status: a prospective study. Stroke 41: 916-920, 2010.

**Rahman M**, Velat GJ, Hoh BL, Mocco J: Direct thrombolysis for cerebral venous sinus thrombosis (CVST). Neurosurgical Focus. 27 (5): E7, 2009.

**Rahman M,** Perkins LA, Pincus DW: Aggressive surgical management of patients with Chiari II malformation and brainstem dysfunction. Pediatric Neurosurgery 45 (5): 337-344, 2009.

**Rahman M**, Friedman WA: Hyponatremia in neurosurgical patients: clinical guidelines development. Neurosurgery 65 (5): 925-35, 2009.

**Rahman M**, Murad GJ, Bova F, Friedman WA, Mocco J: Stereotactic radiosurgery and LINAC: accelerating electrons in neurosurgery. Neurosurg Focus 27 (3): E13, 2009.

**Rahman M**, Murad GJ, Mocco J: Early history of the stereotactic apparatus in neurosurgery. Neurosurg Focus. 27 (3): E12, 2009.

**Rahman M**, Richter EO, Osawa S, Rhoton AL: Anatomic study of the infraorbital foramen for radiofrequency neurotomy of the infraorbital nerve. Neurosurgery 64 (5 Suppl 2): 423-7, 2009.

**Rahman M**, Summers LE, Richter B, Mimran RI, Jacob RP: Comparison of techniques for decompressive lumbar laminectomy: the minimally invasive versus the “classic” open approach. Minim Invasive Neurosurg 51(2):100-5, 2008.

**Presentations**

Yan S, Frain M, Thomas N, Calinescu A, Ebrahim G, McGrath K, Tomdio M, Rajon D, Mitchell DA, Bova FJ, Rahman M. Development of a murine laser interstitial thermotherapy system and studying the post-ablation immune changes in the tumor microenvironment in a preclinical glioma model. American Association of Neurological Surgery (AANS) Annual Meeting. San Diego CA. April 2023.

Frain M\*, Yan S\*, Ebrahim G\*, Tomdio M, Mendez-Gomez H, Thomas N, Karachi A, Dastmalchi F, Flores C, Mitchell DA, Bova FJ, **Rahman M**. Efficacy of novel murine laser interstitial thermotherapy (LITT) system for brain tumors. UF Health Cancer Center Research Day. Gainesville FL, Jan 2023.

Dastmalchi F, Thomas N, Frain M\*, Ebrahim G\*, Moore G, Tomdio M\*, Mendez-Gomez H, Sayour E, Subramaniam V, Angelini T, Mitchell DA, **Rahman M**. CCL4 drives GBM TME reprogramming after treatment with a novel mRNA vaccine. Society of Neuro-Oncology Annual Meeting. Tampa, FL. Nov 2022.

Dastmalchi F, Thomas N, Ebrahim G\*, Frain M\*, Moore G, Mendez-Gomez H, Sayour E, Tomdio M\*, Subramaniam V, Angelini T, Mitchell DA, **Rahman M**. The hydrogel-CXCL9-mRNA (HCM) vaccine results in significant anti-tumor efficacy through recruitment of natural killer cells. Society of Neuro-Oncology Annual Meeting. Tampa, FL. Nov 2022.

Frain M\*, Ebrahim G\*, Tomdio M\*, Mendez-Gomez H, Thomas N, Karachi A, Dastmalchi F, Flores C, Mitchell DA, Bova F, **Rahman M**. Development of a murine model of laser interstitial thermotherapy (LITT) for brain tumors. Society of Neuro-Oncology Annual Meeting. Tampa, FL. Nov 2022.

**Rahman M**, Ghiaseddin A, Deleyrolle P, Peters K, Archer G, Sampson J, Mitchell DA. Randomized, blinded, placebo-controlled trial testing pp65 CMV mRNA dendritic cell vaccine and tetanus diphtheria toxoid for newly diagnosed GBM (ATTAC II, NCT02465268). Society of Neuro-Oncology Annual Meeting. Tampa, FL. Nov 2022.

Deleyrolle P, Dagra A\*, Mohamed S\*, Chowdhury MA, McGrew N, **Rahman M**. Opiate utilization and predictive factors in patients undergoing surgery for gliomas. Society of Neuro-Oncology Annual Meeting. Tampa, FL. Nov 2022.

Mendez-Gomez H, DeVries A, Stover BD, Zhang D, Grippin A, von Roemling C, Weidert F, Karachi A, Qdaisat S, Thomas N, McGuiness J, Castillo P, Huang J, Ligon J, Silver N, Kellish P, Doty A, Carrera-Justiz S, Prados M, Mueller S, **Rahman M**, Ghiaseddin M, Mitchell DA, Sayour EJ. Multi-lamellar mRNA lipid particles induce immunologic reprogramming in canine and human glioblastoma patients. Society of Neuro-Oncology Annual Meeting. Tampa, FL. Nov 2022.

McGuiness J, Weidert F, Zhang D, Grippin A, Karachi A, Qdaisat S, Thomas N, Castillo P, Huang J, Ligon J, Silver N, **Rahman M**, Hwang E, Mitchell DA, Mendez-Gomez H, Sayour EJ. RNA lipid particles induce bi-directional immunity against diffuse midline glioma. Society of Neuro-Oncology Annual Meeting. Tampa, FL. Nov 2022.

Ghosh T, Jin L, Feier D, Silver A, Tian G, Daja M, **Rahman M**, Flores C, Sarkisian M, Huang J, Mitchell DA, Deleyrolle LP. Enhancing the metabolic fitness of T cells to treat brain tumors. Society of Neuro-Oncology Annual Meeting. Tampa, FL. Nov 2022.

Silver A, Feier D, Tian G, Andrews M, Dajac M, Yang C, Ghosh T, Fu DA, Von Roemeling C, **Rahman M**, Sarkisian M, Huang J, Harrison J, Mitchell DA, Deleyrolle LP. Tumor cell architectural heterogeneity and spatial interactions with the tumor immune microenvironment in GBM. Society of Neuro-Oncology Annual Meeting. Tampa, FL. Nov 2022.

Tran DD, Ghiaseddin A, Chen Dongjiang, Le S, **Rahman M**. Final results of the 2-THE-TOP: a phase 2 study of TTFields (Optune) plus pembrolizumab plus maintenance temozolomide (TMZ) in patients with newly diagnosed glioblastoma (ndGBM). Society of Neuro-Oncology Annual Meeting. Tampa, FL. Nov 2022.

Goldman M\*, Melnick K\*, Hodik M, Wang Y, **Rahman M**, Cibula J. Depression and neurotoxicity in a population of brain tumor patients treated with a short course of prophylactic levetiracetam. American Association of Neurology Annual Meeting. Seattle WA. April 2022.

Tran D, Ghiaseddin A, Chen D, **Rahman M**. Phase 2 study of pembrolizumab plus TTFields plus temozolomide in patients with newly diagnosed glioblastoma (2-THE-TOP). World Federation of Neuro-Oncology Societies Annual Meeting. Seoul Korea. March 2022. Best Abstract Award.

Melnick K\*, Miller P\*, Carmichael E\*, Wang Y, Tran D, Kresak JL, Ghiaseddin A, **Rahman M**. Histologic diagnosis at time of repeat resection is predictive of survival in patients with glioblastoma. AANS/CNS Joint Tumor Section Annual Meeting. Austin TX. Oct 2021.

Melnick K\*, Miller P\*, Carmichael E\*, Ghiaseddin A, Tran D, **Rahman M**. Survival benefit of clinical trial participation in adults with glioblastoma. AANS Annual Meeting, Orlando FL. Aug 2021.

Dasmalchi F, Karachi, A, Mehkri Y, Khattri R, Merritt ME, Kubilis, P, Mitchell DA, **Rahman M**. The unique metabolomic based biomarkers of response to immunotherapy for glioblastoma. Society of Neuro Oncology Annual Meeting, Virtual. 2020.

Karachi A, Dastmalchi F, O’Malley A, Yang C, Mitchell DA, **Rahman M**. Temozolomide induced immune dysfunction requires the presence of intracranial tumors. Society of Neuro Oncology Annual Meeting, Virtual. 2020.

Karachi A, Dastmalchi F, O’Malley A, Saia M, Mitchell DA, **Rahman M**. Cellular immunotherapy to overcome temozolomide induced T cell exhaustion in glioblastoma. Society of Neuro Oncology Annual Meeting. Phoenix, AZ, Nov 2019.

Dastmalchi F, Karachi A, Mitchell DA, **Rahman M**. Increasing the trafficking of dendritic cells via the CXC chemokine signaling pathway leads to improved anti-tumor efficacy of dendritic cell vaccines. Society of Neuro Oncology Annual Meeting. Phoenix, AZ, Nov 2019.

Vaziri S\*, Awan O\*, Scott K, Chakraborty S, Khare K, **Rahman M**. The Affordable Care Act and reimbursement patterns in neurosurgery: an analysis of the NERVES survey results. American Association of Neurological Surgeons Annual Meeting. San Diego, CA, April 2019.

**Rahman M**, Dastmalchi F, Karachi A, Vlasak A\*, Azari H, Baban U, Mitchell DA. Sarcosine promotes trafficking of dendritic cells to draining lymph nodes and improves efficacy of treatment of brain tumors via CX3CL1. American Association of Neurological Surgeons Annual Meeting. San Diego, CA, April 2019.

**Rahman M**, Karachi A\*, Dastmalchi F\*, Yang C, Huang J, Sayour E, Mitchell DA. Modulation of temozolomide dose differentially affects T cell response to immune checkpoint inhibition. American Association of Neurological Surgeons Annual Meeting. San Diego, CA, April 2019.

Karachi A\*, Dastmalchi F\*, Yang C, Huang J, Sayour E, Mitchell DA, **Rahman M**. Dose modulation of temozolomide have distinct effects on host response to PD-1 blockade. Society of Neuro Oncology Annual Meeting. New Orleans LA, Nov 2018.

Freedman R\*, Laurent D\*, Cope L\*, Sacks P\*, Kubilis P, Bova F, **Rahman M**. Impact of extent of resection on incidence of post operative complications in patients with glioblastoma. Florida Neurosurgical Society Annual Meeting. Palm Beach FL, Aug 2018.

Vlasak A\*, Shin D\*, Kubilis P, **Rahman M**. Comparing standard performance measures in hospitalized pituitary tumor patients with secretory versus non-secretory tumors. Florida Neurosurgical Society Annual Meeting. Palm Beach FL, Aug 2018.

Rees JH, Tuna I, **Rahman M**, Gregory J, Kresak J. Intraventricular glioblastoma with neuronal component. American Society of Neuroradiology Annual Meeting, Vancouver BC, June 2018.

Rees JH, Rivera-Zengotita M, Tuna I, Gregory J, **Rahman M**. Solitary fibrous tumor/hemangiopericytoma: a new diagnostic entity. American Society of Neuroradiology Annual Meeting, Vancouver BC, June 2018.

Dastmalchi F\*, Karachi A\*, Azari H, Mitchell D, **Rahman M**. Strategy to enhance DC migration for increased efficacy of dendritic cell vaccine immunotherapy. Society of Neuro Oncology Annual Meeting, San Francisco CA, Nov 2017.

Laurent D\*, Oliveria S\*, Shang M, Bova F, Freedman R\*, **Rahman M**. Techniques to ensure accurate targeting for awake laser interstitial thermotherapy treatment. Florida Neurosurgical Society, Palm Beach, FL. Aug 2017.

Decker M\*, Kubilis P, **Rahman M**. The impact of dependent care coverage on neurosurgical population. Florida Neurosurgical Society, Palm Beach, FL. Aug, 2017.

Decker M, Kubilis P, **Rahman M**. The impact of dependent care coverage on neurosurgical population. Congress of Neurological Surgeons Annual Meeting, Boston, MA, Oct, 2017.

**Rahman M**, Karachi A, Mitchell, DA. Using temozolomide to alter host immunity and the tumor microenvironment to improve the efficacy of immune checkpoint blockade for glioblastoma. Academy of Neurological Surgeons Annual Meeting, Jacksonhole, WY, Sept 2016.

Azari H, Karachi A\*, Flores C, Dastmalchi F\*, Mitchell D, **Rahman M**. Leveraging temozolomide to enhance efficacy of immune checkpoint blockade in the treatment of glioblastoma. Florida Center for Brain Tumor Research Annual Summit, Miami, FL, 2016.

De Leo EK\*, Abbatematteo J\*, Kubilis PS, Vaziri S\*, Bova F, **Rahman M**. Permanent postoperative neurologic deficit abrogates survival benefit from increased extent of resection in glioblastoma patients. Florida Center for Brain Tumor Research Annual Summit, Miami, FL, 2016.

Hooten K\*, Neal D, Lovaton R\*, Gil J\*, Azari H, **Rahman M**. Insurance status influences the rates of reportable quality metrics in brain tumor patients: a Nationwide Inpatient Sample database study. Society of Neuro-oncology Annual Meeting, Miami FL, Nov 2014.

Corliss B\*, Hooten KG\*, Gul SS\*, Neal D, Murad GJ, **Rahman M**. Establishing standard performance measures in adult traumatic brain injury patients: a Nationwide Inpatient Sample database study. Congress of Neurological Surgeons Annual Meeting, Boston MA, Oct 2014.

Lockney T\*, Walch FJ\*, Vaziri S\*, Neal D, Murad GJ, **Rahman M**. Prophylactic antiepileptic drugs do not reduce seizure rates in surgical brain tumor patients. Congress of Neurological Surgeons Annual Meeting, Boston MA, Oct 2014.

Jusue-Torres I\*, Chaichana KL, Cabrera-Aldana EE, Navarro R, Olivi A, **Rahman M**, Quinones-Hinojosa A: Extent of resection and residual volume thresholds affecting survival for patients undergoing surgery for an intracranial glioblastoma. Johns Hopkins Fellow Research Day, Baltimore MD, May 2013.

**Rahman M,** Kohler N, Titsworth WL\*, Chakraborty A\*, Best K, Roper SN, Murad JAG: Reversing anticoagulation in neurosurgery patients, a quality initiative. Neurosurgery Quality Day Symposium, Gainesville FL, June 2012.

Fargen KM\*, **Rahman M**, Hoh BL, Welch B, Lanzino G, Boulos A, Carpenter J, Rai A, Veznedaroglu E, Ringer A, Rodriguez-Mercado R, Katzemann P, Siddiqui A, Levy E, Mocco J: Long-term results of Enterprise stent-assisted coiling of cerebral aneurysms. American Association of Neurological Surgeons annual meeting. Miami FL, April 2012.

**Rahman M**, Azari H, Reynolds BA: Avastin and BMP4 for GBM. Department of Neurosurgery Annual Research Symposium. Gainesville FL, Jan 2012.

**Rahman M**, Cox JB, Chi YY, Carter J, Friedman WA: Radiographic response of brain metastases after linear accelerator radiosurgery. Congress of Neurological Surgeons annual meeting. Washington DC, Oct 2011.

**Rahman M**, Ross H, Laywell E, Reynolds BA: Adaptive therapy for glioblastoma multiforme. Florida Neurosurgical Society annual meeting, Sarasota, FL, 2011.

**Rahman M**, Reynolds BA: Neurosphere and adherent culture conditions for glioma stem cell lines. Department of Neurosurgery Annual Research Symposium. Gainesville, FL, Jan, 2011.

**Rahman M**: EdU (ethynyl-2’deoxyuridine), adaptive therapy for GBM. Department of Neurosurgery Annual Research Symposium. Gainesville, FL, Jan, 2010.

**Rahman M,** Smith AA, Wang S, Steindler D, Reynolds RA: Bone morphogenetic protein and glial tumors. Presentation. Joint meeting of the Society for Neuro-oncology and the AANS/CNS section on Tumors, New Orleans, LA, Oct 2009.

**Rahman M**, Ogilvy CS, Zipfel GJ, Bulsara KR, Kim LJ, Siddiqui AH, Hoh BL: Unruptured cerebral aneurysms do not shrink when they rupture: multi-center collaborative aneurysm study group. Top Ten Abstract Presentation. Congress of Neurological Surgeons annual meeting, New Orleans, LA, Oct 2009.

**Rahman M**, Deleyrolle L, Caldeira M, Reynolds BA: Bone morphogenetic protein and slow cycling cells in human glioblastoma multiforme. Congress of Neurological Surgeons annual meeting. New Orleans, LA, Oct 2009.

Mocco JD, **Rahman M**, Snyder KV, Albuquerque F, Bendok BR, Boulos AS, Carpenter JS, Fiorella D, Hoh BL, Howington JU, Jankowitz BT, Rai A, Rodriguez-Mercado R, Siddiqui AH, Veznedaroglu E, Hopkins N, Levy EI: In stent thrombosis/stenosis with Cordis Enterprise – midterm report from Interstate Collaboration of Enterprise stent/coiling (ICES). Congress of Neurological Surgeons annual meeting, New Orleans, LA, Oct 2009.

**Rahman M**, Reynolds BA: Bone morphogenetic protein for glioblastoma multiforme. Department of Neurosurgery Annual Research Symposium. Gainesville, FL, Jan, 2009.

**Rahman M**, Roper SN, Friedman WA: Hyponatremia in neurosurgical patients: clinical guidelines development. Select abstract at the Congress of Neurological Surgeons annual meeting, Orlando, FL, Sept. 2008.

**Rahman M,** Friedman WA, Roper SN: Hyponatremia in neurosurgical patients, clinical guidelines development. Department of Neurosurgery Annual Research Symposium. Gainesville, FL, Jan, 2008.

**Rahman M**, Rhoton AL: Infraorbital rhizotomy for trigeminal neuralgia. Department of Neurosurgery Annual Research Symposium. Gainesville, FL, Jan, 2007.

**Abstracts**

McGrath K\*, Laurent D\*, Lucke-Wold B\*, Musalo M, Chowdhury MAB, **Rahman M**. Retrospective evaluation of normal pressure hydrocephalus patient selection protocol for ventriculoperitoneal shunting: single center experience. Congress of Neurological Surgeons Annual Meeting, Washington D.C. Sept 2023.

Campos JK, Malacon KE, Satpathy Y, Meyer BM, Saripella MA, Collard de Beaufort JC, Chen S, Amin G, Peterson AA, Fote GM, Beach IR, Kim M, Aum DJ, Lin LM, Paff MR, Zygourakis CC, Holly LT, **Rahman M**, Ben-Haim S.  Women in Neurosurgery: Correlation of Scholarly Contributions and Social Media Presence.  Congress of Neurological Surgeons Annual Meeting, Washington DC. Sept 2023.

Malacon KE, Campos JK, Satpathy Y, Meyer BM, Saripella MA, Collard de Beaufort JC, Chen S, Amin G, Peterson AA, Fote GM, Beach IR, Kim M, Aum DJ, Lin LM, Paff MR, Zygourakis CC, Holly LT, **Rahman M**, Ben-Haim S.  Current Generational Differences Among Women Practicing Neurosurgery Versus Training in Neurosurgery: Differences Across Scholarly Productivity and Social Media.  Congress of Neurological Surgeons Annual Meeting, Washington DC. Sept 2023.

Campos JK, Malacon KE, Fote GM, Satpathy Y, Meyer BM, Saripella MA, Collard de Beaufort JC, Chen S, Amin G, Peterson AA, Beach IR, Kim M, Aum DJ, Lin LM, Paff MR, Zygourakis CC, Holly LT, **Rahman M**, Ben-Haim S.  Physician Ratings for Female Neurosurgeons Correlated Against Markers of Academic Productivity and Social Media Engagement. *Congress of Neurological Surgeons Annual Meeting. Washington DC. 9-13 September 2023. [accepted as digital poster]*

Body A, Ernster AE, Deleyrolle P, St. Clair J, Sampson D, Quinones R, **Rahman M**, Tran D, Mitchell DA, Ghiaseddin AP, Pereira DB. Feasibility and acceptability of measuring psychosocial outcomes for primary brain tumor patients and caregivers in neuro-oncology clinical setting. ASCO. June 2022.

Tian G, Dajac M, Petersen A, Silver A, Karachi A, Moore G, **Rahman M**, Flores C, Sarkisian M, Huang J, Mitchell DA, Deleyrolle L. Metabolomic maniupulation of T cells to treat brain tumors. Society of Neuro Oncology Annual Meeting. Boston, MA, Nov 2021.

Karachi A, Huang J, Tao H, Dastmalchi F, Jin L, Mitchell DA, **Rahman M**. Dose intensified temozolomide improves infiltration of CD70 CAR T cells into the GBM microenvironment. Society of Neuro Oncology Annual Meeting. Boston, MA, Nov 2021.

Mehkri Y, Melnick K, Eisenschenk S, Wang Y, Heaton S, Murad G, Hodik M, McGrew N, Smith J, Roepr S, Cibula J, **Rahman M**. Randomized trial on the effect of short versus long term use of prophylactic levetiracetam after surgery for brain tumor. Congress of Neurological Surgeons Annual Meeting. Austin TX, Oct 2021.

**Rahman M**, Deleyrolle P, Lai S, Kubilis P, Wang Y, Huang J, Dechkovskaia A, Massini T, Ghiaseddin A, Bova FJ, Mitchell DA. Pp65 CMV RNA dendritic cell vaccine results in dynamic lymph node volumetric changes on MRI in patients with newly diagnosed glioblastoma. Congress of Neurological Surgeons Annual Meeting. Austin TX, Oct 2021.

Grady C\*, Mehkri Y\*, Christie C\*, Wang Y, Goutnik M\*, **Rahman M**. External ventricular drain related hemorrhage: incidence, risk factors and outcomes. Congress of Neurological Surgeons Annual Meeting. Austin TX, Oct 2021.

Fitzpatrick G, **Rahman M**, Garrett T, Kresak JL. High-grade and low-grade meningiomas harbor differing metabolomic profiles. Society of Neuro Oncology Annual Meeting. Phoenix, AZ, Nov, 2019.

Mitchell DA, Yegorox O, Deleyrolle P, Changlin Y, Ghiaseddin A, **Rahman M**. Sustained complete radiographic response and prolonged systemic immune activation in a patient with MGMT unmethylated midline glioblastoma receiving CMV pp65-LAMP RNA-pulsed dendritic cell vaccines. Society of Neuro Oncology Annual Meeting. Phoenix, AZ, Nov 2019.

Yegorov O, Changlin Y, **Rahman M**, Ghiaseddin A, Dechkovsaia A, Cleaver B, Hodik M, Amdur R, Massini T, Kresak J, Mitchell DA. Single-cell RNA sequencing reveals dynamic immune response changes in gliolastoma patient with durable complete response to CMV pp-65 LAMP RNA-pulsed dendritic cell based vaccines. Society of Neuro Oncology Annual Meeting, Phoenix AZ, Nov 2019.

Freedman R\*, Laurent D\*, Cope L,\* Sacks P\*, Kubilis P, Bova F, **Rahman M**. Increasing extent of resection in operative patients with glioblastoma does not lead to an increase in reported quality metrics. American Association of Neurological Surgeons Annual Meeting. San Diego, CA, April 2019.

Vlasak A\*, Shin DH\*, Kubilis P, Roper S, Karachi A\*, Hoh BL, **Rahman M**. Comparing standard performance and outcome measures in hospitalized pituitary tumor patients with secretory versus non-secretory tumors. American Association of Neurological Surgeons Annual Meeting. San Diego, CA, April 2019.

Dastmalchi F, Karachi A\*, Vlasak A\*, Azari H, Baban U, Mitchell DA, **Rahman M**. A novel metabolite to increase efficacy of cellular immunotherapy in the treatment of glioblastoma. Society of Neuro-oncology Annual Meeting, New Orleans, LA, Nov 2018.

Laurent D\*, Freedman R\*, Cope L\*, Sacks P\*, Kubilis P, Bova FJ, **Rahman M**. Prevalence of patient safety indicators and hospital acquired conditions in patients undergoing biopsy or resection of glioblastoma. American Association of Neurological Surgeons (AANS) Annual Meeting. New Orleans, LA, April 2018.

Dastmalchi F\*, Karachi A\*, Khattri R, Merritt M, Mitchell D, **Rahman M**. A sensitive metabolic signature to predict immune response after immunotherapy for brain tumors. Society of Neuro Oncology Annual Meeting. San Francisco, CA, Nov, 2017.

Dastmalchi F\*, Karachi A\*, Allison J, Basso K, Mitchell D, **Rahman M**. In vivo cellular tracking with 13C labeling of adoptively transferred T cells for the treatment of brain tumors. Society of Neuro Oncology Annual Meeting. San Francisco, CA, Nov, 2017.

Karachi A\*, Dastmalchi F\*, Yang C, Huang J, Mitchell D, **Rahman M**. Immunomodulation with temozolomide to improve efficacy of immune checkpoint inhibition for the treatment of glioblastoma. Society of Neuro Oncology Annual Meeting. San Francisco, CA, Nov, 2017.

Laurent D\*, Oliveria S\*, Shang M, Bova F, Freedman R\*, **Rahman M**. Techniques to ensure accurate targeting for awake laser interstitial thermotherapy treatment. Congress of Neurological Surgeons Annual Meeting, Boston, MA. Oct 2017.

Dastmalchi F\*, Azari H, Karachi A\*, Rocca J, Zeng H, Merritt M, Khattri R, Mitchell DA, **Rahman M**. Lymph node and urine metabolomics: a non invasive strategy to predict efficacy of dendritic cell vaccine immunotherapy. Florida Center for Brain Tumor Research Annual Summit, Orlando, FL. March 2017.

Abbatematteo J\*, Vaziri S\*, De Leo E\*, Kubilis P, Bova F, Mitchel DA, Quinones-Hinojosa A, **Rahman, M**. Postoperative neurologic deficit abrogates survival benefit from increased extent of resection in glioblastoma patients. American Association of Neurological Surgeons Annual Meeting, Los Angeles, CA. April 2017.

Karachi A,\* Azari H, Flores C, Huang J, Yang C, Dastmalchi F\*, Mitchell D, **Rahman, M**. TMZ results in priming of host immunity and changes in GBM tumor PD-L1 expression in a dose dependent fashion that can be leveraged for combination with immune checkpoint blockade. Society of Neuro-oncology Annual Meeting, Scottsdale, AZ. Nov, 2016.

Azari H, Dastmalchi F\*, Rocca JR, Zheng H, Karachi A\*, Mitchell D, Merritt M, **Rahman M**. Lymph node and urine metabolomics: a non-invasive strategy to predict efficacy of dendritic cell vaccine immunotherapy. Society of Neuro-oncology Annual Meeting, Scottsdale, AZ. Nov, 2016.

Decker M\*, Abbatematteo J\*, De Leo E\*, Brennan M, **Rahman M**. The effects of hyperglycemia on complication rates and mortality in patients undergoing craniotomy for high-grade glioma. Congress of Neurological Surgeons Annual Meeting, San Diego, CA, Oct 2016.

Adamczak S\*, Kresak J, **Rahman M**. Expression of innate immune proteins in human gliomas. Florida Center for Brain Tumor Research Annual Summit. Miami, FL, May 2016.

Azari H, Vlasak AL\*, Lovaton R\*, Mitchell D, **Rahman M**. Using magnetic resonance spectroscopy to track dendritic cells for vaccine immunotherapy. Society of Neuro-Oncology meeting. Houston TX, Nov 2015.

Weaver KJ\*, McCord M\*, Neal D, **Rahman M**. Do tumor and ventricular volume predict the need for post-resection shunting in colloid cyst patients? American Academy of Neurological Surgeons Annual Meeting. Washington DC, May 2015.

Donnangelo LL\*, Ahmed MM, Neal D, Mogali K, Decker M\*, **Rahman M**. Perioperative aspirin in patients undergoing craniotomy for brain tumor. American Academy of Neurological Surgeons Annual Meeting. Washington, DC. 2015.

Walch FJ\*, Vaziri S\*, Lockney T\*, Neal D, Murad GJ, **Rahman M**. Prophylactic antiepileptic drugs do not reduce seizure rates in surgical brain tumor patients. Society of Neuro-oncology Annual Meeting, Miami FL, Nov 2014.

Decker M\*, Kresak J, Yachnis T, **Rahman M**. Intraoperative use of fluorescein for malignant glioma resection differentiates tumor with vascular proliferation from infiltrative tumor. Society of Neuro-oncology Annual Meeting, Miami FL, Nov 2014.

Fargen KM\*, Neal D, Blackburn SL, Hoh BL, **Rahman M**: Health disparities and stroke: the influence of insurance status on the prevalence of patient safety indicators and hospital acquired conditions. CNS Annual Meeting, Boston MA, Oct 2014.

Hooten K\*, Neal D, Lovaton RE\*, Gil JN\*, Azari H, **Rahman M**: Insurance status influences the rates of reportable quality metrics in brain tumor patients: a Nationwide Inpatient Sample database study. CNS Annual Meeting, Boston MA, Oct 2014.

**Rahman M**, Neal D, Baruch W, Bova FJ, Frenzten B, Friedman WA: The risk of malignancy after linear accelerator stereotactic radiosurgery. AANS Annual Meeting, San Fransisco CA, April 2014.

**Rahman M,** Neal D, Fargen KM\*, Hoh BL: Establishing standard performance measures for adult stroke patients: a nationwide inpatient sample database study. Congress of Neurological Surgeons annual meeting. San Francisco CA, Oct 2013.

**Rahman M,** Neal, D, Fargen, KM\*, Hoh BL: Establishing standard performance measures for adult brain tumor patients: a nationwide inpatient sample database study. AANS/CNS 10th Biennial Satellite Tumor Symposium, New Orleans LA, April 2013.

**Rahman M,** Kohler N, Titsworth WL\*, Chakraborty A\*, Best K, Roper SN, Murad JAG: Reversing anticoagulation in neurosurgery patients, a quality initiative. American Association of Neurological Surgeons annual meeting. Miami FL, April 2012.

**Rahman M**, Frentzen B, Williams M, Friedman WA: Stamp Out MRSA/MSSA Project: STOMP. American Association of Neurological Surgeons annual meeting, Miami FL, April 2012.

**Rahman M**, Ross H, Laywell E, Reynolds BA: Adaptive therapy for glioblastoma multiforme. Congress of Neurological Surgeons annual meeting. Washington DC, Oct 2011.

Levy EI, **Rahman M**, Khalessi AA, Beyer PT, Natarajan SK, Hartney ML, Fiorella DJ, Hopkins LN, Siddiqui AH, Mocco J: Midterm clinical and angiographic follow up for the first FDA-approved prospective, single-arm trial of primary stentin for stroke: SARIS (Stent-Assisted Recanalization for Acute Ischemic Stroke). International Stroke Conference, Los Angeles, CA, Feb 2011.

**Rahman M**, Reyner K\*, Deleyrolle L, Azari H, Millette S\*, Reynolds BA: Glioblastoma cell lines: no difference between flat and round. Congress of Neurological Surgeons Annual Meeting, San Fransisco, CA, Oct, 2010.

Deleyrolle L, **Rahman M**, Caldeira M, Dunbar E, Reynolds BA: Circulating Tumor Cells (CTCs) in Patients with Glioblastoma Multiforme (GBM). Society of Neuro-oncology Annual Meeting, Montreal CA, Nov, 2010.

**Rahman M,** Levy EI, Khalessi A, Crumlish A, Fiorella DJ, Hopkins LN, Siddiqui AH, Mocco J: Midterm prospective clinical and angiographic followup for the first FDA approved prospective single arm trialof primary stenting for stroke: SARIS (Stent-Assisted Recanalization for Acute Ischemic Stroke). Stroke Research Symposium at UF, Gainesville, FL, May 2010.

**Rahman M,** Smietana J, Hauck E, Hoh BL, Hopkins N, Siddiqui A, Levy EI, Mocco J: Size ratio correlates with intracranial aneurysm rupture status: a prospective study. American Association of Neurological Surgeons annual meeting, Philadelphia, PA, May 2010.

**Rahman M**, Caldeira M, Levkoff L, Roper SN, Reynolds BA: Bone morphogenetic protein decreases proliferative potential of pituitary adenoma cells. Congress of Neurological Surgeons annual meeting, New Orleans, LA, Oct 2009.

Ma D, Tremmel M, **Rahman M**, Paluch R, Levy EI, Meng H, Mocco JD: Size ratio for clinical intracranial aneurysm rupture risk assessment. Congress of Neurological Surgeons annual meeting. New Orleans, LA, Oct 2009.