CURRICULUM VITAE

Mahua Dey MD, FAANS

Assistant Professor
Department of Neurological Surgery
Director of Surgical Neuro-oncology Program
Director of Dey Malignant Brain Tumor Laboratory
University of Wisconsin Medical School & Public Health

PREVIOUS APPOINTMENTS

- Assistant Professor of Neurological Surgery Tenure Track, Indiana University School of Medicine, Indianapolis IN. (July 2015 – Aug 2019)
- Adjunct Assistant Professor of Microbiology and Immunology, Indiana University School of Medicine, Indianapolis IN. (July 2015 – Aug 2019)

EDUCATION

- B.A. (Hons.) in Economics, Jadavpur University, Kolkata India. (May 1998)
- B.S. in Economics, Summa cum laude, University of Houston, Houston TX. (May 2003)
- M.D. in Medicine, Baylor College of Medicine, Houston TX. (May 2007)

PROFESSIONAL TRAINING

2007-2008	Post-doctoral Fellow in Oncology and Molecular
	Biology (Mentor: Raymond DuBois MD PhD), MD
	Anderson Cancer Center, Houston TX.
2008-2015	Neurological Surgery Resident, University of Chicago,
	Chicago IL
2012-2014	NIH R25 Post-doctoral Fellow in Neuro-Oncology
	(Mentor: Maciej Lesniak MD), University of Chicago,
	Chicago IL.
2014-2015	Chief Resident of Neurological Surgery, University of
	Chicago, Chicago IL.
2016	Leksell Gamma Knife Radiosurgery Course, Pittsburg
	PA.

LICENSURE

State of Indiana Medical License, Certificate #01075919A State of Illinois Medical License, Certificate #036.137324

BOARD CERTIFICATION

American Board of Neurological Surgeons, ABNS (2018)

ACADEMIC APPOINTMENTS

2015-Present	Assistant Professor of Neurological Surgery, Indiana		
	University, Indianapolis IN.		
2015-Present	Neurosurgeon at Goodman Campbell Brain and Spine,		
	Indianapolis IN.		
2016-Present	Adjunct Assistant Professor of Microbiology and		
	Immunology, Indiana University, IN.		

HONORS AND AWARDS

2003-2005	Carl J. Herzog Foundation Medical School Scholarship	
	Endowment, University of Texas Medical Branch,	
	Galveston TX.	
2003	1 st Nicholson Integrative Medicine Student Poster	
	Session on Complementary, Alternative, & Integrative	
	Medicine Topics, University of Texas Medical Branch,	
	Galveston TX.	
2004	McLaughlin Best Infection & Immunity Poster,	
	University of Texas Medical Branch, Galveston TX.	
2004	McLaughlin Medical Student Summer Research	
	Program Fellowship, University of Texas Medical	
	Branch, Galveston TX.	
2005	American College of Physicians Annual Meeting,	
	Poster Presentation Award, San Francisco, CA.	
2012	The National Institutes of Health (NIH) Resident	
	Training Award (R25), Bethesda, MD.	
2012	American College of Surgeons (ACS) Resident	
	Research Award, Chicago IL.	
2013	The University of Chicago Huggins Research	
	Conference, Award for the Best Research Poster,	
	University of Chicago, Chicago, IL.	

PROFESSIONAL ASSOCIATIONS

American Associations of Neurological Surgeons (AANS, 2004)

Congress of Neurological Surgeons, (CNS, 2004)
AANS/CNS- Joint Section on Tumors (2015)
American College of Surgeons (ACS, 2012)
Society of Neuro-Oncology (SNO, 2012)
American Medical Association (AMA, 2015)
American Board of Neurological Surgeons (ABNS, 2019)

GRANT SUPPORT-ACTIVE

NIH/NINDS K08NS092895 (PI: Dey) Role of Plasmacytoid Dendritic Cells in Malignant Glioma. \$961,732; 07/01/16 - 06/30/2021

IU Value Research Grant (PI: Dey) A Phase II Study Analyzing Pre-operative Stereotactic Radiosurgery Followed by Resection for Patients with 1 – 4 Brain Metastases \$150,000; 07/01/2018-06/30/2021.

Roche Educational Grant (Co-PI: Dey) Evaluation of PD-L1 Expression and inflammatory intensity in melanoma metastatic to brain. \$25,000 10/16/2018.

GRANT SUPPORT-PAST

NIH/NINDS R25NS065744 (PI: Dey) Plasmacytoid Dendritic Cells Influence Glioma Progression by IDO mediated Treg accumulation 07/01/2012-06/30/2013.

American College of Surgeons (PI: Dey) *Role of Plasmacytoid Dendritic Cells in Malignant Glioma.* \$60,000; 07/01/2012-06/30/2014.

Purdue Institute for Integrative Neuroscience (Co-PI: Dey) *Brain tumor banking in a canine model of spontaneous brain tumors* \$13,000; 06/03/16-06/02/17.

Showalter Young Investigator Award (PI: Dey) *Tumor derived TGF-\beta regulates pDC phenotype in glioblastoma multiforme.* \$60,000; 07/01/2016 – 06/30/2017.

NRCDP NIH K-12 (PI: Dey) Role of Plasmacytoid Dendritic Cells in Malignant Glioma \$313,176; 01/01/2016-12/31/2017.

IU New Frontiers in Arts and Humanities Grant (Co-PI: Dey) Bridging the Gap: Using Video Art to Document the Human Face of Disease & Predict Quality of Life Assessments in Brain Tumor Patients \$14,683; 06/2016-12/2017.

COUNCILS AND COMMITTEES

- 1. Goodman Campbell Brain and Spine Research Review Committee, 2016-present
- 2. Director of Neuro-oncology conference CME, 2015-present
- 3. Member of Director of Neuro-oncology search committee. 2017-present
- 4. Research mentor for Medical Student Program for Research and Scholarship (IMPRS) program, 2016-present
- 5. Research mentor for IUSM NIH T35 medical student training grant, 2017-present
- 6. Invited Judge for IU Simon Cancer Center Cancer Day, 2017
- 7. Member of Women's Advisory Council (WAC) committee at IUSM, 2018
- 8. Member of PhD advisory committee for Qiang Chen, IBMG Graduate Student Department of Microbiology and Immunology, 2018
- 9. Research Preceptor for Dr Mark Kaplan's NIAID T32 Immunology and Infectious Disease Training Grant, 2018-present
- 10. Research Preceptor for Dr Cummins NIH/NINDS R25 grant re-submission, 2018
- 11. Board Member of The Goodman Campbell Brain and Spine Neurosurgery Foundation, 2018-present.
- 12. Invited Judge for IU Simon Cancer Center Cancer Day, 2019

GRANT REVIEW NATIONAL INSTITUTES OF HEALTH

Ad-hoc Committee Member

SEP-2: NCI Clinical Translational R21 and Omnibus R03 2018/10 ZCA1 SRB-K (O1) S, 05/21-05/22, 2018; SRA: Hasan Siddiqui PhD.

INTERNATIONAL GRANT REVIEW ASSOCIATIONS

Invited Guest Scientific Grant Reviewer, KWF Kankerbestrijding – Dutch Cancer Society (DCS), 2017

CLINICAL PROTOCOLS

- 1. Bridging the Gap: Using Video Art to Document the Human Face of Disease and Predict Quality of life Assessments in Brain Tumor Patients. Principle Investigator 2016-Present NCT02890940.
- 2. A Phase II Study Analyzing Pre-operative Stereotactic Radiosurgery Followed by Resection for Patients with 1 4 Brain Metastases. Co-Investigator 2018-Present NCT03398694

EDITORIAL ACTIVITIES

Ad hoc reviewer Medicine
Ad hoc reviewer Oncotarget
Ad hoc reviewer Neurosurgery
Ad hoc reviewer Caner Letter

Ad hoc reviewer British Journal of Cancer

Ad hoc reviewer Cancer Immunology Immunotherapy

BIBLIOGRAPHY

- 1. **Dey M,** Hussain SF, Heimberger AB. *The glioma microenvironment role in immune modulation: Potential targets for intervention.* Letters in Drugs Design & Discovery 3(7):443-451, 2006.
- 2. Heimberger AB, Sun W, Hussain SF, **Dey M**, Crutcher L, Aldape K, Gilbert M, Hassenbusch SJ, Sawaya R, Schmittling B, Archer GE, Mitchell DA, Bigner DD, Sampson JH. "Immunological and clinical response in a patient with glioblastoma multiforme treated with concurrent temozolomide and Immunotherapy: Case Study" Neuro Oncology 10(1):98-103, 2008.
- 3. **Dey M,** Ulasov IV, Lesniak MS. *Virotherapy against malignant glioma stem cells*. Cancer Letters 289(1):1-10, 2010.
- 4. **Dey M,** Ulasov IV, Tyler MA, Sonabend AM, Lesniak MS. *Cancer Stem Cells: The Final Frontier for Glioma Virotherapy*. Stem Cell Review 7(1):119-29, 2010.
- 5. **Dey M,** Turner MS, Wollmann R, Awad IA. Fatal "Hypertensive" Intracerebral Hemorrhage Associated with a Cerebral Cavernous Angioma: Case Report. Acta Neurochir (Wien) 153(2):421-3, 2011.
- 6. **Dey M,** Turner MS, Pytel P, Awad IA. *A "pseudo-cavernoma" an encapsulated hematoma of the choroid plexus.* J Clin Neurosci 18(6):846-8, 2011.
- 7. Ulasov IV, Nandi S, **Dey M**, Sonabend AM, Lesniak MS. *Inhibition of Sonic hedgehog and Notch pathways enhances sensitivity of CD133+ glioma stem cells*

- to temozolomide therapy. Molecular Medicine 17(1-2):103-112, 2011.
- 8. **Dey M,** Awad IA. Fenestration of supraclinoid internal carotid artery and associated aneurysm: report of 2 cases. World Neurosurg 76(6):592.e1-5, 2011.
- 9. **Dey M,** Jaffe J, Stadnik A, Awad IA. *External ventricular drainage for intraventricular hemorrhage*. Curr Neurol Neurosci Rep 12(1):24-33, 2012.
- 10. **Dey M,** D Silver, R Wong, S Smith, B Yamini. *Marginal Zone Lymphoma of the Thoracic Dura Causing Spinal Cord Compression: A Case Report.* J Clin Neurosci 20(1):171-3, 2012.
- 11. Wainwright DA, Nigam P, Thaci B, **Dey M**, Lesniak MS. *Recent developments on immunotherapy for brain cancer*. Expert Opin Emerg Drugs 17(2):181-202, 2012.
- 12. **Dey M,** Stadnik A, Awad IA. *Thrombolytic Evacuation of ICH and IVH*. Curr Cardiol Rep 14(6):754-60, 2012.
- 13. Wainwright DA, **Dey M,** Chang AL, Lesniak MS. Natural and Tumor Induced Regulatory T-cells in Malignant Glioma. Frontiers in Tumor Immunology 15;4:116, 2013.
- 14. **Dey M,** Auffinger B, Lesniak MS, Ahmed AU. *Anti-glioma Oncolytic Virotherapy: Unattainable Lofty Goal or a Success Story in the Making?* Future Virology 8(7):675-693, 2013.
- 15. **Dey M,** Stadnik A, Awad IA. Spontaneous Intracerebral and Intraventricular Hemorrhage: Advances in Minimally Invasive Surgery and Thrombolytic Evacuation, and Lessons Learned in Recent Trials Neurosurgery 74 Suppl 1:S142-50, 2014.
- 16. Ulasov I, Thaci B, Sarvaiya P, Yi R, Auffinger B, Pytel P, Guo D, Zhang L, Kim CK, Borovjagin A, **Dey M**, Han Y, Baryshnikov A, Lesniak MS. *Inhibition of MMP14 Potentiates the Therapeutic Effect of Temozolomide and Radiation in Gliomas*. Cancer Medicine 2(4):457-67, 2013.
- 17. **Dey M**, Chang Al, Wainwright DA, Ahmed AU, Han Y, Balyasnikova IV, Lesniak MS. *Heme Oxygenase-1 Protects Regulatory T Cells from Hypoxia-Induced Cellular Stress in an Experimental Mouse Brain Tumor Model*. J Neuroimmunology 15;266(1-2):33-42, 2013.
- 18. **Dey M,** Lin Y, Melkonian S, Lam S. *Prognostic Factors and Survival in Primary Adult High Grade Brainstem Glioma: A Population Based Study From 1973-2008*. J Clin Neurosci 21(8):1298-303, 2014.
- 19. **Dey M,** Ahmed AU, Lesniak MS. *CMV and Glioma: Putting the Cart Before the Horse.* J Neurol Neurosurg Psychiatry 86(2):191-9, 2015.

- 20. Auffinger B, Tobias AL, Han Y, Lee G, **Dey M,** Lesniak MS, Ahmed AU. *Conversion of Differentiated Cancer Cells into Cancer Stem-Like Cells in a Glioblastoma Model after Primary Chemotherapy*. Cell Death and Differentiation 21(7):1119-31, 2014.
- 21. Wainwright DA, Chang AL, **Dey M,** Balyasnikova I, Kim CK, Tobias A, Cheng Y, Kim J, Qiao J, Zhang L, Han Y, Mautino M, Lesniak MS. *Durable therapeutic efficacy utilizing combinatorial blockade against IDO, CTLA-4 and PD-L1 in mice with brain tumors*. Clin Cancer Res 20(20):5290-301, 2014.
- 22. **Dey M,** Chang AL, Wainwright DA, Ahmed AU, Balyasnikova IV, Pytel P, Han Y, Tobias A, Zhang L, Qiao J, Lesniak MS. *Dendritic Cell Based Vaccines that Utilize Myeloid Rather than Plasmacytoid Cells Offer a Superior Survival Advantage in Malignant Glioma*. J Immunol 195(1):367-76, 2015.
- 23. Dey M, Stadnik A, Riad F, Zhang L, McBee N, Kase C, Carhuapoma JR, Ram M, Lane K, Ostapkovich N, Aldrich F, Aldrich C, Jallo J, Butcher K, Snider R, Hanley D, Ziai W, Awad IA, the CLEAR III Trial Investigators. Bleeding and Infection with External Ventricular Drainage: A Systematic Review in Comparison to Adjudicated Adverse Events in the Ongoing CLEAR III Trial. Neurosurgery 76(3):291-301, 2015.
- 24. Zhai L, Lauing KL, Chang AL, **Dey M**, Qian J, Cheng Y, Lesniak MS, Wainwright DA. *The role of IDO in brain tumor immunotherapy*. J Neurooncol 123(3):395-403, 2015.
- 25. Qiao J, **Dey M**, Chang AL, Kim J, Miska J, Ling A, Nettlebeck D, Han Y, Zhang L, Lesniak MS. *Intratumoral Oncolytic Adenoviral Treatment Modulates the Glioma Microenvironment and Facilitates Systemic Tumor-Antigen Specific T Cell Therapy*. Oncolmmunology 4(8), 2015.
- 26. Zhai L, **Dey M**, Lauing KL, Gritsina G, Kaur R, Lukas R, Nicholas KM, Rademaker AW, Dostal C, McCusker R, Raizer J, Parsa AT, Bloh O, Wainwright DA. *Assessing the Kynurenine to Tryptophan Ratio as a Prognostic Tool for Glioblastoma Patients Enrolling in Immunotherapy*. J Clin Neurosci 22(12):1964-8, 2015.
- 27. Chang AL, Miska J, Wainwright DA, **Dey M,** Rivetta CV, Yu D, Kanojia D, Pituch KC, Qiao J, Pytel P, Han Y, Wu M, Zhang L, Horbinski C, Ahmed AU, Lesniak MS. *CCL2 produced by the glioma microenvironment is essential for the recruitment of regulatory T cells and myeloid-derived suppressor cells.* Cancer Res 76(19):5671-5682, 2016.
- 28. **Dey M,** Dou Y, Kanojia D, Li G, Sukhanova M, Spencer DA, Pituch KC, Zhang L, Han Y, Ahmed AU, Aboody KS, Lesniak MS and Balyasnikova IV. *Intranasal Oncolytic Virotherapy with CXCR4-Enhanced Stem Cells Extends Survival in Mouse Model of Glioma*. Stem Cell Reports 7(3):471-82, 2016.
- 29. Bentley RT, Ahmed AU, Yanke AB, Cohen-Gadol A, **Dey M**. *Dogs are Man's Best Friend: In Sickness and in Health*. Neuro Oncol, 219(3):312-322, 2017.

- 30. Filley AC, **Dey M**. Dendritic Cell based Vaccination Strategy: An Evolving Paradigm. J Neurooncol, 133(2):223-235, 2017.
- 31. Filley AC, **Dey M**. *Immune System, Friend or Foe of Oncolytic Virotherapy?* Front Oncol 7:106, 2017.
- 32. Fetcko K, Gondim DD, Bonnin JM, **Dey M**. *Cervical cancer metastasis to the brain: A case report and review of literature*. Surg Neurol Int. 8:181, 2017.
- 33. Filley AC, Henriquez M, **Dey M**. *Recurrent Glioma Clinical Trial, Checkmate-143: The game is not over yet.* Oncotarget 8(53):91779-91794, 2017.
- 34. Fetcko K, Lukas RV, Watson GA, Zhang L, **Dey M**. Survival and Complications of Stereotactic Radiosurgery: A Systematic Review of Stereotactic Radiosurgery for newly diagnosed and recurrent high-grade gliomas. Medicine (Baltimore) 96 (43):e8293, 2017.
- 35. Li G, Bonamici N, **Dey M.** Lesniak MS and Balyasnikova IV. *Intranasal Delivery of Stem Cell-Based Therapies for the Treatment of Brain Malignancies*. Expert Opin Drug Deliv 18:1-10, 2017.
- 36. Lukas RV, Wu J, **Dey M**. Buerki RA, Byrne RW, Dohrmann GJ. *A Survey of the Neuro-Oncology Landscape*. J Clin Neurol 14(1):8-15, 2018.
- 37. Filley A, Henriquez M, Bhowmik T, Tewari BN, Rao X, Wan J, Miller MA, Liu Y, Bentley RT, **Dey M**. *Immunologic and Gene Expression Profiles of Spontaneous Canine Glioma*. J Neurooncol 137(3):469-479, 2018.
- 38. Fetcko K, **Dey M.** Primary Central Nervous System Germ Cell Tumors: A Review and Update. Med Res Arch Mar;6(3), 2018.
- 39. Petranek S, Pencek J, **Dey M**. The effect of Pet Therapy and Artist Interactions on the Quality of Life in Brain Tumor Patients: A cross-Section of Art and Medicine in Dialog. Behav Sci 8(5). Pii: E43, 2018.
- 40. Mitchell D, Chintala S, **Dey M**. *Plasmacytoid Dendritic Cell in Immunity and Cancer*. J Neuroimmunol. 15;322:63-73, 2018.
- 41. Filley AC, Henriquez M, **Dey M**. CART Immunotherapy: Development Success and Translation to Malignant Glioma and Other Solid Tumors. Front Oncol 17;8:453, 2018.
- 42. Huff W, Agrawal N, Shapiro S, Miller J, Kulwin C, Shah M, Savage J, Payner T, Vortmeyer A, Watson G, **Dey M**. Efficacy of Pre-Operative Stereotactic Radiosurgery Followed by Surgical Resection and Correlative Radiobiological analysis for Patients with 1-4 Brain Metastases: Study Protocol for a Phase II Trial. Radiation Oncol 20;13(1):252, 2018.
- 43. Leibold AT, Monaco GN, **Dey M**. The Role of the Immune System in Brain Metastasis. Curr Neurobiol; 10(2):33-48, 2019.

- 44. Hasan T, Caragher, SP, Shireman JM, Park CH, Atashi F, Baisiwala S, Lee G, Guo D, Wang JY, **Dey M**, Lesniak MS, Horbinski CM, James CD, Ahmed AU, *Interleukin-8/CXCR2 Signaling Regulates Therapy-Induced Plasticity and Enhances Tumorigenicity in Glioblastoma*. Cell Death Dis. 10(4):292, 2019.
- 45. Huff W, Kwon J, Henriquez M, Fetcko K, **Dey M**. The Evolving Role of CD8+CD28- Immunosenescent T-cells in Cancer Immunology. Int. J Mol. Sci. 20(11), 2019.
- 46. Mitchell D, **Dey M**. Neoadjuvant anti-PD-1 Immunotherapy for Recurrent Glioblastoma. Transl Cancer Res 2019. (e-pub ahead of print)
- 47. Mitchell D, Chintala S, Fetcko K, Henriquez M, Tewari BN, Ahmed A, Bentley TR, **Dey M**. Common Molecular Alterations in Canine Oligodendroglioma and Human Malignant Gliomas and Potential Novel Theraputic Target. Front Oncol 2019. (epub ahead of print)

BOOK CHAPTERS

- 1. Awad I, **Dey M,** Jaffe J: *Open Evacuation of Intracerebral Hematoma*. In Jandial R, McCormick PC and Black PM. *Core Techniques in Operative Neurosurgery, Elsvier, 2011*.
- 2. Awad I, **Dey M,** Jaffe J: *Image-Guided Catheter Evacuation and Thrombolysis for Intracerebral Hematoma*. In Jandial R, McCormick PC and Black PM. *Core Techniques in Operative Neurosurgery, Elsvier, 2011*.
- 3. **Dey M,** Awad I: Surgical Treatment Of Cavernous Malformations Associated with Epilepsy. Cavernous Malformations of the Nervous System. Cambridge University Press 2010.
- 4. **Dey M**, Awad I: Management of Cavernoma. *Critical Care of the Stroke Patient*. Cambridge University Press 2010.
- 5. **Dey M,** Jaffe J, Awad I: *Management of ventricular drains in cerebrovascular disease. Critical Care of the Stroke Patient.* Cambridge University Press 2010.
- 6. **Dey M,** Awad I: Non-Shunting Cerebrovascular Anomalies: Cavernous, Capillary and Venous Malformations. Neurointerventional Management: Diagnosis and Treatment. 2nd edition 2011.
- 7. Ahmed AU, Thaci B, Wainwright DA, **Dey M,** and Lesniak MS: *Therapeutic Strategies Targeting Cancer Stem Cells*. Cancer Stem Cells The Cutting Edge, InTech, 2011.

- 8. **Dey M,** and Awad I: Future Microsurgical Technical Advances. Neurovascular Surgical Techniques. Jaypee Publisher 2012.
- 9. **Dey M,** Brem H and Lesniak MS: The role of local drug delivery in management of newly diagnosed and recurrent high grade glioma. Controversies in Neuro-Oncology: Best Evidence Medicine for Brain Tumor Surgery. Thieme Publisher 2012.
- 10. Awad IA, **Dey M,** Brorson J and Lee SK: *Incidental Aneurysms*. *Neurovascular Surgery* 2nd *Edition*. Thieme Publisher 2012.
- 11. **Dey M**, Chang AL, Miska J, Qiao J and Lesniak MS: *Role of Tregs and IDO in brain Tumor Immunosuppression. Translational Immunotherapy of Brain Tumors*. Elsevier Publisher 2015.

POSTER ABSTRACTS

- 1. **Dey M,** Murillo C, Evers BM. *Inhibition of PI3K using anti-p85 SiRNA attenuates dextran sulfate induced inflammatory bowel disease.* Texas Academy of Internal Medicine Annual Meeting, Dallas, 2004.
- 2. **Dey M,** Murillo C, Evers BM. *Inhibition of P13K using anti-p85 SiRNA attenuates dextran sulfate induced inflammatory bowel disease.* American College of Physicians Annual Meeting, San Francisco, 2005.3
- 3. **Dey M,** Wainwright DA, Chang Al, Han Y, Lesniak MS. *Heme oxygenase-1 preferentially protects regulatory T -cells from hypoxia-induced cellular damage mediated by reactive oxygen species*. Charles B Huggins 20th Annual Research Symposium at the University of Chicago Feb 20th 2013
- 4. **Dey M,** Stadnik A, Zhang L, McBee N, Kase C, Carhupoma R, Ram M, Lane K, Hanley D, Ziai W, Awad IA. *Bleeding and Infection Risk With External Ventricular Drainage and Thrombolysis for Intraventricular Hemorrhage*. International Stroke Conference, San Diego, 2014.
- 5. **Dey M,** Wainwright DA, Chang Al, Han Y, Lesniak MS. *The Role of Plasmacytoid Dendritic Cells in Malignant Glioma Progression*. Annual meeting of the Society of Neuro-Oncology 2013.
- 6. Wainwright DA, Chang AL, **Dey M**, Balyasnikova I, Cheng Y, Han Y and Lesniak MS. *Th17 cells cooperate with IDO inhibition to promote tumor rejection and increase survival in a mouse model of glioblastoma*. Annual meeting of the Society of Neuro-Oncology 2013.

- 7. Chang AL, Wainwright DA, **Dey M**, Han Y and Lesniak MS. *CCR4+ regulatory T cells accumulate within the brain tumor in an experimental model of GBM*. Annual meeting of the Society of Neuro-Oncology 2013.
- 8. Wainwright DA, **Dey M**, Chang Al, Cheng Y, Han Y and Lesniak MS. *Simultaneous immunotherapy targeting IDO, CTLA-4 and PD-1 increases overall survival in an orthotopic brain tumor model.* Annual meeting of the Society of Neuro-Oncology 2013.
- 9. **Dey M,** Chang AL, Wainwright DA, Ahmed Au, Han Y and Lesniak MS. *Comparative evaluation of pDCs and mDCs for dendritic cell based vaccine strategy for malignant glioma*. Annual meeting of the Society of Neuro-Oncology 2014.
- 10. Auffinger B, Tobias A, Han Y, Lee G, Guo D, **Dey M**, Lesniak ML and Ahmed AU. *Conversion of differentiated cancer cells into cancer stem like cells in a glioblastoma model after primary chemotherapy*. Annual meeting of the Society of Neuro-Oncology 2014.
- 11. Qiao J, **Dey M**, Chang Al, Woongki K, Han Y, Zhang LJ and Lesniak MS. *Oncolytic adenovirus-mediated immune response in syngeneic murine glioma model*. Annual meeting of the Society of Neuro-Oncology 2014.
- 12. Balyasnikova I, **Dey M**, Tobias A, Kanojia D, Lee G, Han Y, Zhang LJ, Ahmed AU, Aboody K and Lesniak MS. Intranasal Delivery of neural stem cells loaded with oncolytic adenovirus extends survival of mice with intracranial glioma. Annual meeting of the Society of Neuro-Oncology 2014.
- 13. Chang Al, Miska J, Wainwright DA, **Dey M**, Qiao J, Pytel P, Han Y, Zhang L, Balyasnikova IV, Ahmed AU, Lesniak MS. *Glioma microenvironment-derived CCL2 recruits regulatory T cells and myeloid-derived suppressor cells*. Journal for ImmunoTherapy of Cancer. 2015.
- 14. Miska J, Chang Al, Rashidi A, **Dey M**, Han Y, Zhang L, Balyasnikova IV, Ahmed AU, Lesniak MS. *The use of anti-GITR antibody treatment in a murine model of glioblastoma multiforme*. Journal for ImmunoTherapy of Cancer. 2015.
- 15. Hasan T, Atashi F, Kim J, Lee G, Guo D, Park CH, Wu M, **Dey M**, Lesniak MS, Horbinski CM, James CD and Ahmed AU. *Role of Interleukin-8/CXCR2 regulated epigenetic plasticity in GBM recurrence*. Annual meeting of the Society of Neuro-Oncology 2016.
- 16. Henriquez M, Bhowmik T, Tewari BN, Filley AC, Wan J, Liu Y, Bentley RT and **Dey M**. *Immunological and gene expression profile of spontaneous canine glioma*. IU Simon Cancer Center Cancer Research Day May 2017.

- 17. Tewari BN, Bhowmik T, Henriquez M and **Dey M**. *CXCL-12 expression by tumor stroma is responsible for recruitment of plasmacytoid dendritic cells in malignant glioma*. IU Simon Cancer Center Cancer Research Day May 2017.
- 18. Pencek J, Petranek S, **Dey M**. Bridging the gap: Using video art to document the human face of disease and predict quality of life assessment in brain tumor patients. Dogs: Faithful and True Exhibit at Eiteljorg Museum June 2017.
- 19. Pencek J, Petranek S, **Dey M**. *Using facial expression as a surrogate indicator for quality of life in brain tumor patients*. Annual meeting of the Society of Neuro-Oncology 2017.
- 20. Fetcko KM, Henriquez M, Chintala S, Ahmed AU and **Dey M**. *CD8+CD28-cells contribute to the immunosuppressive tumor microenvironment of malignant glioma*. AANS Annual Meeting 2018.
- 21. Monaco GN, Henriquez M, Chintala S, and **Dey M**. *Role pf PD-L1 expression in melanoma brain metastesis*. AANS Annual Meeting 2018.
- 22. Chintala S, Fetcko K, Tewari BN, Henriquez M, Bentley RT, Ahmed AU and **Dey M.** Common molecular alterations in canine and human malignant gliomas: potential novel therapeutic targets. IU Simon Cancer Center Cancer research Day, May 2018
- 23. Chintala S, Tewari BN, Henriquez M, Fetcko K, Filley A and **Dey M.**Transcriptional regulation of MHC class II in tumor associated plasmacytoid dendritic cells in glioblastoma. AACR, April 2018
- 24. Song L, Henriquez M, Chintala S, and **Dey M.** Senescent T cell Population in Glioblastoma. IMPRS Poster Session, Indiana University School of Medicine July 2018
- 25. Newman S, Henriquez M, Chintala S, and **Dey M.** Role of CCL21 on the transcriptional Regulation of MHC-II in malignant glioma-infiltrating plasmacytoid dendritic cells. IMPRS Poster Session, Indiana University School of Medicine July 2018
- 26. Hinshaw R, Henriquez M, Chintala S, and **Dey M.** The role of RUNX in pDC migration: Determining where the downregulation of RUNX2 occurs in plasmacytoid dendritic cells. Indianapolis SEED Poster Session, Indiana University School of Medicine July 2018
- 27. O'Neal WG, Wang R, Maloney B, Henriquez M, **Dey M** and Lahiri DK. *Are signaling pathways inversely regulated in alzheimer's disease and glioblastoma multiforme?* IMPRS Poster Session, Indiana University School of Medicine July 2018.

FACULTY AT SCIENTIFIC COURSES

- 1. Faculty Teacher at Neurosurgery SNS Junior Resident Course April 11-12, 2018.
- 2. Faculty Teacher at Neurosurgery SNS Junior Resident Course April 24-25, 2019.

VISITING PROFESSORSHIPS

- 1. Dendritic Cell based Immunotherapy for malignant Glioma. Visiting Professor, Invited Speaker, Department of Neurosurgery Grand Round, Brown University, Providence, RI. October 3, 2016.
- 2. Immunotherapy for Malignant Glioma. Visiting Professor, Invited Speaker, Department of Neurosurgery Research Lunch and Presentation, University of Wisconsin, Madison, WI. January 11, 2019.
- 3. Tumor Mediated Epigenetic Modification of T-cells in Glioblastoma. Visiting Professor, Invited Speaker, Department of Neurosurgery Grand Rounds, Northwestern University, Chicago, IL. February 22, 2019.
- 4. Immunotherapy for Malignant Glioma. Visiting Professor, Invited Speaker, Department of Neurosurgery Grand Rounds, University of Michigan, Ann Arbor, MI. March 14, 2019.

INVITED LECTURES

- 1. Dendritic Cell based Immunotherapy for malignant Glioma. Indiana University School of Medicine Neuroscience Grand Round, Indianapolis IN Feb 2015.
- 2. Dendritic Cell based Immunotherapy for malignant Glioma. University of Birmingham Alabama, School of Medicine Cancer Center Grand Round, Birmingham AL, April 2015.
- 3. Awake Craniotomy for Brain Tumor Resection. University of Birmingham Alabama, School of Medicine Neurosurgery Grand Round, Birmingham AL, April 2015.
- 4. Dendritic Cell based Immunotherapy for malignant glioma. ,Pediatric Grand Rounds, Indiana University Health, Bloomington Campus. Sept 2, 2015.

- 5. Immunotherapy for Malignant Glioma. Winter Clinics in Neurosurgery, Snowmass Colorado. Feb 23, 2016.
- 6. Immunotherapy for Malignant Glioma. Neuroscience Grand Round Speaker, IUSM April 6, 2016.
- 7. DC based immunotherapy for malignant glioma. Brain Tumor Working Group, IU, May 25, 2016.
- 8. DC based immunotherapy for malignant glioma. Brain Tumor Working Group Summer Group Retreat, IU, July 14, 2016
- 9. DC based Immunotherapy for malignant glioma. Immunology Conference, Department of Immunology and Microbiology IU, September 8, 2016.
- 10. Update on NRCDP K-12 grant, NRCDP-K12 Annual Meeting, Boston MA, November 5, 2016.
- 11. Life of an academic neurosurgeon involved in basic science research, Medical Student Neurosurgery Interest Group, Indiana University, Feb 23, 2017.
- 12. Immunotherapy for Brain Cancer Invited Speaker, Molecular Medicine in Action (MMIA), IU, March 12, 2017
- 13. Update on glioma management Neuroscience Grand Round Speaker, IU, April 5, 2017.
- 14. Radiation and Neuro-oncology, Department of Radiation Oncology, IU May 23, 2017.
- 15. Supplementary Motor Area Syndrome, Advanced Practitioner CME Conference, GCBS IU September 7, 2018.

MEDIA AND NEWS COVERAGE

- 1. Expert comment on CBS "60 Minutes" segment on a new breakthrough clinical trial studying the use of the Poliovirus against the deadly brain cancer on Local CBS news WTTV-TVVideo Indianapolis, May 16, 2016. http://app.criticalmention.com/app/#clip/view/22707927?token
- 2. Dey Receives Prestigious Research Award, June 28,2016
 https://www.goodmancampbell.com/in-the-news/dey-receives-prestigious-research-award
- 3. Invited expert comment on Cellphones and Cancer: Is the Risk Real? on Local NBC news WTHR-TV Indianapolis, November 14, 2016.

https://www.wthr.com/article/13-investigates-cellphones-and-cancer-is-the-risk-real

- 4. IU Health Adopts Pet Therapy, September 6, 2016. https://www.indystar.com/story/life/2016/09/06/lending-paw-help-health-care-providers/88402066/
- 5. IU Health Study uses pet therapy to help brain tumor patients, December 20, 2016 https://www.yahoo.com/news/iu-health-study-uses-pet-041549888.html
 - https://www.theindychannel.com/news/local-news/iu-health-study-uses-pet-therapy-to-help-brain-tumor-patients
- 6. Therapy dogs calming influence for cancer patients. December 25, 2016 http://www.dailyjournal.net/2016/12/26/calming influence/
- 7. IU Health study pairs brain cancer patients with therapy dogs to measure quality of life. December 26 2016

 https://www.beckershospitalreview.com/patient-engagement/iu-health-study-pairs-brain-cancer-patients-with-therapy-dogs-to-measure-quality-of-life.html
- 8. Media Story on Bridging the Gap: Pet therapy to help brain tumor patients. WTHR April 2017 https://www.wthr.com/article/bridging-the-gap-a-doctor-and-her-dog
- 9. Wearing White: How to prepare your immune system to fight cancer June 20, 2018 <a href="https://medium.com/lifeomic/wearing-white-how-to-prepare-your-immune-system-to-fight-cancer-system-to-fight-cancer-sa83a422bd31?fbclid=IwAR25ltycLjycDbz7LMPkTp1MlcfX92lDIDY-2-zSQQl3WLlxigqsevOdtb0
- 10. Bridging the Gap: Using Video Art to Document the Human Face of Disease & Predict Quality of Life Assessments in Brain Tumor Patients https://www.braintumordiaries.org

MENTORING

Individual	Role	Inclusive Dates
Post doctoral Fellows		
 Behzad Shariati 08/2016 	Post-doc fellow in the lab	05/2016-
• Tanmoy Bhowmik 04/2017	Post-doc fellow in the lab	01/2016-
Brij Nath Tewari 11/2017	Post-doc fellow in the lab	02/2017-

•	 Sreenivasulu Chintala Research Associate 12/2018 				
•	Gina Monaco present	Neurosurgery Resident Lab rotation	08/2017-		
•	Wei Xia Huff present	Neurosurgery Resident Lab rotation	07/2018-		
Medic	eal Students				
•	Kaleigh Fetcko	Research Rotation	04/2016-05/2018		
•	Anna Filley	Research Rotation	11/2016-05/2018		
	(Recipient of 2017 W	right Scholarship for Cancer Researc	h, 2017)		
•	Dana Mitchell	Research Rotation	04/2017-present		
	(Recipient of 2019 W	right Scholarship for Cancer Researc	ch, 2019)		
•	Nehal Ninad 08/2017	IUSM, IMPRS Research Mentee	06/2017-		
•	Teresa Easwaran	Research Rotation	04/2017-present		
•	Adam Leibold	Research Rotation	08/2017-present		
	(Recipient of 2018 W	right Scholarship for Cancer Researc	ch, 2018)		
•	Jea Hyun Kwon	Research Rotation	07/2018-present		
•	Leo Song present	IUSM, IMPRS Research Mentee	05/2018-		
•	Sharle Newman present	IUSM, IMPRS Research Mentee	05/2018-		
•	Mariana Hoyos present	Research Rotation	08/2018-		
•	William G O'Neal present	Clinical Mentor	08/2018-		
Graduate Student					
•	Qiang Chen	IBMG Graduate Student	06/2018-present		
High School Student					
•	Rachael Hinshaw present	Indianapolis SEED Project/FSP	ogram 06/2018-		