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# Mustafa Motiwala

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## Education

UNIVERSITY OF TENNESSEE HEALTH SCIENCE CENTER – Memphis, TN  
**Doctor of Medicine**, August 2015-May 2019

RHODES COLLEGE – Memphis, TN

**Bachelor of Science**, May 2013

Major: *Neuroscience*

Minor: *Spanish*

## Publications

**Motiwala M**, Herr MJ, Raju SS, Lillard J, Ajmera, S, Saad H, Schultz A, Fraser B, Wallace D, Norrdahl S, Akinduro O, Oravec CS, Xu R, Jimenez B, Justo M, Hardee J, Vaughn BN, Michael LM II, Klimo P Jr. Dissecting the Financial Relationship between Industry and Academic Neurosurgery. *Neurosurgery*. 2020 Aug 11: nyaa257. Epub ahead of print.

**Motiwala M**, Kumar R, Ajmera S, Lillard J, Saad H, Schultz A, Fraser B, Wallace D, Norrdahl S, Akinduro O, Oravec C, Xu R, Jimenez B, Justo M, Hardee J, Yunis Y, Gungor B, Whitaker J, Klimo P Jr. Innovation, Royalties, and Introduction of the Patent h-Index within US Academic Neurosurgery. *World Neurosurgery*. May 2020; 137: e395-e405. Epub ahead of print.

Ajmera S, **Motiwala M**, Weeks M, Oravec C, Hersh DS, Fraser BD, Vaughn BN, Klimo P Jr. What variables correlate with different clinical outcomes of abusive head injury? *Neurosurgery*. 2020 Sep 15; 87(4): 803-810.

Erwood A, Rindler RS, **Motiwala M**, Ajmera S, Vaughn BN, Klimo P Jr., Chern JJ. Management of Sterile Abdominal Pseudocyst Related to Ventriculoperitoneal Shunt. *Journal of Neurosurgery: Pediatrics*. 2019 Oct 11: 1-5. Epub ahead of print.

Ajmera S, **Motiwala M**, Lingo R, Khan NR, Smith LJ, Giles K, Vaughn B, Klimo P Jr. Emergent and Urgent Craniotomies in Pediatric Patients: Resource Utilization and Cost Analysis. *Pediatric Neurosurgery*. 2019; 54(5): 301-309. Epub ahead of print.

Lee RP, Ajmera S, Fridtjof T, Dave P, Lillard J, Wallace DA, Broussard A, **Motiwala M**, Norrdahl S, Venable G, Khan NR, Harrell C, Jones T, Vaughn BN, Gooldy T, Hersh D, Klimo P Jr. Shunt Failure—The First 30 Days. *Neurosurgery*. 2020 Jul 1; 87(1): 123-129.

Ajmera S, Lee RP, Schultz A, Hersh DS, Lepard J, Xu R, Saad H, Akinduro O, Justo M, Fraser BD, **Motiwala M**, Dave P, Jimenez B, Wallace DA, Osikoya O, Norrdahl S, Dooley JH, Khan NR, Vaughn BN, Maher CO, Klimo P Jr. Postgraduate Publishing Output in

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- Pediatric Neurosurgery: Correlation with Fellowship Site and Individual Scholars. *Journal of Neurosurgery: Pediatrics*. 2019 Jun 21: 1-9. Epub ahead of print.
- Ajmera S, **Motiwala M**, Khan NR, Smith LJ, Giles K, Vaughn B, Klimo P Jr. Image Guidance for Ventricular Shunt Surgery: An Analysis of Hospital Charges. *Neurosurgery*. 2019 Oct 1; 85(4): E765-E770.
- Oravec C, **Motiwala M**, Reed K, Jones TL, Klimo P Jr. Big Data Research in Pediatric Neurosurgery: Content and Statistical Output Analysis. *Pediatric Neurosurgery*, 54(2): 85-97, 2019.
- Motiwala M**, Ajmera S, Akinduro O, Wallace D, Norrdahl S, Schultz A, Fraser F, Saad H, Justo M, Dave P, Nguyen V, Vaughn B, Michael M, Klimo P Jr. How Does the Media Portray Neurosurgeons? *World Neurosurgery*, 122(2): E598-605, 2019.
- Khan NR, Saad H, Oravec CS, Norrdahl SP, Fraser B, Wallace D, Lillard JC, **Motiwala M**, Nguyen VN, Lee SL, Jones AV, Ajmera S, Kalakoti P, Dave P, Moore KA, Akinduro O, Nyenwe E, Vaughn B, Michael M, Klimo P Jr. An Analysis of Publication Productivity During Residency for 1,506 Neurosurgical Residents and 117 Residency Departments in North America. *Neurosurgery*, 84(4): 857-867, 2019.
- Lee R, Xu R, Dave P, Ajmera S, Lillard J, Wallace D, Broussard A, **Motiwala M**, Norrdahl S, Howie C, Akinduro O, Venable G, Khan N, Taylor D, Vaughn B, Klimo P Jr. Taking the Next Step in Publication Productivity Analysis in Pediatric Neurosurgery. *Journal of Neurosurgery: Pediatrics*, 21(6): 655-665, 2018.
- Oravec C, **Motiwala M**, Reed K, Kondziolka D, Barker F, Michael LM, Klimo P Jr. In Reply: Big Data Research in Neurosurgery: A Critical Look at this Popular New Study Design. *Neurosurgery*, 82(6): E188-189, 2018.
- Oravec C, **Motiwala M**, Reed K, Kondziolka D, Barker F, Michael LM, Klimo P Jr. Big Data Research in Neurosurgery: A Critical Look at this Popular New Study Design. *Neurosurgery*, 82(5): 728-746, 2018.
- Latif K, **Motiwala M**, Haque N, Jeter L, Hilliard B, Dagogo-Jack S, Moore M, White S, Jurado J, Yarger K. The Concept of the "Insulin Pump Center": Coordinated and Centralized Care for Insulin Pump Patients. *Endocrine Practice*, 22(suppl. 2): 53, 2016.
- Buharalioglu CK, Song CY, Yaghini FA, Ghafoor HUB, **Motiwala M**, Adris T, Estes AM, Malik KU. Angiotensin II-induced Process of Angiogenesis Is Mediated by Spleen Tyrosine Kinase via VEGF Receptor-1 Phosphorylation. *American Journal of Physiology: Heart and Circulatory Physiology*, 301(3): H1043-1055, 2011.

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## **Presentations**

**Motiwala M**, Herr MJ, Raju SS, Lillard J, Ajmera, S, Saad H, Schultz A, Fraser B, Wallace D, Norrdahl S, Akinduro O, Oravec CS, Xu R, Jimenez B, Justo M, Hardee J, Vaughn BN, Michael LM II, Klimo P Jr. Dissecting the Financial Relationship between Industry and Academic Neurosurgery. *71<sup>st</sup> Southern Neurosurgical Society Annual Meeting*, Scottsdale, AZ: February 26-29, 2020.

**Motiwala M**, Kumar R, Ajmera S, Lillard J, Saad H, Schultz A, Fraser B, Wallace D, Norrdahl S, Akinduro O, Oravec C, Xu R, Jimenez B, Justo M, Hardee J, Yunis Y, Gungor B, Whitaker J, Klimo P Jr. Innovation, Royalties, and Introduction of the Patent h-Index within US Academic Neurosurgery. *71<sup>st</sup> Southern Neurosurgical Society Annual Meeting*, Scottsdale, AZ: February 26-29, 2020.

Ajmera S, **Motiwala M**, Khan NR, Smith LJ, Giles K, Vaughn B, and Klimo P Jr. Image Guidance for Ventricular Shunt Surgery: An Analysis of Hospital Charges. *47<sup>th</sup> Annual Meeting of the American Association of Neurological Surgeons/Congress of Neurological Surgeons Joint Section on Pediatric Neurological Surgery*, Nashville, TN: December 6-9, 2018.

### **\*Selected for Top Poster Presentation**

Lee R, Ajmera S, Xu R, Dave P, Lillard J, Wallace D, Broussard A, **Motiwala M**, Norrdahl S, Howie C, Akinduro O, Venable G, Khan N, Taylor D, Vaughn B, and Klimo P Jr. Taking the Next Step in Publication Productivity Analysis in Pediatric Neurosurgery. *46<sup>th</sup> Annual Meeting of the American Association of Neurological Surgeons/Congress of Neurological Surgeons Joint Section on Pediatric Neurological Surgery*, Houston, TX: November 28-December 1, 2017.

Oravec C, **Motiwala M**, Reed K, Michael LM, and Klimo P Jr. Big Data Research in Pediatric Neurosurgery: More Pyrite than Aurum?\* *46<sup>th</sup> Annual Meeting of the American Association of Neurological Surgeons/Congress of Neurological Surgeons Joint Section on Pediatric Neurological Surgery*, Houston, TX: November 28-December 1, 2017.

### **\*Selected for Top Poster Presentation**

Oravec C, **Motiwala M**, Reed K, Kondziolka D, Barker F, Michael LM, and Klimo P Jr. Big Data Research in Neurosurgery: A Critical Look at this Popular New Study Design. *Annual Meeting of the Congress of Neurological Surgeons*, Boston, MA: October 7-11, 2017.

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**Motiwala M**, Song CY, Bhattacharya SK, and Malik KU. Contribution of Cytosolic Phospholipase A2 $\alpha$  to Angiotensin II-induced Hypertension and Associated Pathophysiology in Female Mice. *Research in Medicine and AOA Medical Student Research Day*, Memphis, TN: February 24, 2017.

Haque N, **Motiwala M**, Jeter L, and Latif KA. The Concept of the ‘Insulin Pump Center’: Coordinated and Centralized Care for Insulin Pump Patients. *25<sup>th</sup> Annual Scientific and Clinical Congress of the American Association of Clinical Endocrinologists*, Orlando, FL: May 25-29, 2016.

**Motiwala M**, Lee S, Salapa H, Shin Y, Douglas J, Cho H, and Levin M. Simultaneous Measurement of hnRNP A1 Fibril Formation by Dynamic Light Scattering (DLS). *Annual Meeting of the Society for Neuroscience*, Chicago, IL: October 17-21, 2015.

Lee S, Gardner L, Douglas J, Shin Y, Salapa H, **Motiwala M**, Segal BM, Lalor SJ, Sawchenko PE, and Levin MC. Autoimmunity to and Mutations Within the RNA Binding Protein hnRNP A1 Contribute to Neurodegeneration in MS. *140<sup>th</sup> Annual Meeting of the American Neurological Association*, Chicago, IL: September 27-29, 2015.

## **Research Training**

UTHSC NIH/AHA MEDICAL STUDENT RESEARCH FELLOWSHIP – Memphis, TN  
**Research Fellow**, May 2016-August 2016

NEUROLOGY SERVICE, VETERANS AFFAIRS MEDICAL CENTER – Memphis, TN  
**Research Assistant**, January 2015-August 2015

DEPARTMENT OF PHARMACOLOGY, UTHSC – Memphis, TN  
**Research Fellow**, June 2009-August 2009

## **Professional Memberships**

AMERICAN ASSOCIATION OF NEUROLOGICAL SURGEONS – Rolling Meadows, IL  
**Member**, August 2017-Present

CONGRESS OF NEUROLOGICAL SURGEONS – Schaumburg, IL  
**Member**, January 2017-Present

UT STUDENT NEUROSURGICAL SOCIETY – Memphis, TN  
**Vice President**, May 2018-May 2019  
**Treasurer**, May 2017-May 2018  
**Active Member**, October 2015-May 2019