

Curriculum Vitae

David A. Wallace, M.D.

Education & Training

The University of Tennessee/Semmes-Murphey Clinic, Memphis, TN
Neurosurgery Resident Physician: 7/2020 - Present

M.D. The University of Tennessee Health Science Center, College of Medicine, Memphis, TN
Doctor of Medicine 8/2016 – 5/2020
Step 1: Passed
Step 2 CK/CS: Passed
Step 3: Passed

B.S. The University of Alabama, College of Engineering, Tuscaloosa, AL
Bachelor of Science, Chemical Engineering, Summa Cum Laude: 8/2011 – 5/2015
University Honors Program: 2011- 2015

Research Experience

University of Tennessee Health Science Center College of Medicine

Publications

Taylor D, Basma J, Jones M, Lillard J, Wallace D, Ajmera S, Gienapp A, Michael LM. "Predicting Surgical Intervention in Cerebellar Stroke: A Quantitative Retrospective Analysis". *World Neurosurgery*. October 2020.

Motiwala M, Herr MJ, Jampana 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, Klimo P. "Dissecting the Financial Relationship between Industry and Academic Neurosurgery". *Neurosurgery*. August 2020.

Motiwala M, 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; "Innovation, Royalties, and Introduction of the Patent h-Index within US Academic Neurosurgery." *World Neurosurgery*. 137. May 2020.

Wallace D, Taylor DR, Pan H, Hwang S, Lucas JT, Klimo P, Upadhyaya S, Boop FA; "Treatment-related calvarial lesions in pediatric brain tumor survivors." *Pediatric Blood Cancer*. April 2020.

Venable G, Dave P, Gordon P, Fraser B, Wallace D, Mangham W, Taylor D, Khan N, Michael M, Vaughn B, Klimo P; "The Application of the Preventable Shunt Revision Rate to an Adult Population". *World Neurosurgery*. 134. February 2020.

Ryan P. Lee, MD; Sonia Ajmera, BS; Fridtjof Thomas, PhD; Pooja Dave; Jock C. Lillard, MD; David Wallace, BS; Austin Broussard, BS; Mustafa Motiwala, BS; Sebastian Norrdahl, BS; Garrett T. Venable, MD; Nickalus R. Khan, MD; Camden Harrell, MS; Tamekia L. Jones, PhD; Brandy N. Vaughn, RN; Tim Gooldy, MD; David S. Hersh, MD; Paul Klimo Jr., MD, MPH "Shunt Failure- The first 30 Days" *Neurosurgery*. Sept 2019.

Sonia Ajmera, BS; Ryan P. Lee, MD; Andrew Schultz, MS; David S. Hersh, MD; Jacob Lepard, MD; Raymond Xu, BS; Hassan Saad, MD; Olutomi Akinduro, BS; Melissa Justo, BS; Brittany Fraser, MS; Mustafa Motiwala, BS; Pooja Dave; Brian Jimenez, MS; David A. Wallace, BS; Olufemi Osikoya, MS; Sebastian Norrdahl, BS; Jennings H. Dooley, BS; Nickalus R. Khan, MD; Brandy N. Vaughn, RN; Cormac O. Maher, MD; Paul Klimo Jr., MD, MPH. "Postgraduate publishing output in pediatric neurosurgery: correlation with fellowship site and individual scholars". *Journal of Neurosurgery: Pediatrics*. June 2019.

Motiwala, M; Ajmera, S; Akinduro, O; Wallace, D; Norrdahl, S.P; Schultz, A; Fraser, B; Saad, H; Justo, M; Dave, P; Nguyen, V; Vaughn, B; Michael, L.M; Klimo, P. "How Does the Media Portray Neurosurgeons?" *World Neurosurgery*, 122, e598-e605.

Vincent Nguyen, MD; David Wallace, BS; Sonia Ajmera, BS; Oluwatomi Akinduro, BS; Lydia J. Smith, RHIT; Kim Giles, MSHA, MBA; Brandy Vaughn, RN; Paul Klimo Jr., MD, MPH "Management of Subdural Hematohygroms in Abusive Head Trauma" *Neurosurgery*. April 2019.

Ryan P. Lee, MD, Raymond Xu, BS, Pooja Dave, Sonia Ajmera, BS, Jock C. Lillard, BS, David Wallace, BS, Austin Broussard, BS, Mustafa Motiwala, BS, Sebastian Norrdahl, BS, Carissa Howie, Oluwatomi Akinduro, BS, Garrett T.

Venable, MD, Nickalus R. Khan, MD, Douglas R. Taylor, MD, Brandy N. Vaughn, RN, and Paul Klimo Jr., MD, MPH. "Taking the next step in publication productivity analysis in pediatric neurosurgery" *Journal of Neurosurgery: Pediatrics*. June 2018.

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 LM, Klimo P Jr. "An Analysis of Publication Productivity During Residency for 1506 Neurosurgical Residents and 117 Residency Departments in North America." *Neurosurgery*. May 2018.

Patel, P; Wallace, D; Boop, F; Vaughn, B; Robinson, G; Gajjar, A; Klimo, P. "Reoperation for Medulloblastoma Prior to Adjuvant Therapy." *Neurosurgery*. April 2018.

Presentations

"An Analysis of Publication Productivity During Residency for 1506 Neurosurgical Residents and 117 Residency Departments in North America". 70th Southern Neurosurgical Society Annual Meeting. Key Largo, FL. February 2019. Oral Presentation.

Nickalus Khan; H. Saad; C.S. Oravec; S.P. Norrdahl; B. Fraser; D. Wallace; J.C. Lillard; M. Motiwala; V.N. Nguyen; S.L. Lee; A.V. Jones; S. Ajmera; P. Kalakoti; P. Dave; K.A. Moore; O. Akinduro; E. Nyenwe; B. Vaughn; L.M. Michael; and P. Klimo, Jr.

David Wallace. "Reoperation for Medulloblastoma Prior To Adjuvant Therapy: A Surgical Perspective". 2017 AANS/CNS Section on Pediatric Neurological Surgery Annual Meeting. Houston, TX. November 2017. Poster Presentation.

"Taking the next step in publication productivity analysis in pediatric neurosurgery". 2017 AANS/CNS Section on Pediatric Neurological Surgery Annual Meeting. Houston, TX. November 2017. Poster Presentation.

Ryan P. Lee, Raymond Xu, Pooja Dave, Sonia Ajmera, Jock C. Lillard, David Wallace, Austin Broussard, Mustafa Motiwala, Sebastian Norrdahl, Carissa Howie, Oluwatomi Akinduro, Garrett T. Venable, Nickalus R. Khan, Douglas R. Taylor, Brandy N. Vaughn, Paul Klimo Jr

Research Experience

Dr. Paul Klimo, Department of Neurosurgery
September 2016-Present

Dr. Frederick Boop, Chief, Pediatric Neurosurgery Division, Department of Surgery
Dr. Santhosh Upadhyaya, Neuro-Oncology Division, Department of Oncology
Projects: Treatment Related Calvarial Lesions in Pediatric Brain Tumor Survivors
November 2017- April 2020

The University of Alabama

Publications

Mittenthal, M.S., Flowers, B.S., Bara, J.E., Whitley, J.W., Spear, S.K., Roveda, J.D., Wallace, D.A., Shannon, M.S., Holler, R., Martens, R., Daly, D.T. (March 2017). "Ionic Polyimides: Hybrid Polymer Architectures and Composites with Ionic Liquids for Advanced Gas Separation Membranes" *Industrial and Engineering Chemistry Research*. Vol. 56(17): 5055-5069.

Brian S Flowers, Max S Mittenthal, Alexander H Jenkins, David A Wallace, John William Whitley, Grayson P. Dennis, Mei Wang, C. Heath Turner, Vladimir N. Emel'yanenko, Sergey P. Verevkin, & Jason E. Bara. (January 2017). "1,2,3-Trimethoxypropane: A Glycerol-Derived Physical Solvent for CO₂ Absorption" *ACS Sustainable Chemistry and Engineering*. Vol. 5(1): 911-921.

Bara, J.E., Mittenthal, M.S., Flowers, B., Taylor, W.F., Jenkins, A.H., Wallace, D.A., David Roveda, J. (2016). "Lessons Learned from the Use of Unconventional Materials for CO₂ Capture" *MRS Advances*, 1(44), 3027-3035.

Zaitsau, D. H.; Yermalayeu, A. V.; Verevkin, S. P.; Bara, J. E.; Wallace, D. A. (December 2015). "Structure-Property Relationships in Ionic Liquids: Chain Length Dependence of the Vaporization Enthalpies of Imidazolium Based ILs with Fluorinated Substituents." *Thermochimica Acta*. Vol. 622:38-43.

Hindman, M. S.; Stanton, A. D.; Irvin, A. C.; Wallace, D. A.; Moon, J. D.; Reclusado, K. R.; Liu, H.; Belmore, K. A.; Liang, Q.; Shannon, M. S.; Turner, C. H.; Bara, J. E. (August 2013). "Synthesis of 1,2-dialkyl-, 1,4(5)-dialkyl- and 1,2,4(5)-trialkyl-Imidazoles via a One-Pot Method." *Industrial & Engineering Chemistry Research*. Vol. 52(34): 11880-11887.

Patents

Bara, Jason E., Matthew S. Shannon, David A. Wallace, John David Roveda, and Max S. Mittenenthal. Ionic Polyimide Materials and Methods of Use. The Board of Trustees of The University of Alabama, assignee. Patent 9,845,380. 19 Dec. 2017.

Presentations

David Wallace. "Designing Hydrophilic, Reactive Polymers for CO₂ Capture and Acid Gas Transport". American Institute of Chemical Engineers National Graduate and Professional Conference. Atlanta, GA. November 2014. Oral Presentation.

Bara, J.E., Shannon, M.S., Jeffrey Horne, W., Whitley, J.W., Liu, H., Wallace, D.A., Turner, H., Verevkin, S.P., Brown, N., Staab, G., Kupfer, R. (2014). Imidazole-based solvents and Membranes for CO₂ Capture Applications. *Materials Research Society Symposium Proceedings: Vol 1673*. 2014 MRS Spring Meeting; San Francisco; United States; 21 April 2014 through 25 April 2014; Code 111286.

Research Experience

Dr. Jason Bara, Chemical and Biological Engineering 1/2013 – 5/2015

Projects: Tethered Imidazole- Amines for CO₂ Capture and Polymer Building Blocks; Designing Hydrophilic, Reactive Polymers for CO₂ Capture and Acid Gas Transport.

Dr. Gregory Szulczewski, Chemistry 1/2012 – 12/2012

Project: Bismuth Telluride Nanostructures for Thermoelectrics.

Activities

University of Tennessee Health Science Center College of Medicine

Student Representative to the Committee of Undergraduate Medical Education May 2018- Present

- Elected as one of two members of the Class of 2020 to serve with faculty from all four UTHSC campuses state wide in evaluating and reviewing the undergraduate curriculum of the College of Medicine
- Assist the committee in reviewing and recommending policies and programs to the Dean of the College of Medicine

Principles of Clinical Medicine Teaching Scholar May 2019- Present

- Assist clinical professors with instructing patient history and physical exam skills to first- and second-year medical students
- Observe and provide student feedback during simulated patient encounters

President, UT Student Neurosurgical Society May 2019- Present

- Organize events on campus and mentor students interested in the neurosurgical opportunities available in Memphis.
- Work closely with faculty to coordinate student engagement with the residency program.

Treasurer, UT Student Neurosurgical Society May 2018- May 2019

- Assist the executive committee in coordinating events on campus and raising awareness towards the neurosurgical opportunities in Memphis for UT Medical students

Vice President of Research, Student Surgical Society April 2017- April 2018

- Assist President in organizing and planning monthly meetings
- Coordinate research opportunities between students and faculty PI's

The University of Alabama

Capstone Men and Women, January 2013- March 2015

The University of Alabama, Tuscaloosa, AL

- Serve the Office of the President as an official ambassador of the University to the many guests and visitors of the University.
- Give daily campus tours to perspective students
- Serve as a host at the many events held on campus.

Vice President of The Anderson Society, April 2014- April 2015

The University of Alabama, Tuscaloosa, AL

- The Anderson Society is the University of Alabama's most respected and lauded honor societies, recognizing individuals who have made significant contributions to the University.

- Assist the President in developing the Anderson Society Community Banquet held every spring.

Honors and Awards

University of Tennessee Health Science Center College of Medicine

Ephriam & Ruth Camp Scholarship recipient May 2018

The University of Alabama

Presidents List: Fall 2011, Spring 2012, Fall 2012, Spring 2013, Fall 2013, Spring 2014, Fall 2014, Spring 2015

The Alumni Association Outstanding Senior Award, April 2015

The Randall Outstanding Undergraduate Research Award, April 2015

Chilton Award for Most Outstanding Junior in Chemical Engineering, April 2014

The Anderson Society Honor Society, April 2014

Blue Key Honor Society, April 2014

Omega Chi Epsilon Chemical Engineering Honor Society

Tau Beta Pi Engineering Honor Society

Work Experience

Technician, May 2012- August 2012, July 2013- August 2013, April 2016-July 2016
Tennessee Retina Consultants, Centennial Hospital, Nashville, TN

- Check in patients by performing a medical history and a variety of visual tests in preparation for the patient to be seen by the doctor.

Personal Interests

Fly Fishing, Backpacking, Kayaking, Mountain Biking, Weightlifting