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720.204.2425

David VanSickle, MD, PhD, FAANS

Dr. VanSickle joined South Denver Neurosurgery in 2007 and is board certified by the American Board of Neurological Surgery.

After earning a masters and doctorate in bioengineering, Dr. Vansickle went on to pursue a career in neurosurgery. He earned his medical degree from the University of Pittsburgh and completed a six year neurosurgery residency at the University of Colorado Health Sciences Center. While there, he was named Surgical Intern of the Year and later the Neurosurgery Resident of the Year. He also patented a new device to help facilitate epilepsy surgery. Dr. VanSickle has authored and co-authored numerous peer-reviewed journal articles and has given multiple presentations. He is a member of the American Association of Neurological Surgeons (AANS), Congress of Neurological Surgeons (CNS), and the American Medical Association (AMA).



Meet Dr. VanSickle

Education

Bachelor of Science in Mechanical Engineering - University of Kansas

Master of Science in Biomedical Engineering - California State University, Sacramento

Ph.D. in Bioengineering - University of Pittsburgh

Doctor of Medicine - University of Pittsburgh School of Medicine

Internship in General Surgery - University of Colorado Health Sciences Center

Resident in Neurological Surgery - University of Colorado Health Sciences Center

Professional Experience

South Denver Neurosurgery (Littleton, CO)

Human Engineering Research Laboratories (Pittsburgh, PA)

Human Engineering/Biomechanics Laboratories (Sacramento, CA)

Assistive Device Center (Sacramento, CA)

Veterans Affairs Rehabilitation Research and Development Center (Palo Alto, CA)

Consulting Experience

Human Engineering Research Laboratories (Pittsburgh, PA)

DBS Economic Value Advisory Board Meeting (Minneapolis, MN)

Professional Certifications

Colorado Medical License 2005-Present

American Board of Neurosurgery, board qualified 2007

United States Medical Licensing Exam, Step III 2002

United States Medical Licensing Exam, Step II 2000

United States Medical Licensing Exam, Step I 1999

Certificate of Engineer in Training 1991

Professional Society Memberships and Activities

American Society for Stereotactic and Functional Neurosurgery (2016-present)

American Association of Neurological Surgeons (2002-present)

Congress of Neurological Surgeons (2002-present)

Alpha Omega Alpha Medical Honor Society (2000-present)

American Medical Association (1997-2007)

Sigma Xi, Scientific Research Society (1997-2007)

Biomedical Engineering Society (1997-2007)

Institute of Electrical and Electronic Engineers - Engineering in Medicine and Biology Society (1993-2001)

RESNA (1992-2001)

American Medical Student Association (1996-2001)

Medical History Society Member (1997-2001)

American Society of Mechanical Engineers (1989-1994)

Society of Automotive Engineers (1989-1994)

Awards

Neurosurgery Outstanding Resident of the Year (2005)

General Surgery Intern of the Year (2002)

Outstanding Clinical Teacher Award (2002)

Alpha Omega Alpha Medical Honor Society (2000)

University of Pittsburgh Honoree (1998)

Recipient of a fellowship at the National Institute on Disability and Rehabilitation Research (1994-1997)

Winner of the RESNA Whitaker Foundation Student Scientific Paper Competition (1994 & 1996)

Honorable Mention, RESNA Whitaker Foundation Student Scientific Paper Competition (1995)

Winner of the RESNA Easter Seals Student Design Competition (1994)

Finalist in the IEEE-Whitaker Foundation Engineering in Medicine and Biology Society Student Paper Competition (1993)

Recipient of a Rehabilitation Engineering Training Fellowship (1991-1993)

Volunteer Work

Board of Directors, Parkinson's Association of the Rockies (2009-present)

Student Interviewer, Committee on Medical School Admissions (1997-1999)

Volunteer, Pittsburgh Cares Community Days (1998)

Volunteer, Pittsburgh Cancer Institute, University of Pittsburgh Medical Center (1995)

Volunteer, National Wheelchair Athletic Association/United States Olympic Committee Paralympic Training Camp (1992, 1993, 1994)

Publications

Wilson-Holden TJ, **VanSickle DP**, Lenke LG, [The benefit of neurogenic mixed evoked potentials for intraoperative spinal cord monitoring during correction of severe scoliosis: A case study](#). *Spine*, Vol. 27, No. 10, pp. E258-265, May 2002.

Conti SF, Kirckner JS, **VanSickle DP**, [Midfoot Osteotomies](#). *Foot and Ankle Clinics*, Vol. 6, No. 3, pp. 519-532, September 2001.

Tomaino MM, Brach PJ, **VanSickle DP**, [The rationale for and efficacy of surgical intervention for electrodiagnostic-negative cubital tunnel syndrome](#). *Journal of Hand Surgery (American)*, Vol. 26, No. 6, pp. 1077-1081, November 2001.

VanSickle DP, Cooper RA, Boninger ML, DiGiovine CP, [Analysis of vibrations induced during wheelchair propulsion](#). *Journal of Rehabilitation Research and Development*, Vol. 38, No. 4, pp. 409-421, 2001.

VanSickle DP, Cooper RA, and Boninger ML, [Road loads acting on manual wheelchairs](#). *IEEE Transaction on Rehabilitation Engineering*, Vol. 8, No. 3, pp. 371-84, September 2000.

DiGiovine MM, Cooper RA, Boninger ML, Lawrence BM, **VanSickle DP**, and Rentschler AJ, [User assessment of manual wheelchair ride comfort and ergonomics](#). *Archives of Physical Medicine and Rehabilitation*, Vol. 81, pp.490-494, 2000

O'Connor TJ, Cooper RA, Fitzgerald SG, Dvorznac MJ, Boninger ML, **VanSickle DP**, Glass L, [Evaluation of a manual wheelchair interface to computer games](#). *Neurorehabilitation and Neural Repair*, Vol. 14, No. 1, pp. 21-31, 2000.

VanSickle DP, Cooper RA, Boninger ML, Robertson RN, and Shimada SD, [A unified method for calculating the center of pressure during wheelchair propulsion](#). *Annals of Biomedical Engineering*, Vol. 26, pp. 328-336, 1998.

Cooper RA, Gonzalez J, Lawrence B, Renschler A, Boninger ML, and **VanSickle DP**, [Performance of selected lightweight wheelchairs on ANSI/RESNA tests](#). *Archives of Physical Medicine and Rehabilitation*, Vol. 78, No. 10, 1997.

Cooper RA, Boninger ML, **VanSickle DP**, Robertson RN, and Shimada SD, [Uncertainty analysis of wheelchair propulsion dynamics](#). *IEEE Transaction on Rehabilitation Engineering*, Vol. 5, No. 2, pp. 130-139, 1997.

Cooper RA, Robertson RN, **VanSickle DP** and Boninger ML, Methods for determining 3-dimensional wheelchair pushrim forces and moments. *Journal of Rehabilitation Research and Development*, Vol. 34, No. 2, pp. 162-170, 1997.

VanSickle DP, Cooper RA, Robertson, RN, and Boninger ML, [Determination of wheelchair dynamic load data for use with finite element analysis](#). *IEEE Transactions on Rehabilitation Engineering*, Vol. 4, No. 3, pp. 161-170, 1996

Cooper RA, Robertson RN, **VanSickle DP**, Boninger ML and Shimada SD, [Projection of the point of force application onto the palmar surface of the hand during wheelchair propulsion](#). *IEEE Transactions on Rehabilitation Engineering*, Vol. 4, No. 3, pp. 133-142, 1996

Cooper RA, Robertson RN, Lawrence B, Heil T, Albright SJ, **VanSickle DP** and Gonzalez J, [Life-cycle analysis of depot versus rehabilitation manual wheelchairs](#). *Journal of Rehabilitation Research and Development*, Vol. 33, No. 1, pp. 45-55, 1996.

Cooper RA, **VanSickle DP**, Albright SJ, Stewart KJ, Flannery M, and Robertson RN, [Power wheelchair range testing and energy consumption during fatigue testing](#). *Journal of Rehabilitation Research and Development*, Vol. 32, No. 3, pp. 255-263, 1995

Cooper RA, **VanSickle DP**, Robertson RN, Boninger ML and Ensminger G, Center of pressure during manual wheelchair propulsion. *IEEE Transactions on Rehabilitation Engineering*, Vol. 3, No. 4, pp. 289-298, 1995

Cooper, RA, Robertson, RN, **VanSickle, DP**, Stewart, KJ, Albright, SJ Wheelchair impact response to ISO pendulum and ISO standard curb. *IEEE Transactions Rehabilitation Engineering*, Vol. 2, No. 4, December 1994, pp. 240-246.

Cooper, RA, Stewart, KJ, **VanSickle, DP** [Evaluation of methods for determining static stability of manual wheelchairs](#). *Journal of Rehabilitation Research and Development*, Vol. 31 No. 2, 1994, pp. 144-147.

Book Chapters

Shrawan, K Ed., Perspectives in Rehabilitation Ergonomics, "Wheelchair Ergonomics," Cooper, RA; Robertson, RN; Boninger, ML; Shimada, SD; **VanSickle, DP**; Lawrence, B; Singleton, T. Taylor & Francis, Edmonton, 1997, pp. 246-272.

Patents

Pending: "Active Invasive EEG Device And Technique" - PCT/US2004/042488