Dr. Keith-Austin Scarfo DO, MS

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EDUCATION

Bucknell University, Lewisburg, PA Biology August 1996 – May 2000 Bachelor of Science – May 2000

Thomas Jefferson University, Philadelphia, PA Biomedical Chemistry June 2000 – August 2002 Master of Science – June 2003

Philadelphia College of Osteopathic Medicine, Philadelphia, PA August 2002 – June 2006 Doctor of Osteopathy – June 2006

POSTGRADUATE TRAINING

Lankenau Hospital, Wynnewood, PA 100 East Lancaster Avenue, Wynnewood, PA 19096 Internship – PGY1 July 2006 – June 2007

Thomas Jefferson University Hospital, Philadelphia, PA 111 South 11th Street, Philadelphia, PA 19107 Anesthesiology – PGY2-4 July 2007 – June 2010

Dartmouth-Hitchcock Medical Center 1 Medical Center Drive, Lebanon, NH 03766 Pain Medicine – PGY5 July 2010 – June 2011

PROFESSIONAL LICENSES AND BOARD CERTIFICATIONS

The American Board of Anesthesiology Board Certified as of September 23, 2011 (Certification # 48209) Part 1 (Written) - PASSED August, 2010 Part 2 (Oral) – PASSED September 2011 Pain Medicine – PASSED September 2013

ACEDEMIC APPOINTMENTS

Department of Neurosurgery – Comprehensive Spine Center Assistant Professor of Neurosurgery, Warren Alpert Medical School - Brown University Rhode Island Hospital 12/2014 – Present

Mentorship to Alpert Medical School Students on PM&R and Neurology rotation and 2nd year students with regard to interviewing and physical exam skills (MSK, neurological, and cardiopulmonary)

HOSPITAL APPOINTMENTS

Department of Anesthesiology Medical Director of the Pain Management Clinic (2013-14) Beth Israel Deaconess Hospital – Plymouth August 2011 – December 2014

Department of Neurosurgery – Comprehensive Spine Center Director of the Intrathecal Pump Program Rhode Island Hospital December 2014 – Present

HOSPITAL COMMITTEES

Pain Committee 2018 - Present (Committee Chair)

Burnout and Resiliency Focus Group- RIH 2018

Palliative Care Committee 2017- Present

Fellowship Curriculum Committee 2010 - 2011

Operating Room Committee 2007 - 2010

Resident Liaison Committee 2007 - 2010

ICU Committee 2006 -2007

MEMBERSHIP IN SOCIETIES

American Society of Anesthesiologists 2007 – Present

American Society of Interventional Pain Physicians
Vice President for the Rhode Island Society of Interventional Pain Physicians (2015 – Present)
2010 – Present

PUBLICATION LIST

PUBLICATIONS, PEER REVIEWED

"Preoperative Surveillance Thoracic MRI for Thoracic Dorsal Column Stimulation: Case Series." IPM Report 2018

Michael Nantz, Christopher Dicus, Brenden Hilliard, Srikanth Yellayi, Keith Scarfo, Shaomin Zou, James Hecker. "The benefit of hydrophobic domain asymmetry on the efficacy of transfection as measured by in vivo imaging" *Molecular Pharmaceutics*

Shaomin Zou, Keith Scarfo, Michael H. Nantz, and James G. Hecker. "Lipid-mediated delivery of RNA is more efficient than delivery of DNA in non-dividing cells." *International Journal of Pharmaceutics* April 2010 Vol 389: 232-243.

Ellen S. Hauck, Shaomin Zou, Keith Scarfo, Michael H. Nantz, and James G. Hecker. "Whole Animal *In Vivo* Imaging After Transient, Nonviral Gene delivery to the Rat Central Nervous System." *Molecular Therapy* November 2008 16(11): 1857–1864.

James G. Hecker, Gideon O. Berger, Keith A. Scarfo, Shaomin Zou, Michael H. Nantz. "A Flexible Method for the Conjugation of Aminooxy Ligands to Preformed Complexes of Nucleic Acids and Lipids" *ChemMEDChem* July 2008 3(9): 1356-1361.

McCarter, T., Shaik, Z., Scarfo, K., Thompson, L., "Capnography Monitoring Enhances Safety of Postoperative Patient-Controlled Analgesia." *American Health & Drug Benefits* June 2008: 28-35.

Cummins, T.R. and Scarfo, K. "The pentapeptide QYNAD does not block voltage-gated sodium channels." *Neurology* (2002) Vol 60: 224-229.

PUBLICATIONS, NON-PEER REVIEWED

Invite author to blog with regard to "Snow Shoveling Techniques and Back Injuries" January 2017, "Chronic Back Pain and Its Management", July 2027 for Rhode Island Hospital

Advised with regard to the revision of workers compensation guidelines for the State of Rhode Island for injections in the management of spinal pain, 2016

BOOK CHAPTERS

Scarfo, K. Opioid induced Hyperalgesia Syndrome. In: Comprehensive Pain Management in the Rehabilitation Patient. A Carayannopoulos, 2017 (Author of Chapter 31, Opioid Induced Hyperalgesia Syndrome)

Hecker, J.G., Baranov, D., McClung, H., Kelton, T., Scarfo, K. Neurologic Diseases. In: <u>Anesthesia and Uncommon Diseases</u>. LA. Fleisher, Editor, Elsevier. 2006 (Co-author of Chapter 6, Neurologic Diseases)

ABSTRACTS

Scarfo, K., Carayannopoulos, A., Grande, G., Yates, A., Coombs, M., Scarfo, K. "Intrathecal Pump Management: the Cost Effectiveness of Compounded Drugs verses Monotherapy." From Proceedings of the 2017 Annual Meeting of the International Neuromodulation Society.

Taicher, B., Scarfo, K., Gandhi, K., Viscusi, E., "Economic Perspective of Three Common Analgesic Modalities for Total Knee Arthroplasty." From Proceedings of the 2010 Annual Meeting of the America Society of Regional Anesthesia.

Scarfo, K., Taicher, B., Gandhi, K., Viscusi, E., "Health Care Resource Utilization: A Comparison of 3 Analgesic Modalities for Total Knee Arthroplasty." From Proceedings of the 2010 Annual Meeting of the International Anesthesia Research Society (Abstract #486).

Scarfo, K., Viscusi, E., Kenndey, E., "Does intraoperative administration of dexmetatodine reduce postoperative pain and opioid requirements?" From Proceedings of the 2009 Annual Meeting of the American Society Anesthesiologists.

McCarter, T., Shaik, Z., Scarfo, K., Thompson, L., "End-Tidal Carbon Dioxide Monitoring in Patient Controlled Analgesia" *AARC* May 2007

INVITED PRESENTATIONS

Speaker on opioid management Interdisciplinary Spine Conference, Warren Alpert Medical School, September 29, 2018

Panel member and speaker on treatment of lumbar disc herniation and low back pain Interdisciplinary Spine Conference, Warren Alpert Medical School, October 1, 2016

Speaker on capnography "The Safety Benefits of Continuous Monitoring During PCA" Webcast for over 100 hospitals. April 18, 2007