

Suguna Pappu, MD, PhD

Education/Training:

Institution/Location	Degrees	Years	Field of Study
Miami University (OH):	BS, AB	09/83-12/85	Mathematics
MIT	SM	09/86-06/89	Operations Research
MIT	PhD	09/86-06/92	Operations Research
Yale University	MD	09/97-05/01	Medicine

Positions and Employment

9/92-6/95	Yale University: Post-Doctoral Fellow, Dept. of Computer Science.
9/95-12/95	Wesleyan University: Instructor, Department of Mathematics
7/95-6/97	Yale University: Post-Doctoral Fellow, Dept. of Diagnostic Radiology
7/01-6/05	Yale University: Resident, Department of Surgery
7/06- 2/07	University of New Mexico: Resident, Department of Surgery
2/07 –6/08	University of New Mexico: Pre-residency Fellow, Department of Neurosurgery
7/08 –6/12	University of New Mexico: Resident, Department of Neurosurgery
11/13-1/16	New Mexico VA-HCS, Staff Neurosurgeon and Acting Chief of Neurosurgery
8/12 –12/17	University of New Mexico, Assistant Professor, Department of Neurosurgery
1/18 –present	Loyola University, Associate Professor, Department of Neurosurgery
1/18-present	Staff Physician, Hines VA Hospital

Honors/Awards

1985	<i>Phi Beta Kappa.</i>
1983-1985	President's List of Distinguished Undergraduate Scholars
1995-1997	NRSA(NIH) Post-doctoral fellowship, Department of Diagnostic Radiology, Yale University
2005	OHSE fellowship, Department of Surgery, Yale University
2006	Best Paper, New Mexico Surgical Society

Other Activities

Member, Congress of Neurological Surgeons
Member, American Association of Neurological Surgeons
Member, Health Sciences Center Research Committee
Faculty Senator, University of New Mexico

Diplomate, American Board of Neurological Surgeons (May, 2016)

Other Activities

Admissions Committee, Yale University School of Medicine 2004–2005

Current Research Interests

I work fulltime as a clinical neurosurgeon. My research work lies at the juncture between clinical problems and mathematical modeling of such problems. I collaborate with engineers. My long-term goals are to define such quantitative models which can be used in clinical decision making.

Publications:

Pappu S, Lerma J, Khraishi T, Brain CT to Assess Intracranial Pressure in Patients with Traumatic Brain Injury, **Journal of Neuroimaging**, 26(1), p 37–40, January/February 2016.

Svenkeson, D, Sena B, Oishi M, Pappu S, Yonas H. A Novel Use of Transfer Function Estimation for Early Assessment of Brain Injury Outcome. **IEEE Transactions in Biomedical Engineering**. April 17, 2014.

Lovald S, Heinrich J, Khraishi T, Yonas H, Pappu S. The role of fluid dynamics in plaque excavation and rupture in the human carotid bifurcation: a computational study. **International Journal of Computational and Experimental Biomechanics**. January, 2009. (1:1. pp 75-96).

Carlson AP, Pappu S, Keep MF, Turner P. Large cerebellar hemorrhage during trumpet playing: importance of blood pressure elevation during the Valsalva maneuver: Case report. **Neurosurgery**. 2008 Jun; 62(6): E1377

Pappu S, Dardik A, Tagare H, Gusberg RJ. Beyond Fusiform and Saccular: A Novel Quantitative Tortuosity Index May Help Classify Aneurysm Shape and Predict Aneurysm Rupture Potential. **Annals of Vascular Surgery - January 2008 (Vol. 22, Issue 1) Pages 88-97**.

Pappu S, Cheng D, Donovan P, Udelsman R, All Sestamibi Scans Are Not Created Equally. **Arch Surg**. 2005 Apr;140(4):383-6.

Gold S, Rangarajan A, Lu CP, Pappu S and Mjolsness E. New Algorithms for 2D and 3D Point Matching: Pose Estimation and Correspondence. **Pattern Recognition**, 1997.

Rangarajan A, Chui H, Mjolsness E, Pappu S, Davachi L, Goldman-Rakic PS and Duncan JS, A Robust Point Matching Algorithm for Autoradiograph Alignment. **Medical Image Analysis**, August 1997.

Rangarajan A, Mjolsness E, Pappu S, Davachi L, Goldman-Rakic PS and Duncan JS. A Robust Point Matching Algorithm for Autoradiograph Alignment. **Visualization in Biomedical Computing (VBC)**, K. H. Hohne and R. Kikinis editors, pp. 277-286, 1996.

Pappu S, Gold S and Rangarajan A, A framework for non-rigid matching and correspondence. **Advances in Neural Information Processing Systems 8**, pp. 795-801, 1996.

