
ARVIND B. SONI, MD

EDUCATION **University of Medicine and Dentistry of New Jersey (UMDNJ), Robert Wood Johnson Medical School**, Piscataway, NJ, May 1994
Medicinae Doctor.

Rutgers University, Rutgers College of Engineering, New Brunswick, NJ, May 1990
Bachelors of Science (cum laude) in Electrical Engineering with emphasis in Biomedical Engineering.

POST GRADUATE TRAINING **Strong Memorial Hospital**, Rochester, NY, Jul 1997 to Jun 1998
Chief Resident. Radiation Oncology. Responsible for residents. Covered multiple services, coordinating schedules and special procedures. Responsible for organizing conferences and guest speakers.

Resident. Primary Emphasis: General Radiation Oncology. Additional Training: Pediatric Oncology, High Dose Rate Vaginal Cylinders, High Dose Rate Endobronchial Radiotherapy, Total Body Irradiation, Radiopharmaceutical therapy, Prostate Implants, Stereotactic Radiosurgery, and Fractionated Stereotactic Radiotherapy.

TEACHING EXPERIENCE **University of Rochester, Strong Memorial Hospital**, Rochester, NY, Jul 1998 to Dec 2001
Assistant Professor & Co-Director of Vascular Radiation Medicine at Department of Radiation Oncology. *Teaching & Medical responsibilities.* Implemented Cardiovascular Radiation Therapy at Strong Memorial Hospital. Participated in national and institutional clinical trials. Responsible for the GI/GU service as well as Vascular Radiation Clinical Trials. In charge of Benign Disease Service including Heterotopic Bone, Keloids, and Vascular Restenosis (Neo-Intimal Hyperplasia) prevention. Experience with body radiosurgery and the Novalis™ radiosurgery system from BrainLab, GmbH. Participating in multiple RTOG and URCC trials. Helped solve logistical problems with multidisciplinary protocols. Active in multidisciplinary GI and GU clinics and conferences. Member of various administrative committees for Strong Health Care. Electronic Editor of Dr. Philip Rubin's Clinical Oncology Textbook.

Patients included routine cases as well as "unique" presentations. Responsible for Vascular Radiation Clinical Trials, TBI, Stereotactic Radiosurgery, HDR Endobronch/Esophagus, and Heterotopic Bone. Participated in the training of Residents. Involved in writing several clinical protocols and obtaining FDA approvals with IDE's. Trained to use Novoste's BetaCath™ system. Over 30 publications and posters.

Technical responsibilities. Implemented and debugged new medical devices and software. *Electronic Editor* of Clinical Oncology CDROM.

Business responsibilities. Organized conferences, lectures, and meetings. Solved logistical problems while creating multidisciplinary conferences and clinics. Wrote and conducted multiple institutional, national, and cooperative studies. Member of several administrative committees, including peer review committees, credentialing committees and Medical Faculty Council. Active in national cooperative groups (RTOG and ASTRO).

TECHNICAL EXPERIENCE

InSynch Institute, Inc., Livingston, NJ, 1993 to 1999
Subcontractor/Developer. Helped develop thought recognition computer software. Implemented software with object-oriented design tools on multiple hardware platforms to perform pattern recognition and brainwave form manipulation.

monoChrome, Inc., Edison, NJ, 1992 to 1998
Co-Founder & President. Compiled, implemented and tested massive (Steve Jobs') NeXT Computer software library on compact disc (CD). Licensed software, manufactured and marketed the CD. Co-developed one of the first pieces of software, CDevil, as freeware to extract digital audio from compact discs. Worked as a beta tester for multiple software companies.

UMDNJ, Robert Wood Johnson Medical School, Piscataway, NJ, 1991 to 1992
Systems Engineer. Designed, developed, implemented, and administered a graphics oncology detection system employing early use of neural networks???

CERTIFICATIONS

Board certified in Radiation Oncology by American Board of Radiology.
Medical licenses. FL (active), NY, RI.
Authorized user of radioactive materials. Practicing Radiation Oncologist treating pediatrics to geriatrics since 1998. Experience with Zevalin (Y-90), Xofigo (Ra-223), Bexxar, Ir-192, I-125, Pd-103, Cs-135, I-131, P-32, Sr-90

SKILLS & INTERESTS

Computer: proficient with many hardware, operating system, development, and software environments. Developed software programs in C, Assembly, Pascal, BASIC, FORTRAN, COBOL, UNIX, LINUX. Network skills including server management. Familiarity with Microsoft products.
Hobbies: Computers and Information Technology, Traveling, Cooking, Skiing.

HONORS

Roentgen Resident/Fellow Research Award.
John Michelis Memorial Award for High Achievement in Biomedical Engineering
TAU BETA PI National Engineering Honor Society
ETA KAPPA NU National Electrical and Computer Engineering Honor Society
B.S.E.E. with honors.

PROFESSIONAL ASSOCIATIONS

Polk County Medical Association, Lakeland?, FL
Member of Board of Trustees 2011-present. *President* 2014-2016. *President Elect* 2012-2013. *Vice President* 2011-2012.

FL Florida Medical Association & PAC, Lakeland?, FL
Board of Directors 2013-2015.

Florida Association Physicians of Indian Origin
American Society of Therapeutic Radiation Oncologists
American College of Radiology
American Medical Association
Indian American Medical Association

CONSULTING

Worked with multiple BioTech, semiconductor, and engineering companies creating, updating, and bringing products to market. Involved with logistics and obtaining FDA IDE's and clearance for products. Written, supervised, and debugged computer programs for medical and non-medical use including systems for cancer detection, neural networks, and optimizing radiation treatments. Editor of several journals, textbooks and articles. Involved with building new cancer centers and bringing new technologies to practices.

COMMITTEES

Radiation Safety Committee, 2011-present
Breast Program Leadership Committee, 2011-2021
Cancer Committee, 2011-present
Credentials Committee, 2004-2008
Breast Cancer Advisor Committee, 2004-2008
Laboratory Review Committee, 2003-2008
Medical Faculty Council at University of Rochester, 2000-2001
GI Protocol Standards Committee, 2000-2001
Protocol Review Committee, 2000-2001
Credentials & Privilege Review Committee, 1999-2001
ASTRO Annual Meeting Program Advisory Group, 2001

PUBLICATIONS

Soni AB, Sandhu AP, Smuzdin T, Schell M, Sitzmann J, Okunieff P. The Feasibility of Treatment of Hepatic Malignancies with High Dose per Fraction Radiation Delivered by 3D Conformal Techniques. Submitted to IJROBP.

Joseph J, Soni A, Brassacchio R, Messing E. Lower Urinary Tract Symptoms in Patients with Localized Prostate Cancer Treated with Brachytherapy Versus Combined External Beam and Brachytherapy. Submitted AUA 97th Annual meeting.

Soni AB, Illig KA, Sternbach Y, Anthony P, Jacob P, Reddy G, Storey J, Gerety R, Williams JP, Schell M, Waldman D, Rubin P, Green R, Okunieff P. Benefits of External Irradiation for Peripheral Arterial Bypass (BIPASS): preliminary report on a Phase I study. IJROBP 54(4);1174-1179, 2002.

Illig KA, Williams JP, Lyden SP, Hernady E, Soni A, Davies MG, Schell M, Okunieff P, Rubin P, Green RM. External beam irradiation for inhibition of intimal hyperplasia following prosthetic bypass: preliminary results. Annals of Vascular Surgery 2001;15(5):533-8.

Illig KA, Williams J, Soni A, Shortell CK, Ouriel K, Okunieff P, Rubin P, Green RM. Irradiation for the Treatment of Anastomotic Intimal Hyperplasia after Peripheral Arterial Bypass Surgery. Submitted to Cardiovascular Radiation Medicine.

Soni AB, Illig KA, Williams J, Hernady E, Okunieff PG, Schell M, Green R, Rubin P. Safety of Irradiating PTFE and Native Vessel Grafts Following Surgery. Submitted to Cardiovascular Radiation Medicine.

Illig, KA, Soni, AB, Williams, J, Shortell; CK, Okunieff, P, Schell, M, Rubin, P, Green, RM: Irradiation for intimal hyperplasia: implications for peripheral arterial bypass. J. Am. Coll. Surg. 2000;190(3):364-70.

Illig KA, Soni AB, Williams J, Shortell CK, Okunieff P, Rubin P, Green RM. Clinical Review: Irradiation for Lower Extremity Arterial Occlusive Disease. CVRM 1(3); 1999.

Messing EM, Zhang JB, Rubens DJ, Brasacchio RA, Strang JG, Soni A, Schell MC, Okunieff PG, Yu Y. Intraoperative optimized inverse planning for prostate brachytherapy: early experience. IJROBP. 44(4):801-8, 1999.

Williams JP, Rubin P, Soni A, Hernady E, Schell M, Green R, Illig K, Pomerantz R, Okunieff P. Comparability of the External vs. Internal Location of Radiation in Inhibiting Neointimal Hyperplasia. CVRM 1(1); 55-63, 1999.

Yu Y, Zhang JBY, Brasacchio RA, Okunieff PG, Rubens DJ, Strang JG, Soni AB, Messing EM. Automated Treatment Planning and Optimization for Prostate Seed Implant Brachytherapy. IJROBP 43(3); 647-652, 1999.

Rubin P, Soni A, Williams JP The Molecular and Cellular Biologic Basis for the Radiation Treatment of Benign Proliferative Diseases. Sem in Rad Onc 9(2); 203-214, 1999

Zhang JBY, Yu Y, Ruebens D, Brasacchio RA, Strang JG, Soni AB, Schell M, Okunieff PG, Messing EM. Real time OR-based Optimized Planning for Prostate Brachytherapy. Med Phys 25 A106, 1998.

Soni AB, Constine LS, Smith D, Ojomo K, Muhs A. Preservation of Retinal, Optic Nerve and Chiasmic Function Following Radiation Therapy Demonstrated by Visual Evoked Response Testing. IJROBP 39(2S):273, 1997.

Soni AB, Tzanakou E, Devereux D. A System For Melanoma Evaluation. Proceedings of IEEE/EMBS Conference, Philadelphia:1990.

Wolpert S, Tzanakou E, Rosenblum J, Soni AB. Experiments With Lateral Inhibition In Two-dimensional Photoreceptor Arrays. Proceedings of IEEE/EMBS Conference, Boston:1989.

PRESENTATIONS & POSTERS

IMRT, A Soni. 5th Annual EMHC Health Education Seminar, Elmhurst Memorial Hospital, Elmhurst, IL: Guest Lecturer (Apr 2005).

Vascular Radiation Therapy, A Soni. Finger Lakes Radiation Therapy Society Meeting, Rochester, NY: Guest Lecturer (Mar 2000).

Benefits of Irradiation for Peripheral Arterial Bypass (BIPASS). Illig KA, Soni A, Williams J, Okunieff P, Shortell CK, Green RM, Schell M, Rubin P. Transcather Cardiovascular Therapeutics Scientific Sessions, Washington DC, September 22-26, 1999 (Sept 1999).

Vascular Radiation Therapy, A Soni. St Joseph's Hospital, Albuquerque, NM: Guest Lecturer (Feb 1999).

Safety of Irradiating PTFE and Native Vessel Grafts Following Surgery, A Soni, K Illig, J Williams, E Hernady, P Okunieff, M Schell, R Green, and P Rubin; Cardiovascular Radiation Therapy III, Washington, DC.: Poster (Feb 1999).

Preservation of Retinal, Optic Nerve and Chiasmic Function Following Radiation Therapy Demonstrated by Visual Evoked Response Testing, A Soni MD, LS Constine MD, D Smith MD, K Ojomo MD, A Muhs; ASTRO, Orlando: Poster (Oct 1997).

A Composite Image Enhancement Method for Digitized Simulation and Portal Images, Q Gao, FF Yin, RP Li, Y Chen, A Philip, L Yerneni, A Soni MD; URCC Scientific Symposium: Poster (Sept 1997).

Optic Pathway Resistance to Radiation Injury, A Soni MD, LS Constine MD, D Smith MD, K Ojomo MD, A Muhs; URCC Scientific Symposium: Poster (Sept 1997).

Value of CT Scan Treatment Planning of Scar Boost in Early Breast Cancer When Clips Are Not Available To Determine Surgical Bed Volume, A Soni MD, DF Nelson MD, D Rubens MD, FF Yin Ph.D.; ICRO, Beijing: Presentation (Jun 1997).

A System For Melanoma Evaluation, A Soni, E Tzanakou, D Devereux MD; IEEE/EMBS Conference, Philadelphia: Oral Presentation (Oct 1990).

Experiments With Lateral Inhibition In Two-dimensional Photoreceptor Arrays, S Wolpert, E Tzanakou, J Rosenblum, A Soni; IEEE/EMBS Conference, Boston: Presentation (May 1989).