CURRICULUM VITAE

George Michael Samaras

National Society of Professional Engineers®
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EDUCATION

Doctor of Science[1] The George Washington University 1992
Engineering Management & I/O Psychology
Doctor of Philosophy University of Maryland 1976
Physiology/Pharmacology & Biopsychology[2]
Master of Science University of Maryland 1974 General Physiology
Bachelor of Science University of Maryland 1972 Electrical Engineering (biomedical emphasis)

LICENSURE AND CERTIFICATION

Certified Forensic Engineer
National Academy Forensic Engineers (#966S, 2017)
Certified Biomedical Auditor
American Society for Quality, (#1389; 2015)
Professional Engineer[3] **(Software Engineering)**
State of Maryland & Colorado eligible (#13004; 2014)
Certified Quality Engineer[4]
American Society for Quality, (#47957; 2005)
Certified Professional Ergonomist[5]
Board of Certification in Professional Ergonomics (#950; 1998)
Professional Engineer (Electrical/Electronics)
State of Maryland & Colorado eligible (#13004; 1980)

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[1] **Engineering Management** is a subdiscipline of Industrial Engineering; the other three subdisciplines of IE are: Engineering **Ergonomics**, Engineering Economics, and Work Science.

[2] Also called Physiological Psychology or Psychobiology

[3] The term **Professional Engineer** and the actual practice of professional engineering is legally defined and protected by a government body. In some jurisdictions, only registered or licensed Professional Engineers are permitted to use the title, or to practice Professional Engineering. The earmark that distinguishes a licensed/registered Professional Engineer is the authority to sign and seal or "stamp" engineering documents (reports, drawings, and calculations) for a study, estimate, **design or analysis**, thus taking legal responsibility for it

[4] The **Certified Quality Engineer** is a professional who understands the principles of product and service quality evaluation and control. This body of knowledge and applied technologies include, but are not limited to, development and operation of quality control systems, application and analysis of testing and inspection procedures, the ability to use metrology and statistical methods to diagnose and correct improper quality control practices, an understanding of human factors and motivation, facility with quality cost concepts and techniques, and the knowledge and ability to develop and administer management information systems and **to audit quality systems for deficiency identification and correction**. CQE requires EIGHT years of higher education and/or work experience including THREE years in a decision-making position.

[5] The **Certified Professional Ergonomist** is a practitioner of human factors/ergonomics. A practitioner is defined as an individual who has (1) a mastery of ergonomics knowledge; (2) a command of the methodologies used by ergonomists in applying that knowledge to the design of a product, process, or environment; and (3) has applied his or her knowledge **to the analysis, design, test, and evaluation of products**, processes, and environments.

EMPLOYMENT RECORD

CEO Samaras & Associates, Inc. 1996-present
Engineering private practice involved in software engineering, human factors engineering, computer systems validation, quality engineering, technical management consulting, expert testimony, and occupational & environmental health & safety research. Corporate clients range from new start-ups to Fortune 500 multinational firms; also consulted with universities, government agencies, and labor unions. *Most of our consulting contracts are bound by strict confidentiality agreements and are not reflected in this document*.

Visiting Research Professor, College of Education, Engineering and Professional Studies, CSU-Pueblo (formerly, USC), Fall 2010-2013. **Adjunct Professor, University of Southern Colorado** Fall 1997-Spring 98 Graduate Program in Systems Engineering (graduate courses in Project Management and Ergonomics–with lab).

Associate Director US Food and Drug Administration 12/95-6/96 Division of Electronics and Computer Science, Center for Devices and Radiological Health, FDA (this is the same entity, renamed, where I worked from 1968 – 1972). Managed, with the Division Director, a staff of 40, consisting largely of scientists and engineers with advanced degrees and an annual operating budget (excluding salaries and facilities) of about 750K$. Primarily responsible for electronics & software activities, while the Director (a medical physicist) was primarily responsible for medical imaging & ionizing radiation activities. Involved in initiating process of a software validation guidance document for industry.

Interdisciplinary Scientist US Food and Drug Administration 6/94 -11/95 Interdisciplinary scientist and primary software engineering reviewer in the Division of Ophthalmic Devices, Center for Devices and Radiological Health, FDA; primary duties included the engineering review of ophthalmic medical devices utilizing software. Team led development of industry guidance for ophthalmic lasers systems that was approved by outside advisory committee. Appointed one of Center's experts on electromagnetics. Numerous FDA individual and group recognition awards for FDA regulatory work on ophthalmic laser systems and computer software.

Visiting Senior Scholar, The George Washington University 9/93 – 12/94 **Visiting Professor The George Washington University** 1/93 – 9/93 Dept. Engineering Management and Systems Engineering, Graduate School of Engineering and Applied Sciences. Taught graduate management courses (including marketing management and entrepreneurial management). Conducted theoretical (mathematical) research in Industrial Engineering (organizational theory and measures of organizational efficiency and effectiveness).

Dissertation Research, **The George Washington University** Washington, DC 1992

CEO GMS Engineering Corporation Columbia, MD 1981-1991 Began and managed a contract biomedical engineering firm providing development work for federal (DoD and NIH) and private clients. Federal projects included: (a) prototype mechanical, electrical, electronic, and software development of an NBC-hardened vital signs monitor and an NBC-hardened flash reflectance oximeter for the US Army; (b) R&D on an algorithm and hardware implementation for electroencephalography artifact reduction for the US Army and the NINCDS; (c) theoretical work and mathematical modeling on workload leveling and other ergonomics issues for Army AH-64 helicopter pilots; and (d) prototype development of an airworthy biomedical data acquisition system for the USAF. Developed first human sympathetic neural prosthesis (Lancet, 1983). The firm's engineers and scientists were also involved in other consulting jobs in the areas of biomedical engineering, software development, and system test & evaluation with larger commercial organizations. Annual budgets ranged from 700K$ to 1100K$, after the first year.

Associate Professor University of Maryland School of Medicine 1980–82;p/t 83-86**Assistant Professor University of Maryland School of Medicine** 1976 – 1980Department of Radiation Oncology. Managed a medical school-based academic research and teaching laboratory (cancer research funded by ACS, NIH/NINCDS, and the Whittaker Foundation) conducting research in biomedical engineering related to brain tumor and esophageal cancer therapy. Taught graduate physicians & and doctoral students physiology, biophysics and biomedical aspects of microwave engineering.

Graduate Teaching Asst. University of Maryland College Park 1974-1976 Department of Zoology, undergraduate physiology laboratory and graduate seminar in neuropharmacology

Biomedical Engineer U.S. Environmental Protection Agency. 1971-1972
Computer Technician U.S.D.H.E.W., Bureau of Radiological Health 1970-1971
Biochemistry Lab. Tech. U.S.D.H.E.W., Bureau of Radiological Health 1968-1970
Technician St. Savvas Anticancer Hospital Athens, Greece 1965-1967

LANGUAGE FLUENCY

Computer languages and Application Software:

Fluent in Intel assembly language, proficient in C/C++, SQL, HTML, and various other computer languages. Proficient with a variety of software development CASE tools (MS DevStudio, MS VisualSourceSafe, ER/Studio, MSFrontPage, Rational's RequisitePro, Rational's Rose, etc.), electrical engineering tools (MultiSIM, MPLAB, FilterLab), human factors engineering tools (MannequinPRO, MS Visio), statistical software (NCSS/PASS), and mathematical software (MathCAD). Proficient with MS Office (with MSProject).

Modern European Languages:

Fluent in Modern Greek

INTERESTS

RESEARCH

Systems Engineering, Man-Machine Systems, Human Organizational Structures, and Engineering Ethics

PERSONAL INTERESTS

Snow skiing, Dressage, Hiking/Backpacking, Scuba diving, and Soaring.

PERSONAL DATA

Born: January 6, 1948, Ottawa, Ontario, Canada; US Citizen
Family: Married to Elizabeth Averill; one child, Demetrios
Contact Information: 7755 Soda Creek Road, Red Creek Ranch, Pueblo, CO 81005
Telephone: (719) 485-3751 E-mail: george@samaras-assoc.com

TITLE OF SECOND DOCTORAL DISSERTATION

D.Sc. - directed by Prof. R.C. Waters
Organizational Effectiveness: Towards a Unifying Theoretical Perspective.

TITLE OF FIRST DOCTORAL DISSERTATION

Ph.D. - directed by Prof. J.F. Contrera
In vivo Demonstration of Sodium-dependent High-affinity Hippocampal Choline Uptake.

TITLE OF MASTER'S THESIS

M.S. - directed by Prof. J.F. Contrera
A Biochemical Approach for Elucidating Protein Uptake in Mammalian Tissue.

ADDITIONAL TRAINING

Woods Hole Marine Biological Laboratory, Woods Hole, MA, Summer course, laboratory and field research in Invertebrate Zoology (1974).
National Geographic Society Expedition, Isla Mujeres, Mexico, Scuba diving study of sharks and their physical environment with Dr. Eugene Clark (1973). Designed, built, and used all the submersible electronics equipment required for the study as part of my graduate course in marine biology.
Flight Training (FAA #2169558)
Scuba Training (NASDS #8454/SSI #657622, various DAN & PADI certifications).

RECENT COURSE WORK

MITx Professional Education:
- Cybersecurity: Technology, Application & Policy – 2016
- Internet of Things: Roadmap to a Connected World - 2016
- Data Science: Data to Insights - 2017

RITx Professional Education:
- Cyber 501x: Cybersecurity Fundamentals - 2017
- Cyber 502x: Computer Forensics - 2017
- Cyber 503x: Cybersecurity Risk Management – 2017

Compliance Training Online.com
- Medical Laser Safety Officer - 2022

PROFESSIONAL ASSOCIATIONS (past and present)

Aerospace Medical Association
American Association for Advancement of Science
American Management Association
American Society for Cybernetics
American Society of Safety Engineers (Professional Member)
American Society for Quality (ASQ Senior Member)
Association for Computing Machinery (ACM Senior Member)
Association for the Advancement of Medical Instrumentation (AAMI)
Human Factors and Ergonomics Society
International Council on Systems Engineering (INCOSE)
Institute of Electrical and Electronics Engineers (IEEE Senior Member)
Institute of Industrial Engineering (IIE Senior Member)
Institute of Validation Technology
International Society of Pharmaceutical Engineers
Maryland Society of Professional Engineers
National Academy of Forensic Engineers (NAFE Senior Member)
National Society of Professional Engineers (NSPE Licensed Member)
New York Academy of Sciences
Society for Neuroscience
Society for Psychophysiological Research

ACADEMIC RESEARCH AWARDS

University of Maryland School of Medicine

Principal Investigator, NIH/NINCDS Research Grant "Focal Microwave Radiation Therapy: Preclinical Evaluation" (10/79-9/82; $332,873) & (4/83-3/85; $218,198). Principal Investigator, Whitaker Foundation Research Grant "Computer- Controlled Multiple-Beam Microwave Thermotherapy" (11/78-10/81) ($106,414).
Principal Investigator, American Cancer Society Research Grant, "Hyperthermal Radiotherapy for Brain Tumors Using Focused Microwaves" (1/1978-12/1980) ($100,000).
Principal Investigator, University of Maryland Hospital Radiology Department
Faculty Research Award (1976-1978) ($5,000).
Co-Investigator, on numerous other grants and contracts (1977 – 1984).

University of Maryland College Park

Co-Principal Investigator, Huntington's Chorea Foundation Research Grant, (1973-1977; $25,000). I wrote this grant proposal as a graduate student and submitted it with my dissertation advisor to fund my MS/PhD research.

INDUSTRIAL CONTRACTS (non-confidential or non-classified only)

Samaras & Associates, Inc.
Most of our FDA-related industrial contracts are bound by strict confidentiality agreements and are not listed here.
Consultant, Ergonomics Training for Vocational Rehabilitation Counselors, IAMAW, 2001
Consultant, University of Maryland School of Nursing, “EnvirRN”, 2000
Consultant, University of Maryland School of Medicine, USDOE Task Ordering Contract, 1998 – 2000
Consultant, USDOE/NIOSH Former Worker Medical Surveillance Program Phase I Grant, 1998
Consultant, Consortium for Risk Evaluation with Stakeholder Participation, USDOE funding to the University of Medicine and Dentistry of New Jersey and the University of Washington (6/96 - 3/99))
Consultant, MEDCO Foundation Grant (1994 -1996)

GMS Engineering Corporation
Principal Investigator, Development of an EEG Artifact Correction Device, US Army Medical R&D Command, DAMD17-89-C-9045, 2/89-11/89
Principal Investigator, Development of an Advanced Life Detector, US Army Medical R&D Command, DAMD17-88-C-8143, 7/88-9/89
Principal Investigator, Development of a Prototype Sympathetic Neural Prosthesis, National Institute of Neurological and Communicative Disorders and Stroke, 9/87-10/89
Principal Investigator, Conceptual Design of a Biocybernetic Link for Workload Leveling via Dynamic Task Partitioning, US Army Medical R&D Command, DAMD17-86-C-6027, 10/85-6/86 (see NASA CP 2504, pgs. 43-55, 1988).
Principal Investigator, Advanced Development of an NBC-Hardened Portable Vital Signs Monitor, US Army Medical R&D Command, DAMD17-86-C-6067, 10/85-10/87.
Principal Investigator, Exploratory Development of Chemically Hardened Vital Signs Monitor, US Army Medical R&D Command, DAMD17-83-C-3064, 2/83- 6/85.
Principal Investigator, Development of a Prototype Computerized Microwave Thermotherapy System, CompuMed Corp., 3/82-6/83.
Co-Investigator, Numerous other biomedical R&D projects awarded to GMS Engineering Corporation, including various SBIRs and commercial product development/testing contracts, 1981 - 1991.

Cheung, Samaras & Stuchly, Consultants
Consultants to various commercial organizations on the (non-telecomm) applications of ISM-band radiation, 1978 – 1980

SELECTED PROFESSIONAL ACTIVITIES

Peer Review Panel Member, USAISR Combat Casualty Research Program (6/9-10/2009); DoD/USA: FSECSTS (3/7/2012), FSERC (6/13/2012)
Proctor, BCPE and ASQ certification examinations, (2003 - present)
Publicity Chair, IEEE Pike's Peak Section (7/97 - 7/01)
Member, various software engineering standards development committees for the FDA and IEEE (1994-1996)
External Reviewer, Veterans Administration (1981-1985)
Reviewer, (for numerous technical journals) (1981-1985)
Technical Reviewer, National Institutes of Health (NCI & NINCDS) (1981-1985)
Guest Editor, J Microwave Power, Special issue on Microwave and Radiofrequency Hyperthermia in Cancer Therapy, Vol. 16(2), 1981
Member, W.H.O. Scientific Review Committee (Radiofrequency and Microwave Bioeffects) (November, 1978)
External Reviewer, National Science Foundation (1978-1985)
Moderator, Methods of Heating Session, Symposium on Hyperthermia as an Antineoplastic Agent, Norfolk, VA (January, 1978)
Member, High Frequency Therapeutic Device National Standards Committee, Association for the Advancement of Medical Instrumentation (1977 – 1985)
Consultant, University of Maryland, Department of Psychology, Computer Systems Hardware/Software Interfacing (Summer, 1975)
Chief Editor, Forum, a journal of the American Society for Cybernetics (1973-1974)
Consultant, U.S. Environmental Protection Agency, Computer (Cybernetic) Systems (1972-1973)

NON-RESEARCH AWARDS & HONORS

Numerous FDA individual and group recognition awards for FDA regulatory work on ophthalmic laser systems and computer software (1994/1995)
Who's Who in Frontier Science and Technology (biographee, 1984/85).
Full IEEE membership as undergrad after 1971 IEEE/MTT peer-reviewed publication

PATENTS

Samaras, G.M., Falk, S.M., and Blaumanis, O.R., Flash Reflectance Oximeter, U.S. Patent Number: 5,069,214; December 3, 1991
Samaras, G.M. and Falk, S.M., Blood Pressure Measurement System for Filtering Low- Frequency, High-Amplitude Noise, U.S. Patent Number:4,858616; August 22, 1989
Samaras, G.M., Blaumanis, O.R., and Van Horn, H.Wm., Noise-Immune Blood Pressure Measurement Technique and System, U.S. Patent Number:4,649,928; March 17, 1987.

BOOK CHAPTERS

Samaras, G.M. Human-Centered Systems Engineering: Managing Dissonance in Healthcare Delivery, in Management Engineering for Effective Healthcare Delivery: Principles and Practices, Kolker, A. & Story, P. (Eds). Philadelphia:IGI Global pg. 148-171. 2011

PUBLICATIONS I (recent article preprints: http://www.samaras-assoc.com/eLibrary.htm)

*(Peer-Reviewed Journal & Conference Publications; see **next** section for Technical Reports, Invited Presentations, and Peer-Reviewed Workshops)*

Samaras, GM & Samaras EA. Ergonomics & Forensic Engineering. Presented at NAFE 2019 Summer Conference (Denver CO). JNAFE. 38(1):17-24 July 2021

Samaras, EA & **Samaras, GM**. Commentary: Stakeholder Dissonance Impedes Medical Device Cyber-Risk Reduction. AAMI Biomedical Instrumentation & Technology. 52(4): 296-304, July/August 2018

Samaras, EA & **Samaras, GM**. Commentary: Confronting systemic challenges in interoperable medical device safety, security & usability. Journal of Biomedical Informatics 63(2016) 226-234.

Samaras, GM. What IS my failure rate? ASQ Biomedical Division Biofeedback Newsletter, 44(2), 2016

Samaras, GM. Medical Device Life Cycle Risk Management. ASQ Biomedical Division Biofeedback Newsletter, Volume 43 (2), August 2015.

Samaras, GM. Use, Misuse, and Abuse of the Device Failure Modes Effects Analysis. MD+DI Online (and later print Magazine August 2013).

Samaras, GM. US Medical Device Innovation: Moving from the Bench to Market. IEEE Healthcare Innovation Conference: Translational Engineering in Health and Medicine. Houston, TX. November 7-9, 2012.

Samaras, GM. Exactly What Medical Device Innovation Are You Talking About? MD+DI Online (and later print Magazine October 2012)

Samaras, GM. Medical Device Mechatronics Maturity. Medical Electronics Design Online (and later print Magazine January 2013).

Samaras, E. and **Samaras,** G. (February 2012). Stakeholder Dissonance as a Critical Determinant of an E-health Initiative: A Case Study. Online Journal of Nursing Informatics (OJNI), 16 (1), Available at http://ojni.org/issues/?p=1268

Samaras, GM. "A Perspective on Invention, Innovation, and Regulation of Medical Devices". MDDI Online (and later print Magazine April 2012).

Samaras, GM. Reducing latent errors, drift errors, and stakeholder dissonance. WORK: A Journal of Assessment, Prevention, and Rehabilitation, 41(s1):1948-1955 (2012)

Samaras, GM. Human-Centered Systems Engineering: A Unified Approach to Product Safety Engineering. Proc. IEEE PSES 2011 Conference, San Diego, CA. 10/11-13/2011.

Samaras, EA & **Samaras,** GM. Using Human-Centered Systems Engineering to Reduce Nurse Stakeholder Dissonance. Biomed Instrum & Technol 44(s1):25-32 (2010)

Samaras, GM. The Use, Misuse, and Abuse of Design Controls. IEEE Eng Med Biol Magazine 29(3):12-18, 2010

Samaras, G.M. Human-Centered Systems Engineering: Building Products, Processes, and Services. Proc. 2010 SHS/ASQ Conference, February 25-27, 2010 on CD-ROM (6 pages)

Samaras, G.M. & Samaras, E.A. Feasibility of an e-Health Initiative: Information NWDs of Cancer Survivor Stakeholders, Proc. 17th World Congress on Ergonomics, August 9-14, 2009, Beijing, China, on CD-ROM (10 pages).

Samaras, G. M., "Systems Engineering for the Human Factors Engineer: A Workshop", a 4-hour workshop, Proc. 16th World Congress on Ergonomics (IEA 2006), Maastricht, Netherlands, July 13, 2006, on CD-ROM (6 pages).

Samaras, G. M., "An Approach to Human Factors Validation", J. Validation Technology, 12(3):190-201, 2006.

Samaras, G. M. "Engineering Complex Systems: Validating the Human Factors", Proc. 7th Annual Symposium on Human Interactions with Complex Systems, Greenbelt, MD, November 17-18, 2005, on CD-ROM (8 pages).

Samaras, G. M., Horst, R. L., "A systems engineering perspective of the human centered design of health information systems", J. Biomedical Informatics, 38(1):61-74, 2005.

Horst R.L., **Samaras**, G. M., "Validation Engineering in the Ergonomics of Medical Systems: Application Perspectives", Proc. 47th Annual HFES Meeting, pgs 1458 -1462, Denver, CO, October 13-17, 2003.

Samaras, G. M., "Validation Engineering in Ergonomics: Theoretical Perspectives", Proc. 47th Annual HFES Meeting, pgs 1453 -1457, Denver, CO, October 13-17, 2003.

Samaras, G.M., "Towards a Mathematical Formalism of Performance, Task Difficulty, and Activation" (invited paper), Proc. 1987 NASA Workshop on Mental State Estimation, Williamburg, VA, June 3-4, NASA CP 2504, pgs. 43-55, 1988

Almenas, K., Moore, R., **Samaras**, G.M., and Blaumanis, O.R., "Temperature distribution calculation in tissues with assymetric geometry and temperature dependent sources and blood perfusion rates", J Am Soc Mech Eng, 61:55-64, 1986

Salazar, O.M., **Samaras**, G.M., Eddy, H.A., Amin, P.P., Sewchand, W., Drzymala, R.E., and Bajaj, K.G., "Henschke memorial oration, Neurobrachytherapy: a new frontier", Endocur/Hyperth Oncol, 2:S-3-S-15, 1986.

Samaras, G.M., Eddy, H.A., Better, W.E., and Carlyle, J.R., "The use of swine in brain interstitial radiation studies", Lab Animal Science, 36:381-385, 1986

Sewchand, W., Amin, P.O., Drzymala, R.E., Salazar, O.M., Salcman, M., **Samaras**, G.M., and Batero, E., "Removable high-intensity iridium-192 brain implants", J Neurooncology, 2:177-186, 1984

Samaras, G.M., "Intercranial microwave hyperthermia", IEEE Trans Biomed Engin, (invited paper) BME-31(1):63-69, 1984.

Salcman, M. and **Samaras**, G.M., "Interstitial microwave hyperthermia for brain tumors: Results of a phase I clinical trial", J Neurooncology, 1:225-236, 1983

Polinsky, J.R., **Samaras**, G.M., and Kopin, I.J., "A sympathetic neural prosthesis for managing orthostatic hypotension", Lancet, April 23, pp. 901-904, 1983

Samaras, G.M., Rosenbloom, S., and Cheung, A.Y., "Correction of microwave-induced thermistor sensor errors", Med Phys, 10(3):326-332, 1983.

Harrison, G.H., Robinson, J.E., and **Samaras**, G.M., "Temperature uniformity in hyperthermal tumor therapy", Proc Symp Hyperthermia Antineoplastic Treatment Modality, NASA Publ. 2051, pp. 27-31, 1978

Salcman, M. Kaplan, R.S., **Samaras**, G.M., Ducker, T.B., and Broadwell, R.D., "Aggressive multimodality therapy based on a multicompartmental model of glioblastoma", Surgery, 92:250-253, 1982

Samaras, G.M., Salcman, M., Cheung, A.Y., Abdo, H.S., and Schepp, R.S., "Microwave-induced hyperthermia: an experimental adjunct to brain tumor therapy", J Natl Cancer Inst, 61:477-482, 1982

Scott, R.M., Cheung, A.Y., and **Samaras**, G.M., "Clinical local heating – microwaves (invited paper)", 3rd Int Symp Cancer Therapy Hyperthermia, Drugs & Radiation, J Natl Cancer Inst, 61:351-355, 1982

Robinson, J.E., Cheung, A.Y., Harrison, G.H., and **Samaras**, G.M., "The response of mouse mammary tumors to microwave heating at 2.45 GHz", Radio Science, 17(2), 1982

Taylor, L.S., **Samaras**, G.M., Cheung, A.Y., Salcman, M., and Scott, R.M., "Implantable microwave antennas for clinical hyperthermia", Radio Science, 17(2):1255-1335, 1982

Samaras, G.M. and Cheung, A.Y., "Microwave hyperthermia in cancer therapy (invited tutorial review)", CRC Crit Rev Bioengineering, 5(2):123-184, 1981

Cheung, A.Y., Golding, W.M., and **Samaras**, G.M., "Direct contact applications for microwave hyperthermia", J Microwave Power, 16(2):151-159, 1981

Samaras, G.M., Van Horn, H.W., King, V.F., Slawson, E.L., and Cheung, A.Y., "Clinical hyperthermia systems engineering", J Microwave Power, 16(2):161-169, 1981

Salcman, M. and **Samaras**, G.M., "Hyperthermia for brain tumors: biophysical rationale", Neurosurgery, 9(3):327-335, 1981

Stuchly, M.A., Athey, T.W., Stuchly, S.S., **Samaras**, G.M., and Taylor, G.E., "Dielectric properties of animal tissues *in vivo* at frequencies 10MHz - 1GHz", Bioelectromagnetics J, 2(2):93-103, 1981

Stuchly, M.A., Athey, T.W., **Samaras**, G.M., and Taylor, G.E., "Measurement of radio frequency permittivity of biological tissues with an open-ended coaxial line: part II. Experimental results", IEEE Trans Microwave Theory & Techniques, 30(1):87-92, 1981

Salcman, M., **Samaras**, G.M., and Kaplan, R., "Experimental adjuncts in the combined modality treatment of glioblastoma multiforme", Proc 1st Sandie Altman Conf, pp. 73-76, Univ of Penna Med School, Philadelphia, PA, 1980

Salcman, M., **Samaras**, G.M., Mena, H., Monteiro, P., and Garcia, J., "Whole body hyperthermia: potential hazards in its application to glioblastoma", in Multidisciplinary Aspects of Brain Tumor Therapy, P. Paoletti, M.D. Walker, G. Butti, and R. Knerich (eds.), pp. 351-356, Elsevier/North-Holland Biomedical Press, 1979

Samaras, G.M., Robinson, J.E., Cheung, A.Y., and Weinmann, S.F., "Focussed microwave radiation therapy for deep tumors", Proc Symp Hyperthermia Antineoplastic Treatment Modality, NASA Publ. 2051, pp. 67-68, 1978

Robinson, J.E., Harrison, G.H., McCready, W.A., and **Samaras**, G.M., "Good thermal dosimetry is essential to good hyperthermal research", Br J Radiol, 51:532-534, 1978.

Salcman, M. and **Samaras**, G.M., "Neurosurgery and clinical engineering (invited paper)", J Clin Engineering, 3(3):251-256, 1978

Robinson, J.E., Cheung, A.Y., **Samaras**, G.M., and McCulloch, D., "Techniques for uniform and replicable microwave hyperthermia of a model mouse carcinoma (invited paper)", IEEE Trans Microwave Theory & Techniques, 26(8):546-549, 1978

Cheung, A.Y., Robinson, J.E., McCulloch, D., and **Samaras**, G.M., "Simultaneous free field irradiation of multiple tumors for microwave hyperthermia (Proc. 2nd Int. Symp.)", in Cancer Therapy by Hyperthermia and Radiation, C. Streffer (ed.), pp. 128-130, Urban and Schwarzenberg, Baltimore-Munich, 1978

Samaras, G.M., Robinson, J.E., Cheung, A.Y., Prempree, T., and Slawson, R.G., "Production of controlled hyperthermial fields for cancer therapy (Proc. 2nd Int. Symp.)", in Cancer Therapy by Hyperthermia and Radiation, C. Streffer (ed.), pp. 131-133, Urban and Schwarzenberg, Baltimore-Munich, 1978

Samaras, G.M. and Contrera, J.F., "Choline: high affinity uptake *in vivo* by rat hippocampus", J Neurochem., 28:1373-1376, 1977

Samaras, G.M., "Scientific research and social responsibility: self regulation or external controls", Amer Soc Cyber Forum, 6(2):1-2, 1974

Samaras, G.M., Anderson, G.E., and Rolofson, J.R., "An automated biological stress research facility", Proc 1972 IEEE-ASC Inter Conf Cyber & Soc, 1972

Samaras, G.M., Muroff, L.R., and Anderson, G.E., "Prolongation of life during high intensity microwave exposures", IEEE Trans Microwave Theory & Techniques, 19(2):245-247, 1971.

Samaras, G.M., Anderson, G.E., and Rolofson, J.R., "A controlled environmental facility", Radiation Bioeffects, BRH/DBE 70(7):72-74, 1970

Samaras, G.M., Muroff, L.R., and Anderson, G.E., "Prolongation of life in a microwave field by means of an environmental chamber", Radiation Bioeffects, BRH/DBE 70(1):59-61, 1969

PUBLICATIONS II (Technical Reports, Invited Presentations, and Peer-Reviewed Workshops)

Samaras, GM Participant and invited moderator, FDA Public Workshop - Cybersecurity of Medical Devices: A Regulatory Science Gap Analysis, May 18-19, 2017

Samaras, GM and Samaras EA, Risk Management Workshop for HF/E Practitioners, HFES 2016, Washington, DC. September 18, 2016.

Horst, RH, Caplan, SH, Karn, KS, Mauro, CL, & **Samaras, GM.** Challenges in Supporting the Design of Products for Health Care: The Human Factors Consultant's Perspective. Human Factors and Ergonomics Society International Annual Conference (HFES 2015). Los Angeles. October 26-30, 2015

Samaras, GM. Premarket vs. Postmarket: Applying Risk Management to Your Device's Entire Lifecycle QMED MedTechPulse, May 20, 2015.

Samaras, GM. US Medical Device Innovation: Moving from the Bench to Market presented at IEEE Healthcare Innovation Conference: Translational Engineering in Health & Medicine, Houston, TX November 7-9, 2012

Samaras, GM. Human-Centered Systems Engineering - Human Factors from Lust to Dust. Workshop at IEEE EMBS 2012 34th Annual International Conference of the IEEE Engineering in Medicine and Biology Society. San Diego, CA. August 28, 2012.

Samaras, GM. Human-Centered Systems Engineering - Human Factors Engineering and Reliability. Workshop at 2012 IEEE International Conference on Prognostics and Health Management (IEEE PHM 2012). Denver, CO June 18, 2012

Samaras, GM. Letter to the Editor: Risky Tool? ASQ Quality Progress. June 2012. pg. 7

Samaras, GM. Human-Centered Systems Engineering: Managing Complex Systems. Workshop at IEEE SysCon 2012 International Systems Conference, Vancouver BC, March 19, 2012.

Samaras, GM. Human-Centered Systems Engineering: Human Factors Engineering from Lust to Dust. Workshop at IEA 2012 World Congress on Ergonomics, Recife, Brazil. February 15, 2012.

Samaras, GM. "Reducing Latent Errors, Drift Errors, and Stakeholder Dissonance: Discriminating NWDs, Requirements, and Specifications" Presentation at IEA 2012 World Congress on Ergonomics, Recife, Brazil. February 12-16, 2012.

Samaras, GM. Letter to the Editor: Software Engineering Is Engineering. Communications of the ACM, 55(1): 6 (2012)

Samaras, GM. Human-Centered Systems Engineering: A Unified Approach to Product Safety Engineering. Workshop at IEEE PSES 2011 Conference, San Diego, CA. October 13, 2011.

Samaras, GM. Presenter & panelist, FDA Workshop on Medical Device Interoperability. FDA White Oak Campus, Silver Spring, MD. January 25-27, 2010

Samaras, GM**.** Letter to the Editor: Mathematical Knowledge and Practice. IEEE Computer. 42(12):7 (2009)

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