Ronald S. Hosek

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CURRICULUM VITAE

Education

MPH Epidemiology & Biostatistics, Emory Univ, Atlanta, GA

DC Life Chiropractic College, Marietta, GA

PhD Biomedical Engineering, Marquette Univ, Milwaukee, WI BSEE Electrical-Biomedical Engineering, Northwestern Univ,

Evanston, IL

Professional Experience

Staff Rsch 2013 – Present OSRSA, Life University, Marietta, GA

Asso

Consultant 1989 - Present Software development: Internet-based database

applications

Chiropractor 1999 - 2005 Private Practice Albuquerque – *semi-retired*

specializing in low-force methods and wellness

Chiropractor 1989 -1998 Private Practice Atlanta, GA. Hands-On Health Center

Consultant 1997- 1999 Atlanta Technology Group, Tucker, GA: Developed QA plan,

control systems & processes for cost containment for government contractor working in ultra-purification

Administrator 1996 - 1998 Aetna/USHealthcare, Hartford, CT Assoc Director for

Chiropractic Services for the Southeast. Managed

credentialing, peer review, cost containment for in-system

doctors in coordination with National Director

Consultant 1993 - 1998 PathCon Laboratories, Norcross, GA. Developed computer

system for tracking and reporting environmental sample

analyses as part of overall lab QA system

Consultant 1994 - 1997 Advanced Materials, Inc., New Orleans, LA. Developed QA

program for government defense contractor

Consultant 1991 -1993 Ritz-Carlton Corporation, Atlanta, GA. Developed systems

for documenting processes and ideas as part of program to

win Malcolm Baldridge Award

Professor 1988 - 1991 Life Chiropractic College. Various research projects

Professor & 1984 - 1986 Life Chiropractic College, Marietta, GA. Designed and

Director of Research supervised clinical and basic research studies for faculty and students, both in-house and sponsored; performed

management analyses of programs and curricula

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Professor 1980 - 1984 Life Chiropractic College, Marietta, GA. Designed and

implemented clinical and basic research studies. Introduced computers to research dept. and assisted in computerization

of entire college

Director of Research 1975 - 1980 Dept. Neurological Surgery, Univ of Miami,

Miami, FL. Supervised residents' research and research education; ran research laboratory; provided clinical

research support; did basic and clinical research in pain and

spinal cord injury

Asst Prof 1973 – 1974 Biomedical Engineering, University of Miami, FL. Teaching

and research

Asst Prof 1971 – 1973 Biomedical Engineering, Marquette University, Milwaukee,

Wisconsin. Teaching, research and administration

Publications and Presentations

Owens EF Jr, Russell BS, Hosek RS, Sullivan SG, Dever LL, Mullin LE. Changes in adjustment force, speed and direction factors in chiropractic students after 10 weeks undergoing standard technique training. The Journal of Chiropractic Education (in review).

Owens EF, Hosek RS, Mullin L, Dever L, Sullivan S, Russell B. Thrust magnitudes, rates and 3-dimensional directions delivered in simulated lumbar spine HVLA adjustments. J Manipulative Physiol Ther. 2017 (accepted for publication 3/16/2017.

Owens EF, Russell BS, Weiner M, Mullin LE, Dever L, Hosek, RS, Sullivan SGB. Amplitude and speed of Gonstead technique side-posture lumbopelvic adjustments in humans. ACC/RAC Conference 2017. Washington, DC March 15-18. Proceedings in J Chiropr Education 2017; 31(1):71.

Owens EF, Esposito J, Hosek RS. Using private electronic health care databases when publich ones do not exist. ACC/RAC Conference 2017. Washington, DC March 15-18. Proceedings in J Chiropr Education 2017; 31(1):71.

Owens EF, Hosek RS. A physical model of lumbar spine fixation for use in palpation and adjustment training. WFC/ACC Education Conference. Montreal, Quebec, Canada. October 19-22, 2016.

Owens EF, Hosek RS, Russell B. Using technology to measure adjustment vectors as well as force and speed. WFC/ACC Education Conference. Montreal, Quebec, Canada. October 19-22, 2016.

Owens EF, Hosek RS, Mullin L, Dever L, Sullivan S, Russell BS. Changes in adjustment force, speed and direction factors in chiropractic students after 10 weeks undergoing standard technique training [conference abstract]. J Chiropr Educ. 2016; 30(1): 63. doi: http://dx.doi.org/10.7899/JCE-15-22.

Hosek RS, Owens EF, Plasker E, Sullivan S. A practice-based pilot study of patient's attitudes about long-term care and longevity. ACC/RAC Conference 2016. Orlando, FL March 17-19. Proceedings in J Chiropr Education 2016; 30(1):69-80.

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Owens EF, Esposito J, Hosek RS, Sullivan S. How well do diagnosis codes from claims databases represent health issues of chiropractic patients? ACC/RAC Conference 2016. Orlando, FL March 17-19. Proceedings in J Chiropr Education 2016; 30(1):69-80.

Owens EF, Plasker E, Hosek RS, Sullivan S. The long-term effects of continuing chiropractic care: a feasibility study. ACC/RAC Conference 2016. Orlando, FL March 17-19. Proceedings in J Chiropr Education 2016; 30(1):69-80.

Russell BS, Hoiriis KT, Hosek RS, Weiner MT. Kinetic and kinematic analysis of walking gait, before and after chiropractic care, following fifth metatarsal fractures [conference abstract]. J Chiropr Educ. 2016; 30(1): 65. doi: http://dx.doi.org/10.7899/JCE-15-22.

Capes M, Russell BS, Oz M, Hosek RS. Kinetic gait assessment before and after chiropractic lower extremity adjustments [conference abstract]. J Chiropr Educ. 2016; 30(1): 54. doi: http://dx.doi.org/10.7899/JCE-15-22.

Weiner MT, Russell BS, Bishop A, Hosek RS. Motion capture analysis of students performing side posture set up and thrusts on a mannequin: a pilot study [conference abstract]. J Chiropr Educ. 2016; 30(1): 67-8. doi: http://dx.doi.org/10.7899/JCE-15-22.

ACC-RAC 2014, ORLANDO, FL,

PBRN Infrastructure Considerations in Workshop: Practice-based research: A pressing need for the chiropractic profession, with EF Owens, C Hawk, S Sullivan and J Alcantara.

ACC-RAC 2014, ORLANDO, FL,

Russell, B., RS Hosek, KT Hoiriis and A Linkhorn, Kinetic evaluation of gait in an injured football player before and after chiropractic care, Poster Presentation

INTL CONF ON SPINAL MANIPULATION, PALM SPRINGS, CA 1994

Leach, R. and RS Hosek, Clinical and myoelectric observations on fibromyalgia in a chiropractic practice: a prospective descriptive clinical series

- 9th Annual Upper Cervical Spine Conference, Marietta Ga, 1992
 - Owens, EF and RS Hosek, The flexion/relaxation phenomenon detected in the cervical spine using surface emg at static end-range of motion
- 9th Annual Upper Cervical Spine Conference, Marietta Ga, 1992
 - Owens, EF, RS Hosek, Hoiriis KT. Validity of an x-ray marking system: effect of tube tilt on laterality
- 8TH ANNUAL UPPER CERVICAL SPINE CONFERENCE, MARIETTA GA, 1991
 - Owens, EF, RS Hosek. Validity of an x-ray marking system: accuracy of lateral tilt measure and influence of rotation.
- 1ST ANNUAL RESEARCH CONFERENCE ON ANIMAL CHIROPRACTIC, MARIETTA GA 1986 Grostic, J, EF Owens, RS Hosek. Animal models in research.
- CONSERVATIVE HEALTH SCIENCES RESEARCH CONFERENCE, SUNNYVALE CA, 1985

Hosek, RS, EF Owens. A real-time EEG monitoring system.

Owens, EF, RS Hosek. In-vivo measurement of muscle tone.

Sheres, BM, RS Hosek. Upper cervical postural analysis by photographic means.

17TH BIOMECHANICS OF THE SPINE CONFERENCE, BOULDER CO, 1985

Steinle, LB, RS Hosek, BM Sheres. Cervical x-ray reliability.

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- Owens, EF, RS Hosek. Thrust magnitudes and rates in upper cervical adjustment.
- 3RD ANNUAL ADVANCES IN CONSERVATIVE HEALTH CARE CONFERENCE, PASADENA TX, 1984 Hosek, RS, EF Owens. Instrument-delivered sham adjustments.
 - Owens, EF, G Elmore, RS Hosek. Relationship of gravity weight line and functional short leg.
- 15TH ANNUAL BIOMECHANICS OF THE SPINE CONFERENCE, SEOUL KOREA, 1984
 - Williams, SE, EF Owens, RS Hosek. Computerized adjusting instrument.
 - Owens, EF, SE Williams, RS Hosek. Low-cost computerized gravity weight line analysis device.
 - Williams, SE, EF Owens, RS Hosek. Effects of some adjusting parameters on cervical structure.
- 14TH ANNUAL BIOMECHANICS OF THE SPINE CONFERENCE, SAN LORENZO CA, 1983
 Nathan, G, RS Hosek, EF Owens, SB Schram. Effect of gravity inversion on the lumbar spine.
 - Hosek, RS, EF Owens, G Elmore. Non-invasive monitoring of neuromuscular changes.
- 2ND ANNUAL ADVANCES IN CONSERVATIVE HEALTH CARE CONFERENCE, LOMBARD IL, 1983 Hosek, RS, G Elmore. EEG and evoked potential monitoring.

 Owens, EF, RS Hosek. Spinal buckling loads and curvature.
- 13TH ANNUAL BIOMECHANICS OF THE SPINE CONFERENCE, SAN FRANCISCO CA, 1982 Owens, EF, SB Schram, RS Hosek. Application of the Euler buckling theory to the human spine.
 - Schram, SB, RS Hosek, EF Owens. Variations of skin surface temp with chiropractic adjustments.
- LOGAN/CRC CONFERENCE ON MANIPULATION, DIAGNOSIS, AND THERAPY, ST LOUIS 1982 Hosek, RS. Modelling chiropractic phenomena.
 - Schram, SB, RS Hosek. Chiropractic diagnosis using neuromuscular signal tracing. Owens, EF, SB Schram, RS Hosek. Computerized thermal scanning system.
- WORLD CHIROPRACTIC CONFERENCE, VENICE ITALY, 1982
 - Schram, SB, RS Hosek. Clinical applications of a three-dimensional x-ray technique.
- 12TH ANNUAL BIOMECHANICS OF THE SPINE CONFERENCE, BOULDER CO, 1981
 Schram, SB, RS Hosek. Limitations in the use of kinematic analysis for chiropractic research.
 - Hosek, RS. Kinematic analysis of the cervical spine: a clinical trial.
 - Schram, SB, RS Hosek. A computer program for kinematic analysis.
- 11TH ANNUAL BIOMECHANICS OF THE SPINE CONFERENCE, BOULDER CO, 1980
 - Hosek, RS, BS Miller, JB Myers. X-ray misalignments, high blood pressure and low back pain.
 - Silverman, HL, RS Hosek, SB Schram. Monte Carlo algorithm to improve orthogonal x-ray results.
- HALDEMAN CONFERENCE ON THE SPINE, LAS VEGAS 1980
 - Schram, SB, HL Silverman, RS Hosek. 3-dimensional x-ray techniques for the cervical spine.

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31ST ANNUAL CONFERENCE ON ENGINEERING, MEDICINE, AND BIOLOGY, ATLANTA 1978
Carroll, FB, CH Sutton, RS Hosek, G Alexander. Microwave hyperthermia apparatus for tumor irradiation.

- Alexander, G, RS Hosek. Microprocessor-based physiological data system.
- Hosek, RS, G Alexander. Microprocessor-based clinical data system.
- COMPUTERS IN CARDIOLOGY, AMSTERDAM 1977
 - Augenstein, JS, RS Hosek, GW Andrews. A microprocessor-based monitoring system for intensive care.
- 29TH ANNUAL CONFERENCE ON ENGINEERING, MEDICINE, AND BIOLOGY, BOSTON 1976
 Hosek, RS, JS Augenstein, N Schneiderman, EA Peterson. A microprocessor-based physiological data recorder.
- JOINT ACOUSTICAL SOCIETY OF AMERICA, WASHINGTON DC, 1976

 Peterson, EA, JS Augenstein, RS Hosek. Noise and the cardiovascular system.
- 28TH ANNUAL CONFERENCE ON ENGINEERING, MEDICINE & BIOLOGY, NEW ORLEANS, 1975 Kennedy, PJ, A Feingold, RS Hosek, E Weiner. Task analysis of anesthesiology.
- FLOW SYMPOSIUM, INSTRUMENT SOCIETY OF AMERICA, 1974

 Battocletti, J, S Evans, SJ Larson, R Bowman, V Kudravcev, RS Hosek, A Sances Jr, J Linehan, W Genthe. Analysis of a nuclear magnetic resonance blood flow meter.
- 27TH ANNUAL CONFERENCE ON ENGINEERING, MEDICINE, AND BIOLOGY, PHILADELPHIA 1974 Hosek, RS, LJ Perlman, J Hilbert. Analysis of a VA hospital admissions service.
- SOCIETY FOR CLINICAL RESEARCH, BOSTON 1973

 Hilbert, J, RS Hosek, LJ Perlman. Mathematical modelling of a VA hospital admissions system.
- 26TH ANNUAL CONFERENCE ON ENGINEERING, MEDICINE, AND BIOLOGY, MINNEAPOLIS 1973 Hosek, RS, A Sances Jr. On the relationship of scalp recorded potentials and underlying cortical activity.
 - Cohen, BA, E Bravo-Fernandez, RS Hosek. Analysis of serial EEGs in patients with cerebro-vascular disorders.
- 25TH ANNUAL CONFERENCE ON ENGINEERING, MEDICINE, AND BIOLOGY, MIAMI FL, 1972 Battocletti, J, J Linehan, RS Hosek, A Sances Jr, R Halbach, H Itzkovitz, S Larson, Evans, R Bowman, V Kudravcev. NMR blood flow measurements in an isolated perfused kidney.
- 9TH ISA BIOMEDICAL SCIENCES INSTRUMENTATION SYMPOSIUM, MILWAUKEE 1971 Lessard, C, A Sances Jr, S Larson, RS Hosek. Automatic analysis of continuous sleep.
- NEUROELECTRIC SOCIETY, SAN FRANCISCO CA, 1969

 Zuperku, E, RS Hosek. Ongoing current studies during electrotherapeutic sleep.
- BIOPHYSICAL SOCIETY, LOS ANGELES CA, 1969
 - Hosek, RS, A Sances Jr, SJ Larson. Experimental determination of cerebral volume conduction.

Articles

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Hosek, RS, EF Owens, J Grostic. Animal Research Conference, TODAY'S CHIRO, Jul-Aug 1986.

- Hosek, RS, EF Owens. Computerized leg check, TODAYS CHIRO, Jan-Feb, p 9-13,1985.
- Hosek, RS. Research in Pediatrics, TODAY'S CHIRO, May-June, p 9, 1984.
- Hosek, RS. The Life Cervical Instrument, TODAY'S CHIRO, Mar-Apr, p 12, 1984.
- Hosek, RS. Research at the College Level, TODAY'S CHIRO, Mar-Apr, p 11-12, 1984.
- Owens, EF, SB Schram, RS Hosek. A critique of applications of the Euler equation to the human spine, J MANIP PHYSIOL THER, 6(2):67-70, 1983.
- Schram, SB, RS Hosek, EF Owens. Computerized paraspinal skin surface temperature scanning: a technical report, J MANIP PHYSIOL THER, 5(3):117-22, 1982.
- Schram, SB, RS Hosek. Error limitations in x-ray kinematics, J MANIP PHYSIOL THER, 5(1):5-10, 1982.
- Schram, SB, RS Hosek, HL Silverman. Positioning errors in Gonstead x-ray analysis, J MANIP PHYSIOL THER, 4:179-82, 1981.
- Hosek, RS, SB Schram, HL Silverman, JB Myers. Cervical manipulation, Letter to the Editor, J AMER MED ASSN, 245:922, 1981.
- Hosek, RS, A Sances Jr, SJ Larson, R Jodat. The contribution of intracerebral currents to the EEG and evoked potentials, IEEE TRANS BIOMED ENG, BME-25(5):405-13,1978.
- Cohen, BA, E Bravo-Fernandez, RS Hosek, A Sances Jr. Period analysis of the EEG: normative data, PSYCHOPHYSIOL, 13:591-95, 1976.
- Peterson, EA, JS Augenstein, RS Hosek, J Kiose. Noise and cardiovascular function in rhesus monkeys, J AUD RES, 1976.
- Feingold, A, PJ Kennedy, RS Hosek. Task analysis and human factors consideration of anesthesia for coronary bypass surgery, ANES ANALG, 33:374-77, 1976.
- Hosek, RS. A technique for accurate identification of alpha frequencies in the EEG, BEHAV RES METH INSTRU, 5:405-6, 1973.

Book Chapters

- Schneiderman, N, RS Hosek. The Nervous System: an introductory overview, in <u>Medical</u> Foundations of Biomedical Engineering, J Kline, Ed, Little Brown, Boston, 1976.
- Gimpl, M, RS Hosek. The Neural Control of Movement, in <u>Medical Foundations of</u> Biomedical Engineering, J Kline, Ed, Little Brown, Boston, 1976.