

CURRICULUM VITAE

Name: **Kenneth J. Dormer, M.S., Ph.D., FAHA**
Date/Location of Birth: March 10, 1944, Ashland, Pennsylvania
Citizenship: U.S.A.
Marital Status: Married: Karen Marie Dormer, M.S. (Child Development)
Children: Kelly Noel (4/13/70)
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EDUCATION:

1974/1977	NIH Postdoctoral Fellow (Cardiovascular Physiology)	University of Texas, Medical Branch Galveston, TX
1974	Ph.D. (Biology/Physiology)	University California, Los Angeles, CA
1969	M.S. (Physiology)	University California, Los Angeles, CA

1966	B.S. (Marine Biology)	Cornell University, Ithaca, NY
PROFESSIONAL EXPERIENCE:		
1990/present	Professor (primary appointment)	Department of Physiology University of Oklahoma Health Sciences Center College of Medicine
1983/1990	Associate Professor	Dept. of Physiology and Biophysics University of Oklahoma Health Sciences Center College of Medicine
1977/1983	Assistant Professor	Department of Physiology & Biophysics University of Oklahoma Health Sciences Center College of Medicine
1986/1995	Adjunct Associate Prof.	Dept. of Health and Sports Sciences College of Arts and Sciences
2002/present	Co-Founder, Chief Scientific Officer	NanoBioMagnetics Inc. Edmond, OK
1995/1999	Adjunct Professor	Dept. of Health and Sports Sciences College of Arts and Sciences
1986/1996	Adjunct Associate Prof.	Dept. of Otolaryngology University of Oklahoma Health Sciences Center College of Medicine
1998/Present	Adjunct Professor	Dept. of Otolaryngology University of Oklahoma Health Sciences Center College of Medicine
1995/2000	Reader	Faculty of Medicine University of Hong Kong
1984/Present	Vice President, Dir. Research	Hough Ear Institute Oklahoma City, OK
1998/present	Charter Board, Vice President	African Regional Training Centre and Network for Medical and Allied Health Sciences Durban, South.Africa
1997/present	Co-Founder, Vice President, Research & Development	SOUNDTEC Inc. Oklahoma City, OK
1997/2000	Chief Operating Officer	Hough Ear Institute Oklahoma City, OK
1997/present	Adjunct Associate Prof.	Dept. of Psychiatry & Biological Psychology, Univ. of Oklahoma Health Sciences Center
1997/present	Co-Founder and Executive Vice President	Hough Ear Institute Oklahoma City, OK
1983/1997	Adjunct Associate Prof.	College of Dentistry, University of Oklahoma Health Sciences Center
1982/2000	Vice President	Central Ear Research Institute, Inc. Oklahoma City, OK
1980/1996	Adjunct Assistant Prof.	Dept. of Psychiatry & Biological Psychology, Univ. of Oklahoma Health Sciences Center
1979/2002	Clinical Neurophysiologist	Cochlear Implant Clinic, INTEGRIS Baptist Med. Center

1979/present	Member	3400 N.W. 56th Oklahoma City, OK 73112 Graduate College University of Oklahoma Health Sciences Center
1979/1983	Adjunct Assistant Prof.	College of Dentistry, University of Oklahoma Health Sciences Center
1975-1977	NHLBI Post-doctoral Fellow	University of Texas Medical Branch Marine Biomedical Institute Galveston, TX
1974-1975	NIH Post-doctoral Fellow	University of Texas Medical Branch Marine Biomedical Institute Galveston, TX
1972-1974	Research Assistant	University of California Brain Research Institute Los Angeles, CA
1967-1968	USPHS Predoctoral Trainee	Department of Physiology & Biophysics University of California Los Angeles, CA
2002/present	Co-Founder, Chief Science Officer	NanoBioMagnetics, Inc Edmond, OK

MEMBERSHIPS AND HONORS:

1. Professional Activities and Scientific Memberships (Date of election)

2005	Founding Member, Board of Directors, Oklahomans for Better Science Education
2005	Member, Founding Advisory Board, Oklahoma Nanotechnology Initiative
2004/present	Chairman ASTM/ FDA Committee F04-37, Implantable Hearing Devices
2004	Member, ASTM/FDA Committee F04, Medical and Surgical Devices
2004	Member, Ad Hoc, Veterans' Health Administration, VA Merit Review, Rehabilitation Research and Development, September.
2003/present	Member: Association for Research in Otolaryngology
2002	Elected Fellow, American Heart Association, Council for High Blood Pressure Research
2001	Elected Fellow, American Heart Association, Council for Basic Cardiovascular Sciences
2000/2002	Credentialed Reviewer: Medical Care Ombudsman Program. Bethesda, MD
1999-2002	Member: Oklahoma Association for Healthcare Ethics
1998/2001	Co-designer and author of FDA Investigative Device Exemption (G970299) with Multicenter Clinical Trials initiated in Oklahoma City 15 January 1998, Nation wide, 18 March, 1999, completed October 2000, Second FDA approved implantable middle hearing device in U.S.
1995/present	Member: The Center for Bioethics and Human Dignity, Bannockburn, IL
1995	Elected Fellow: Council for High Blood Pressure Research, American Heart Association
1994/1997	Member: Research Committee, American Heart Association, Oklahoma Affiliate
1991/1994	Member: American Heart Association, Mountain West Regional Consortium Review Committee
1989/present	Member: Christian Medical and Dental Associations, OUHSC Campus advisor until 2000
1988/present	Associate Member: American Academy of Otolaryngology - Head & Neck Surgery
1988/1991	Member: American Heart Association, Southern Section Research Review Committee
1986	NIH Program Project Study Section P01NS24621, NHLBI (October)

1983 Member, Sigma Xi
1984 Ad Hoc Member: Physiology-Pharmacology Categorical Merit Review Committee VA Medical Center, Oklahoma City
1985 NIH Special Study Section - NHLBI (April) "Neuropeptides in Stress/Cardiovascular Function")
1982/2000 International Brain Research Organization/World Federation of Neuroscientists
1978 Society for Experimental Biology and Medicine
1977/2005 American Scientific Affiliation (Elected Fellow, 1983)
1976/present American Physiological Society
1976/present Member: Neural Control and Autonomic Regulation Section, American Physiological Society
1976/2000 Society for Neuroscience

2. Awards or Honors

2005 NanoBioMagnetics Inc. early stage company award from Nanoscience & Technology Institute
2004 Oklahoma Investment Forum Finalist, Innovator of the Year (SOUNDTEC Inc.)
2004 Oklahoma Investment Forum Finalist, Innovator of the Year (NanoBioMagnetics Inc.)
2004 Nominee, Oklahoma Innovator of the Year (NanoBioMagnetics Inc.) OK. Technology Commercialization Center (OCAST)
2004 Oklahoma Innovator of the Year, "On-the-Brink" Award, Journal Publishing Co.
2002 Who's Who in Medicine and Healthcare
2002 Oklahoma Innovator of the Year (SOUNDTEC Inc.), Journal Record Publishing Co.
2002 Oklahoma Technology Commercialization Center Award, Million Dollar Hall of Fame, June 21st (to SOUNDTEC Inc., Dormer, Co-Founder)
2001 Oklahoma Technology Commercialization Center Award, Million Dollar Hall of Fame, June
1999 2000 Outstanding Scholars of the 20th Century
1999/present Vice President, African Regional Training Center and Network, Durban, South Africa
1997/present Who's Who in Science and Engineering
1990 Nominated, for Provost's Research Award, OUHSC
1989 (March) Nominated by C. Everett Koop, M.D., U.S. Surgeon General, as National Science Advisor of President George Bush (White House appointed position)
1989/1993 Vice President, President of American Scientific Affiliation
1988 OUHSC College of Medicine, Alumni Association Research Scholar
1985 Oklahoma Bar Association, Patent and Trademark Division: Oklahoma Inventor of the Year for 1985
1983/1984 President, Oklahoma Society of Physiologists
1979/1991 American Men & Women of Science
1976 Outstanding Young Men of America
1974/1977 National Research Service Award, Individual Postdoctoral Fellowship, University of Texas Medical Branch at Galveston, Texas, Cardiovascular Control Section
1974/1975 National Research Service Award, Institutional Postdoctoral Fellowship, University of Texas Medical Branch at Galveston, Texas, Cardiovascular Control Section
1972/1974 NSF Predoctoral Fellowship in Physiology, UCLA, Brain Research Institute
1967/1968 USPHS Traineeship in Physiology, Univ. of Calif. at Los Angeles, Department of Physiology and Biophysics
1966/present A loving wife and successful children

3. Patents/Inventions

- 2004** Delivery of Bioactive Substances to Target Cells (submitted 6/04)
- 2003** Method and Apparatus for making Magnetically Responsive Nanoparticles, U.S. Serial No. 10/724,563
- 2002** Direct Drive Movement of Body Constituents, U.S. 6,436,028
- 2001** Middle Ear Magnet Implant, Attachment Device and Method, U.S. 6,277,148 B1
- 1999** Bone Conducting Floating Mass Transducers, U.S. 5,913,815
- 1988** Percutaneous Access Port for Intravascular or Intracavitary Sterile Access, U.S. 4,790,826 (assisted bring patent to OUHSC but not listed as inventor)
- 1988** Implantable Electromagnetic Middle-Ear Bone Conduction Hearing Aid Device, U.S. 4,776,322
- 1986** Direct Bone Conduction Hearing Aid Device, U.S. 4, 612, 915
- 1982** Magnetic Transcutaneous Mount for External Device of an Associated Implant, U.S. 4,352,960

LICENSES

Drug Enforcement Agency-Controlled Substances Reg. No. R00204052

TEACHING ACTIVITIES/STUDENT SUPERVISION/GRADUATE COMMITTEE MEMBERSHIPS:

1. Student/ Fellow Supervision

- 2005** Ronald Wassel, PhD, Post-doctoral Fellow, Hough Ear Institute
- 2004** Jianzhong Liu, MD, PhD, Research Scientist, Hough Ear Institute
- 2004** Kejian Chen, MD, PhD, Research Scientist, Hough Ear Institute
- 2004** Natasha Mamedova, Ph.D., Post-doctoral Fellow in nanotechnology, HEI
- 2003** Nikki Fox, M.S. Student in Exercise Physiology, Member, Graduate Advisory Committee
- 2003/2005** Brandon Clark, B.S., Graduate Student in Physiology of Exercise, Major Committee Advisor
- 2003/2005** Fadee Mondalek, BS, Masters Student in Bioengineering, OU, Major Research Advisor
- 2003/2004** Najeeb Shirwany, MD, Ph.D. Student in Physiology, Major Advisor temporarily
- 2003** Ebony Shaver, Undergraduate student ,OUHSC Mentor, Undergraduate Biomedical Education Program at (Langston University) Summer research experience.June-August
- 2003/2005** Bin Feng, PhD thesis committee, OU Center for Bioengineering, Dept. Mech. & Aerospace Engn.
- 2003** Fadee Mondalek, Spring Semester, Senior Bioengineering Student from UCO, Practicum Semester biomedical experience, international student program.
- 2001/2003** Hunsook Jang, PhD Student, College of Allied Health, Committee Member, Dissertation: Auditory Processing Rate in Frequency Regions of Normal and Impaired Sensitivity
- 2002** Lanie Goodman, PhD. Student 12 week laboratory rotation in biotechnology introduction.
- 2001** Nguyen Tan Phong, MD, PhD, Fellow in Otology/Neurotology, Hough Ear Institute
- 2001** Denis Colomb, Ph.D. Student 3 month rotation in biotechnology introduction.
- 1999/2001** Peng Yan, M.S. in Mechanical Engineering, Thesis Committee Member, “Finite Element Modeling of the Human Middle Ear”. School of Aerospace & Mechanical Engineering.
- 1997/2001** Qunli Sun, Ph.D.in Biomedical Engineering, PhD Committee Member, “Computer-Integrated Finite Element Modeling and Simulation of Human Middle Ear”; School of Aerospace & Mechanical Engineering, College of Engineering.
- 2000** Nguyen Phong, MD, International Fellow, Vietnam, International Otologic Fellow Awardee, cochlear implant research
- 2000** Taylor Lancaster, MSI, Summer Research project. Human temporal bone histological and 3-D computer reconstruction.

- 2000** Aaron Collins, undergraduate student, OBU, 5 week volunteer, hearing research at HEI
- 1998** Ha Shem Fakuri, MD, International Otologic Fellowship Awardee, hearing research
- 1998** Haug Nguyen, MD, International Otologic Fellowship awardee implantable hearing device research
- 1997** Dawn Lasseigne, M.S. Exercise program, directed clinical practicum: Exercise and Weight Loss in Obese Women
- 1996** Janet Matthews, M.S. Exercise program, directed clinical practicum: Effect of Exercise on Pregnancy
- 1996** Yvonne Han, Ph.D., Student, University of Hong Kong, "Role of Baroreceptors in Hypertension", Thesis Committee.
- 1994/95** Mark Wood, M.D., Fellow in Otology, Hough Ear Institute; Supervised research on implantable magnetic devices.
- 1995** Chris Gideon, Student at Oklahoma School of Science & Mathematics, Mentor, Jan-June.
- 1993/99** David Hough, Ph.D. Student, Keys Speech and Hearing Center, College of Health, "Clinical Assessment of Vestibular Function", Ph.D. Committee member.
- 1993/94** Martin Schneider, M.D., Fellow in Otology, Hough Ear Institute; Supervised research on implantable magnetic devices.
- 1993/94** Abe Marerro, Ph.D. Student, Biopsychology Program, "Hypertension and Stress in Problem Solving", Ph.D. General examination committee.
- 1992/93** Jeffrey Silber, Ph.D., Postdoctoral Fellow, "Selective Lesions in Brainstem Using Tuned Laser Light", Mentor.
- 1992** Member OUHSC Medical Student Teaching Program (M.D./Ph.D. faculty)
- 1992** Gerald Amundson, M.S. Student, Department of Physiology, masters oral and written examination (non-thesis) committee.
- 1992** Andy Revelis, M.S. Student, Department of Physiology, masters oral and written examination committee.
- 1992** Electrical Engineering 4773, "Senior Project", co-supervised 8 students in biomedical transducer design.
- 1992** Mechanical Engineering, co-supervised class project in blood pressure transducer design.
- 1991/94** Elaine McKinney, Ph.D., Student, School of Electrical Engineering, "Multimicrophone Array for Spatial Resolution of Sound Directionality", Ph.D. Committee Member.
- 1991/99** Keith Clark, M.D., Ph.D. Student, Department of Physiology, "Afferent Feedback of Phonation by the Larynx", dissertation committee.
- 1991/92** Fellow in Otology, Hough Ear Institute, Kent Dyer, M.D. Supervised basic research on animal studies for (implantable) hearing devices.
- 1991** Summer Semester: Steve Paulsen, MSII, Harris Presbyterian Health Foundation Research Fellow, "Respiratory Airway Resistance Changes from the Rostral Ventrolateral Medulla", Mentor.
- 1991** Mentor: American Physiological Society NIDDK Minority Fellowship Program. Atlanta, GA 4/21-4/25.
- 1990/94** Angela Evans, Ph.D. student, Department of Physiology, "Brainstem Modulation of Somatic and Visceral Pain", dissertation committee member.
- 1990/93** Vicki Christianson, Ph.D. student, College of Pharmacy, " Cardiovascular Effects of Ricin Toxin", dissertation committee member.
- 1990/92** Dale Brooks, M. S. student, Biopsychology Program, Department of Psychiatry. "Behavioral Risk Factors for Cardiovascular Disease", advisory committee member.
- 1990/91** Fellow in Otology, Hough Ear Institute, Graham Bryce, M.D., FRAS(C) Supervised basic research on baboon implementation of hearing device.
- 1990** Summer Semester: Jonathan Cromwell, Summer Academy for Medical Sciences, OUHSC, "Computer Method for Data Acquisition and Processing", Mentor.

- 1990** Summer Semester: Kenneth LeClerc, MSII, Harris-Presbyterian Health Foundation Research Fellow, "Exercise-Cardiovascular Control by the Brainstem", Mentor.
- 1990** Spring Semester: Clinical Exercise Physiology (PHYO/HPER 5873), course coordinator, lecturer, 30 contact hours, lectures on hypertension and exercise.
- 1990** Spring Semester: Core Curriculum in Pulmonary Medicine and Critical Care: Lecture, "Cardiovascular Response to Exercise and Effects of Training".
- 1989/91** Linda Sanabria-Roberts, M.S. Student, College of Arts & Sciences, "The Prediction of Energy Expenditure through use of a Biaxial Accelerometric Heart Rate Model", dissertation committee member.
- 1989** Summer Semester: Pham Tran, Minority High School Research Apprentice Program NIH, summer assistant in "Medullary Cardiovascular Control", Mentor.
- 1989** Terri Neal, M.S. student, Physiology and Biophysics. Non-thesis Masters degree, oral examination committee member
- 1989** Philip B. Adamson, M.S. Student, Physiology and Biophysics. Thesis Title: "Heart Rate Variability as a Predictor of Sudden Cardiac Death in Dog with Myocardial Infarction", committee member
- 1988/91** Priya Dharan, Ph.D. student, Electrical Engineering and Computer Science, "Digital Signal Processing in Implantable Hearing Devices", major advisor
- 1988/89** Gretchen Barratt, M.S. student, Health, Physical Education "Exercise Workload and Cardiovascular Response in the Stairmaster Apparatus", committee member
- 1988** Summer Semester: directed research of medical student Chris Crawford MSII "Auditory Brainstem Evoked Response in the Goat - FDA Safety Study for Implantable Middle Ear Hearing Device use in Humans"
- 1988** Summer Semester: directed research of Harold Cheung, Dept. of Engineering "Biotelemetry in Humans: A Multichannel Telemetry System for Monitoring Ambulatory Humans during Rehabilitation, Exercise or Evaluating Patients at Risk for Sudden Cardiac Death"
- 1988** Summer Semester: Minority High School Research Apprentice Program NIH, Cynthia Pham, "Neural Control of Circulation", advisor
- 1988** Assisted in collaborative supervision of visiting scientist from Peoples Republic of China, Ping Liu, human telemetry and computer monitoring
- 1988** Supervised research training in otolaryngology to R.Stan Baker, M.D., Fellow in Otology, Hough Ear Institute
- 1988** Brad Bassett, MS, HPER, Supervised research project for master's degree, "Ingested Telemetry Pill for Monitoring Body Core Temperature in Exercising Humans"
- 1988** Barron Fishburne, MSI, directed independent research project in computer directed data acquisition in blood flow studies (OB/GYN)
- 1987** Richard Vandevere, MS, HPER, Supervised his masters research project on human thermoregulation with exercise
- 1986** Summer Semester: directed medical student Jeff Stewart, MSI, in summer research program (Harris Fellowship), "Neural Control of Arterial Pressure by the Brainstem"
- 1985/86** Ahmad Ashrafzadeh, Ph.D., Postdoctoral Fellow, "Dual Transducer Pulsed Doppler Ultrasound for Measurement of Blood Flow Velocity" (Special Dean's Award for Engineering Fellowship in Biomedical Basic Science Department), advisor
- 1983/86** Toby Bedford, Ph.D., Postdoctoral Fellow, "Cardiovascular Dynamics in Orthostatic (Postural) Changes, A Model for the Human", advisor
- 1980/87** 9 medical students, Summer research training program as part of the Harris or Presbyterian Health Fund research fellowships, to encourage undergraduate medical students to consider academic medicine as a career (clinical research)
- 1982/83** John Braggio, Ph.D., Postdoctoral Fellow, "The Fastigial Nucleus of the Cerebellum and

Cardiovascular Responses to Classical Conditioning in the Conscious Dog", advisor

2. Teaching

- 2005** Fall Semester: Directed Reading: Exercise Physiology Advanced Topics
- 2005** Fall Semester: Integrative Physiology, (PHYO 6047), Homeostasis, systems analysis and heart failure
- 2005** Spring Semester: Professional Ethics and Professionalism (IND 9668), MS II, 10-15 hours group teaching format, 20 students.
- 2005** Spring Semester: Medical Physiology, (PHYO 5019), 13 hours in Cardiovascular, Exercise, Aging and Diabetes. Recruited two clinicians for clinical correlation lectures.
- 2004** Fall Semester: Directed Reading: Exercise Physiology Advanced Topics
- 2004** Fall Semester: Integrative Physiology, (PHYO 6047), Homeostasis, systems analysis and heart failure
- 2004** Spring Semester: Professional Ethics and Professionalism (IND 9668), MS II, 10-15 hours group teaching format, 20 students.
- 2004** Spring Semester: Medical Physiology, (PHYO 5019), 13 hours in Cardiovascular, Exercise, Aging and Diabetes.
- 2004** Spring Semester: Systemic Physiology, (BMSC 6032/6046), Arterial pressure, hemodynamics and nanotechnology, Graduate Program in Biomedical Sciences
- 2003** Fall Semester: Integrative Physiology, (PHYO 6047), Homeostasis and heart failure
- 2003** Spring Semester: Clinical Exercise Physiology, (PHYO 5873), Course Coordinator.
- 2002/2003** Spring Semester: Medical Physiology (PHYO 5019) 13 hours in cardiovascular and exercise physiology; module advisor 1 hour/week/semester.
- 2002/2003** Spring Semester: Facilitator, Professional Ethics and Professionalism (IND9668), MSII, 10-15 hours class time/teaching.
- 2002/2003** Spring Semester: Systemic Integration (BMSC 6032/6046) 4 hours, cardiovascular short term regulation
- 2001** Spring Semester: Medical Physiology (PHYO 5019) 13 hours in cardiovascular and exercise physiology; module advisor 1 hour/week/semester.
- 2001** Spring Semester: Current Issues in Biomedical Research (BMSC 6020), Graduate Students, 3 hours, Biomedical Engineering and Medical Devices
- 2001** Spring Semester: Facilitator, Professional Ethics and Professionalism (IND9668), MSII, 10-15 hours class time/teaching.
- 2001** Spring Semester: Systemic Integration (BMSC 6032/6046) 8 hours, cardiopulmonary function
- 2000** Fall Semester: Implantable Medical Devices (Aerospace & Mechanical Engineering XXX) 5 hours, cochlear implant devices.
- 2000** Spring Semester: Integrative Biology (BMSC-6045) 8 hrs – systemic cardiovascular physiology
- 2000** Spring Semester: Facilitator, Professional Ethics and Professionalism (IND9668), MSII, 10-15 hours class time/teaching.
- 2000** Spring Semester: Medical Physiology (PHYO 5019) 13 hrs in cardiovascular and exercise physiology; module advisor 1 hr/week/semester
- 2000** Fall Semester: Advanced Cardiovascular Physiology (XXX) 10 hours
- 1999** Spring Semester: Facilitator, Professional Ethics and Professionalism (IND9668), MSII, 10-15 hours class time/teaching.
- 1999** Spring Semester: Medical Physiology (PHYO 5019) 13 hrs in cardiovascular & exercise physiology; faculty module instructor @ 1 hour/week/semester

- 1999 Spring Semester: Integrative Biology, BMSC-6045- cardiovascular physiology
- 1999 Co-founder Oklahoma University Center for Bioengineering
- 1998 Fall Semester: Advanced Systemic Physiology, 2 hours, Arterial Pressure
- 1998 Spring Semester: Facilitator, Professional Ethics and Professionalism (IND9668), MSII, 10-15 hours class time/teaching.
- 1998 Spring Semester: Medical Physiology (PHYO 5019) 15 hrs in cardiovascular, exercise and circulatory physiology; faculty module instructor (hour teaching weekly)
- 1998 Spring Semester: Clinical Exercise Physiology (PHYO5873) Course Coordinator and lecturer
- 1997/1999 Spring Semester: (BMSC 5001) Integrity in Scientific Research; 2 hrs lecture on "Data collection analysis and intellectual property".
- 1997 Fall Semester: Advanced Systemic Physiology, Arterial Pressure – Computer Simulations, 2 hours
- 1997 Spring Semester: Facilitator, Professional Ethics and Professionalism (IND9668), MSII, 10-15 hours class time/teaching.
- 1997 Spring Semester: Neurophysiology Graduate Course (PHYO 6373); Lectures on Vestibular and Cerebellar Systems.
- 1997 Spring Semester: Medical Physiology (PHYO 5019) 15 hrs in cardiovascular, exercise and circulatory physiology; faculty module instructor (hour teaching weekly)
- 1997 Spring Semester: Directed Reading Course, Clinical Exercise Physiology, 2 hrs, Dawn Lasseigne.
- 1996 Spring Semester: Facilitator, Professional Ethics and Professionalism (IND9668), MSII, 15 hours class time/teaching.
- 1996 Spring Semester: Directed Reading, Clinical Exercise Physiology, 2 hr course, Janet Matthews.
- 1996 Spring Semester: Medical Physiology (PHYO 5019) 15 hrs in cardiovascular, exercise and auditory physiology; faculty module instructor.
- 1995 Summer: Mentor, MSII, Shelly Leshner, Presbyterian/Harris research program, "Implantable Hearing Prosthesis".
- 1995 Spring Semester: Medical Ethics (PEDI 9668), 2 hours, Discussion leader in module.
- 1995 Fall Semester: Advanced Systemic Physiology, 4 hrs. lecture on Systemic Hemodynamics.
- 1995 Spring Semester: Mentor, Chris Gideon, Sr. Oklahoma School of Science and Mathematics.
- 1995 Spring Semester: Medical Physiology (PHYO 5019); 15 hrs. in cardiovascular, exercise and auditory physiology; faculty module instructor.
- 1995 Spring Semester: Advanced Neurophysiology (PHYO 6890); 4 1/2 hrs of lectures on cerebellar, vestibular and auditory system
- 1995 Spring Semester: Edmond Memorial High School Physiology Classes "Exercise Physiology" 6 hours.
- 1994 Fall Semester: Advanced Exercise Physiology (HSS 5823), "Cardiovascular changes in dynamic exercise: 1 1/2 hours.
- 1994 Spring Semester: Medical Physiology (PHYO 5019); 15 hrs. in cardiovascular, exercise and auditory physiology; faculty module instructor.
- 1993 Fall Semester: Advanced Systemic Physiology, 4 hrs. lecture on systemic hemodynamics, hypertension stress.
- 1993 Fall Semester: Advanced Exercise Physiology (PHYO/HSS 5823); 2 hr. lecture on cardiovascular effects.
- 1993 Spring Semester: Advanced Cardiovascular Physiology (PHYO 63131), Course Coordinator, lecture in hypertension, neural control of circulation.
- 1993 Spring Semester: Medical Physiology (PHYO 5019), 15 hours in cardiovascular, exercise and auditory physiology. Faculty module instructor.

- 1992** Fall Semester: Aerospace Mechanical Engineering 4362 Design Practicum, lecture and coordinate student project in implantable strain gauge for pressure measurement (Norman Campus).
- 1992** Fall Semester: Advanced Neurophysiology (PHYO 6980) 4 hours lecture on cerebellum, vestibular system.
- 1992** Fall Semester: lecture 1 hour in EE 4773 Senior Design Project. (Norman Campus)
- 1991** Fall Semester: lecture 6 lecture hours PHYO 5823 Advanced Exercise Physiology; cardiovascular system and exercise.
- 1991** Course Coordinator, Advanced Cardiovascular Physiology (PHYO 6313); Spring Semester; tutorial format; lectures in arterial pressure, neural control of cardiovascular physiology and exercise physiology.
- 1991** Medical Physiology (PHYO 5019); Spring Semester, 12 lectures in cardiovascular physiology (same as 1990). Faculty module instructor.
- 1990** Co-Instructor, surgical course, Xomed-Treace (Bristol Myers-Squibb) Jacksonville, FL, October 12, 13. "Xomed Audiant Implantable Hearing Device (21 surgeons, 18 audiologists). Lectures and laboratory.
- 1990** Advanced Neurophysiology (PHYO 6980); lectures on auditory and vestibular systems.
- 1990** Course Co-coordinator, Clinical Exercise Physiology (PHYO 5813); Spring Semester; lectures on blood pressure.
- 1990** Co-Instructor, short course, American Academy of Otolaryngology - Head and Neck Surgery, San Diego, CA, Sept. 9-13, "Electromagnetic Hearing Devices", 2 credits, CME.
- 1990** Spring Semester: Medical Physiology (PHYO 5019), 53 contact hours, 40 in class/discussion, 12 in lectures on cardiovascular physiology (peripheral vascular system, neural control, hemodynamics, exercise, computer aided instruction). Faculty module representative.
- 1989** Co-Instructor in surgical courses: Bangkok, Thailand; Hong Kong; Seoul, S. Korea; and Singapore; (March) Xomed Audiant Bone Conductor, 120 surgeons.
- 1989** Co-Instructor, short course, American Academy of Otolaryngology, New Orleans, Sept. 24, "Electromagnetic Implantable Hearing Devices", 2 credits CME.
- 1989** Co-Instructor, Duke University, Sept. 15, "Xomed Audiant Implantable Hearing Device" (18 surgeons, 15 audiologists), 8 hours short course and workshop.
- 1989** Fall Semester: Lecturer Advanced Neurophysiology (PHYO 6980), Cerebellar/Vestibular Systems and Auditory System, 16 contact hours, 8 lecture hours.
- 1989** Spring Semester: Medical Physiology (PHYO 5019), 53 total contact hours, 15 in lecture, 28 in module small group discussions; lectures in cardiovascular physiology.
- 1989** Advanced Cardiovascular Physiology (PHYO 6313); Spring Semester: Course Coordinator (tutorial format) and lecturer in neural control of cardiovascular system.
- 1988** Participated in National Board Review course for MS II students (cardiovascular 1 hr).
- 1988** Co-Instructor in surgical course, Duke University, Oct. 28, 29, "Implantable Hearing Device Techniques", (50 Surgeons, 50 Audiologists).
- 1988** American Academy of Otolaryngology, Sept. 28, "Xomed Implantable Hearing Devices", co-instructor of course, 2 credits CME.
- 1988** Spring Semester: co-coordinator; lecturer; Clinical Exercise Physiology (PHYO 5873), 15 contact hours on cardiovascular benefits of exercise, pathology and exercise.
- 1988** Spring Semester: Medical Physiology (PHYO 5019), 14 contact hours on peripheral circulation, CV control, special circulation, arterial pressure, computer lab demonstration, hemodynamics.
- 1987/89** Co-Directed 13 laboratory courses with J. Hough, M.D. for 720 U.S. surgeons, Xomed Audiant Bone Conductor hearing device, 7 hrs CME credit, Okla. City, OUHSC.

- 1987** Co-Instructor, American Academy of Otolaryngology course; "Implantable Hearing Devices", September, Chicago, 2 hrs CME credit.
- 1987** Instructor: N.J. Academy of Otolaryngology, "Audiant Bone Conductor", NY, October.
- 1987** Co-coordinated laboratory course with F. Kuhn, M.D., 20 U.S. surgeons, Endoscopic Sinus Surgery, 3 hrs. CME credit, Okla. City, October.
- 1987** Spring Semester: Course Coordinator, Lecturer: Advanced Exercise Physiology (PHYO 6323), Medicine and Human Performance (PHYO 6323), 25 contact hours. This is a new course, regents approved and designed by Kenneth J. Dormer and Ronald Ratliff (Adjunct Associate Professor of Physiology and Biophysics).
- 1986/present** Coordinator: Graduate Studies in Exercise Physiology.
- 1985/86** Spring Semester: Medical Physiology (PHYO 5019), 11 lecture hours on Cardiac output, Cardiac cycle, Cardiac reflexes, Hemodynamics, Peripheral Integration, Exercise, Heart Failure, Shock.
- 1986** Introduced computer-aided instruction into Medical Physiology course at OUHSC (first time ever in basic sciences curriculum at the University of Oklahoma Health Sciences Center).
- 1985/86** Fall Semester: Advanced Neurophysiology, directed reading for Uh-Taek Oh, graduate student.
- 1985/86** Fall Semester: Intensive Studies in Health, Physical Education and Recreation, directed reading for Gretchen Barratt, graduate student, Norman campus.
- 1985** Summer Semester: Directed medical student research, Brad Marple, NIH - Short-term training grant.
- 1985** Guest Lecturer: Department of Physiology University of Nairobi, Kenya, Africa.
- 1984/85** Spring Semester: Medical Physiology, 20 lecture hours: Hemodynamics, Cardiac Cycle, Cardiac Output, Cardiac Reflexes, Exercise, Hypertension, Heart Failure, Peripheral and Cardiac Integration. Coordinator: Cardiovascular Section. Coordinator: ECG Laboratory Demonstration.
- 1984** Course Coordinator: Advanced Cardiovascular Physiology, 8 lectures.
- 1983/84** Medical Student Module faculty representative (20 students).
- 1984** Summer Semester: a) Directed Medical Student research, Brad Britton, NIH short-term training grant; b) Directed premed student research, Tom Craven; c) Directed special minority program student research, C.T. Jacob.
- 1983** Fall Semester: Advanced Neurophysiology, 6 Lecture hours on Cerebellar Physiology.
- 1982/83** Medical student module faculty representative (20 students).
- 1983** Summer Semester: Directed medical student research, L. Deck, NIH short-term training grant.
- 1982/83** Summer Semester: Directed medical student research, B. Watrous, NIH short-term training grant.
- 1981/83** Spring Semester: Medical Physiology, 13 lecture hours, Autonomic N.S., Hemodynamics, Cardiac Cycle, Cardiac Output, Integration. Coordinator: ECG/Exercise Demonstration. Coordinator: cardiovascular section.
- 1981/84** Course Coordinator: Advanced Cardiovascular Physiology, 8 lectures.
- 1981** Summer Semester: Directed medical student, R. Mahnken, NIH short-term training grant.
- 1980/81** Spring Semester: Medical Physiology, 8 lecture hours on Autonomic N.S., Cardiac Cycle, Cardiac Output, Hypertension and Heart Failure.
- 1980/81** Spring Semester: Advanced Neurophysiology, 6 lecture hours on Central Autonomic Control, Neurotransmitters, Autonomic Ganglia.
- 1980/81** Spring Semester: Residents Conference, Dept. of Neurosurgery, Cerebellar Function.
- 1979/80** Fall Semester: Dental physiology, 2 lectures on Cardiac Output, Coronary Blood Flow, Heart Failure.
- 1979/80** Fall Semester: Departmental Biophysics Course, 2 lectures on Control Theory and

Cardiovascular System.

1979/80 Fall Semester: Departmental Physiological Methods Course; 4 hours, Stereotaxic Techniques.

1979/80 Spring Semester: Medical Physiology Course; 8 lectures on Autonomic Nervous System, Cardiac Cycle, Hypertension, Heart Failure, Control of Respiration.

1979 Summer Semester: Summer Research Direction of Dan Smith, MSII Harris-NIH Research Fellow.

1979 Summer Semester: Directed Independent Study Physiology Course; Ron Stratton, Graduate Student in Biological Psychology.

1978/79 Spring Semester: Medical Physiology, 10 lectures on Autonomic Nervous System, Cardiovascular Integration, Hypertension, Heart Failure, Control of Respiration Section Leader for 20 medical students.

1978/79 Spring Semester: Residents Conference, Department of Neurosurgery, one hour of lecture to residents, Cerebellar Function.

1978/79 Coordinator: Cardiovascular Discussion Group for Physiology Department

1978 Spring Semester: Medical Physiology, 10 lecture hours on Autonomic Nervous System, Cardiovascular Integration, Hypertension, Heart Failure. Section Leader for 20 medical students.

1978 Spring Semester: Advanced Cardiovascular Physiology. 2 lecture hours on Cardiovascular integration.

1976/77 Spring Semester: Instructor, Integrated Functional Laboratory, Department of Physiology and Biophysics, University of Texas Medical Branch, Galveston, Texas. Taught laboratories on ECG, Cardiac function to 15 medical students.

1974 Summer Semester: Lectures in Biology, Division of Natural Science, 100 students. Field work and lectures 40 hours.

1974/75 Graduate Teaching Assistant: Coastal Marine Laboratory, University of California at Santa Cruz.

RESEARCH GRANTS, CONTRACTS AND TECHNOLOGY FUNDING :
(PI, Co-I or Co-Founder roles > \$20 million total)

2005	Oklahoma State Regents for Higher Education	“Nanostructured Materials Supplement to State EPSCoR Award” (pending)	\$500,000
2005	Office of Naval Research BAA 04-001	“Optimized Oral Treatment of Acute Acoustic Trauma”, Co-I	\$1,294,492
2005	Office of Naval Research BAA 04-001	“Targeted Delivery of Therapeutics by Magnetic Nanoparticles to the Inner Ear” PI (joint total funding OUHSC and NMCSO \$894,115)	\$516,615
2005	NSF EPSCoR	“Nanostructured Materials” Co-I, Interdisciplinary Group Leader (OUHSC portion \$60,000)	\$6,000,000
2004	NHLBI-STTR	“Magnetic Nanoparticles as Carriers of Cardiac Drugs” Co-I, approved, not	

2004	Presbyterian Health Foundation	funded \$100,000 “HSC Student Medical Mission to Peru” Co-PI	\$10,000
2004	Merrick Foundation, Oklahoma City	“Protection against Noise-Induced Deafness” (Hough Ear Institute) PI	\$10,000
2004	NIH-NIDCD SBIR Phase II	“Magnetic Nanoparticles for Advanced Hearing Devices”, Co-I, (pending) Approved, not funded, \$735,325	
2004	NIH-NIDCD	“Biomechanics of Sound Transmission” Co-I , Approved, not funded, \$1,250,000	
2004	OCAST Health Research	“Sound Transmission in Normal and Pathological Ears” Co-I Not funded, \$135,000	
2004	OCAST Health Research	“Magnetic Nanoparticles for Advanced Hearing Devices” Co-I (NBMI, HEI, HSC)	\$47,000
2003	NIH-NIDCD SBIR Phase II	“Magnetic Nanoparticles for Advanced Hearing Devices” Co-I (to NBMI) Approved, not funded, \$737,168	
2003	NIH-NIDCD SBIR Phase I	“Magnetic Nanoparticles for Gene Delivery to the Cochlea” Co-I (to NBMI) Approved, not funded, \$100,000	
2003	NIH-NHLBI SBIR Phase I	“Magnetic Nanoparticles as Carriers of Cardiac Drugs” Co-I Approved, not funded, \$100,000	
2003/2006	Office of Naval Research	“Magnetically Responsive Nanoparticles as Vehicles for Gene Delivery to the Cochlea” (Co-PI) Not funded, \$1,155,433	
2003/2005	Shulsky Foundation	“Maximizing Gene Delivery to the Inner Ear for Hair Cell Regeneration” Co-I (to HEI, subcontract to OUHSC and subcontract to NBMI)	\$885,000
2003	Presbyterian Health Foundation	“Optimization of Treatment of Acute Acoustic Trauma” (Equipment only) \$59,577 not funded	

2003	Oklahoma Technology Commercialization Center (OTCC)	NanoBioMagnetics Inc TBFP Business Loan Chief Scientific Officer	\$150,000
2003	Oklahoma Technology Commercialization Center (OTCC)	SOUNDTEC Inc. Technology Business Finance Award Vice Pres. R & D	\$150,000
2003	Dept. of Defense EPSCoR Program Oklahoma	“Targeted Delivery of Therapeutics by Magnetic Nanoparticles for Inner Ear Repair and Regeneration” Co-Investigator (national finalist, not funded, \$500,000)	
2003	NanoBioMagnetics Inc. Sponsored Research Contract	“Magnetic Nanoparticles for Targeted Delivery of Cardiac Medication” PI, (approved, award pending)	\$64,000
2002	Presbyterian Health Foundation	“Drug Delivery to the Heart using Magnetic Nanoparticles” Principal Investigator	\$29,600
2002	NIH-NIDCD Small Business Innovative Research Grant 1 R43 DC05528-01	“Magnetic Nanoparticles for Advanced Hearing Devices” Co-PI	\$118,761
2002	U.S. Dept. Commerce National Inst. Standards and Technology	“Magnetic Nanoparticles as Vehicles for Targeted Delivery of Therapeutics” (NanoBioMagnetics Inc. with Subcontract to K. Dormer) (\$1,545,500, not funded)	
2002	Mabee Foundation, Tulsa, OK	Building on the Legacy (Building grant for Hough Ear Institute) Co-Author	\$250,000
2002	Oklahoma Center for the Advancement of Science & Technology Applied Research \$240,000	“Totally Implantable Hearing System-Phase I” Co-PI	
2002	Oklahoma Center for the Advancement of Science & Technology- Applied Research	“Nanoparticles for Cardiac Therapeutics and Imaging” Co-PI \$300,000 (not funded)	

2002	OU College of Medicine Alumni Association	“Epithelial Attachment of Collagen-Coated Nanoparticles by Integrins” PI (not funded) \$25,000	
2002-present	Private investors, for biotech startup, research	NanoBioMagnetics Inc,	\$130,000
2002	U.S. House of Representatives Subcommittee on African Affairs	“Preclinical Medical Education in Africa” (for African Regional Training Center for Medical and Allied Health Sciences) K. Dormer, Acting President (pending)	\$20,000
2002	NSF-SBIR Phase I	“Nanobiotechnology of Hearing Devices” Co-I (not funded) \$100,000	
2002	Whitaker Foundation for Biomedical Engineering	“Mechanics of Implantable Hearing Device Restoration of Hearing” Co-I (not funded) \$80,000	
2001	OCAST-SBIR Phase II	“Magnetic Nanoparticles as Miniaturized Hearing Devices” Co-PI (not funded) \$677,000	
2001	NIH-NIDCD R-21 Feasibility-Pilot Study	“Nanotransducers for Implantable Hearing Devices” PI \$145,500 (not funded)	
2001	NIH-NIDCD Small Business Technology Transfer Grant	“Implantable Magnetic Nanoparticles for Hearing Devices”(voluntarily withdrawn, \$118,716))	
2001	NIH-RFA Research Partnerships in Biomedical Engineering	“Mechanics of Implantable Device Restoration of Hearing” Co-Investigator (Approved, not funded \$2,560,800)	
2001	NIH-NHLBI R01	“G-Protein Kinase Modulation in Diabetic Cardiomyopathy” Co-Investigator (Approved, not funded \$1,007,125)	
2001	Oklahoma Center for Advancement for Science & Technology-Health Research	“Middle Ear Simulator for Sound Transmission” Co-Investigator (to HEI)	\$135,000

2000	U.S..Agency for International Development Pretoria South Africa	“Physiology Teaching Workshop” Co-Investigator	\$ 4,377
2000/2005	VA Medical System Milwaukee, WI	“Role of a Medullary and a Cerebellar Nucleus in Control of Breathing” Consultant	\$75,000
2000/2003	NSF-EPSCOR Oklahoma	“Oklahoma Science and Technology Infrastructure Network” Co-Investigator (not funded \$2,943,300)	
2000	American Physiological Society	“AFRET Meeting and AAPS Workshop” PI	\$ 2,000
2000	Oklahoma University Bioengineering Center (Seed Grant)	”In Vivo Online Monitoring of Endogenous Nitric Oxide” Co-Investigator	\$ 35,000
2000-2004	NIH (HLB1)	“G-Protoein Kinase-Mediated Modulaltion of Diabetic Cardiomyopathy” Co-Investigator (approved, not funded) \$1,443,625	
2000-2003	OCAST Health Research Program	“Middle Ear Simulator for Sound Transmission” Co-Investigator (not funded) \$135,000	
2000-2003	OCAST Health Research Program	“Adenovirus Gene-Control of Cardiac Beta Adrenergic Receptor Kinase” Consultant (not funded) \$135,000	
2000	American Physiological Society	Summer Research Program for undergraduates (Justin Davis, OU Sophmore) (not funded) \$2,500	
2000/2001	OCAST Applied Research Program	“Totally Implantable Hearing System” Co-Investigator	\$ 80,000
1999/2000	National Hearing Research Foundation	“Laser Doppler Interperometry and Hearing Analysis” PI (not funded) \$20,000	
1999/2000	Presbyterian Health Foundation	“OUHSC Medical & Dental Student Mission 2000: Bolivia” Co-PI	\$ 22,800

1999/2002	Whitaker Foundation for Biomedical Engineering	“Laser Interferometry and Finite Element Modeling for Middle Ear Transplant Functions” Co-Investigator	\$210,000
1999/2000	Presbyterian Health Foundation	“Blood Substitute and Pulmonary Circulation” PI	\$10,000
1999/2002	Whitaker Foundation for Biomedical Engineering (Training Grant)	An Inter-Campus Bioengineering Center at the University of Oklahoma Co-Author	\$1,000,000
1999	U.S. Embassey Pretoria, S. Africa U.S. Information Service	“Travel Grant for Medical” Information Exchange Co-Recipient. Vice-President AFRET	\$10,000
1999	Culpeper Foundation	“Application of Laser Doppler Interferometry in Middle Ear Analysis” PI (not funded)	\$27,000
1999	Center for Biomedical Engineering	“Middle Ear Mechanical Model and Laser Doppler Interferometry” Co-Investigator (not funded)	\$35,000
1998	United States Information Service, U.S. Embassey Pretoria, S. Africa	“Education Workshop Presentation AFRET, South Africa” Co-Principle Investigator	\$7,600
1997/1999	National Institute Deafness and Communicative Disorders - Neural Prosthesis Program	"Percutaneous Electrical Connector for Neural Protheses" Co-Principal Investigator (not funded)	\$786,000
1997	American Physiological Soc. Bethesda, MD	“Travel Grant to present APS Satellite data base to the African Physiologist”	\$1200
1997	Rockefeller Foundation New York, NY	“Travel Grant to African Regional Training Centre and Network Meeting” P.I. (not funded)	\$12,000
1997	World Health Organization Regional Office for Africa	“Travel Grant to African Regional Training Centre Network Meeting”	

1997-2004	SOUNDTEC Inc.	P.I. (not funded) \$12,000 Private investors' capital into startup, through FDA approval	\$11,000,000
1997-2000	SOUNDTEC, Inc To Central Ear Research Institute (Contract)	"Development and Testing of Direct Drive Hearing System" Co-Investigator \$220,000/yr	\$880,000
1997	Presbyterian Health Found.	"Blood Substitutes and Pulmonary vasoconstriction" Co-Investigator	\$40,287
1997/2000	OCAST	"Middle Ear Implantable Hearing Device Validation" PI: Rong Gan Co-Investigator	\$98,516
1996/1999	Dept. of Veterans Affairs	"A Comparative Analysis of Cardiac Rehabilitation Treatments Co-Investigator (not funded)	\$740,476
1996/2001	NIH	"Effects of Hemoglobin on Lung Hemodynamics" Co-Investigator (approved but not funded)	\$349,929
1995/1997	Symphonix Devices, Inc.	"Development of Implantable Hearing Prosthesis" Contract to Hough Ear Institute Co-Investigator	\$750,000
1995	Cellular Phone Industry of America	"Electromagnetic Interference of Hearing Aids from Cellular Phones" Sub-Contract from OU Center for Electromagnetic Compatibility Co-Investigator	\$45,000
1995/1997	American Heart Association	"Pulmonary Hemodynamics in Response to Hemoglobin Blood Substitutes" Co-Investigator (approved but not funded)	\$155,000

1995	Dept. Defense SBIR	"Dental Conduction Hearing Device for Divers" Dir. Clinical Trials (not funded) \$100,000	
1995	NHLBI SBIR	"Percutaneous Implant for Blood Pressure Measurement" Co-Investigator (not funded) \$100,000	
1995/1997	Stewardship Foundation	"Acaraside Properties of <u>Commiphora</u> Species" Co-Author, Administrator	\$10,000
1994	DEPSCOR	"Enhanced Speech/Signal Reception Recognition and Spatial Orientation in Complex Noisy Environments" Principal Investigator (State Finalist/but not funded) \$240,000	
1994	Astra/Merck	"Computers in Education" Principal Investigator	\$2,000
1994/1995	Deafness Research Foundation	"Magnetic Stimulation of the Cochlea" Co-Investigator, 5% (Jointly with Louisiana Tech Univ.)	\$14,872
1994/1995	Presbyterian Health Foundation	"Brainstem Control of Cardiopulmonary Function" Principal Investigator, 20%	\$33,596
1994/1995	Procter & Gamble Pharmaceuticals (Contract)	"Evaluation of New Cardiotonic Drug Compound with Digoxin" Principal Investigator, 20%	\$150,000
1993/94	OCAST Center for Laser Research	"Selective Lesions in Labeled Brain Tissue" Co-Investigator, 10%	\$60,000
1993	Research Council of OUHSC	"Equipment repair grant"	\$950
1993	Stewardship Foundation	"Acariside properties of <u>Commiphora</u> species" Co-Author, Administrator	\$2,000
1991/97	NIH	"Behavioral Medicine: Cardiovascular Disease	

		Research" Training Grant Faculty, 5%	\$203,682
1989/93	Hough Ear Institute Baptist Medical Center Foundation	"Middle Ear Implantable Hearing Device Co-Investigator/Sponsor for FDA-IDE Clinical Trial, 20%	\$261,000
1992/93	OCAST Center for Laser Research	"Selective Lesion in Brain Cells Using Laser Photolysis" Co-Principal Investigator, 20%	\$69,000
1991/92	OCAST Center for Laser Research	"Selective Lesion in Brain Cells using Laser-Induced Photolysis" Principal Investigator, 20%	\$115,500
1991	International Development & Research Corp. (Canada)	"Start up grant for African Institute for Scientific Research and Development" Trustee - Board of Directors	\$20,400
1990/93	NIH-NHLBI	"Vasomotor Center Control of Cardiovascular Function" Principal Investigator, 20%	\$230,000./3 yrs
1989/1990	Presbyterian Health Found.	"Brainstem Control of Cardiovascular Function" Principal Investigator, 20%	\$34,000./yr
1988/89	Presbyterian Health Found.	"Human Biotelemetry for Activity Monitoring" Principal Investigator, 10%	\$20,000
1981/89	Bristol-Myers Co. and Hough Ear Institute	"Audiant Bone Conductor, Implantable Hearing Device" Co-PI Investigator, 10%	\$500,000
1988	OU Alumni Association	"Cardiorespiratory Control from the Rostral Medulla" Principal Investigator	\$6,700
1987	Presbyterian Health Found.	"Accelerometry and Heart Rate to Measure Physical Activity" Principal Investigator, 10%	\$21,500
1987/88	Walter Reed Army Institute of Research	"Verification of Telemetry Accuracy in Humans" Principal Investigator, 10%	\$15,000
1986/87	NIH (small business grant)	"Percutaneous Access Port for Measuring Blood Pressure in Small Animals" Co-Investigator, 5%	\$50,000

1986/87	Konigsberg Instruments Inc. Contract	"Human Exercise and Thermoregulatory monitoring by Multichannel Telemetry" Principal Investigator, 10%	\$41,000
1985/86	Provosts' Research Fund (In House Grant)	"Cardiovascular Control: Medullary Organization" Principal Investigator, 20%	\$24,300
1983/84	Bristol-Myers Co.	Antihypertensive Drug Testing Principal Investigator, 5%	\$7,500
1982/85	NIH-NHLBI	"Exercise and Alcohol, Cardiovascular Dynamics" Principal Investigator	\$152,000
1981/86	(Training Grant) NIH	"Short Term Research Training of Medical Students" Mentor, 2%	\$98,640
1979/84	(Training Grant) NIH	"Cardiovascular control and Hypertension" Associate	\$159,027
1981/84	NIH-NHLBI	"Central Organization of Cardiovascular Control" Co-Investigator, 30%	\$200,175
1979/85	Baptist Medical Center Foundation	"Cochlear Implant Startup Project" Clinical Neurophysiologist, 10%	\$200,000
1978/81	Young Invest. Award NIH	"Cardiodynamics and Hypertension Under Cerebellar Control" Principal Investigator, 80%	\$85,000
1978	OUHSC Biomedical Research Support Grant	"Cardiac Arrhythmias of Cerebellar Origin" Principal Investigator	\$2,933
1974/77	NIH-NHLBI	"Cerebellar Control of Cardiac Function" Principal Investigator	\$45,000
1970/72	National Science Foundtation	"Mechanisms of Sound Production and Processing in Delphinid Cetaceans" Principal Investigator	\$3,600

PUBLICATIONS:

Articles

1. Baslow MH, Read GW and **Dormer K**: Hypotensive and paralytic agents from the sponge, Toxadocia violacea. Am. Zool. 7:738-739, 1966.
2. **Dormer KJ**: A stimulation-recording technique for evaluating binaural sound processing in porpoises. IEEE Trans. Biomed. Eng. 21(5):399-405, 1976.
3. **Dormer KJ** and Stone HL: Cerebellar pressor response in the dog. J. Appl. Physiol. 41:574-580, 1976.
4. **Dormer KJ**, Foreman RD and Stone HL: Glutamate-induced fastigial pressor response in the dog.

- Neuroscience 2:577-584, 1977.
5. **Dormer KJ**, Denn M and Stone HL: Cerebral blood flow during voluntary diving in California Sea Lions (*Zalophus Californianus*) Comp. Biochem. Physiol. 58A:11-18, 1977.
 5. **Dormer KJ** and Stone HL: The effect of clonidine on the fastigial pressor response in dogs. J. Pharm. Exp. Ther. 205:(1):212-220, 1978.
 6. **Dormer KJ**: The mechanism of sound production and air recycling in Delphinids: Cineradiographic evidence. Journal Acoust. Soc. Am. 65:229-239, 1979.
 7. Foreman R, **Dormer KJ**, Ohata C and Stone HL: Neural control of the heart during arrhythmias and exercise. Fed. Proc. 39:2519-2525, 1980.
 8. **Dormer KJ**: Technique for the surgical implantation of solid-state pressure transducers. Medical Electronics. Oct. pp. 69-75, 1980.
 9. **Dormer KJ**, Richard G, Hough J.V.D. and Hewett T: The cochlear implant (auditory prosthesis) utilizing rare earth magnets. Am. J. Otology. 2(1):22-27, 1980.
 10. **Dormer KJ** and Stone HL: Interaction of the fastigial pressor response and depressor response to nasal perfusion. J.A.N.S. 2:269-280, 1980.
 11. Stratton R, **Dormer KJ** and Zeiner AR: The cardiovascular effects of ethanol and acetaldehyde in exercising dogs. Alcoholism: Clinical and Experimental Research. 5(1):56-63, 1981.
 12. **Dormer KJ**, Richard G, Hough JVD and Nordquist R: The use of rare-earth magnetic couplers in cochlear implants. Laryngoscope 91(11):1812- 1820, 1981.
 13. **Dormer, KJ**, Foreman, RD and Ohata CA: Fastigial nucleus stimulation and excitatory spinal sympathetic activity in the dog. Am. J. Physiol. 243(1):R25-R33, 1982.
 14. Hough JVD, McGee M, **Dormer KJ**, Richard G, Guthrie G, Waterfall K, Engleman LL, Shafer A: The cochlear implant - Oklahoma group experience to date. Laryngoscope 92(8):863-872, 1982.
 15. Lutherer LO, **Dormer KJ**, Janssen HF and Lutherer BC: Role of the fastigial nucleus in recovery of arterial pressure during hemorrhagic or endotoxin-induced hypotension. Brain Research 269:251-257, 1983.
 16. Andrezik JA, **Dormer KJ**, Foreman RD and Person RJ: Fastigial nucleus projections to the brain stem in beagles: Pathways for autonomic regulation. Neuroscience 11:497-507, 1984.
 17. **Dormer KJ**: Modulation of the cardiovascular response to dynamic exercise by the fastigial nucleus. J. Appl. Physiol. 56(5):1369-1378, 1984.
 18. Stone HL, **Dormer KJ**, Foreman RD, Thies R and Blair RW: Cardiovascular system and neural regulation during exercise. Fed. Proc. 44(2):2271- 2278, 1985.
 19. Braggio JT and **Dormer KJ**: Effects of fastigial nucleus stimulation on behavior and cardiovascular parameters in freely moving dogs. Physiological Psychology 13(2): 80-85, 1985.
 20. Braggio JT and **Dormer KJ**: Classical conditioning of the arterial pressor response in a dog. Psychological Reports. 57:527-533, 1985.
 21. **Dormer KJ**, Andrezik JA, Person RJ, Braggio JT and Foreman RD: Fastigial nucleus cardiovascular responses and brain stem lesions in the beagle. Am. J. Physiol. 250 (Heart Circ. Physiol. 19):H231-H239, 1986.
 22. **Dormer KJ**, Richard G, McGee M, Hough JVD and Shew R: An implantable hearing device: osseointegration of a titanium-magnet temporal bone stimulator. Am. J. Otology 7(6):399-408, 1986.
 23. Hough JVD, Vernon J, Johnson B, **Dormer K**, Himelick T, McGee M, Richard G, Meikle M, Phillips M and Over S: Our experiences with hearing devices and a presentation of a new device. Annals of Otol. Rhinol. Laryngol. 95(1):60-65, 1986.
 24. Person RJ, Andrezik JA, **Dormer KJ**, Foreman RD: Fastigial nucleus projections in the midbrain and thalamus in dogs. Neuroscience 18(1):105-120, 1986.
 25. Ashrafzadeh AR, Cheung JY and **Dormer KJ**: Multidimensional transducers for pulsed Doppler ultrasound, a new sensor model for quantitative analysis and image processing. IEEE Transactions

- on Ultrasonic Ferroelectrics and Frequency Control (May, 1986).
- 26 Cheung JY, Ashrafzadeh AR and **Dormer KJ**: Determining stenosis in turbulent blood flow using a dual-transducer pulsed Doppler ultrasound system. *IEEE Ultras* 34(3):391, 1986.
- 27 Person RJ, **Dormer KJ**, Bedford TG: Fastigial modulation of medullary parasolitary neurons. *Neuroscience* 19(4):1293-1301, 1987.
- 28 Hough, JVD, Vernon J, Himelick T, Meikel M, Richard G and **Dormer KJ**: A middle ear implantable hearing device for controlled amplification of sound in the human - A Preliminary Report. *Laryngoscope* 92(2):141- 151, 1987.
- 29 **Dormer KJ** and Phillips MA: Auditory Protheses: Implantable and vibrotactile devices. *IEEE Eng. in Med. and Biol.* 6(2):36-41, 1987.
- 30 Patterson E, **Dormer KJ**, Scherlag BJ and Lazarra R: Long-term intracoronary administration of ethanol: electrophysiologic and morphologic effects in the dog. *Alcohol* 4:375-384, 1987.
- 31 Cheung JY, Ashrafzadeh AR, and Dormer KJ: Measuring turbulent flow characteristics using a multidimensional ultrasonic probe. *Ultrasonics Intl. Conf. Proc.*, pp. 882-887, July 6-9, 1987.
- 32 Ashrafzadeh AR, Cheung JY, **Dormer K**: In-vivo and in-vitro measurements of turbulent blood flow characteristics by using a multi-dimensional ultrasound probe. *Acoustical Imaging, SONOSCAN & IEEE Ultrasonic Ferroelectric and Frequency Control Society*, June 1987.
- 33 Herbst CP, **Dormer KJ**, Brackett DJ, Wilson MF, Barkan B and Burow RD: Digitizing and signal averaging of left ventricular pressure signals using a dedicated radionuclide imaging system. *Eur. J Nucl. Med.* 13:338-342, 1987.
- 34 Bedford TG and **Dormer KJ**: Arterial hemodynamics during head-up tilt in the conscious dog. *Am J. Physiol.* 65(4):1556-1562, 1988.
- 35 Fishburne JI, Jr., **Dormer KJ**, Payne GG, Prabhcharan SG, Ashrafzadeh AR and Rossavik IK: Effects of amrinone and dopamine on uterine blood flow and vascular responses in the gravid baboon. *J. Obstet. Gyn.*, 158(4):829-837, 1988.
- 36 Ashrafzadeh AR, Cheung JY and **Dormer KJ**: Analysis of velocity estimation error for a multidimensional Doppler Ultrasound System. *Trans. Ultrasonics, Ferroelectrics and Frequency Control.* 35(5):536-545, 1988.
- 37 Hough J, **Dormer KJ**, Baker RS, Meikle M, Himelick T: A middle ear implantable hearing device: ongoing animal and human evaluation. *Annals Otol. Rhinol. Laryng.* 97(6):650-658, 1988.
- 38 **Dormer KJ**, Person RJ, Andrezik JA, Foreman RD and Braggio JP: Rostral ventrolateral medulla: Electrolytic lesions and kainic acid effects on the fastigial nucleus cardiovascular response. *Am. J. Physiol.*, 256:H1200-H1208, 1989.
- 39 Ashrafzadeh AR, **Dormer KJ**, Cheung, JY: A two-dimensional Doppler ultrasonic probe for flow measurement. *Biomedical Instrumentation and Technology.* 23:301-307, 1989.
- 40 Payne GG, Jr., Fishburne JI, Jr., **Dormer KJ** and Rossavik IK: Cardiovascular hemodynamic effects of amrinone and dopamine in the gravid baboon. *J. Matern. Fetal Med.*, 1:33-38, 1992.
- 41 Yan JL, **Dormer KJ**, Ratliff RA and Egle DM: An exploration of the application of piezoresistive accelerometry to physical activity measurement. *Chinese J. of Biomedical Engineering*, 11(4):271-278, 1992.
- 42 Ratliff RA, **Dormer KJ**, Yan JL, Egle DM and Roberts LS: Methods for measuring human physical activity by piezoresistive accelerometry. *Behav. Res. Methods Inst. Computers.* (In Press, 1993).
- 43 **Dormer KJ**, Anwar M, Ashlock SR and Ruggiero DA: Organization of presumptive catecholamine-synthesizing neurons in the canine medulla oblongata. *Brain Res.*, 601:41-64, 1993.
- 44 Hough JH, Wilson N, **Dormer KJ**, and Rohrer M: The Audiant Bone ConductorTM: An update of North American patients. *Am. J. Otol.*, 15(2):189-197, 1994.
- 45 Christianson VJ, Hsu CH, **Dormer KJ** and Robinson CP: The cardiovascular effects of ricin in rabbits. *Pharmacology and Toxicology* 74:148-152, 1994.

- 46 Stith RD and **Dormer KJ**: Pressor and endocrine responses to lesions of canine rostral ventrolateral medulla. *Am. J. Physiol.* 266:(Heart Circ. Physiol. 35):H2520-H2526, 1994.
- 47 Schneider ML, Walker GB, **Dormer KJ**: Effects of magnetic resonance imaging on implantable permanent magnets. *Am. J. Otol.* 16(5):687-689, 1995.
- 48 Gan RZ, Wood MW, Ball GR, Dietz TG and **Dormer KJ**: Implantable hearing device performance measured by laser Doppler interferometry. *ENT-Ear, Nose & Throat J.* 76(5):297-309, 1997.
50. **Dormer KJ** and Kinoti G: Research and development in developing countries. Perspectives on science and Christian faith. 51(3):146-157, 1999.
51. **Dormer KJ**, Dennis M, Baker RS and Katz B: Residual hearing is not affected by middle ear implantable hearing device in the bovine model. *Am. J. Otology* (accepted for publication, 1999).
52. Gan RZ, Sun Q, Wood MW, Chang KH and **Dormer KJ**: Middle ear mechanics, finite element modeling and human temporal bone studies. *Proc. 1999 Bioengineering Conf.*, (Goal VK, Spilker RL, Ateshian Gaand Soslowsky LJ (eds). *BED- Vol.42:237-238,1999.*
53. **Dormer KJ** and Whaley PA: Cochlear implantation in children. *Ethics & Medicine.* 16(1):11-14, 2000.
54. Hough JVD, Dyer RK, **Dormer KJ**, Matthews, P, Gan RZ and Wood MW: Middle ear electromagnetic implantable hearing device: Initial clinical results. *Ann. Otol. Rhinol. and Laryngol.*, 2000 (in press).
55. Dyer RK, **Dormer KJ**, Pineda M, Conley K, Saunders J and Dennis M: The Hearing Laser Vibrometer Initial Clinical Results. pp383-397 In The Function and Mechanics of Normal, Diseased and Reconstructed Middle Ears. Eds. Rosowski JJ and Merchant SN. Kugler Publications, The Hague, The Netherlands, 2000.
56. Gan RZ, Dyer RK, Wood MW and **Dormer KJ**: Mass loading on ossicles and middle ear function. *Ann. Otol. Rhin. Laryngol.* 110(5):478-485, 2001.
54. Gan RZ, Sun QL, Wood MW and **Dormer KJ**: Finite element modeling and human temporal bone studies in middle ear mechanics. *Ann. Biomed. Engineering* , 2002.
55. Gan RZ, Sun Q, Dyer RK, Chang K-H and **Dormer KJ**: Three Dimensional Modeling of Middle Ear Biomechanics and its Applications. *Otology & Neurotology*, 23:271-280, 2002.
56. Dyer RK, **Dormer KJ**, Hough JVD, Nakmali U and Wickersham R: Biomechanical Influences of MRI on the SOUNDTEC Direct System™ Implant. *Otol. Head & Neck Surg.*, 2002.
57. Sun Q, Chang KH, **Dormer KJ**, Dyer RK, and Gan RZ: An Advanced Computer-Aided Geometric Modeling and Fabrication Method for Human Middle Ear. *Medical Engineering & Physics* 24:596-606, 2002.
58. Sun Q, Gan RZ, Chang K-H, and **Dormer KJ**: Computer integrated finite element modeling of human middle ear. *Biomechanics and Modeling in Mechanobiology.* 1:109-122, 2002.
59. Gan RZ, Wood MW and **Dormer KJ**: Human middle ear transfer function measured by double laser interferometry system. *Otology & Neurotology* 25: 423-425, 2004.
60. **Dormer KJ**, Seeney CE, Lewelling K, Lian G, Dibson D, and Johnson M: Internalization of nanoparticles in middle ear epithelium and response to external magnetic field. *Biomaterials* 26(14):2061-2072, 2004.

ABSTRACTS

- 1 **Dormer KJ**: The method of sound production in *Stenella Longirostris* as elucidated by

- cineradiography. 53rd Ann. Conf. Am. Soc. Mammalogists, Monterey, CA, 1973.
- 2 **Dormer KJ** and Stone HL: Heart rate and contractility changes with cerebellar stimulation. *Physiologist* 18(3):193, 1975.
- 3 **Dormer KJ** and Stone HL: Cerebellar pressor response in the dog. *Soc. for Neurosci.*, No. 665, p. 529, 1975.
- 4 **Dormer KJ** and Stone HL: Cardiovascular responses to cerebellar stimulation in the conscious dog. *Federation Proceedings* 35(3):445, 1976.
- 5 Foreman RD, **Dormer KJ**, Stone HL and Willis WD: Effects of glutamate on the pressor response originating from the fastigial nucleus of dogs. *Federation Proceedings* 35(3):445, 1976.
- 6 **Dormer KJ** and Stone HL: Simultaneous cerebellar pressor and dive responses in the anesthetized dog. *Soc. for Neurosci.*, No. 154, p. 109, 1976.
- 7 **Dormer KJ** and Stone HL: Clonidine attenuation of the cerebellar pressor response in dogs. *Federation Proceedings* 36(3):421, 1977.
- 8 **Dormer KJ** and Stone HL: Cerebellar effects on cardiovascular control during rest and exercise in conscious dogs. *XXVII Intl. Congress Physiol. Proc. (Paris)* 13:191, 1977.
- 9 **Dormer KJ**, Foreman RD, Ohata CA and Dowell RT: Descending pressor pathways emanating from the fastigial nucleus of the cerebellum. *Federation Proceedings* 37(3):744, 1978.
- 10 **Dormer KJ**, Foreman RD and Ohata CA: Role of arterial baroreceptors and effects of hypotensive agent clonidine on cerebellar activated sympathetic nerves. *Physiologist* 21(4):29, 1978.
- 11 Ohata CA, **Dormer KJ**, Foreman RD and Kem DC: Effect of fastigial nucleus stimulation on plasma renin activity. *Physiologist* 21(4):86, 1978.
- 12 Ohata CA, Foreman RD and **Dormer KJ**: Influence of the descending fastigial pressor pathway on splanchnic preganglionic fibers. *Fed. Proc.* 3(3):1321, 1979.
- 13 **Dormer KJ**: Noninvasive Doppler and implantable pressure transducer verification of sustained elevated arterial pressure in selected beagles. *Fed. Proc.* 37(3):744, 1979.
- 14 **Dormer KJ**: Noninvasive Doppler and implantable pressure transducer techniques for the study of hypertension in dogs. *Proc. Am. Lab. Assn. Lab. Animal Sci. (Texas Branch)* May, 1979.
- 15 **Dormer KJ**: Hypertensive effects of cerebellar lesions in fastigial nucleus. *Soc. Neurosci. Abstr.* 5:41, 1979.
- 16 Ohata CA, Foreman RD and **Dormer KJ**: Multiple spinal pathways descending from the fastigial nucleus. *Soc. Neurosci. Abstr.* 5:48, 1979.
- 17 Brown EH, **Dormer KJ** and Christianson HD: Cardiovascular response to caffeine in exercising dogs. *Fed. Proc.* 39(3):288, 1980.
- 18 **Dormer KJ** and Brown EH: The importance of the fastigial nucleus and the results of stimulation and lesions of fastigial nucleus in exercising dogs. *Fed. Proc.* 39(3):842, 1980.
- 19 **Dormer KJ** and Brown EH: Harmaline induced autonomic changes from the cerebellum in conscious dogs. *Soc. Neurosci. Abstr.* 6:163, 1980.
- 20 Stratton R, Gwartz P and **Dormer KJ**: Acetaldehyde-induced coronary vasodilation in conscious dogs. *Fed Proc.* 40(3):729, 1981.
- 21 **Dormer KJ**, Stratton HT and Mousissian G: Exercise following prolonged exposure to alcohol in conscious dogs. *Fed Proc.* 40(3):799, 1981.
- 22 **Dormer KJ**, Richard G, Hough JVD and Nordquist R: Rare earth magnetic couplers in the cochlear implant. Presented to the middle section of the American Society of Otolaryngology, Rhinology and Laryngology, Jan. 24, 1981, Oklahoma City.
- 23 **Dormer KJ**: Reduction of the harmaline cardiovascular response by diazepam administered in the cerebellum. *Soc. Neurosci. Abstr.* 7:821, 1981.
- 24 Andrezik JA, **Dormer KJ**, Foreman RD and Gower MD: Fastigial nucleus projections to the brain stem in beagles. *Fed. Proc.* 41(5):1517, 1982.

- 25 Lutherer BC, **Dormer KJ**, Janssen HF and Lutherer LO: Demonstrated role of fastigial nucleus in recovery of mean arterial pressure (MAP) during hemorrhagic or endotoxin-induced hypotension. Fed. Proc. 41(5):1516, 1982.
- 26 **Dormer KJ**, Foreman RD, Andrezik JA and Person RJ: Brain stem lesions modulate the fastigial nucleus pressor response in anesthetized beagles. Soc. Neurosci. Abstr. 8:270, 1982).
- 27 Person RJ, **Dormer KJ** and Andrezik JA: Ascending fastigial projections in the beagle. Soc. Neurosci. Abstr. 8:76, 1982.
- 28 **Dormer KJ**, Andrezik JA, Person RJ, Braggio J, Foreman RD and Treas KD: Lesions in ventral medullary chemosensitive region block fastigial nucleus (FN) sympathoexcitation in beagles. Fed. Proc. 42(5):1121, 1983.
- 29 Person RJ and **Dormer KJ**: Fastigial pressor response in the mongolian ferret. Fed. Proc. 42(5):1121, 1983.
- 30 **Dormer KJ**, Mahnken R, Watrous B and Goforth L: Ventricular arrhythmias resulting from intracoronary alcohol infusion in dogs. Physiologist 26(4) A91, 1983.
- 31 Robinson C and **Dormer KJ**: Norepinephrine effects on isolated coronary and other arteries from aged, colony-bred beagles. The Pharmacologist 25:843, 1983.
- 32 Braggio JT and **Dormer KJ**: Effects of fastigial nucleus stimulation and cardiovascular parameters in the free-moving dog. Soc. Neurosci. Abstr. 9(2):1057, 1983.
- 33 Person R, **Dormer KJ**, Bedford TG and Andrezik JA: Fastigial projections to solitary and "A5" areas of the dog. Fed. Proc. 43(4):425, 1984.
- 34 Patterson E and **Dormer KJ**, Scherlag BJ and Lazarra R: Mechanisms of ventricular tachycardia in the dog heart after chronic intracoronary ethanol infusions. Fed. Proc. 43(4):809, 1984.
- 35 Bedford TG and **Dormer KJ**: Influence of cerebellar lesions in arterial blood pressure response to head-up tilt in conscious dogs. Fed. Proc. 44(5):1728, 1985.
- 36 Williams N, Bedford TG and **Dormer KJ**: A percutaneous skin button method for chronic pressure measurement in the rat. Fed. Proc. 44(4):1197, 1985.
- 37 **Dormer KJ**: Exercise performance after chronic intracoronary ethanol infusion in dogs. Fed. Proc. 44(5):1482, 1985.
- 38 Ashrafzadeh A, Cheung J, Bedford T and **Dormer KJ**: Dual transducer pulsed-doppler ultrasound (DTP-DU) and its application in measuring the doppler angle and blood flow velocity. Fed. Proc. 44(5):1565, 1985.
- 39 Bedford TG, Person RJ and **Dormer KJ**: Electrophysiological analysis of the fastigial nucleus (FN): A nucleus involved in the cardiovascular response to exercise. Physiologist 28(4):276, 1985.
- 40 Ashrafzadeh AR, Cheung JY and **Dormer KJ**: A new technique for measuring laminar and turbulent blood flow characteristics in in-vivo and in-vitro experiments. Association for the Advancement of Medical Instrumentation, p. 9, April, 1986.
- 41 Ashrafzadeh AR, Cheung JY and **Dormer KJ**: Dual transducer pulsed Doppler ultrasound and its applications in measuring blood flow velocity in laminar and turbulent regions of the blood. American Institute of Ultrasound in Medicine 5(9):78, Sept. 1986.
- 42 Bedford TG and **Dormer KJ**: Head-up tilt in conscious dogs as a model for orthostatic responsiveness. Fed. Proc. 45(3):644, 1986.
- 43 **Dormer KJ**, Bedford T, Herbst C and Wilson M: Multiple gated acquisition (MUGA) nuclear blood pool imaging in the dog compared to pulse transit time flow measurements. Fed. Proc. 45(4):782, 1986.
- 44 Herbst C, **Dormer K**, Sung BH, Brackett DJ, Barkan B, Burow R and Wilson MF: Pressure-volume relations using radionuclide cardiac imaging. Fed. Proc. 45(4):778, 1986.
- 45 Ashrafzadeh AR, Cheung JY and **Dormer KJ**: Determining percentage of stenosis through turbulent blood flow characteristics using dualtransducer pulsed Doppler ultrasound. IEEE Proc Sonics and

- Ultrasonics (In press, 1986).
- 46 Cushing T, Konigsberg E., **Dormer KJ**, Ratliff R and Ashrafzadeh AR: Multichannel human telemetry
system for thermoregulatory, cardiovascular and activity monitoring. Fed. Proc. 46(3):676, 1987.
- 47 **Dormer KJ** and Ashlock SR: Rostral ventrolateral medulla (RVL) affects cardiovascular control in the
conscious dog. Fed. Proc. 46(3):494, 1987.
- 48 Cheung J, **Dormer KJ** and Ashrafzadeh AR: In-vivo and in-vitro measurements of turbulent blood
flow characteristics using a multidimensional ultrasonic probe. 16th Intl. Symp. Acoustical
Imaging, 1987.
- 49 **Dormer KJ**, Wilson MF, Ashlock SR, and Brackett DJ: Orthostatic and hypoxia challenge deficits
following rostroventrolateral medullary lesions in dogs. Soc. Neurosci. Abst. 13(1):276, 1987.
- 50 **Dormer KJ**, Ratliff RA, and Vandever RJ: The efficacy of using selected physiological and
biophysical data via a FM-biotelemetry-microcomputer system to identify "at risk" subjects exposed
to potential thermoregulatory distress. Presented at Central State's American College of Sports
Medicine Meeting, Fayetteville, AR, October 28-30, 1987.
- 51 **Dormer KJ**, Ratliff RA, Cushing T, and Konigsberg E: Human temperature and heart rate telemetry
during exercise. FASEB J. 2(4):522, 1988.
- 52 **Dormer KJ**, Ratliff R, Egle D, Liu P, Leigh P, and Bassett B: Multichannel human telemetry real time
data analysis for simultaneous monitoring of accelerations, heart rate and body core temperature.
Am. College Sports Medicine - Central States. October, 1988.
- 53 **Dormer KJ**, Ruggiero DA, Anwar M, and Ashlock SR: Functional mapping of the canine rostral
ventrolateral medulla with L-glutamate and phenylethanolamine n-methyltransferase
immunohistochemistry. Soc. Neurosci. Abst. 14(1):191, 1988.
- 54 **Dormer K**, Ratliff R, and Ashlock SR: Comparison of body core temperature measures with
swallowable telemetry pill and rectal probe during exercise. FASEB J. 3(4): A990, 1989.
- 55 Roberts L, Ratliff R, Yan Y, **Dormer K**, Egle D, and Palmer M: Prediction of energy expenditure by a
biaxial accelerometry and heart rate model. American College of Sports Medicine - Central States,
1990.
- 56 **Dormer KJ**, Stith RD, Papka RE, and Sved AF: Rostral ventrolateral medullary (RVL) lesions affect
plasma catecholamines in the conscious dog. Soc. Neurosci. Abst. 16(1):552, 1990.
- 57 Morgan MA, Silavin SL, **Dormer KJ**, Fishburne BC, Fishburne JI Jr.: Effects of labetalol on uterine
blood flow and cardiovascular hemodynamics in the hypertensive gravid baboon. VII World Cong.
Hypertension in Pregnancy, Perugia, Italy, 7-11 Oct. 1990.
- 58 **Dormer KJ** and Ashlock S: Tachypnea with blood pressure reduction following lesion in rostral
ventrolateral medulla (RVL) of instrumented dogs. FASEB J. 5(4):A665, 1991.
- 59 Herrmann R, **Dormer KJ** and Price M: The Institute for African Research and Development. FASEB
J. 5(5):A1029, 1991.
- 60 Knighton R, **Dormer KJ** and Koop CE: Reader's Digest international fellowships: A learning/teaching
opportunity for senior medical and public health students. FASEB J. 5(5):A1029, 1991.
- 61 Cheung JY, Li Z-X, Kung F and **Dormer KJ**: A digital hearing aid simulator based on the TMS32010.
Proc. Texas Instruments Educators Conference. pp. 111-121, September, 1991.
- 62 Paulsen SM, **Dormer KJ**, Farber JP and Ashlock SR: Lesions in canine rostral ventrolateral medulla
(RVLM) decrease arterial pressure but either increase or decrease respiratory rate. FASEB J.
6(5):A1756, 1992.
- 63 Ratliff R, Egle D, **Dormer K**, Yan J and Roberts L: Comparison of the caltrac and pams accelerometry
instruments as measures of energy expenditure during walking. Medicine & Science in Sports &
Exercise. Vol. 24:590, 1992.
- 64 **Dormer KJ** and Ashlock SR: Central command is aided by the RVLM (rostral ventrolateral medulla) in
the dog. The Physiologist 35(4):240, 1992.

- 65 **Dormer KJ** and Ashlock SR: Cardiovascular response to treadmill exercise is supported by the rostral ventrolateral medulla (RVLM) in the conscious dog. Soc. Neurosci. Abst. 18, Part II, p. 1186, 1992.
- 66 **Dormer KJ** and Ratliff RA: Ingestible temperature telemetry pills and body core measurements. Am. Coll. Sports Med. Central States, Kansas, October 1992.
- 67 Silfer JA, Barron KW, Garner RP, Miller KE and **Dormer KJ**: Effects of tuned laser illumination of chromophore-labelled neurons in the brain stem of the rat. FASEB J. 7(4):A627, 1993.
- 68 Barron KW, **Dormer KJ** and Miller KE: Selective in vitro enzyme inactivation by tuned laser light in the rat brainstem. FASEB J. 8:A333, 1994.
- 69 Clifford PS and **Dormer KJ**: Rostral ventrolateral medulla mediates cardiovascular reflexes from chemosensitive receptors. FASEB J. (8):A602, 1994.
- 70 Richard GA and **Dormer KJ**: A microcomputer software database for archiving and sharing cochlear implant patient information. Intl. Cochlear Implant Symp., Melbourne, Australia, 1994.
- 71 Clifford PS, Mittelstadt SW and **Dormer KD**: Neurons in the C1 area of the rostral ventrolateral medulla are necessary for the arterial chemoreceptor pressor reflex. Soc. Neurosci. Abst. Vol 20, Part 2, p. 1182, 1994.
- 72 Hsu C.-H, Christiansen VJ, **Dormer KJ**, and Robinson CP: The effects of ricin on cardiovascular responses of rabbits. XII Congress of Pharmacology Abstracts, Can. J. Physiol. Pharmacol., 72, Suppl 1, 1994.
- 73 Clifford PS, Mittelstadt SW and **Dormer KJ**: Hypoxic pressor response is dependent on neurons in the C1 area of the rostral ventrolateral medulla. IX Int. Symp. on Hypoxia and Mountain Medicine, McMaster University Canada, 14-18 February, 1995.
- 74 Clifford PS and **Dormer KD**: Rostral ventrolateral medulla mediates cardiovascular reflexes from chemosensitive receptors. FASEB J. 9(3):A427, 1995.
- 75 **Dormer KJ**, Cates SR, Jones SM and Brooks RR: Inotropy and tolerance of LNF-209 and digoxin in conscious instrumented normal mongrel dogs. FASEBJ. 10(3):A428, 1996.
- 76 **Dormer KJ**, Ball G, Dietz T and Gan RZ: Laser Doppler interferometry: a proposed standard for testing of implantable hearing devices. 2nd Intl. Symposium on Electronic Implants in Otolology, Goteburg, Sweden, April 2-5, pg. 4, 1996.
- 77 Gan RZ, Nakmali D, Richard G, Matthews P, and **Dormer K**: In vitro testing of middle ear implantable hearing devices. FASEB J. 10(3):A387, 1996.
- 78 Dyer Jr. RK, Collier MA, **Dormer KJ**, Gan RZ: Evaluation of the audiant none conductor using laser Doppler interferometer. 2nd Intl. Symposium on Electronic Implants in Otolology, Goteburg, Sweden, April 2-5, Pg. 9, 1996.
- 79 Baker RS, **Dormer KJ**, Dennis M and Katz B: The neonatal bovine ear as a potential model for developing human implantable hearing devices. 2nd Intl. Symposium on Electronic Implants in Otolology, Goteburg, Sweden, April 2-5, 1996.
- 80 Muueller PJ, **Dormer KJ**, Zuperku EJ, Buckwalter JB and Clifford PS: NMDA or AMPA receptor activation in the rostral ventrolateral medulla produces bronchoconstriction. Soc. Neurosci. Abst. 22(2): 1996.
81. Gan RZ, **Dormer KJ** and Kotake Y: Detection of free radicals in pulmonary circulation by using ESR spin trapping method. FASEB J. 13(4):A503, 1999.
82. Gan RZ, Sun Q, Wood MW, Chang K-H and **Dormer KJ**: Middle ear mechanics, finite element modeling and human temporal bone studies. Proceedings 1999 Bioengineering Conference (VK Goal, RL Spiker, GA Ateshian, LJ Soskowsky, eds) BED 42:237-238, 1999.
83. Gan RZ, Sun Q, Dyer RK, Wood MW and **Dormer KJ**: Finite element modeling and human temporal bone structures in middle ear mechanics. Harvard University Oct 21-24, 1999 2nd Intl Symposium on Middle Ear Mechanics and Research in Otosurgery, p 2.
84. Gan RZ, Dyer RK, Wood MW and **Dormer KJ**: Effect of mass loading in ossicles on middle ear

- function. 2nd Intl Symposium on Middle Ear Mechanics and Research in Otosurgery, Boston, p 52, 1999.
85. **Dormer KJ**, Dyer RK, Sanders J, Goode R, Dennis M and Pineda M: Laser Doppler interferometry in clinic. Harvard University Oct 21-24, 1999 2nd Intl Symposium on Middle Ear Mechanics and Research in Otosurgery.
 86. Dyer RK, Hough J, Matthews P, **Dormer K** and Wood M: Implantable electromagnetic hearing device, initial clinical results. Harvard University Oct 21-24, 1999 2nd Intl Symposium on Middle Ear Mechanics and Research in Otosurgery.
 87. Gan R and **Dormer KJ**: Nitric oxide involvement in delayed vasodilation of dog lungs perfused with hemoglobin solution. FASEB J. 14(4): A124, 2000.
 88. Gan RZ, Wood MW, Dyer RK and **Dormer KJ**: In vitro testing of middle ear implantable hearing devices by laser interferometry. 3rd Intl. Symp. Electronic Implants in Otology & Conventional Hearing Aids, 3.7.3, pg. 68, Birmingham, UK, June 2000.
 89. **Dormer KJ** and Gan RZ: Biomaterials in middle ear implants. 3rd Intl. Symp. Electronic Implants in Otology & Conventional Hearing Aids. (Poster) Birmingham, UK, June 2000.
 90. Gan R, Sun Q, Wood M, Chang K-H and Dormer K: Middle ear transfer function measured by dual laser Doppler interferometry in human temporal bones. Assoc. for Research in Otolaryngology-2000 Midwinter Meeting. Feb 20-24, 2000. St. Petersburg, FL.
 91. Gan R, Sun Q, Chang KH, Dyer RK, and Dormer K: 3-D Finite element modeling of human middle ear with temporal bone histology. Ann. Biomed. Engn. 28(Supp) 2000.
 92. Gan RZ, Wood MW and **Dormer, KJ**: Middle ear transfer function measured by dual laser Doppler interferometry in human temporal bones. Assn. Res. Otolaryngol. Abstr. 23:115, 2000.
 93. Gan RZ, Wood MW, Dyer RK, Sun Q and Dormer KJ: Implantable middle ear device validation in temporal bones. FASEB J.15 (5): LB41, 2001.
 94. **Dormer KJ**, Gan RZ and Santo R. Middle ear titanium transducer.6th World Biomaterials Congress. Abst . 1272, Kona, HI, 2000.
 95. Gan RZ, Sun Q, Dyer RK and Dormer KJ: Three Dimensional Modeling of Middle Ear Biomechanics and its Applications. Combined Otorhinolaryngological Spring Meeting (COSM) May 11-13, Palm Desert CA ; pg.10 ,2001.
 96. Gan RZ, Wood MW and **Dormer KJ**: Middle ear biomechanics using double laser interferometry. Ann. Biomed. Engn. Soc. 2001.
 97. Gan RZ, Nakmali D, Madaffari P and **Dormer KJ**: Preliminary study: Microphone of totally implantable hearing system. Ann. Biomed. Engn. Soc. 2001.
 98. **Dormer KJ**, Gan RZ, Wood MW. Middle ear biomechanics using double laser interferometry. FASEB J (16) 4, A xxx,2002.
 99. Dyer, RK, Nakmali D, **Dormer KJ**: Biomechanical Influences of MRI on the SOUNDTEC implant. Amer. Acad. Otolaryng.-Head & Neck Surgery, Annual Meeting, 2002.
 100. **Dormer KJ**, Seeney CE and Kotov NA: Nanoparticles for targeted magnetic cardiac therapy. FASEB J 17(4):A144, 2003.
 101. **Dormer KJ**, Jackman W, Mamedov A, Kotov NA, Mondalek F: Nanoparticles for targeted magnetic cardiac therapy. Univ. Texas SPRING Conference, TX Nanotechnology Foundation, 25-26 August, Dallas, TX
 102. **Dormer KJ**, Seeney CE, Lewelling K, Lian G, Gibson D, and Johnson M: Internalization of nanoparticles in middle ear epithelium and response to external magnetic field: Generation of force. Assn. Res. Otolaryngology, Spring 2004 (abstract)
 103. **Dormer KJ**, Seeney CE, Lewelling K, Lian G, Gibson D, and Johnson M: Internalization of nanoparticles in middle ear epithelium and response to external magnetic field: Generation of force. Nanotechnology 2004, 1:19-22, 2004.

104. Mamedova N, Seeney C and **Dormer KJ**. VIIth Intl. Meeting of Scientific & Clinical Applic. of Magnetic Carriers, Lyon, France, May 17-22, 2004 (accepted, not presented)
105. **Dormer KJ**, Seeney C, Lewelling K, Lian G, Gibson D, Johnson M: Epithelial internalization of nanoparticles in response to external magnetic field. *FASEB J* 18(4):late breaking abstract 464,A 95, 2004 .
106. Lian G, Lewelling K, Johnson M, Gibson D, **Dormer KJ** and Seeney C: Fe₃O₄ magnetite nanoparticles coated by silica for biomedical applications. *Microscopy and Microanalysis*, 2004.
107. Maamedova, N, Kopke R, Liu J, Jackson R, Costello M, Gibson D and **Dormer KJ**: Feasibility of superparamagnetic nanoparticles for drug delivery to the inner ear. *Association for Res. Otolaryngology* 2005, Abstr. # 48 p 6.

BOOK CHAPTERS AND OTHER PUBLICATIONS

- 1 Norris KS, **Dormer KJ**, Pegg J and Liese GL: The mechanism of sound production and air recycling in porpoises: a preliminary report. *Proc. 8th Ann. Conf. on Biological Sonar and Diving Mammals* (Stanford Research Institute), pp. 33-41, 1971.
- 2 **Dormer KJ**, Denn M and Stone HL: Cerebral and cardiovascular adjustments to diving. *Proc. of Marine Mammal Conf.*, Santa Cruz, CA, 1975.
- 3 **Dormer KJ**: Elements of Marine Ecology. *Archives of Environmental Health* (book review) 31(2):54, 1976.
- 4 **Dormer KJ** and Stone HL: The fastigial nucleus and its possible role in the cardiovascular response to exercise. In: *Circulation, Neurobiol. and Behav.*, O.R. Smith, R. Galosy and S. Weiss, ed., Elsevier, pp 201-216, 1982.
- 5 **Dormer KJ**: Technical Report. Johns Hopkins University, Applied Physics Laboratory, NASA Goddard Space Flight Center. "Ingestible Telemetry Systems", January 7, 1988, workshop.
- 6 **Dormer KJ** and Bedford TG: Cardiovascular control by the rostral ventrolateral medulla in the conscious dog. In: *Progress in Brain Research*, Vol. 81. The Central Neural Organization of Cardiovascular Control. pp. 265-281, Elsevier, Amsterdam, 1989.
- 7 McHale P, and **Dormer KJ** : Cardiovascular Physiology. In: Oklahoma Notes -Physiology. Thies R (Ed). Springer Verlag, NY, 1989, 1992, 1995.
- 8 Hough JH, Vernon J, Johnson B, **Dormer KJ** and Himelick T: Experiences with implantable hearing devices and a presentation of a new device. In: *Seminars in Hearing*, Thieme Medical Publishers, Inc., New York, NY, Vol. 13, pp 275-282, 1992.
9. **Dormer KJ**, Bryce GE and Hough JVD. Selection of Biomaterials for Middle and Inner Ear Implants, pp 17-27. In. Maniglia, A (ed): *Implantable Hearing Devices: State of the Art.*: Otolaryngologic Clinics of North America. Vol. 28(1) Feb 1995
10. Ravindran R, Schlegel R, Grant H, Matthews P, **Dormer KJ** and Scates P: Electromagnetic interference to hearing aids from wireless phones. Research Report to the Hearing Aid Industry of America, July, 1996.
11. Hough J, Dyer R, **Dormer KJ**, Matthews P, Gan R, and Wood M: Middle Ear Electromagnetic Implantable Hearing Device-Initial Clinical Results. In: *The Function and Mechanics of Normal, Diseased and Reconstructed Middle Ears. Proceedings of the 2nd International Symposium on Middle Ear Mechanics in Research and Otosurgery held in Boston MA, Oct. 21-24, 1999*. J. Rosowski and S. Merchant (eds). Kugler Publications, Netherlands, pp 353-366, 2000.
12. Dyer R, **Dormer KJ**, Pineda M, Conley K, Saunders J, and Dennis M: The Hearing Laser Vibrometer-Initial Clinical Results. In: *The Function and Mechanics of Normal, Diseased and Reconstructed Middle Ears*. Proceedings of the 2nd International Symposium on Middle Ear Mechanics in Research and Otosurgery held in Boston MA, Oct. 21-24, 1999. J. Rosowski and S. Merchant (eds).

Kugler Publications, Netherlands, pp 383-397,2000.

13. **Dormer KJ** and Gan RZ: Biomaterials for Implantable Middle Ear Hearing Devices. In: Manigia AJ and Proops PW (eds). *Implantable Electronic Otologic Devices State of the Art*. Otolaryng. Clin. North Am. 34(2): 289-297, 2001.
14. **Dormer KJ**: Implantable Electronic Otologic Devices for Hearing Restoration. In: Finn WE and Lopresti PG (eds.) *Handbook of Neuroprosthetic Research Methods*. CRC Press, Boca Raton, FL, 2003.

PROFESSIONAL SERVICE:

- 2005** Community: Initiated an organ donation program for research on human materials, with LifeShare Organ Transplantation Service, Oklahoma City. Fresh human temporal bones are acquired from donors for biomechanical research on hearing at OU and Hough Ear Institute.
- 2005** Profession: Co-Chair, Symposium, International Union of Physiological Sciences, San Diego, CA, April 2005, Symposium on Bioethics in Physiological Genomics. Co-Chair, Ewald Weibel, PhD, Chair, IUPS Committee on Ethics in Research, Zurich, Switzerland
- 2004/2006** College of Medicine: Member Student Promotions Committee
- 2004/2005** Profession: Chair, FDA Standards Committee on Evaluation of Implantable Middle Ear Hearing Devices, Rockville, MD
- 2004/2005** State: Originator/coordinator: state initiative to create a nanotechnology corridor, linking Houston, Dallas, Oklahoma City (Stillwater, Tulsa) for educational and research interactions.
- 2004** University: Initiated and caused to be enacted the non-penalty (additional indirect cost charges) to faculty on one campus having students doing interdisciplinary research on another campus of OU.
- 2004** Profession: Co-Chairman, international meeting, ASA and CSA Annual Meeting, "Neuroscience and the Image of God", Vancouver, BC, Canada, July 23-27, 2004
- 2003** State: Oklahoma Nanotechnology Initiative, OCR-23, May 2003; Senate Bill 1537 expanded the Science & Technology Research and Development Act to include nanotechnology
- 2003/2006** Profession: American Physiological Society, Founder and Committee Member, Annual Walter C. Randall Lectureship in Biomedical Ethics, Experimental Biology Annual Meeting
- 2003/present** State: Founding Board member, "Oklahomans for Better Science Education"
- 2003** Department: MS Degree-Industry Collaboration Committee
- 2003 /2005** Department: Seminar Coordinator
- 2002/present** College: Co-Faculty Advisor, CMDA OUHSC Student Chapter
- 2002/2005** College: Promotion and Implementation Committee for the Clinical Sciences
- 2002** Community: Oklahoma Baptist University, Panelist Discussant for Morter Board Society Symposium, "Ethics of Stem Cell Research", April 30th, Shawnee, OK.
- 2002** Community: City Rescue Mission. Medical Student Health Fair, volunteer, March 2nd, Oklahoma City
- 2002** State: Oklahoma School of Science and Mathematics: Admissions Review Committee, April 2nd
- 2001-02** State: Facilitator, Oklahoma Student Leadership Forum on Faith and Values, Oklahoma State University, 1-3 Mar, with OK Sen. Don Nickles and OK Cong. Steve Largent.
- 2001/present** Community: Member Bioengineering Advisory Committee, University of Central Oklahoma Dept. of Physics and Engineering; Secretary, 2003
- 2000** State: Facilitator, Oklahoma Student Leadership Forum on Faith and Values, Oklahoma State University, 6-8 Mar, with Cong. Steve Largent and Tom Coburn, MD

2000 University: Site Visit, Center for Bioethics, University of Pennsylvania, Philadelphia, PA, Aug 2-4.

2000/2001 University: Member Bioethics Dept. Task Force (Presbyterian Health Foundation)

2000 Community: Admissions Committee, Okla. School of Science and Mathematics.

1997-2000 Profession: Founder and Selection Committee, Walter B. Randall Lectureship in Biomedical Ethics, American Physiological Society and Taylor University.

1999/2001 College: Member Campus Tenure & Promotion Committee

1999 Community: Judge, Oklahoma City Regional Science and Engineering Fair, March 2nd.

1999 College: Member, Dean's Office, Committee on Committee's

1999/present Community: Member Bioethics Committee, INTEGRIS Baptist Medical Center, Oklahoma City.

1999 Community: Project Originator. 111 Computers sent to each (1) medical school of Africa.

1998 State: Facilitator, Oklahoma Student Leadership Forum on Faith and Values, Tulsa, OK Feb 18-20, with Senator Don Nickles and Cong Steve Largent.

1998 Professional/Community, Organizer, Bioethics CME Workshop "Breathtaking Decisions – Bioethics, Genetics and end-of-life issues, Oct. 16, 17, Oklahoma City, OK

1998/1999 Community: Facilitator, 1998 Oklahoma Student Leadership Forum, Tulsa, OK Feb 6-8.

1998/1999 College: Member Board of Admissions, College of Medicine, OUHSC

1997 University: March 10, Presented to Okla. House of Representatives Leadership Committee on the benefits of OCAST to Oklahomans

1997 College: Originator of CD ROM interactive computer aided classroom education to medical student education, OUHSC.

1997 State of Oklahoma: Co-founder of biotech company, SOUNDTEC™ Inc., Oklahoma City, OK.

1997 Profession: Founder, American Physiological Society international clearinghouse (satellite based information on the internet) for worldwide physiologists.

1997 Profession: Founder, Annual Lectureship of the American Physiological Society/Taylor University Walter C. Randall Lecture in Biomedical Ethics (given annually at Experimental Biology Meeting.

1996/2001 University: Co- Founder/originator "Ethics Grand Rounds", OUHSC monthly lecture series.

1995 Department: Member, Medical Physiology Review Committee; Chair, Annual Faculty Curriculum Retreat; organizer "7 Habits of Highly Effective People" course.

1995 College: Member, Board of Admissions, College of Medicine

1995/1999 College: Member Clinical Promotions and Implementation Committee, College of Medicine

1995 College: Member, Interview/Selection Committee Oklahoma School of Science and Mathematics

1995 Profession: NIH-NINDS, Site visit Johns Hopkins Institution; "Cardiac Consequences of Hemispheric Stroke"

1995\1996 College: Member Student Awards Committee

1994/1996 Profession: Member, Research Review Committee, American Heart Association, Oklahoma Affiliate

1989/present Profession: Reader's Digest International Fellowships Selection Committee (4th year medical student and MBA and resident 8 week externships in developing countries)

1994/present Community: Member Academic Advisory Council, Oklahoma Family Policy Council

1993/1996 Profession: Member of American Physiological Society, International Committee.

12/94 Profession: Ad Hoc Site Visit Committee Member; NIH Epidemiology and Disease Control. -2 (primary review committee, John's Hopkins Medical Institution.

1993/1994 College: Member Academic Misconduct Board

1993/1994 College: Member Student Awards Committee

1992/1995 University: Member Presbyterian Health Foundation grant review committee.

1992/2001 Medical and Dental Colleges: Co-founder of Brent Gilson Memorial/CMDs Scholarship for Humanitarian Behavior; annual award of \$1,000 to 3rd year medical or dental student.

1992 University: Member Faculty Search Committee, HPER Dept., Norman Campus.

1992/present Profession: Member Board of Directors, MAP International, relief and development organization for medical supplies, assistance and education.

1992/1995 Department: Originator of and annual participant in departmental guest teaching in Human Physiology, Edmond Memorial H. S., 200+ students, 6 hours teaching cardiovascular.

1991/1994 National: Member Grants Review Committee, American Heart Association, Mountain West Region.

1991 University: Initiated first ever-joint research and technology development agreement between OU and Baptist Medical Center (Oklahoma Health Care Corp.).

1991 University: Grant Reviewer, OU Medical Alumni Association Research Awards.

1991 Profession: FASEB Radio Debater, Atlanta, GA "Animal Rights & Research".

1991 University: Grant Reviewer, Presbyterian Health Foundation Research Grants.

1991/present Department: Member, Promotion and Tenure Committee.

1991/2002 Profession: Founding Board Member, African Institute for Scientific Research and Development, Nairobi, Kenya, East Africa.

1990/93 Department: Member Graduate Studies Committee (Chair, 1992)

1990/92 College: Member, Committee on Student Awards

1990/92 College: Member, Committee on Committees, College of Medicine

1985/present College: Founder, Coordinator, A.K. Weiss Lectureship in Biomedical Ethics.

1989 University: Initiated joint seminar series sponsored by Dept. ORL-OUHSC and the Hough Ear Institute, Baptist Medical Center.

1989 University: Member, Provost Committee for revising University Copyright Policy

1989 University & State: Research contract resulted in U.S. patent for University (No. 4,790,826). Further negotiations resulted in a new corporation being formed in Oklahoma (Cosmos Commodity, Inc.)

1989/1990 Department: Member, New Faculty Recruitment Committee (2 positions filled)

1989 University: Chairman, Special Ad Hoc VA Merit Review Committee (Physiology and Pharmacology)

1989/present National: Member, Reader's Digest International Fellowships Selection Committee (Administered by MAP Intl., Brunswick, GA; sends 4th year medical students on 8 week preceptorship to the Developing World).

1989 University: Guest on KTOK radio program "OU Today", speaking of physiology research.

1989 University: Assisted in planning Graduate Education Research Day for 1989 (Graduate College)

1989 University: Initiated first joint seminar between Physiology/Biophysics and Otolaryngology departments: H. Levitt, Ph.D., Distinguished Professor of Speech and Hearing Science, CUNY.

1989 University: Met with Senator Don Nickels and Rep. Glenn English (Washington, D.C.) regarding pending legislation on animal research and agriculture.

1989 University: Member, Provost's Committee for writing University guidelines on copyright laws for faculty and staff.

1988/1989 Member, Dean of Medicine Task Force on Developing an OU Biomedical Engineering Program; became official OU program in 11/92.

1988 First of the OUHSC "Talk Trip" experts. Appeared as spokesman for animals used in research,

- KJRH, Channel 2, Tulsa, OK, "Midday Oklahoma", 10/10/88.
- 1988** Wrote the first brochure for Provost on use of animals in research for dissemination in the state and on the campus: "Animal Rights Human Needs/The Facts". The brochure was recognized nationally in The Physiologist, publication of the American Physiological Society, February, 1989 and by the November 1988 meeting of the Society for Neuroscience, Animal Care Committee.
- 1988** Guest on public radio talk show, KTOK 8/29/88, animal rights issues; public resource speaker for OUHSC, Dept. of Public Information
- 1988** Began coordinating/teaching the first cross-listed Norman-OUHSC course in 15 years on HSC campus: Clin. Exercise Physiol., HPER/PHYO 5873
- 1988/91** College: Member, Graduate College Research Committee, OUHSC, Chairman 1991
- 1987** Invited participant, Reader's Digest International Fellowships Selection Committee for MS IV's; Chairman C.E. Koop, M.D., U.S. Surgeon General, Brunswick, GA.
- 1987/89** Co-founder and Officer, Christian Medical Coalition, with the purpose of using public donations to annually bring nationally and internationally known physicians to our medical campus to speak on issues in biomedical ethics (eg. April 1989, Dennis Burkitt, M.D., United Kingdom, "Man: Carton and Content, 3rd Annual A. Kurt Weiss Memorial Lectureship in Biomedical Ethics. Previous speakers included Paul Brand, M.D., Elton Trueblood, Ph.D.)
- 1987** Workshop, invited member Oklahoma Center for Advancement of Science, Dept. Commerce, Technology Transfer, October 1986.
- 1986** Designed and coordinated new regents-approved Physiology course: Advanced Exercise Physiology and Medicine (PHYO 6323)
- 1985/present** Departmental Coordinator, Graduate Studies in Exercise Physiology
- 1984/1994** (Physiology Department Graduate Studies Committee Chairman 1992)
- 1985/90** Department: Computer Committee
- 1984/1999** Profession: Coordinator, Founder, Society for Neuroscience Christian Fellowship. This is an ancillary annual meeting during a national science meeting to discuss moral ethical issues in science (www.cneuroscience.org)
- 1984/87** University of Oklahoma, Patent Advisory Committee
- 1983** President, Oklahoma Society of Physiologists
- 1982/88** National: Public Affairs Advisory Committee, Am. Physiological Soc., (Animal Legislation Committee, Oklahoma Representative)
- 1981** Lecturer: Non-Technical Medical Care Workshop (Oct. 1981) DHS, State of Oklahoma
- 1981/1982** Curriculum Review Committee, Biopsych. Prog., Dept. Psychiatry
- 1980/1984** Animal Care Admin. Advisory Committee - Div. of Comparative Medicine, Chairman 1981-82
- 1979/1983** Member, Financial Support Committee, Graduate College
- 1978/1980** Departmental special animal procurement. Animals obtained for research projects at a savings of thousands of dollars to tax payers and the departmental grants
- 1978/present** OUHSC Faculty Advisor to Medical Baptist Collegiate Ministries
- 1978/2000** Coordinator, Fed. of Amer. Societies for Exp. Biol., Christian Fellowship. This is an annual ancillary meeting, during a national science meeting, founded 35 years ago.

INVITED REVIEWER (Journals)

American Journal of Physiology (Heart & Circulation)
 Journal of Applied Physiology
 Brain Research

American Journal of Physiology: Integrative, Regulatory and Comparative Physiology
Laryngoscope
Hypertension (American Heart Association)
J. Otolaryngology (AAO-HNS)
NeuroSignals

INVITED LECTURES & SEMINARS

- 2004** Nanomaterials 2004:Biotechnology and Biomedicine, Stamford, CT, IBM, Oct 25-26
- 2004** Nanotechnology: Biomedical Applications in Oklahoma,. Annual Meeting Oklahoma Nanotechnology Initiative, Nov. 20th, Presbyterian Health Foundation, Oklahoma City, OK
- 2003** KTOK Oklahoma City, Oklahoma Innovations Radio Show (Oklahoma Center for the Advancement of Science and Technology), 5 July, “Nanotechnology in Oklahoma”
- 2003** INTEGRIS Rural Health, Inc., Baptist Healthcare of Oklahoma, Inc., Board of Directors Meeting, 24 June, “Research on Implantable Hearing Devices at Hough Ear Institute”
- 2003** Oklahoma Society of Physiologists, Annual Meeting, Plenary Speaker, June 6, “Magnetic Moments- Physiologists and Device Development.
- 2002** Bioengineering Association- OU College of Engineering, Nov. 20, Norman, OK. “Bioengineering of Implantable Devices and Advice for Future Entrepreneurs”
- 2002** Oklahoma City, Neuronight- Oklahoma Center for Neuroscience, August 15, The Brain and Senses, “He that hath ears to hear, let him hear”
- 2001** Dallas, TX, Surgical Training Workshop for SOUNDTEC Direct Drive Hearing Device, 6-7 July.
- 2001** Dallas, TX, Surgical Training Workshop for Implantable Hearing Devices, Okla. Soc. Otolaryngol., 1-2 May.
- 2001** Norman, OK, Great Decisions 2001, (Foreign Policy Interest Group) “Global Disease Crisis”, 9 April, Norman, OK.
- 2000** Durban, South Africa, "Hippocrates, an Intranet Teaching Tool for Basic Sciences Medical Education", Department of Physiology, University of Durban, Westville, 13 Sept.
- 2000** Durban, South Africa. "Introduction to the Cardiovascular System", University of Natal, College of Medicine, Sept. 11.
- 2000** Pretoria, South Africa. “Teaching Workshop on Physiology and Pathophysiology”, Univ. of Pretoria, Third Congress of the African Association of Physiological Sciences and the 26th Annual Congress of the Physiological Society of Southern Africa, American Physiological Society and African Regional Training Centre and Network. Sept. 5-15.
- 2000** Birmingham, UK. “Biomaterials in Middle Ear Implantable Hearing Devices”, 3rd Intl. Symposium on Electronic Implants in Otolaryngology. June 1-4, 2000.
- 2000** Pretoria, South Africa. “Research & Development in Developing Countries: Workshop of the African Association of Physiological Sciences and AFRET, University of Pretoria, Sept. 3-8, 2000.
- 1999** Pietermaritzburg, South Africa. “Bioethics and Medical Informatics” Workshop, “Health and Medical Informatics in KwaZulu Natal Health Care” July 20-22, 1999.
- 1999** University of Texas, Denton. Seminar. “Middle Ear Mechanics Finite Element Analysis and Implantable Hearing Devices”. Feb. 16.
- 1998** San Antonio, TX. Presented Talk. American Academy Otolaryngology-Head and Neck Surgery. “Laser Doppler Interferometry and Middle Ear Mechanical Measurements”.
- 1998** Cambridge University, UK. Presented talk: Basic Science and Development in Developing Countries. Aug 3, 1998.
- 1997** University of Nairobi, Kenya, East Africa. Presented ENT/Dept. Surgery Grand Rounds, “Implantable Hearing Devices –Emerging Technologies”. July 29, 1998, Seminar
- 1997** Pretoria, South Africa, Univ. Natal, Dept. Physiology, College of Medicine. “Basic Medical Science

- Education: African Issues for the 21st Century” 25 Sept. Seminar
- 1997** Durban, South Africa, Univ. Durban, Health Sciences University, Dept. Physiology. Workshop: Teaching and Pathophysiology, “Development and Technology”, Seminar 21-24 Sept.
- 1997** Oklahoma Center for the Advancement of Science and Technology, May 22, Radio talk show presentation: AA new biotech company for Oklahoma@
- 1997** INTEGRIS Health Foundation, March 19, AImplantable Hearing Device Technology@
- 1996** Grand Rounds, Dept. of Otorhinolaryngology, OUHSC, March 28th. "Implantable Hearing Devices: Safety and Efficacy"
- 1996** Scientific Faculty, Presenter, Planning Committee: 2nd International Symposium on Electronic Implants in Otology and Conventional Devices, June 2-6, Gothenberg, Sweden.
- 1995** Co-organizer, 1 day conference on hearing impaired treatment and technology; brought Miss America Heather Whitestone, to Oklahoma City, Oct 7, Hough Ear Institute; talk given on Implantable Devices
- 1995** Invited speaker: University of Central Oklahoma Pre-med Club, "The Changing Face of Medical Education" Feb. 17th.
- 1994** Invited speaker: International Cochlear Implant, Speech and Hearing Symposium, Melbourne, Australia, October 16-20, 1994. "A Microcomputer Software Database for Archiving and Sharing Cochlear Implant Patient Information".
- 1993** Invited speaker/faculty: 3rd International Symposium on Electronic Implants in Otology, Orlando, FL, November 10-15. "Selection of Biomaterials for Implantable Hearing Devices".
- 1993** Seminar: OU College of Dentistry "The Audiant Bone Conductor" December 15.
- 1993** Seminar: McGee Eye Institute - Laser Center Series, "Selective Photothermolysis in Brain". May 10, 1993.
- 1993** Seminar: Department of Neurology Grand Rounds, "Cochlear Implant Neural Prosthesis". May 20, 1993.
- 1993** Seminar: Oklahoma Center for Neurosciences, "Cochlear Implants". June 1, 1993.
- 1991** Invited Speaker: 2nd International Symposium on Transplants and Implants in Otology, Ehime University, Matsuyama, Japan. "Audiant Bone Conductor: North American Patient Results".
- 1991** Invited Seminar Speaker: National Cardiovascular Institute of Japan, Osaka, Japan. "Rostral ventrolateral medulla and cardiovascular control" April 25-29.
- 1990** Workshop Instructor. Bristol Myers Inc. "Audiant Bone Conductor - Basic Science Development". Oct 12, 13. 13 surgeons, lectures and laboratory teaching.
- 1990** Practical Seminar: Dept. of Family Medicine, 20 April 1990, "Stress: Long Term Physiological Implications".
- 1990** Invited Speaker: Rutledge Marine Laboratory, Isles of Shoals, Portsmouth, NH (25th Anniversary Program), "Sir Alister Hardy, marine biologist-theologian".
- 1989** Coordinator and Speaker: 3 session departmental seminar series, Physiology and Biophysics, "Role of the Ventrolateral Medulla in Cardiovascular Control and Pain", K. Dormer "Rostral Ventrolateral Medullary Control of Arterial Pressure in the Resting and Exercising Dog: (March)
- 1989** Invited Speaker: American Scientific Affiliation Annual Meeting, Indiana Wesleyan University, Marion IN, August 4-7, 1989, "Anger, Forgiveness, Trust and Sudden Cardiac Death"
- 1989** Invited Seminar Speaker: Seoul National University and Hanyang University, Department of Physiology, Schools of Medicine & Pharmacy. Seoul, S. Korea. "Medullary Brainstem Cardiovascular Control"
- 1989** Department of Physiology, School of Medicine, The University of Hong Kong, Hong Kong. "Rostral Ventrolateral Medulla in Cardiovascular Control."

- 1989** Lecturer/workshop instructor: "Surgical and Basic Science Principles Regarding the Xomed Audiant™ Bone Conductor™, Implantable Hearing Device." (150 surgeons, Bangkok, Thailand, Seoul, S. Korea, Singapore and Hong Kong)
- 1988** Invited participant: Satellite Symposium 18th Annual Meeting, Society for Neuroscience, London, Ontario. "Role of the Rostrolateral Medulla in the Control of the Cardiovascular System". KJ Dormer, Cardiovascular Control by the rostral medulla in the conscious dog. Nov. 11, 12, University of Western Ontario, Canada.
- 1988** Invited Speaker: "Hypertension and Health", Midwest City Hospital employees wellness luncheon
- 1988** Invited Speaker: "The Animal Rights Movement", Central State University, February
- 1988** Invited Speaker: "Biotelemetry Monitoring of Exercising Subjects", Johns Hopkins Univ., Applied Physics Laboratory, Goddard Space Center, Laurel, MD
- 1988** Channel 43 Television Show (Oklahoma County Medical Assoc.) "Medicine and You: Implantable Hearing Devices"
- 1987** Invited Seminar: "Cardiovascular Response from RVL in Conscious Dogs", Lab of Neurobiology, Cornell University Medical Center, October.
- 1987** Invited Seminar: "Implantable Prostheses in Humans", Oral Roberts University, December
- 1987** Invited Speaker: Politzer Society International Conference, Cancun, Mexico, "Implantable Hearing Devices", Dec. 7, 1987.
- 1987** Invited Speaker: Chinese Medical Association, Peking Union Medical College, Department of Otolaryngology, Peking, China. June 18, 1987 "Implantable Hearing Devices" (by invitation of the President, Chinese Medical Association)
- 1987** Instructor/special course: American Academy of Otolaryngology. Implantable Hearing Devices. Sept. 18, 1987, Chicago.
- 1987** Special Lecturer: Brooks Sch. of Aerospace Med., San Antonio, TX., Apr. 13, 1987, "Cochlear Implants, a Merging of the Basic and Clinical Sciences"
- 1986/87** Co-Director of Surgical Instruction Course for the Xomed Audiant™ Bone Conductor™ Hearing device. Trained 500 U.S. surgeons at OUHSC. (Aug. 1986 - Mar. 1987)
- 1986** Invited speaker: 2nd International Symposium on Surgery of the Inner Ear, Aspen, Co., August 10-15.
- 1986** Tutorial: Acute and Chronic Measurements of Blood Volume Flow using Transit-Time Ultrasonic Technology. Fed. Am. Soc. Exp. Bio. St. Louis, MO., April.
- 1985** Tutorial: Implantable Pressure Transducers: Use and Calibration. Fed. Am. Soc. Exp. Bio. Anaheim, Calif., April.
- 1985** Invited Lectures: Dept. of Physiol., Univ. of Nairobi, Kenya, "Neural Control of Heart and Circulation", "Exercise Physiology", "Cardiac Output"
- 1985** Invited Seminar: Central State University, Department of Biology, "Exercise and Alcohol, Cardiovascular Dynamics"
- 1984** Coordinator: 3rd Annual Meeting - Oklahoma Society of Physiologists
- 1983** Speaker: Okla. Speech and Hearing Assoc., "Cochlear Implants: Adults and Children Update"
- 1983** Public Lecture: Cardiovascular Research, BMC OR Technicians
- 1982** Invited Seminar: Bristol-Myers Co., Pharmaceutical Division, "Autonomic Functions of the Cerebellum"
- 1981** Invited Talk: Deafness Research Foundation of American Auxillary, "The Cochlear Implant".
- 1981** Seminar: Cerebellar Autonomic Functions, Oral Roberts Univ., Nov. 1981.
- 1980** Invited Seminar: Texas Tech Univ. Cardiovascular Training Program "The Cerebellum in Cardiovascular Control", Oct. 1980.
- 1980** Invited Seminar: Univ. of Calif. at San Francisco. "The Fastigial Nucleus and Cardiovascular Function", Nov. 1980.

- 1980** Invited Lecture: Stanford University - Workshop on Totally Implantable Telemetry Systems, "Implantable Cardiovascular Telemetry - Fact or Fiction", Aug. 1980.
- 1980** Invited Lecture: Tulsa Speech and Hearing Association, "The Cochlear Implant", Dec. 1980.
- 1979** Invited Lecture: Texas Branch Assoc. of Laboratory Animal Sci. "Non-invasive Determination of Arterial Pressure in Dogs", College Station, TX, May, 1979.
- 1979** Invited Lecture: Okla. Acad. of Audiologists. The Clinical Auditory Neurophysiologist, Oklahoma City, Nov. 9, 1979.

PROFESSIONAL GROWTH AND DEVELOPMENT:

- 2002** Attended CME courses, American Academy of Otolaryngology-Head & Neck Surgery, Sept., : Free Oxygen Radicals and Inner Ear Pathology (1 CME); Growth Factors in Wound Healing (1 CME); Intratympanic Pharmacotherapy for Inner Ear Treatments (1 CME); Infections in Otolaryngology (1 CME); Inner Ear Medicines: Pharmacology and Pharmacokinetics (2 CME)
- 2000** Attended annual conference: Oklahoma Association for Healthcare Ethics, Dec.1, 2000, Oklahoma City Community College
- 2000** Attended Short Course: "People-Centered Management", INTEGRIS Health Inc, October 19,20, Oklahoma City.
- 1999** Attended Short Course: "Neurophysiology of Hearing" Am. Acad. Otolaryngology, New Orleans, LA. Sept 1999.
- 1999** Attended Short Course: "Breathtaking Decisions" Sept, Trinity University and Center for Bioethics and Human Dignity, Oklahoma City, OK.
- 1998** Attended Short Course: "Implantable Electromagnetic Hearing Devices", Am. Acad. Otolaryngology, San Antonio, TX, Sept 18.
- 1998** Attended Bioethics Course: "Breathtaking Decisions", Trinity University and CBHD, Little Rock, AK, Feb 26, 27.
- 1997** Attended Fred Pryor Seminar "How to supervise people" Oklahoma City, April 1, 1997.
- 1997** Attended courses (7 hours CME credit) Am Academy Otolaryngology-Head and Neck Surgery: Critical Issues in Respiratory Disease; Implantable Hearing Aids; Advances in Cochlear Implants; Pediatric Cochlear Implants; Implantable Hearing Aids. September.
- 1996** Attended 28th Annual Neural Prosthesis Workshop, NINCDS, Bethesda, MD. Oct. 26-28.
- 1995** Attended 27th Annual Neural Prosthesis Workshop, NINCDS, Bethesda, MD. October, 18-20.
- 1995** Organized course for Physiology Faculty Members "The Seven Habits of Highly Effective People", October 6, Ponca City, OK.
- 1995** Attended Workshop "Promoting and Active Learning Environment in the Classroom:, H. Modell, Ph.D. Physiol. Ed. Res. Consortium, Seattle, WA., August, 1995.
- 1995** Attended new direction conference, "The Art of Antisense Oligonucleotides", New Orleans, LA, Sept. 21-22.
- 1995** Attended course: Stephen Covey Leadership Seminar "The Seven Habits of Highly Effective People" Jan. 12, 13., Oklahoma City, OK.
- 1994** Attended course: Introduction to Total Quality Management, Juran Institute, Oklahoma City, December 1, 1994.
- 1993** Attended workshop: Computers and Physiology Education, NIH-SBIR Software Product, New- port, OR, September 8-12, 1993.
- 1992** Attended short course: New Methods in Immunology, Society for Neuroscience, Anaheim, CA, October 25, 1992.
- 1989** Completed short course: Department of Family Medicine, OUHSC, "Clinical Decision Making in

Medicine"

- 1989** Attended short course: Lesioning Techniques in the Central Nervous System. Society for Neuroscience, Phoenix, AZ, Nov. 1.
- 1989** Attended 2 short courses: Biocompatibility of Implant Materials. American Academy of Otolaryngology - Head and Neck Surgery, New Orleans, Sept. 24-28.
- 1988** Attended 19th Annual Neural Prosthesis Workshop, NINCDS, Bethesda, MD, October.
- 1988** Completed short course: Cellular and Molecular Approaches to Synaptic Plasticity. Society for Neuroscience, Toronto, Canada, Nov. 13.
- 1988** Attended course at American Academy of Otolaryngology, Chicago: "Techniques in Auditory Brainstem Evoked Audiometry", 2 hours CME credit
- 1986** 16th Annual Neural Prosthesis Workshop, NINCDS, National Institutes of Health, October 1986.
- 1985** Cochlear Implant Workshop, Univ. of Calif. at San Francisco, Dept. of Otolaryngol., March 4-7, 1985 (16 hours CME credit).
- 1984** 15th Annual Neural Prosthesis Workshop, NINCDS - National Institutes of Health, Nov. 1984.
- 1983** 14th Annual Neural Prosthesis Workshop, NINCDS National Institutes of Health, Oct. 18-21.
- 1982** 13th Annual Neural Prosthesis Workshop, NINCDS National Institutes of Health, Oct. 14,15.
- 1981** Surgical Conference, Cochlear Implant Project, UC, San Francisco.
- 1981** 12th Annual Neural Prosthesis Workshop NINCDS - National Institutes of Health, Nov. 4-6.
- 1980** 11th Annual Neural Prosthesis Workshop - NINCDS National Institutes of Health.
- 1979** Surgical Conference, Auditory Neural Prosthesis-Cochlear Implant Project, UC, San Francisco.
- 1979** 10th Annual Neural Prosthesis Workshop - National Institutes of Health.
- 1979** Short Course-Electrophysiological Methods, Society for Neuroscience, Atlanta, GA.
- 1978** Short course, Neuroanatomical Methods, Society for Neuroscience, St. Louis, MO.

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