BIOGRAPHICAL SKETCH

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NAME: Jenkins, Herman

eRA COMMONS USER NAME (agency login): JENKINS.H

POSITION TITLE: Professor and Chair, Dept. Otolaryngology

EDUCATION/TRAINING *(Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable.)*

INSTITUTION AND LOCATION	DEGREE (if applicable)	Completion Date MM/YYYY	FIELD OF STUDY
Marshall University, Huntington, WV	BS	05/1966	Zoology
Vanderbilt University, Nashville, TN	MD	05/1970	Medicine
UCLA Affil. Hospitals, Los Angeles, CA	Resident	06/1966	Otolaryngology Residency
University Hospital, Zurich, Switzerland	Fellow	08/1980	Fellowship Neurotology

A. Personal Statement

Dr. Jenkins is currently the chair of the Department of Otolaryngology at the University of Colorado, School of Medicine. His overall research career began as a medical student in a mentored research situation and continued throughout the residency program. A KO7 Teacher Investigator award was received upon joining the faculty in Otolaryngology at UCLA. Throughout this time he worked under the mentorship of Dr. Vicente Honrubia in translational vestibular research. He moved to Baylor College of Medicine in 1981 and continued vestibular research with funding from the Clayton Foundation for Research. He served as program director of the departmental program project center grant for a six-year period. He moved to Colorado in 2000 to head up the Otolaryngology program and began working with a local manufacturer developing a fully implantable hearing aid. This work resulting in him becoming the primary investigator in the Phase I and II clinical trials of the device. This afforded an opportunity to do translational research with Dr. Daniel Tollin in the animal neurophysiology laboratory with studies of stimulation routes of sound to the cochlea and studies of coupling technique. These studies have translated into the clinic situation in the Department and in Europe through fellows mentored jointly with Dr. Tollin. Dr. Jenkins is currently Co-PI of a T-32 grant in the Department of Otolaryngology, working with Sue Kinnamon, PhD, a grant that has participants from pre- and postdoctoral PhD programs, medical students and Otolaryngology residents for an intensive two-year experience in research. As Chair of the Department, I am responsible for oversight in all aspects, including research activities. The Head and Neck Spore would be an outstanding addition to our Department and our research training programs for residents and junior faculty. The Department supports this grant as it fosters collaborative innovative research with pilot projects that promote translational research in a very important part of our specialty.

B. Positions and Honors

Positions and Employment

1972 - 1974 Major, Master Clinician , United States Air Force
1977 - 1981 Asst Prof in Residence, Dept. Surgery, UCLA, Los Angeles, CA
1979 - 1981 Postdoctoral Fellow, Dept Otolaryngology, University of Zurich, Zurich
1981 - 1986 Assoc Prof, Dept. Otorhinolaryngology, Baylor College of Medicine, Houston, TX
1981 - 2000 Senior Scientific Investigator, Clayton Foundation for Research, Houston, TX
1987 - 2000 Professor, Dept. Otorhinolaryngology, Baylor College of Medicine, Houston, TX
1988 - 1995 Vice Chair, Dept. Otorhinolaryngology, Baylor College of Medicine, Houston, TX
1995 - 1996 Interim Chair, Dept. Otorhinolaryngology, Baylor College of Medicine, Houston, TX
2000 - Professor and Chair, Dept. Otolaryngology, University of Colorado, Denver, CO

Other Experience and Professional Memberships

1995 -	Editorial Rev. Brds: J Skull Base Surg; Laryngoscope; Otology Neurotology, International Journal of Advanced Otology
1995 -	Listed in Best Doctors in America, all editions, Who's Who in Science and Engineering in the South and Southwest in Medicine and Health Care
1995 -	Member, Collegium Otorhinolaryngologica Amiticae Sacrum
1995 -	Member, American Otology Society
1995 -	Member, American Neurotology Society
1995 -	Member, Triological Society
1995 -	Member, Barany Society
1995 - 1998	Chair 1997-8, NIH-NIDCD Communicative Disorders Review Committee
1995 - 2000	Senior Examiner, American Board of Otolaryngology
1998 -	Member, ENT Device Panel/Food and Drug Administration
2000 -	Listed in America's Top Doctors, Castle Connolly Guide
2001 - 2007	Member, Association Res Otolaryngology Long Range Planning and Media Committees
2004 - 2006	President, Association of Academic Departments Otolaryngology
2006 - 2009	Secretary/Treasurer, Society of University Otolaryngologists
2011 - 2012	President, American Otological Society

Honors

2002	George Davey Howells Prize, University of London
2006	Manion-Lingeman lecturer, University of Indiana School of Medicine
2006	Member Excellence in State Advocacy Award, AAO-HNS Board of Governors
2010	Presidential Citation, American Academy Otolaryngology Head and Neck Surgery, Boston
2010	Member of Honour, Sociedad Espanola de Otorrinolaringologia Y Pathologia Cervico-Facial,
2010	ENTER Fellow 2010, Ear, Nose, Throat and Eye Research Foundation, Middlesborough, UK
2010	Gordon Smyth Lecturer, ENT-UK, Coventry, UKC

C. Contribution to Science

1. 1) Vestibular Pathophysiology and Visual Vestibular Interaction; My career began in medical school with an interest in the vestibular system and the definition of basic mechanisms of vestibular testing and pathophysiology of changes in response to injury. The focus was on definition as to changes that result with site of lesions. These studies were the focus of my Teacher Investigator Award from NIDCD. It was at a time when nystagmus analysis was difficult and unavailable and my work with Dr. Vicente Honrubia established this possibility and brought it into the clinical realm. These studies help define a normal vestibular battery and the compensation course that takes place following loss of vestibular input. Much of what is evaluated today came out of our early work in the laboratory using animal and human models.

    a. Koehn WW, Jenkins HA, Honrubia V, Fenton WH Jr. Effect of unilateral ablation of the vestibular cerebellum on visual-vestibular interaction. Exp Neurol. 1981 Sep;73(3):618-31. PubMed PMID: 6973488.

    b. Honrubia V, Koehn WW, Jenkins HA, Fenton WH. Visual-vestibular interaction: effect of prolonged stimulation on the vestibulo-oculomotor reflex responses. Exp Neurol. 1982 May;76(2):347-60. PubMed PMID: 6980137.

    c. Honrubia V, Jenkins HA, Baloh RW, Konrad HR, Yee RD, Ward PH. Comparison of vestibular subjective sensation and nystagmus responses during computerized harmonic acceleration tests. Ann Otol Rhinol Laryngol. 1982 Sep-Oct;91(5 Pt 1):493-500. PubMed PMID: 6982653.

    d. Honrubia V, Jenkins HA, Baloh RW, Yee RD, Lau CG. Vestibulo-ocular reflexes in peripheral labyrinthine lesions: I. Unilateral dysfunction. Am J Otolaryngol. 1984 Jan-Feb;5(1):15-26. PubMed PMID: 6549495.

2. Adaptive changes in the vestibular System: The next phase of my career looked at the adaptive changes in the human and effects on vision. These were done in conjunction with Dr. Joseph Demer, an ophthalmologist. This is significant in that it quantified the role of vision in vestibular reflexes and our understanding of head movement responses. This was one of the first times that the roles of injury had on either vestibular or visual reflexes. The role of vision in stability and function during daily activites was established in the process.

    a. Jenkins HA. Long-term adaptive changes of the vestibulo-ocular reflex in patients following acoustic neuroma surgery. Laryngoscope. 1985 Oct;95(10):1224-34. PubMed PMID: 4046709.
    b. Demer JL, Goldberg J, Jenkins HA, Porter FI. Vestibulo-ocular reflex during magnified vision: adaptation to reduce visual-vestibular conflict. Aviat Space Environ Med. 1987 Sep;58(9 Pt 2):A175-9. PubMed PMID: 3675487.
    c. Demer JL, Porter FI, Goldberg J, Jenkins HA, Schmidt K. Dynamic visual acuity with telescopic spectacles: improvement with adaptation. Invest Ophthalmol Vis Sci. 1988 Jul;29(7):1184-9. PubMed PMID: 3417408.
    d. Demer JL, Porter FI, Goldberg J, Jenkins HA, Schmidt K. Adaptation to telescopic spectacles: vestibulo-ocular reflex plasticity. Invest Ophthalmol Vis Sci. 1989 Jan;30(1):159-70. PubMed PMID: 2912909.

3. 3) Cochlear Implant Development: I was part of the first clinical trials of a multichannel cochlear implant that established the feasibility of stimulation of the cochlear nerve for hearing. The first few years were difficult in working with the deaf community as well as the scientific and demonstrated changes were important for the survival of this fledging technology, today recognized as common rehabilitative measures. Two things that we established early on was the best predictor of success was length of deafness and that it is possible to program listening levels on Stapedial reflex measures. This latter was used by one of the major cochlear implant companies for many years in programming.

    a. Jenkins H, Chmiel R, Jerger J. Speech tracking in the evaluation of a multichannel cochlear prosthesis. Laryngoscope. 1989 Mar;99(3):245-51. PubMed PMID: 2918797.
    b. Marsh MA, Coker NJ, Jenkins HA. Temporal bone histopathology of a patient with a nucleus 22-channel cochlear implant. Am J Otol. 1992 May;13(3):241-8. PubMed PMID: 1609853.
    c. Jorgensen SK, Chmiel RA, Clark JG, Jenkins HA. Cochlear implantation in a multihandicapped child. Ann Otol Rhinol Laryngol Suppl. 1995 Sep;166:329-32. PubMed PMID: 7668692.
    d. Chmiel R, Clark J, Jerger J, Jenkins H, Freeman R. Speech perception and production in children wearing a cochlear implant in one ear and a hearing aid in the opposite ear. Ann Otol Rhinol Laryngol Suppl. 1995 Sep;166:314-6. PubMed PMID: 7668686.

4. 4) Development of an Active Middle Ear System: This phase has been my primary concentration over the last ten years of my career. I have worked with the Otologic LLC in testing out an active middle ear prosthesis in the human cadaver and patient models as well as an animal model. This work has demonstrated the feasibility of using these devices in a large population of patients with production of responses that are equivalent to an appropriately fitted hearing aid. Through work on testing microphones in the cadaver to clinical trial in patients this device is now CE marked in Europe and has been in clinical trials in the US. The feasibility of using novel methods of stimulation, i.e., round window and third window stimulation has offered proof of early attempts to introduce this into the patient.

    a. Jenkins HA, Atkins JS, Horlbeck D, Hoffer ME, Balough B, Alexiades G, Garvis W. Otologics fully implantable hearing system: Phase I trial 1-year results. Otol Neurotol. 2008 Jun;29(4):534-41. PubMed PMID: 18317397.
    b. Jenkins HA, Pergola N, Kasic J: "Anatomical Vibrations that Implantable Microphones Must Overcome." Otol Neurotol. 2007 Aug;28(5):579-88. PMID: 17534199.
    c. Lupo JE, Koka K, Hyde BJ, Jenkins HA, Tollin DJ. Physiological assessment of active middle ear implant coupling to the round window in Chinchilla lanigera. Otolaryngol Head Neck Surg. 2011 Oct;145(4):641-7. PubMed PMID: 21593462.

d. Lupo JE, Koka K, Jenkins HA, Tollin DJ. Third-window vibroplasty with an active middle ear implant: assessment of physiologic responses in a model of stapes fixation in Chinchilla lanigera. Otol Neurotol. 2012 Apr;33(3):425-31. PubMed PMID: 22334156.

Complete List of Published Work in My Bibliography:

http://www.ncbi.nlm.nih.gov/myncbi/herman.jenkins.1/bibliography/48067064/public/?sort=date&direction=ascendingD. Research Support

Ongoing Research Support

2013/07/01-2018/06/01
ST32DC012280, T-32 NIDCD
Jenkins, Herman (PI)
Research Training in Otolaryngology
Dr. Jenkins serves as CO-PI along with Dr. Sue Kinnamon. His role is to oversee the research implementation into the Department of Otolaryngology and selection of candidates. He coordinates the interaction between the clinical and the basic science faculty who serve as Mentors and Co-Mentors for the trainees. Dr. Jenkins serves as a Co-Mentor in the project and brings in the translational focus, the overall motivation of this project to train basic and clinical translational scientists. This role of coordination across multiple disciplines is of importance in any NIH clinically related project.
Role: CPI

2015/02/01-2017/01/01
AM101CL1201, Auris
Jenkins, Herman (PI)
Clinical trials for tinnitus
This is a multiple site clinical trail for the effectiveness of a particular drug on treatment of tinnitus in the acute injury situation. This project is important in coordinating clinical trial studies.
Role: PI

Completed Research Support

2009/06/01-2013/05/01
G040052, Otologics LLC
Jenkins, Herman (PI)
Phase II Clinical Trial for Otologics Carina
Otologics Carina, a fully implantable active middle ear prosthesis; Dr. Jenkins served as the site PI and as medical consultant to the study for the company. It is a large clinical trial with multiple sites seeking marketing approval.
Role: CPI