

Bibliography

Assad, JA, and D Corey (1992) An active motor model for adaptation by vertebrate hair cells. **J. of Neuroscience**, 12(9) 3291-3309.

Assad, JA, Hacohen and Corey. (1989) Voltage dependence of adaptation and active bundle movement in bullfrog saccular cells. **Proc. Natl Acad. Sci.** 86:2918-2922.

Assad, JA, GMG Shepherd, and D Corey (1991) Tip-link integrity and mechanical transduction in vertebrate hair cells. **Neuron**. 7:985-994.

Bagger-Sjoberg and Takumida (1988) Geometrical array of the vestibular sensory hair bundle. **Acta Otolaryngol** 106:393-403.

Corey, DP and J Howard (1994). Models for Ion Channel Gating with Compliant States. **Biophysical Journal** 66:1254-1257.

Crawford and Fettiplace (1985) The mechanical properties of ciliary bundles of turtle cochlear cells. **Journal of Physiology** 364:359-379.

Crisfield, MA (1991) **Nonlinear Finite Element Analysis of Solids and Structures, Volume 1**. John Wiley and Sons, New York.

Denk, W, WW Webb, and AJ Hudspeth (1989) Mechanical properties of sensory hair bundles are reflected in their Brownian motion measured with a laser differential interferometer. **Proceedings of the National Academy of Sciences (USA)** 86:5371-5375.

Duncan, RK (1993) **Finite Element Analysis of Inner Ear Hair Bundles: A parameter study of bundle mechanics**. Thesis, Virginia Polytechnic Institute and State University.

Duncan RK and JW Grant (1997) A finite element model of inner ear hair bundle micromechanics. **Hearing Research**, 104: 15-26.

Ernstson and Smith (1986) Stereo-kinociliar Bonds in Mammalian Vestibular Organs. **Acta Otolaryngol** 101:395-402.

Fernandez, C and J Goldberg (1976) Physiology of Peripheral Neurons: Innervating Otolith organs of the Squirrel Monkey. II Directional Selectivity and Force-Response Relations. **Journal of Neurophysiology**, 39:985-995.

Flock A and S Orman (1983) Micromechanical properties of sensory hairs on receptor cells of the inner ear. **Hearing Research**, 11:249-260.

Flock A and Strelieff (1984) Graded and nonlinear mechanical properties of sensory hairs in the mammalian hearing organ. **Nature**. 310:597-599.

Furness D, and CM Hackney (1985) Cross links between stereocilia in the Guinea Pig Cochlea. **Hearing Research**, 18: 177-188.

Furness, D, CM Hackney and DE Zetes. (1995) Mechanotransduction channels on cochlear hair cells could be operated by shear displacement. (Abstract) **Journal of Physiology**. 485.P:16P-17P

Furness, DN, DE Zetes, CM Hackney, and CR Steele (1997). Kinematic Analysis of shear displacement as a means for operating mechanotransduction channels in the contact region between adjacent stereocilia of mammalian cochlear hair cells. **Proceedings of the Royal Society of London, Series B**. 264 (1378) 45-51.

Gitter A.H. (1996) Row-to Row Horizontal links may be associated with the transduction channels of hair cells. **ORL**; 58:1-3.

Gittes F, B Mickey, J Nettleton, and J Howard (1993) Flexural rigidity of microtubules and actin filaments measured from thermal fluctuations in shape. **Journal of Cell Biology**, 120: 923-924.

Goodyear R, G Richardson (1994) Differential Glycosylation of Auditory and Vestibular Hair Bundle Proteins Revealed by Peanut Agglutinin. **The Journal of Comparative Neurology**. 345:267-278.

Grant, J.W. (1997) Personal Communication.

Hackney, CM and DN Furness (1995) Mechanotransduction in vertebrate hair cells: structure and function of the stereociliary bundle. **American Journal of Physiology**. 268 (1 Part 1):C1-C13.

Hackney, CM and DN Furness (1995) Field-emission scanning electron microscopy of cochlear hair cells: tip links, lateral links, and tip junctions on stereocilia. (Abstract) **Journal of Physiology**. 485P:2P

Howard J, and Ashmore (1986) Stiffness of sensory hair bundles in the sacculus of the frog. **Hearing Research**. 23:93-104.

Howard J, and AJ Hudspeth (1987) Mechanical relaxation of the hair bundle mediates adaptation in mechano-electrical transduction by the bullfrog's saccular hair cell. **Proceedings of the National Academy of Sciences (USA)** 84:3064-3068.

Howard J, and AJ Hudspeth (1988) Compliance of the hair bundle associated with gating of mechano-electrical transduction channels in the bullfrog saccular hair cell. **Neuron**, 1:189-199, May 1988.

Howard J, WM Roberts, and AJ Hudspeth (1988) Mechanoelectrical transduction by hair cells. **Annual Review of Biophysics and Biophysical Chemistry**, 17:99-124.

Hudspeth, AJ. (1983) The Hair Cells of the Inner Ear. **Scientific American**, 248:54-64.

Kelly, JP (1991) The Sense of Balance, in **Principles of Neural Science, Third Edition**. Edited by ER Kandel, JH Schwartz, and TM Jessell. Appleton and Lange, Norwalk, Connecticut.

Lewis, ER, EL Leverenze, WS Bialek (1985) **The Vertebrate Inner Ear**. CRC Press

Markin, VS and AJ Hudspeth (1995) Gating-spring models of mechanoelectrical transduction by hair cells of the internal ear. **Annual Review of Biophysics and Biomolecular Structures**. 24: 59-83

Nagel, G, DC Neugebauer, B Schmidt, U Thurm (1991) Structures transmitting stimulatory force to the sensory hairs of vestibular ampullae of fishes and frog. **Cell and Tissue Research**. 265:567-578.

Orman, S and A Flock (1983) Active control of sensory hair mechanics implied by susceptibility to media that induce contraction in muscle. **Hearing Research** 11:261-266.

Peterson, EH, JR Cotton, and JW Grant (1996) Structural Variation in Ciliary Bundles of the Posterior Semicircular Canal: Quantitative Anatomy and Computational Analysis. from *New Directions in Vestibular Research*, **Annals of the New York Academy of Sciences** 781:85-102.

Pickles, JO (1993) A model for the mechanics of the stereociliar bundle on acousticolateral hair cells. **Hearing Research** 68:159-172.

Pickles, JO and DP Corey, (1992) Mechanoelectric Transduction by hair cells. **TINS**, 15;7:254-259.

Pickles, JO, Comis, and Osborne (1984) Crosslinks between stereocilia in the guinea pig organ of Corti, and their possible relation to sensory transduction. **Hearing Research** 15, 103-112.

Reddy, JN (1993) **An Introduction to the Finite Element Method**. McGraw Hill, New York.

Saunders, J and Y. Szymko, (1989) The design, calibration, and use of a water microjet for stimulating hair cell sensory hair bundles. **J. Acoust. Soc. Am.** 86(5) 1797-1804.

Steele and Jen (1989) Mechanical Analysis of Hair Cell Microstructure and Motility. in **Cochlear Mechanisms: Structure, function, and Models**, ed. Wilson and Kemp, Plenum, NY.

Strelioff and A Flock, (1984) Stiffness of sensory-cell hair bundles in the isolated guinea pig cochlea. **Hearing Research** 15:19-28

Szymko, Y., P Dimitri and J Saunders (1992) Stiffness of hair bundles in chick cochlea. **Hearing Research** 59:241-249

Tilney, LG, EH Egelman, DJ DeRosier, JC Saunders. (1983) Actin Filaments, Stereocilia, and Hair Cells of the Bird Cochlea II: Packing of the Actin Filaments in the Stereocilia and in the Cuticular Plate and What Happens to the Organizations When the Stereocilia Are Bent. **Journal of Cell Biology** 96:822-834.