

**CURRICULUM VITAE**  
(Dec 2008)

**Joseph Santos-Sacchi**

Website: [www.YaleEarLab.org](http://www.YaleEarLab.org)

**ACADEMIC DEGREES**

A. B.                    May, 1973 Columbia College, CU, Psychology  
MPhil. D.             May, 1978 Columbia University, Audiology  
Ph. D.                   May, 1978 Columbia University, Audiology

M.A. (privatim)      1995, Yale University, Honorary

Doctoral thesis:    An ultrastructural evaluation of normal strial capillary permeability using electron-opaque tracer molecules.

**POSITIONS HELD**

Professor (tenured), Section of Otolaryngology (Surgery), Dept. of Cellular and Molecular Physiology, Dept. of Neurobiology, Interdepartmental Neuroscience Program, Yale University, School of Medicine, 1994 - present.

Associate Professor (tenured), Section of Otolaryngology (Surgery), Section of Neurobiology, and Interdepartmental Neuroscience Program, Yale University, School of Medicine, 1991 - 1994.

Associate Professor (tenured) and Director of Research, Section of Otolaryngology (Surgery), UMDNJ - New Jersey Medical School, 1987 - 1991.

Assistant Professor and Director of Research, Section of Otolaryngology (Surgery), UMDNJ - New Jersey Medical School, 1984 - 1987.

Visiting Assistant Professor of Hearing Science, Department of Audiology, Teachers College, Columbia University, Fall 1985.

Assistant Professor and Director of Electronmicroscopy Facilities, Department of Anatomy and The Neurobiology Laboratory (Director: Jose Del Castillo), Medical School, University of Puerto Rico, 1982 - 1984.

Research Associate in Auditory Physiology (with Prof. Peter Dallos), Auditory Physiology Laboratory (Audiology), and Department of Neurobiology and Physiology, Northwestern University, 1980 - 1982.

Research Associate in Reproductive Cell Biology (with Prof. Mildred Gordon), School for Biomedical Education, City College, City University of New York, 1978 - 1980.

Lecturer, Department of Anatomy, Mount Sinai School of Medicine, City University of New York, 1979 - 1980.

Visiting Scholar, (with Prof. William L. Williams), Reproduction Research Labs, Dept. of Biochemistry, University of Georgia, Aug. - Sept., 1978.

Researcher, Prof. William F. Marovitz, Dept. of Otolaryngology, Mount Sinai School of Medicine City University of New York, 1976 - 1978.

Salaried Teaching Assistant, Electronmicroscopy, (with Prof. O. Roger Anderson), Teachers College, Columbia University, Spring 1977, Spring 1978.

Teaching Assistant, Differential Audiometry II, (with Prof. Barbara Kruger), Teachers College, Columbia University, Spring 1977.

Teaching Assistant, Bioacoustics, (with Prof. Barbara Kruger), Teachers College, Columbia University, Fall 1976.

Clinical Audiology training: Teachers College Speech and Hearing Clinic, Bronx VA Hospital, Harlem Hospital, NYC, 1975 - 1976

**COURSES TAUGHT**

Neurobiology  
Histology and Cell Biology

Electronmicroscopy  
Auditory Physiology

## COMMITTEE AND REVIEWER EXPERIENCE

Ad Hoc NIH AUD Study section member 2008  
Reviewer NIH Innovator Awards 2007  
Ad Hoc Reviewer Small Grants, NIDCD 2006  
Member, NIH - NIDCD Hearing Research Study Section (IFCN6), 1995 - 1999  
Ad Hoc Member, Board of Counselors, NIDCD, NIH, 1996  
Member, NIH - NIDCD Panel on Tinnitus Research, 1995  
Member, Editorial Board, Audiology & Neuro - Otology, 1997 - 1999  
Member, Editorial Board, Primary Sensory Neuron, 1994 -  
Member, Editorial Board, Hearing Research, 1993 -  
Member, NIH Reviewer Reserve, 1993 - 1995  
Member, National Strategic Research Planning Panel, Hearing and Hearing Impairment Section, NIH - NIDCD, 1992  
Member, Technical Committee of Psychological & Physiological Acoustics, ASA, 1993 - 1997  
Member, NIH - NIDCD Communication Disorders Review Committee (CDRC), 1989 - 1993.  
Member, Special Meeting, NIH Sensory Disorders Study Section, 1989.  
Ad hoc Member, NIH - NINCDS Site Visit Team, CDRC, 1985.  
Ad hoc grant Reviewer, National Science Foundation; Medical Research Council, London; Wellcome Trust, London  
Ad hoc manuscript Reviewer, Journal of Neuroscience, Journal of Neurophysiology, Science, Journal of the Acoustical Society of America, Biophysical J., Am. J. Physiol., Nature, Primary Sensory Neuron, Nature Neuroscience, PNAS, J. Membrane Biology and others  
Ad hoc Reviewer, Science Books and Films, American Association for the Advancement of Science, 1980 - 1984.

## GRANTS

### Current:

NIH Grant (R01, DC009913): Synaptic specializations of auditory hair cells. NIDCD 12/1/ 2000-12/1/2005.  
NIH Grant (R01, DC008130): Structural correlates of prestin activity. NIDCD Jan 2007- Dec 2009.  
NIH Grant (R01, DC000273): Membrane Properties of Cells Comprising the Outer Hair Cell System. NIDCD, 1984 - 2010 (*dates 1984-1987 under NINCDS with title: Intercellular Communication in the Organ of Corti.*).

### Completed:

NIH Grant (R23 DC008115): Anthony Ricci (Stanford U), Joseph Santos-Sacchi. New Technologies for investigating the hair cell afferent fiber synapse. 2006-2008  
Research Career Development Award, NINCDS - NIH, 1985 - 1990.  
Foundation of the University of Medicine and Dentistry of N.J. Grant: Modulation of cell - to - cell communication in an in vitro preparation of the organ of Corti. 1984 - 1985.  
Deafness Research Foundation Grant: Factors affecting intercellular communication in the Supporting Cells of the Organ of Corti. 1982 - 1984.  
Biomedical Resource Center Grant: Intercellular Coupling in the Supporting Cells of the Organ of Corti, Medical School, University of Puerto Rico, 1982 - 1983.  
N.I.H. Grant (R01): Cyclic Nucleotides in Guinea Pig Sperm (PI - M. Gordon) 1979 - 1980.  
Sigma Xi Grant - in - Aid of research, 1977 - 1978.  
Joanne Schwartz Scholarship in Audiology. 1977 - 1978.  
Minority Group Scholarship, Teachers College, Columbia University. 1973 - 1977.

## PROFESSIONAL MEMBERSHIPS

Biophysical Society, Society for Neuroscience, Acoustical Society of America, Association for Research in Otolaryngology, American Society for Cell Biology (1978-1991), American Association for the Advancement of Science, Sigma Xi

## PUBLICATIONS

- Bai, J.-P. Navaratnam, D. , A. Surguchev, S. Montoya, P. S. Aronson, and J. **Santos-Sacchi**. Prestin's anion transport and voltage sensing capabilities are independent: implications for the cochlear amplifier. *Biophysical Journal* (in press)
- Santos-Sacchi, J.** E. Navarrete and L. Song. Fast electromechanical amplification in the lateral membrane of the outer hair cell. *Biophys J.* 2009 Jan;96(2):739-47.
- Santos-Sacchi, J.,** L. Song, X. Li Firing Up The Amplifier: Temperature, Pressure And Voltage Jump Studies On OHC Motor Capacitance. In *Concepts And Challenges In The Biophysics Of Hearing, Mechanics of Hearing Proceedings*, Keele University, eds. N.P. Cooper and D.T. Kemp, 2009
- Rybalchenko, V. and **Santos-Sacchi, J.** Anion control of voltage sensing by the motor protein prestin in outer hair cells. *Biophys J.* 2008 Nov 1;95(9):4439-47.
- Santos-Sacchi, J** Cochlea mechanics: no shout but a twist in the absence of prestin. *Current Biology*, 2008 Apr 8;18(7):R304-6, 2008
- Brown, MC, **Santos-Sacchi, J** Audition. Chapter in *Fundamental Neuroscience*, 3<sup>rd</sup>. Edition., Eds., LRSquire et al. Academic Press, 2008.
- Abe T, Kakehata S, Kitani R, Maruya S, Navaratnam D, **Santos-Sacchi J**, Shinkawa H. Developmental expression of the outer hair cell motor prestin in the mouse. *J Membr Biol.* 2007 Jan;215(1):49-56. 2007.
- Bai JP, Navaratnam D, Samaranayake H, **Santos-Sacchi J.** En block C-terminal charge cluster reversals in prestin (SLC26A5): effects on voltage-dependent electromechanical activity. *Neurosci Lett.* Sep 1;404(3):270-5. 2006.
- Santos-Sacchi J.** (guest Editor for special issue) *Membranes and Their Interacting Partners in Peripheral Auditory Function : Foreword: Let's Hear It for the Membranes!* *J. Membrane Biology*, May 25 (Epub ahead of print), 2006.
- He DZ, Zheng J, Kalinec F, Kakehata S, **Santos-Sacchi J.** Tuning in to the amazing outer hair cell: membrane wizardry with a twist and shout. *J Membr Biol.* 2006 Feb-Mar;209(2-3):119-34. 2006 May 25.
- Santos-Sacchi J,** Song L, Zheng J, Nuttall AL. Control of mammalian cochlear amplification by chloride anions. *J Neurosci.* 2006 Apr 12;26(15):3992-8.
- Santos-Sacchi J,** Rybalchenko V, Bai JP, Song L, Navaratnam D. On the temperature and tension dependence of the outer hair cell lateral membrane conductance G<sub>metL</sub> and its relation to prestin. *Pflugers Arch.* 2006 Jun;452(3):283-9. 2006 Mar 7.
- Navarrete EG, **Santos-Sacchi J.** On the effect of prestin on the electrical breakdown of cell membranes. *Biophys J.* 2006 Feb 1;90(3):967-74. 2005 Nov 18.
- Santos-Sacchi, J,** Song, L, Bai, J-P, and Navaratnam, D. Chloride and the OHC lateral membrane motor. *Auditory mechanisms: processes and models, Proceedings of Mechanics of Hearing 9<sup>th</sup> Meeting*, 2006.
- Navaratnam, D, Bai, J-P, Samaranayake, H, and **Santos-Sacchi, J.** N-terminal mediated homo-multimerization of prestin, the outer hair cell motor protein. *Biophys J.* 2005 Nov;89(5):3345-52.
- Carlo Spirlì, Romina Fiorotto, Lei Song, **Joseph Santos-Sacchi,** Lajos Okolicsanyi, Sara Masier, Loretta Rocchi, Maria Pia Vairetti, Marina De Bernard, Saida Melero, Tullio Pozzan, Mario Strazzabosco. Glibenclamide stimulates fluid secretion in rodent cholangiocytes through a CFTR-independent mechanism. *Gastroenterology.* 2005 Jul;129(1):220-33.
- Song, L. Seeger, A. and **Santos-Sacchi, J.** On chloride flux and membrane motor activity in the outer hair cell of Corti's organ: lessons learned from the environmental toxin tributyltin *Biophysical Journal* 88(3):2350-62, 2005.
- Santos-Sacchi J.** Animal Models for Otolaryngological Disorders: Part IV: Animal research in peripheral auditory physiology. in *Handbook of Laboratory Animal Science.* 2nd. Ed. Vol III

- Animal models. CRC Press, 2005
- Santos-Sacchi J.** and Wu, M. Protein and lipid reactive agents alter outer hair cell lateral membrane motor charge movement. *J. Membrane Biology* 2004 200:83-92
- Santos-Sacchi, J.** Determination of cell capacitance using the exact empirical solution of  $\partial Y/\partial C_m$  and its phase angle. *Biophysical Journal* 87:714-727, 2004.
- Santos-Sacchi J** New tunes from Corti's organ: the outer hair cell boogie rules. *Current Opinion in Neurobiology*. 13(4):459-68. 2003.
- Rybalchenko, V. and **Santos-Sacchi, J.** Cl<sup>-</sup> flux through a non-selective, stretch sensitive conductance influences the outer hair cell motor of the guinea pig. *J Physiol* (2003), 547.3, pp. 873–891
- Santos-Sacchi J.** and Zhao, H.-B. Excitation of fluorescent dyes inactivates the outer hair cell integral membrane motor protein prestin and betrays its lateral mobility. *Pflugers Archiv* 446(5):617-22. 2003.
- Rybalchenko, V. and **Santos-Sacchi, J** Allosteric modulation of the outer hair cell motor protein prestin by chloride. In: *Biophysics of the Cochlea: From Molecules to Models* (Gummer A, ed), pp 116-126. Singapore: World Scientific Publishing, 2003.
- Santos-Sacchi, J.** Functional motor microdomains of the outer hair cell lateral membrane. *Pflugers Archiv*. 445, 331-336, 2002.
- Santos-Sacchi, J.,** Navarrete, E., Voltage-dependent changes in specific membrane capacitance caused by prestin, the outer hair cell lateral membrane motor. *Pflugers Arch*. 444(1), 99-106, 2002
- Meltzer J, **Santos-Sacchi J.** Temperature dependence of non-linear capacitance in human embryonic kidney cells transfected with prestin, the outer hair cell motor protein. *Neurosci Lett*. 313(3):141-4, 2001
- Santos-Sacchi, J.,** Wu, M., and Kakehata, S. Furosemide alters nonlinear capacitance in outer hair cells. *Hearing Research* 159, 69-73, 2001
- Santos-Sacchi, J.,** Shen, W., Zheng, J., Dallos, P. Effects of membrane potential and tension on prestin, the outer hair cell lateral membrane motor protein. *Journal of Physiology (Rapid Report)* 531.3, pp. 661-666, 2001
- Takahashi, S. and **Santos-Sacchi, J.** Non-uniform mapping of stress-induced, motility-related charge movement in the outer hair cell plasma membrane. *Pflugers Archiv*, 441, 506-513, 2001.
- Santos-Sacchi, J.,** *Cochlea Physiology*. In Jahn, A. and **Santos-Sacchi, J.** (Eds.) *Physiology of the Ear*. 2nd Edition, Singular Press, 2001
- Jahn, A. and **Santos-Sacchi, J.** (Eds.) *Physiology of the Ear*. (textbook) 2nd Edition, Singular Press, 2001
- MacLeish, P., Shepherd, G. Kinnamon, S, **Santos-Sacchi, J** *Sensory Transduction Chapter in Fundamental Neuroscience*, 2<sup>nd</sup>. Ed., Eds., Lees, GV, and Conner, E, Academic Press, 2001.
- Blasits, S., Maune, S. and **Santos-Sacchi, J.** Nitric oxide uncouples gap junctions of supporting Deiters cells from Corti's organ. *Pflugers Archiv* 440, 710-712, 2000
- Zhao, H-B and **Santos-Sacchi, J.** Voltage gating of gap junctions in cochlear supporting cells: evidence for nonhomotypic channels. *J. Membrane Biology* 175, 17-24, 2000
- Santos-Sacchi, J.** Cell coupling in Corti's organ. *Brain Research Reviews* 32, 167-171, 2000
- Santos-Sacchi, J.** The magnificent outer hair cell of Corti's organ. *Otol Jpn* 9, 111-115, 1999.
- Zhao, H-B and **Santos-Sacchi, J.** Auditory collusion and a coupled couple of outer hair cells. *Nature* 399, 359-362, 1999.
- Takahashi, S. and **Santos-Sacchi, J.** Distortion product analysis of outer hair cell motility - related gating charge. *J. Membrane Biology* 169, 199-207, 1999.
- Santos-Sacchi, J.,** Kakehata, S., Kikuchi, T., Katori, Y. and Takasaka, T. Density of motility-related charge in the outer hair cell of the guinea pig is related to best frequency. *Neuroscience Letters* 256: 155-158, 1998.
- Zhao, H-B and **Santos-Sacchi, J.** Effect of membrane tension on gap junctional conductance of supporting cells in Corti's organ. *J. Gen. Physiol.* 112(4):447-455, 1998.
- Wu, M. and **Santos-Sacchi, J.** Effects of lipophilic ions on outer hair cell membrane capacitance and motility. *J. Membrane Biol.* 166(2):111-118, 1998
- Santos-Sacchi, J.,** Kakehata, S. and Takahashi, S. Effects of membrane potential on the voltage-dependence of motility - related in outer hair cells of the guinea pig. *J. Physiology (London)* 510:225-235. 1998
- MacLeish, P., Shepherd, G. Kinnamon, S, **Santos-Sacchi, J** *Sensory Transduction Chapter in Fundamental Neuroscience*, Eds., Lees, GV, and Conner, E, Academic Press, 1998.

- Santos-Sacchi, J.** and Huang G - J Effects of temperature on OHC nonlinear capacitance. *Hearing Research* 116: 99-106, 1998.
- Santos-Sacchi, J.**, Huang G - J, and Wu, M. Mapping the distribution of outer hair cell voltage - dependent conductances by electrical amputation. *Biophysical J.* 73:1424-1429, 1997
- Ruggero, M.A. and **Santos-Sacchi, J.** Cochlear mechanics and biophysics., In: *Handbook of Acoustics*, (Ed. M.J. Croker), John Wiley & Sons., 1997
- Harris, D.M., Evans, B. and **Santos-Sacchi, J.** Laser selective microablation of sensitized intracellular components within auditory receptor cells. *SPIE* 2396:260 - 265, 1996.
- Harris DM, L. Reinisch, G. Edwards, M. Yessik, S. Ashrafi, **J. Santos-Sacchi.** "Mid - infrared Ablation of Dentin with the Vanderbilt FEL. *SPIE Proceedings* 2672, 1996.
- Kakehata, S. and **Santos-Sacchi, J.** Effects of lanthanides and salicylate on outer hair cell motility and associated gating charge. *J. Neuroscience* 16, 4881, 1996
- Hasson, T., Heintzelman, M.B., **Santos-Sacchi, J.**, Corey, D.P., Mooseker, M.S. Expression in Cochlea and Retina of Myosin VIIa, the Gene Product Defective in Usher Syndrome Type 1b. *Proceedings of the National Academy of Sciences (USA)*, 92(n21): 9815 - 9819, 1995.
- Kakehata, S. and **Santos-Sacchi, J.** Membrane tension directly shifts voltage dependence of outer hair cell motility and associated gating charge. *Biophysical J.* 68, 2190 - 2197, 1995.
- Huang, G. - J. and **Santos-Sacchi, J.** Motility voltage sensor of the outer hair cell resides within the lateral plasma membrane. *Proc. Natl. Acad. Sci. USA* 91, 12268 - 12272, 1994.
- Sato, Y. and **Santos-Sacchi, J.** Calcium and hydrogen ion sensitivity of gap junctional conductance in the supporting cells of the organ of Corti. *Hearing Research* 80, 21 - 24, 1994
- Santos-Sacchi, J.** Harmonics of outer hair cell motility. *Biophysical J.* 65, 2217 - 2227, 1993
- Huang, G. - J. and **Santos-Sacchi, J.** Mapping the distribution of the outer hair cell motility voltage sensor by electrical amputation. *Biophysical J.* 65, 2228 - 2236, 1993
- Santos-Sacchi, J.** Ionic conductances of Type I spiral ganglion cells of the mammalian inner ear. *J. Neuroscience* 13: 3599 - 3611, 1993.
- Santos-Sacchi, J.** On the frequency limit and phase of outer hair cell motility: effects of the membrane filter. *J. Neuroscience* 12, 1906 - 1916, 1992.
- Santos-Sacchi, J.** Reversible inhibition of voltage dependent outer hair cell motility and capacitance. *J. Neuroscience* 11, 3096 - 3110, 1991.
- Santos-Sacchi, J.** Isolated supporting cells from the organ of Corti: some whole cell electrical characteristics and estimates of gap junctional conductance. *Hearing Research*, 52, 89 - 98, 1991.
- Santos-Sacchi, J.** Fast outer hair cell motility: how fast is fast? In: *Mechanics and Biophysics of Hearing*. Dallos, P. et al. (Eds.) 1990, Springer - Verlag.
- Santos-Sacchi, J.** Asymmetry in voltage dependent movements of isolated outer hair cells from the organ of Corti. *J. Neuroscience*, 9, 2954 - 2962, 1989.
- Santos-Sacchi, J.** and Dilger, J.P. Whole cell currents and mechanical responses of isolated outer hair cells. *Hearing Research*, 35, 143 - 150, 1988.
- Jahn, A. and **Santos-Sacchi, J.** (Eds.) *Physiology of the ear*. 1988, Raven Press, NY.
- Santos-Sacchi, J.** Cochlear Physiology. In: *Physiology of the Ear*. Jahn, A. and **Santos-Sacchi, J.** (Eds.) 1988, Raven Press, NY.
- Dilger, J.P. and **Santos-Sacchi, J.** Patch clamp recording from hair cells. In: *Physiology of the Ear*. Jahn, A. and **Santos-Sacchi, J.**(Eds.) 1988, Raven Press, NY.
- Santos-Sacchi, J.** Cell coupling differs in the in vitro and in vivo organ of Corti. *Hearing Research* 25, 227 - 232, 1987.
- Marbey, D. and **Santos-Sacchi, J.** Immunocytochemical demonstration of astrocytes in the eighth nerve of the red eared turtle. *Experimental Neurology* 94, 141 - 148, 1986.
- Santos-Sacchi, J.** Dye coupling in the organ of Corti. *Cell and Tissue Res.* 245,525 - 529, 1986.
- Santos-Sacchi, J.** The temperature dependence of electrical coupling in the organ of Corti. *Hearing Res.* 21, 205 - 211, 1986.
- Santos-Sacchi, J.** The effects of cytoplasmic acidification upon electrical coupling in the organ of Corti. *Hearing Res.* 19, 207 - 215, 1985.
- Santos-Sacchi, J.** and Marovitz, W.F. A ferritin - containing cell type in the stria vascularis of the mouse inner ear. *Acta Otolaryngol.* 100, 26 - 32, 1985.
- Santos-Sacchi, J.** A reevaluation of cell coupling in the organ of Corti. *Hearing Research* 14:203 - 204, 1984.
- Dallos, P. and **Santos-Sacchi, J.** AC receptor potentials from hair cell in the low frequency region of the guinea pig cochlea. In: *Mechanisms of Hearing*, Eds. Webster, W.R. and Aitkin, L.M., Monash University Press, Clayton, Australia, pp. 11 - 16, 1983.

- Santos-Sacchi, J.** and Dallos, P. Intercellular communication in the supporting cells of the organ of Corti. *Hearing Research* 9, 317 - 326, 1983.
- Dallos, P., **Santos-Sacchi, J.** and Flock, A. Intracellular recordings from outer hair cells. *Science* 218, 582 - 584, 1982.
- Santos-Sacchi, J.** and Gordon, M. The effect of ATP deletion upon the acrosome reaction in guinea pig sperm. *J. of Andrology* 3, 108 - 112, 1982.
- Santos-Sacchi, J.** An electronmicroscopic study of microtubules in the maturation of marginal cells of the mouse stria vascularis. *Hearing Research* 6, 7 - 13, 1982.
- Santos-Sacchi, J.,** Gordon, M. and Williams, W.L. Potentiation of the cGMP - induced acrosome reaction by zinc. *J. Exp. Zool.* 213, 289 - 291, 1980.
- Santos-Sacchi, J.** and Gordon, M. The induction of the acrosome reaction in guinea pig spermatozoa by cGMP analogues. *J. Cell Biol.* 85, 798 - 803, 1980.
- Santos-Sacchi, J.** and Marovitz, W.F. An evaluation of normal strial capillary transport using the electron opaque tracers ferritin and iron dextran. *Acta Otolaryngol.* 89, 12 - 26, 1980.
- Santos-Sacchi, J.** Differential effects of primary glutaraldehyde and osmium fixation upon the membranous systems of the strial and external sulcus cells. *Acta Otolaryngol.* 86, 56 - 63, 1978.
- Santos-Sacchi, J.** Cytoplasmic microtubules in strial marginal cells. *Arch. Oto - Rhino - Laryng.* 218, 297 - 300, 1978.

## PRESENTATIONS AND ABSTRACTS

### Completed

- Santos-Sacchi, J. Plenary Lecture Mechanics of Hearing 10<sup>th</sup> International Symposium, Keele University, England. July 26, 2008
- Santos-Sacchi, J. Inner Ear Biology Meeting. Ferrara, Italy, Sept. 21., 2008
- Tao Wu; Lei Song; Xiaorui Shi; Zhi-Gen Jiang; Joseph **Santos-Sacchi**; Alfred Nuttall. Action of Capsaicin on the Outer Hair Cells of the Guinea Pig Through Non-TRPV-1 Mechanisms. *Assoc. Res. Otolaryngol. Abs.*, 2008.
- Alexei Surguchev; Joseph **Santos-Sacchi**; Dhasakumar Navaratnam FRET as a Method to Demonstrate Prestin Function. *Assoc. Res. Otolaryngol. Abs.*, 2008.
- Alexei Surguchev; Jun-Ping Bai; Joseph **Santos-Sacchi**; Dhasakumar Navaratnam A6-Prestin Chimeras Do Not Show NLC. *Assoc. Res. Otolaryngol. Abs.*, 2008.
- Joseph **Santos-Sacchi**; Lei Song; Volodya Rybalchenko Prestin's Extrinsic Anion Voltage Sensor Model Is Untenable. *Assoc. Res. Otolaryngol. Abs.*, 2008.
- Shu Min Bian; Jun-Ping Bai; Joseph **Santos-Sacchi**; Dhasakumar Navaratnam Characterization of OHC Motor Protein in 293 Stable Cell Lines. *Assoc. Res. Otolaryngol. Abs.*, 2008.
- Xiantao Li; Joseph **Santos-Sacchi** The Mechanism of Chloride Flux Across the Outer Hair Cell Membrane. *Assoc. Res. Otolaryngol. Abs.*, 2008.
- Lei Song; Joseph **Santos-Sacchi** Modulation of Prestin's State Dependent Chloride Binding. *Assoc. Res. Otolaryngol. Abs.*, 2008.
- Jun-Ping Bai; Alexei Surguchev; Joseph **Santos-Sacchi**; Dhasakumar Navaratnam The Role of Cysteine Residues in Prestin. *Assoc. Res. Otolaryngol. Abs.*, 2008.
- Santos-Sacchi, J.,** Lei Song Membrane Tension Alters Anion Binding to Prestin. *Assoc. Res. Otolaryngol. Abs.*, 2007.
- Jun-Ping Bai, Dhasakumar Navaratnam, Joseph **Santos-Sacchi** Mutation in the NQE (Saier) Motif in Prestin: Insights Into Prestin Structure and Function. *Assoc. Res. Otolaryngol. Abs.*, 2007.
- Santos-Sacchi, J.** OHC electromotility. Invited lecture. Stanford University. 2007
- Santos-Sacchi, J.** Newest tunes from Corti's organ. Plenary Speaker, 16th Congress of the Japan Otology Society, Hirosaki on October 18–21, 2006.
- Santos-Sacchi, J.** Invited Chair, Symposium on Cochlear Amplification, Shanghai International Conference on Audition and Vision, November 2006
- Bai, J-P, Navaratnam, **Santos-Sacchi, J** MAP-1S, A Microtubule Associated Protein Interacts with Prestin and Modulates Its Activity. *Assoc. Res. Otolaryngol. Abs.*, 2006.

Bai, J-P, Ortega, A, **Santos-Sacchi, J**, Navaratnam, D BK Channels (Slo) Interact with CDK5 Kinase in Chick Hair Cells – Implications to Tuning. *Assoc. Res. Otolaryngol. Abs.*, 2006.

Navaratnam, D, Bai, J-P, Peter Aronson, **Santos-Sacchi, J** Prestin Is an Anion Transporter. *Assoc. Res. Otolaryngol. Abs.*, 2006.

Abe, T, Kakehata, S, Kitani, R, Maruya, S-I, Navaratnam, D, **Santos-Sacchi, J**, Shinkawa, H Developmental Expression of the Outer Hair Cell Motor, Prestin, in the Mouse. *Assoc. Res. Otolaryngol. Abs.*, 2006.

**Santos-Sacchi, J**, Song, L, Jiefu Zheng, Nuttall, AL Control of Mammalian Basilar Membrane Amplification by Chloride Anions. *Assoc. Res. Otolaryngol. Abs.*, 2006.

Song, L, **Santos-Sacchi, J** Cable Properties Along the OHC Cylinder. *Assoc. Res. Otolaryngol. Abs.*, 2006

**Santos-Sacchi, J**. L. Song, J.- P. Bai, D. Navaratnam. Chloride And The Ohc Lateral Membrane Motor . 12<sup>th</sup> Mechanics of Hearing Meeting, July, 2005.

Takahisa Abe, Seiji Kakehata, Rei Kitani, J. **Santos-Sacchi**, Hideichi Shinkawa. Developmental expression of the outer hair cell motor in the mouse. Society for Neuroscience Meeting, November, 2005

**Santos-Sacchi, J**. Biophysics of the outer hair cell. Invited Seminar. Kao University Japan, Sept, 2004

Nuttall, AL, Zheng J, **Santos-Sacchi, J** Modulation of cochlea amplification by tributyltin and salicylate. *Assoc. Res. Otolaryngol. Abs.* February, 2005.

**Santos-Sacchi, J**, Song, L, and Navarrete, E Fast electromechanical amplification in the lateral membrane of the outer hair cell. *Assoc. Res. Otolaryngol. Abs.* February, 2005.

Song, L, and **Santos-Sacchi, J** Tributyl-tin rescues salicylate ototoxicity in outer hair cells by promoting chloride influx. *Assoc. Res. Otolaryngol. Abs.* February, 2005.

Bai, J-P, Samarnanayake, H, Joshi, P, **Santos-Sacchi, J** and Navaratnam, D Prestin's partners: molecular interactions a go-go! *Assoc. Res. Otolaryngol. Abs.* February, 2005.

Joshi, P, Samarnanayake, H, Ortega, A, **Santos-Sacchi, J** and Navaratnam, D CSlo interacting proteins in the inner ear.

Ortega, A, Samarnanayake, H, **Santos-Sacchi, J** and Navaratnam, D The effect of the beta subunits on the kinetic properties of the BK channel from chick hair cells.

Navaratnam, D, Bai, J-P, Samaranayake, H. **Santos-Sacchi, J**. Structure – function studies of prestin, the OHC lateral membrane motor. *Assoc. Res. Otolaryngol. Abs.* February, 2004.

Navaratnam, D, Samaranayake, H., Ortega, A., **Santos-Sacchi, J** Distribution and effects of the beta 1 and 2 subunits of cSlo: implications for tuning. *Assoc. Res. Otolaryngol. Abs.* February, 2004.

**Santos-Sacchi, J**, Rybalchenko,V, Bai, J-P, Song, L, Navaratnam, D, A closer look at the lateral membrane Cl conductance,  $G_{metL}$ . *Assoc. Res. Otolaryngol. Abs.* February, 2004.

Rybalchenko,V. & **Santos-Sacchi,J**. Evidence for different anion-binding sites for the control of prestin's voltage-sensor charge movement and operating range. *Assoc. Res. Otolaryngol. Abs.* February, 2004.

Song, L & **Santos-Sacchi,J**. Effects of tributyl-tin on chloride homeostasis and membrane capacitance in the outer hair cell. *Assoc. Res. Otolaryngol. Abs.* February, 2004.

**Santos-Sacchi, J**. On cell capacitance and fusion pores: an exact empirical determination of the elusive partial derivative  $\partial Y/\partial C_m$  and its phase angle. Biophysical Society Meeting, Baltimore, MD, February, 2004.

**Santos-Sacchi, J**. Biophysics of the outer hair cell. Invited Seminar. Osaka University Japan, Sept, 2004

**Santos-Sacchi, J**. & Navaratnam,D. Structure-function studies on prestin. Gordon Research Conference on Gravity and Mechanosensation, July, 2003

**Santos-Sacchi,J**. & Rybalchenko,V. Prestin Activity May Support Outer Hair Cell Lateral Membrane Chloride Flux. *Assoc. Res. Otolaryngol. Abs.* 208 (2003).

Bai,J.-P., Samaranayake,H., Navaratnam,D. & **Santos-Sacchi,J**. Carboxy-terminal truncations and mutations of prestin; affects on NLC. *Assoc. Res. Otolaryngol. Abs.* 208 (2003).

Rybalchenko,V. & **Santos-Sacchi,J**. Modulation of The Outer Hair Cell Motor by Sulfonate-Containing Anions. *Assoc. Res. Otolaryngol. Abs.* (2003).

**Santos-Sacchi, J**. The cellular basis of amplification in the cochlea. Invited Speaker, Dept. Neuroscience UCONN Medical Center, October, 2002

**Santos-Sacchi, J** and Rybalchenko, V. Allosteric modulation of the outer hair cell motor protein prestin by chloride. Biophysics of the Cochlea: From Molecules to Models, Titisee, Germany, July

- 2002.
- Santos-Sacchi, J.** A Biophysical Dissection of the Outer Hair Cells. Invited Speaker, Boys Town National Research Hospital, Sept, 2002.
- Santos-Sacchi, J.** Hysteresis in the OHC. Invited Speaker. Mid - winter Meeting of the Association for Research in Otolaryngology, St. Petersburg, FL, January, 2002.
- Rybalchenko, V. and **Santos-Sacchi, J.** An Unusual Cl<sup>-</sup> Conductance in Isolated Guinea Pig Outer Hair Cells. Mid - winter Meeting of the Association for Research in Otolaryngology, St. Petersburg, FL, January, 2002.
- Santos-Sacchi, J.** and Rybalchenko, V. Tension-Dependent Chloride Current Affects OHC Capacitance. Mid - winter Meeting of the Association for Research in Otolaryngology, St. Petersburg, FL, January, 2002.
- Santos-Sacchi, J.** Tunes from Corti's organ. Invited Speaker. Dept. of Biology, U. of Maryland, College Park, November, 2001
- Rybalchenko, V. and **Santos-Sacchi, J.** Influence of extracellular chloride and tension on OHC nonlinear capacitance. Molecular Biology of Hearing Symposium., Bethesda, MD, October., 2001
- Rybalchenko, V. and **Santos-Sacchi, J.** Modulation of OHC capacitance by chloride. Inner Ear Biology Meeting, Rome, Italy, July, 2001
- Santos-Sacchi, J.** Roving nonlinearities of the OHC motor. Invited participant. Perceptual Consequences of Cochlear Nonlinearity, Hanse-issenschaftskolleg Lehmkuhlenbusch 4 D-27753 Delmenhorst, Germany, August, 2001.
- Santos-Sacchi, J.,** Shen, W., Zheng, J., Dallos, P. Prestin, the OHC lateral membrane motor has memory. Mid - winter Meeting of the Association for Research in Otolaryngology, St. Petersburg, FL, February, 2001.
- Santos-Sacchi, J.** and Navarrete, E. The OHC's linear capacitance is nonlinear!! Presentation at the Mid - winter Meeting of the Association for Research in Otolaryngology, St. Petersburg, FL, February, 2001.
- Navarrete, E. and **Santos-Sacchi, J.** Electropermeabilization and fast resealing in the cellular elements of the mammalian cochlea. Mid - winter Meeting of the Association for Research in Otolaryngology, St. Petersburg, FL, February, 2001.
- Santos-Sacchi, J.** Latin tunes from Corti's organ: Outer hair cells can mambo!. Invited Speaker. Dept. of Physiology and Biophysics, State University of New York at Buffalo, Oct. 2000
- Santos-Sacchi, J.** Electro-mechanical nonlinearity within and among outer hair cells. Invited Symposium Presentation at the Mid - winter Meeting of the Association for Research in Otolaryngology, St. Petersburg, FL, February, 2000.
- Santos-Sacchi, J.,** Takahashi, S. and Huang, G. - J. Electro-mechanical evidence for motor microdomains in the lateral plasma membrane of the OHC. Mid - winter Meeting of the Association for Research in Otolaryngology, St. Petersburg, FL, February, 2000.
- Santos-Sacchi, J.** and Zhao, H. Green card motors: OHC lateral membrane molecular motors may travel. Mid - winter Meeting of the Association for Research in Otolaryngology, St. Petersburg, FL, February, 1999.
- Zhao, H. and **Santos-Sacchi, J.** Multiple types of asymmetric voltage gating in gap junctions of cochlear supporting cells: evidence for heterotypic and heteromeric-like channels. Mid - winter Meeting of the Association for Research in Otolaryngology, St. Petersburg, FL, February, 1999.
- Santos-Sacchi, J.** The magnificent outer hair cell of Corti's organ. Invited Speaker. Japanese Otolaryngology Meeting. Sendai, Japan, Oct., 1998.
- Santos-Sacchi, J.** Physiological assessment of gap junctional communication in Corti's organ. Invited Speaker. Gap Junctions 98 Symposium, Rio de Janeiro, Brazil, June, 1998.
- Santos-Sacchi, J.** Biophysical dissection of the OHC. Invited Seminar, University of Washington, June, 1998.
- Zhao, H-B. And **Santos-Sacchi, J.** Mechano-electrical coupling between outer hair cells. Biophysical Society Meeting, Kansas City, MO, February, 1998.
- Santos-Sacchi, J.** and Wu, M. Electrical correlates of OHC viscoelastic behavior - evidence for voltage-induced membrane tension. Mid - winter Meeting of the Association for Research in Otolaryngology, St. Petersburg, FL, February, 1998.
- Takahashi, S. and **Santos-Sacchi, J.** Tension-induced OHC gating currents are restricted to the cell's mid region. Mid - winter Meeting of the Association for Research in Otolaryngology, St. Petersburg, FL, February, 1998
- Zhao, H. and **Santos-Sacchi, J.** Effects of turgor pressure and membrane voltage on gap junctions of



- isolated cochlear supporting cells. Mid - winter Meeting of the Association for Research in Otolaryngology, St. Petersburg, FL, February, 1997.
- Santos-Sacchi, J.**, Kakehata, S. and Takahashi, S. Voltages past: The outer hair cell has memory. Mid - winter Meeting of the Association for Research in Otolaryngology, St. Petersburg, FL, February, 1997.
- Kakehata, S. and **Santos-Sacchi, J.** Higher frequency outer hair cells have a greater specific voltage - dependent capacitance. Mid - winter Meeting of the Association for Research in Otolaryngology, St. Petersburg, FL, February, 1997.
- Takahashi, S. and **Santos-Sacchi, J.** Distortion product analysis of outer hair cell motility - related gating currents. Mid - winter Meeting of the Association for Research in Otolaryngology, St. Petersburg, FL, February, 1997.
- Wu, M. and **Santos-Sacchi, J.** Lipophilic ions modify voltage - dependent capacitance and motility of outer hair cells. Mid - winter Meeting of the Association for Research in Otolaryngology, St. Petersburg, FL, February, 1997.
- Santos-Sacchi, J.**, Kakehata, S. and Takahashi, S. The voltage - dependent capacitance function of the outer hair cell has memory. Society for Neuroscience, 26th Annual Meeting, 1996
- Wu, M. and **Santos-Sacchi, J.** Effects of lipophilic ions on outer hair cell voltage - dependent capacitance and motility. Society for Neuroscience, 26th Annual Meeting, 1996
- Santos-Sacchi, J.** and Kakehata, S. Nonlinear capacitance of the outer hair cell is inversely related to linear capacitance. Biophysical Society Meeting , 1996.
- Santos-Sacchi, J.** New dances with outer hair cells. Invited Seminar, University of Connecticut Health Center, Center for Neurological Sciences, March , 1996.
- Santos-Sacchi, J.** OHC motility. Invited Seminar, National Institute on Deafness and other Communicative Disorders, Bethesda, Maryland, March, 1996.
- Sato, Y., Oku, M., Orita, Y. and **Santos-Sacchi, J.** Effect of IP<sub>3</sub> on gap junction conductance of supporting cells of the organ of Corti. Mid - winter Meeting of the Association for Research in Otolaryngology, St. Petersburg, FL, February, 1996.
- Santos-Sacchi, J.** and Huang, G. - J. Electrical dissection of ionic conductances in the outer hair cell. Mid - winter Meeting of the Association for Research in Otolaryngology, St. Petersburg, FL, February, 1996.
- Kakehata, S. and **Santos-Sacchi, J.** Effects of salicylate on nonlinear capacitance of outer hair cells from guinea pig cochlea. Mid - winter Meeting of the Association for Research in Otolaryngology, St. Petersburg, FL, February, 1996.
- Santos-Sacchi, J.** Electrical dissection of ionic conductances in the outer hair cell. Symposium on the molecular biology of hearing and deafness, Bethesda, MD, 1995.
- Hasson, T., Heintzelman, M.B., **Santos-Sacchi, J.**, Corey, D.P., Mooseker, M.S. Expression in Cochlea and Retina of Myosin VIIa, the Gene Product Defective in Usher Syndrome Type 1b. Symposium on the molecular biology of hearing and deafness, Bethesda, MD, 1995.
- Santos-Sacchi, J.** Controlling the volume of the cochlear amplifier: tweaking the outer hair cell., Invited Speaker, Rutgers University, Jan. 31, 1995.
- Santos-Sacchi, J.** New tunes from Corti's organ: Playing the outer hair cell. , Invited Speaker, Cellular and Molecular Physiology Department, Yale Medical School, Dec., 1994.
- Santos-Sacchi, J.** New tunes from Corti's organ: Playing the outer hair cell. , Invited Speaker, Biophysics Seminar, SUNY Stony Brook, Oct. 26, 1994.
- Santos-Sacchi, J.**, Kakehata, S and Huang, G. - J Effects of putative efferent transmitters on the OHC motility voltage sensor. Invited Speaker, First International Symposium, Inner Ear Neuropharmacology, Montpellier, France Sept., 1994.
- Santos-Sacchi, J.**, Huang, G. - J and Kakehata, S. Variability of voltage dependency of the outer hair cell (OHC) motility voltage sensor. 127 th Meeting of the Acoustical Society of American, June, 1994.
- Santos-Sacchi, J.** Progress in Auditory Neurobiology, Invited Speaker, Human Anatomy and Physiology Society, Portsmouth, NH, June, 1994.
- Santos-Sacchi, J.** On the scientific achievements of Peter Dallos. Invited Speaker on the occasion of presentation of the Award of Merit to Peter Dallos, Association for Research in Otolaryngology, St. Petersburg, Florida, Feb., 1994.
- Santos-Sacchi, J.** Mechanical activity of outer hair cells from the mammalian inner ear. Invited Speaker, Purdue University Neuroscience Program, Dec, 1993.
- Santos-Sacchi, J.** and Huang, G. - J. Characterizing the extent of the OHC motility voltage sensor with an electrical guillotine: evidence that ends don't meet. Symposium: Biophysics of hair cell

- sensory systems. Paterswolde, The Netherlands, June 1993.
- Santos-Sacchi, J.** OHC motility: Is it the answer?. Invited Speaker, Presidential Symposium on Sensory Transduction, Midwinter Meeting of the Association for Research in Otolaryngology, St. Petersburg, FL, February, 1993.
- Santos-Sacchi, J.** OHC mechanical function. Invited Speaker, Eaton - Peabody Laboratory, Harvard Medical School, Dec, 1992.
- Santos-Sacchi, J.** and Lesnik, D. Shake, rattle but no roll - - whole cell fluid based vibration of OHCs induces no DC length change. Midwinter Meeting of the Association for Research in Otolaryngology, St. Petersburg, FL, February, 1993.
- Huang, G. - J. and **Santos-Sacchi, J.** Metabolic control of OHC function: phosphorylation and dephosphorylation agents shift the voltage dependency of motility related capacitance. Midwinter Meeting of the Association for Research in Otolaryngology, St. Petersburg, FL, February, 1993.
- Santos-Sacchi, J.** Role of outer hair cells in mammalian hearing. Invited Speaker, Interdepartmental Neuroscience Program, Yale University, Neuroscience Retreat, MBL, MA, February 19 - 21, 1993.
- Santos-Sacchi, J.** Role of outer hair cell motility in hearing. Invited Speaker, Cell and Developmental Biology Graduate Program, Rutgers University, Oct. 27, 1992.
- Santos-Sacchi, J.** Outer hair cell motility: Its role in mammalian hearing. Invited Speaker, MBL/BUMP 1992 Seminar Series, Marine Biological Laboratory, March 6, 1992.
- Santos-Sacchi, J.** The role of outer hair cells in mammalian hearing. Invited Speaker, Center for Neural Science, New York University, March 9, 1992.
- Santos-Sacchi, J.** Effects of Voltage dependence on outer hair cell fast motility. Mid winter Meeting of the Association for Research in Otolaryngology, St. Petersburg, FL, February, 1992.
- Sato, Y. and **Santos-Sacchi, J.** Calcium and hydrogen ion sensitivity of gap junctional conductance in the supporting cells of the organ of Corti. Mid winter Meeting of the Association for Research in Otolaryngology, St. Petersburg, FL, February, 1992.
- Santos-Sacchi, J.** Relations between DC and AC mechanical responses of the outer hair cell. Meeting of the Acoustical Society of American, Houston, TX, November, 1991.
- Santos-Sacchi, J.** The role of the outer hair cell in mammalian hearing. Invited Lecturer. Dept. of Neuroscience, Johns Hopkins University, Baltimore, MD, April 4, 1991.
- Santos-Sacchi, J.** Overview: the outer hair cells of the organ of Corti. Invited Lecturer. Neurosciences Program Series, Michigan State University, East Lansing, MI, February 28, 1991.
- Santos-Sacchi, J.** Comparison between nonlinear voltage dependent capacitance and motility of isolated outer hair cells. Mid winter Meeting of the Association for Research in Otolaryngology, St. Petersburg, FL, February, 1991.
- Santos-Sacchi, J.** Nonlinear voltage dependent capacitance of the outer hair cell (OHC) membrane. Invited Speaker. Meeting of the Acoustical Society of American (special session in memory of Dr. Jurgen Tonndorf), San Diego, CA, November, 1990.
- Santos-Sacchi, J.** Frequency response analysis of OHC motility under voltage clamp. Mechanics and Biophysics of Hearing, Madison, WI, June, 1990.
- Santos-Sacchi, J.** Studies on the fast inward Na<sup>+</sup> current in isolated Type I spiral ganglion cells. Midwinter Meeting of the Association for Research in Otolaryngology, St. Petersburg, FL, February, 1990.
- Santos-Sacchi, J.** Gadolinium ions reversibly block voltage dependent movements of isolated outer hair cells. Society for Neuroscience, 19th Annual Meeting, Phoenix, AZ, October, 1989.
- Santos-Sacchi, J.** Whole cell voltage clamping of spiral ganglion and outer hair cells. Hearing and Chemical Senses Seminars, Kresge Hearing Research Institute, U. of Michigan, Ann Arbor, MI, April, 1989.
- Santos-Sacchi, J.** Calcium currents, potassium currents and the resting potential in isolated outer hair cells. Midwinter Meeting of the Association for Research in Otolaryngology, St. Petersburg, FL, February, 1989.
- Santos-Sacchi, J.** Gap junctional communication in isolated supporting cells of the organ of Corti. Fourth International Congress of Cell Biology, Montreal, Quebec, Canada, August, 1988.
- Santos-Sacchi, J.** Rectified mechanical responses in outer hair cells from the mammalian organ of Corti. Fourth International Congress of Cell Biology, Montreal, Quebec, Canada, August, 1988.
- Santos-Sacchi, J.** Whole cell voltage clamp studies on isolated outer hair cells. Invited Speaker. Current Concepts of Hair Cell Function. Kresge Hearing Research Institute, U. of Michigan, Ann Arbor, MI, June, 1988.
- Santos-Sacchi, J.** and Dilger, J.P. Whole cell currents and mechanical responses in outer hair cells. Midwinter Meeting of the Association for Research in Otolaryngology, Clearwater, FL, February,

- 1988.
- Santos-Sacchi, J.** Intracellular recordings from supporting cells and hair cells in the organ of Corti. Invited Seminary, Northwestern U., Dept. of Neurobiology and Physiology, Evanston, IL, March, 1987.
- Santos-Sacchi, J.** Electrophysiological studies of hair cells and supporting cells in the organ of Corti. Invited Seminar, Syracuse U., Institute for Sensory Research, Syracuse, NY, June, 1987.
- Santos-Sacchi, J.** and Marbey, D. The effects of endolymphatic potential alteration upon electrical coupling in the organ of Corti. Midwinter Meeting of the Association for Research in Otolaryngology, Clearwater, FL, February, 1987.
- Santos-Sacchi, J.** and Dilger, J.P. Patch clamp studies on isolated outer hair cells. Advances in Auditory Neuro - science, The IUPS Satellite Symposium on Hearing, Lone Mountain Conference Center, San Francisco, CA, July, 1986.
- Santos-Sacchi, J.** Intracellular studies in the mammalian inner ear. Seminary, Dept. of Physiology, UMDNJ - New Jersey Medical School, Newark, NJ, March, 1986.
- Santos-Sacchi, J.** Cell coupling differs in the in vivo and in vitro organ of Corti. Midwinter Meeting of the Association for Research in Otolaryngology, Clearwater, FL, February, 1986.
- Santos-Sacchi, J.** Cell coupling studies in the organ of Corti. Midwinter Meeting of the Association for Research in Otolaryngology, Clearwater, FL, February, 1986.
- Santos-Sacchi, J.** Temperature dependence of electrical coupling in the organ of Corti. Midwinter Meeting of the Association for Research in Otolaryngology, Clearwater, FL, February, 1986.
- Santos-Sacchi, J.** Cell coupling in the in vivo and in vitro organ of Corti. Twenty - fifth Annual Meeting, The American Society for Cell Biology, Atlanta, GA, J. Cell Biol. 101, 179a, 1985.
- Santos-Sacchi, J.** CO<sub>2</sub> treatment can transiently enhance current spread through Hensen's cells. Midwinter Meeting of the Association for Research in Otolaryngology, Clearwater, FL, February, 1985.
- Santos-Sacchi, J.** Increased intracellular H<sup>+</sup> and Ca<sup>++</sup> uncouples the cells of Corti's organ. Midwinter Meeting of the Association for Research in Otolaryngology, St. Petersburg, FL, February, 1984.
- Santos-Sacchi, J.** Intracellular studies in the mammalian cochlea. Seminar, Dept. of Surgery, Div. of Otolaryngology, UMDNJ - New Jersey Medical School, Newark, NJ, November, 1983.
- Dallos, P. and **Santos-Sacchi, J.** AC receptor potentials from hair cells in the low frequency region of the guinea pig cochlea. I.U.P.S. Satellite Symposium on Mechanism of Hearing. Monash University, Melbourne, Australia, August 24 - 26, 1983.
- Santos-Sacchi, J.** Intracellular studies in the cochlea: From hair cells to supporting cells. Seminary, Dept. of Otolaryngology, Neurosensory Center, Baylor College of Medicine, Houston, TX, July, 1983.
- Santos-Sacchi, J.** Sound evoked activity from mammalian cochlear hair cells. Society for Neuroscience Seminar, U. Puerto Rico Medical School Chapter, San Juan, PR, June 1983.
- Santos-Sacchi, J.** A unique ferritin - containing cell type in the stria vascularis of the mouse. Midwinter Research Meeting, Association for Research in Otolaryngology, St. Petersburg, FL, January, 1983.
- Santos-Sacchi, J.** Intracellular recordings from cochlear hair cells. Anatomy Seminar, Medical School, U. Puerto Rico, San Juan, PR, July, 1982.
- Dallos, P., **Santos-Sacchi, J.** and Lutz, W. Determination of cochlear receptor potential characteristics by pseudorandom noise. Acoustical Society of America, 103rd Meeting, April, 1982.
- Santos-Sacchi, J.** Intracellular recordings from the cochlear outer hair cells. Seminar, Dept. of Surgery, Division of Otolaryngology, Downstate Medical Center, SUNY, March 1982.
- Santos-Sacchi, J.** and Dallos, P. Intercellular communication in the supporting cells of the guinea pig organ of Corti. Midwinter Research Meeting, Association for Research in Otolaryngology, St. Petersburg, FL, 1982.
- Dallos, P., and **Santos-Sacchi, J.** Intracellular recordings from cochlear outer hair cells. Midwinter Research Meeting, Association for Research in Otolaryngology, St. Petersburg, FL, 1982.
- Santos-Sacchi, J.** and Gordon, M. Depletion of ATP is associated with the acrosome reaction in guinea pig sperm. Twenty - first Annual Meeting, The American Society for Cell Biology, J. Cell Biol. 91, 9010, 1981.
- Dallos, P., Flock, A., and **Santos-Sacchi, J.** The electrical profile of the organ of Corti. XVIIIth Workshop on Inner Ear Biology, 1981.
- Santos-Sacchi, J.** and Gordon, M. cGMP analogues induce the guinea pig acrosome reaction. Thirteenth Annual Meeting of the Society for the Study of Reproduction, 1980.
- Santos-Sacchi, J.** The role of cyclic nucleotides in mammalian fertilization, Biochemistry Seminar, U.

of Georgia, Athens, GA, August, 1978.  
**Santos-Sacchi**, J. Preparative alterations in strial ultrastructure. Annual Meeting of the New York State Speech and Hearing Association, 1978.