

Stone Lab Papers

Research Papers

- Golub, JS, Tong, L, Nguyen, T, Hume, C, Palmiter, RD, Rubel, EW, Stone, JS (2012). Hair cell replacement in adult mouse utricles after targeted ablation of hair cells with diphtheria toxin. *Journal of Neuroscience* 32(43):15093-105.
- Chonko KT, Jahan I, Stone JS, Wright MC, Fujiyama T, Hoshino M, Fritzsich B, Maricich SM (2013). *Atoh1* directs hair cell differentiation and survival in the late embryonic mouse inner ear. *Developmental Biology* 381(2):401-10.
- Bucks, SA, Cox, BC, Vlosich, BA, Manning, JP, Nguyen, TB, Stone, JS (2017). Supporting cells remove and replace sensory receptor hair cells in a balance organ of adult mice. *eLife* 6. pii: e18128.
- Warchol ME, Stone J, Barton M, Ku J, Veile R, Daudet N, Lovett M (2017) ADAM10 and γ -secretase regulate sensory regeneration in the avian vestibular organs. *Developmental Biology* 428(1):39-51.
- Scheibinger M, Ellwanger DC, Corrales CE, Stone JS, Heller S (2018) Aminoglycoside Damage and Hair Cell Regeneration in the Chicken Utricle. *Journal of the Association for Research in Otolaryngology* 19(1):17-29.
- Lewis RM, Keller JJ, Wan L, Stone JS (2018) Bone morphogenetic protein 4 antagonizes hair cell regeneration in the avian auditory epithelium. *Hear Res.* pii: S0378-955(17)30531-2. doi: 10.1016/j.heares.2018.04.008.
- Hicks KL, Wisner SR, Cox BC, Stone JS (2020) *Atoh1* is required in supporting cells for regeneration of vestibular hair cells in adult mice. *Hear Res.* 385:107838.
- Wan L, Lovett M, Warchol ME, Stone JS (2020) Vascular endothelial growth factor is required for regeneration of auditory hair cells in the avian inner ear. *Hear Res* 385:107839.
- Stone JS, Pujol R, Nguyen TB, Cox BC (2021) The transcription factor *Sox2* is required to maintain the cell type-specific properties and innervation of type II vestibular hair cells in adult mice. *J Neurosci* 41(29):6217-33.
- González-Garrido A, Pujol R, López-Ramírez O, Finkbeiner C, Eatock RA, Stone JS (2021) The differentiation status of hair cells that regenerate naturally in the vestibular inner ear of the adult mouse *J Neurosci* 41(37):7779-7796.

Reviews

- Rubel, EW, Furrer, SA, Stone JS (2013). A brief history of hair cell regeneration research and speculations on the future. *Hearing Research* 297:42-51.
- Wan G, Corfas G, Stone JS (2013). Inner ear supporting cells: Rethinking the silent majority. *Seminars in Cell and Developmental Biology* 2013 Mar 29.
- Lewis, R, Rubel, E, Stone, JS (2016). Regeneration of auditory hair cells: A potential treatment for hearing loss on the horizon? *Acoustics Today*, Summer 2016 Issue.
- Burns JC, Stone JS (2017). Development and regeneration of vestibular hair cells in mammals. *Semin Cell Dev Biol* 65:96-105.

Reviews and other papers on vestibular system

- Eatock RA, Songer JE (2011) Vestibular hair cells and afferents: two channels for head motion signals. *Annu Rev Neurosci.* 34:501-34. doi: 10.1146/annurev-neuro-061010-113710.
- Agrawal Y, Carey JP, Della Santina CC, Schubert MC, Minor LB (2009) Disorders of balance and vestibular function in US adults: data from the National Health and Nutrition Examination Survey, 2001-2004. *Arch Intern Med.* 169(10):938-44. doi: 10.1001/archinternmed.2009.66.PMID: 19468085
- Coto J, Alvarez CL, Cejas I, Colbert BM, Levin BE, Huppert J, Rundek T, Balaban C, Blanton SH, Lee DJ, Loewenstein D, Hoffer M, Liu XZ (2021) Peripheral vestibular system: Age-related vestibular loss and associated deficits. *J Otol.* 16(4):258-265. doi: 10.1016/j.joto.2021.06.001.

Reviews on hair cell regeneration (auditory and vestibular)

- Iyer AA, Groves AK (2021) Transcription Factor Reprogramming in the Inner Ear: Turning on Cell Fate Switches to Regenerate Sensory Hair Cells. *Front Cell Neurosci* 15:660748. doi: 10.3389/fncel.2021.660748. eCollection 2021.
- Atkinson PK, Kim GS, Cheng AG (2019) Direct cellular reprogramming and inner ear regeneration *Expert Opin Biol Ther*19(2):129-139. doi: 10.1080/14712598.2019.1564035. PMID: 30584811 PMCID: PMC6592785
- Layman WS, Zuo J (2015) Epigenetic regulation in the inner ear and its potential roles in development, protection, and regeneration. *Front Cell Neurosci.* 8:446. doi: 10.3389/fncel.2014.00446. eCollection 2014. PMID: 25750614

Reviews on vestibular hair cell death and regeneration

- Rauch SD, Velazquez-Villaseñor L, Dimitri PS, Merchant SN (2001) Decreasing hair cell counts in aging humans. *Ann NY Acad Sciences* 942:220-7.
- Forge A, Li L, Nevil G (1993) Hair cell recovery in the vestibular sensory epithelia of mature guinea pigs, *J Comp Neurol* 397(1):69-88.PMID: 9671280
- Taylor RR, Jagger DJ, Saeed SR, Axon P, Donnelly N, Tysome J, Moffatt D, Irving R, Monksfield P, Coulson C, Freeman SR, Lloyd SK, Forge A (2015) Characterizing human vestibular sensory epithelia for experimental studies: new hair bundles on old tissue and implications for therapeutic interventions in ageing. *Neurobiol Aging.* 36(6):2068-84. doi: 10.1016/j.neurobiolaging.2015.02.013. PMID: 25818177.
- Taylor RR, Filia A, Paredes U, Asai Y, Holt JR, Lovett M, Forge A (2018) Regenerating hair cells in vestibular sensory epithelia from humans. *Elife* 18;7:e34817. doi: 10.7554/eLife.34817. PMID: 30019672.