Peer Reviewed Publications

- Mundackal Sivaraman Divya, Vazhanthodi Abdul Rasheed, Tiffany Schmidt, Soundararajan Lalitha, Samer Hattar, and Jackson James; Intraocular injection of ES cell-derived neural progenitors improve visual function in retinal ganglion cell-depleted mouse models: Frontiers in Cellular Neuroscience, 11 (2017) e 295, doi: 10.3389/fncel.2017.00295
- Chandramohan Subashini, Sivadasan Bindu Dhanesh, Chih-Ming Chen, Paul Ann Riya, Vadakkath Meera, Thulasi Sheela Divya, Rejji Kuruvilla, Kerstin Buttler & Jackson James; Wnt5a is a crucial regulator of neurogenesis during cerebellum development: Scientific Reports, 7 (2017) 42523; doi: 10.1038/srep42523
- 3. Sivadasan Bindu Dhanesh, Chandramohan Subashini, Paul Ann Riya, Vazhanthodi Abdul Rasheed & Jackson James; Pleiotropic Hes-1 concomitant with its differential activation mediates neural stem cell maintenance and radial glial propensity in developing neocortex: Cerebral Cortex 27(2017) 3943–3961, DOI: 10.1093/cercor/bhw207
- 4. Thulasi Sheela Divya, Soundararajan Lalitha, Surendran Parvathy, Chandramohan Subashini, Rajendran Sanalkumar1, Sivadasan Bindu Dhanesh, Vazhanthodi Abdul Rasheed, Mundackal Sivaraman Divya, Shubha Tole & Jackson James; Regulation of Tlx3 by Pax6 is required for the restricted expression of Chrnα3 in Cerebellar Granule Neuron progenitors during development: Scientific Reports, 6 (2016) 30337, DOI: 10.1038/srep30337
- Sivadasan Bindu Dhanesh, Chandramohan Subashini & Jackson James: Hes1: The maestro in neurogenesis; Cell. Mol. Life. Sci., 73(2016):4019-42, DOI: 10.1007/s00018-016-2277-z.
- **6.** Anupama Vijayakumar, Aneesh Chandran, Sivadasan Bindu Dhanesh, **Jackson James**, K. Shivakumar: Molecular mechanisms in H2O2-induced increase in AT1 receptor gene expression in cardiac fibroblasts: a role for endogenously generated Angiotensin II; **Journal of Molecular and Cellular Cardiology**, **97** (2016) 295–305.
- Mereena George, Anupama Vijayakumar, Sivadasan Bindu Dhanesh, Jackson James, K. Shivakumar: Molecular basis and functional significance of Angiotensin II-induced increase in Discoidin Domain Receptor 2 gene expression in cardiac fibroblasts; Journal of Molecular and Cellular Cardiology, 90 (2016) 59–69.
- 8. Vazhanthodi A Rasheed, Sreekumaran Sreekanth, Sivadasan B Dhanesh, Mundackal S Divya, Thulasi S Divya, Palakkottu K Akhila, Chandramohan Subashini, Krishnankutty Chandrika Sivakumar, Ani V Das & Jackson James. Developmental wave of Brn3b expression leading to RGC fate specification is synergistically maintained by miR-23a and miR-374; Developmental Neurobiology, 74 (2014) 1155–1171.

- 9. Nishit Srivatsava, **Jackson James** and KS Narayan. Morphology and electrostatics play active role in neuronal differentiation processes on flexible conducting substrates; **Organogenesis** (2014)10:1, 1-5.
- Sasidharan Shashikala, Rohith Kumar, Nisha E. Thomas, Dhanesh Sivadasan, Jackson James and Suparna Sengupta. Fodrinin Centrosomes: Implication of a role of Fodrin in the transport of Gamma-Tubulin Complex in Brain; *PLOS One 8(2013)e76613.*
- 11. Nishit Srivastava, Vijay Venugopalan, Divya MS, Rasheed VA, **Jackson James*** and K. S. Narayan*. Neuronal differentiation of embryonic stem cell derived neuronal progenitors can be regulated by stretchable conducting polymers; *Tissue Engineering*, 2013, 19(17-18)1984-1993. **Corresponding Authors.
- 12. Mundackal Sivaraman Divya, Roshin Elizabeth George, Thulasi Sheela Divya, Vazhanthodi Abdul Rasheed, Retnabai Thankayyan Santhoshkumar, Kandathil Eapen Elizabeth, Jackson James* & Radhakrishna M Pillai. Umbilical Cord blood derived mesenchymal stem cells consist of a unique population of progenitors co-expressing MSC and neuronal markers capable of instantaneous neuronal differentiation; Stem Cell Research & Therapy, (2012) 3:57 doi:10.1186/scrt148. #Corresponding Author.
- 13. Praveen K. Sobhan, Mahendra Seervi, Jeena Joseph, Saneesh Varghese, Prakash Rajappan Pillai, Divya Mundackal Sivaraman, Jackson James, Roshin Elizabeth George, K.E. Elizabeth, T.R. Santhoshkumar & M. Radhakrishna Pillai. Immortalized Functional Endothelial Progenitor Cell Lines from Umbilical Cord Blood for Vascular Tissue Engineering; Tissue Engineering Part C: Methods, 2012, Vol. 18, No. 11: 890-902
- 14. Indulekha CL, Divya TS, Divya MS, Sanalkumar R, Abdul Rasheed VT, Dhanesh SB, Anu Sebin, Amitha George & Jackson James. Hes-1 regulates the excitatory fate of neural progenitors through modulation of Tlx3 (HOX11L2) expression, Cell. Mol. Life. Sci, (2012) 69:611–627 (Research Article).
- **15.** Lekha Nair K, Vidyanand S, **Jackson James** and G S Vinod Kumar. Pilocarpine loaded PLGA nanoparticles as potential candidate for controlled drug delivery with enhanced ocular pharmacological response; **Journal of Applied Polymer Science**, **2012**, **124(3)**: **2030-2036**.
- 16. Sivakumar KC, Dhanesh SB, Sekar Shobana, Jackson James and Sathish Mundayoor. A Systems Biology Approach to model Neuronal Stem Cell regulation by Notch, Sonic Hedgehog, Wnt, EGF signaling pathways; OMICS: A Journal of Integrative Biology, 2011, 15(10): 729-737.
- 17. KK Saju, Jayadas NH, Sasidharan Vidyanand, Jackson James: Investigations into the molecular level adhesion characteristics of Hydroxyapatite coated and anodized titanium surfaces using molecular orbital approach; <u>Proceedings of the Institution of Mechanical Engineers. Part H, Journal of Engineering in Medicine</u>, 225:3 (2011) 246-254.

- **18.** Sanalkumar R, Dhanesh SB & **Jackson James**: Non-canonical activation of Notch signaling/target genes in vertebrates; *Cell. Mol. Life. Sci.*, 67 (2010) 2957–2968.
- Indulekha CL, Sanalkumar R, Anoopkumar Thekkuveettil & Jackson James: Seizure induces activation of multiple subtypes of neural progenitors and growth factors in hippocampus with neuronal maturation confined to dentate gyrus; <u>Biochem. Biophys.</u> Res. Commun., 393 (2010) 864–871.
- 20. Sanalkumar R, Indulekha CL, Divya TS, Divya MS, Anto RJ, Vinod B, Vidyanand S, Jagatha B, Venugopal S & Jackson James: ATF2 maintains a subset of neural progenitors through CBF1/Notch independent Hes-1 expression and synergistically activates the expression of Hes-1 in Notch dependent neural progenitors; <u>J. Neurochem.</u>, 113 (2010) 807–818. (Cover page article)
- Sanalkumar R, Vidyanand S, Indulekha CL & Jackson James: Neuronal vs. glial fate of embryonic stem cell derived neural progenitors (ES-NPs) is determined by FGF2/EGF during proliferation; J. Mol. Neurosci.,42 (2010)17–27.
- **22.** Rajeevkumar, R., Suma Priya, S., Mayadevi, M., Mathew Steephan, Santhoshkumar, T. R., John Cheriyan, Sanalkumar, R., Pradeep, K. K., **Jackson James**, and Omkumar R. V.: Phosphorylation status of the NR2B subunit of NMDA receptor regulates its interaction with Calcium/calmodulin dependent protein kinase II; *J. Neurochem.*, 110 (2009) 92-105.
- 23. B Jagatha, MS Divya, R Sanalkumar, CL Indulekha, S Vidyanand, TS Divya, AV Das & Jackson James: In vitro differentiation of retinal ganglion-like cells from embryonic stem cell derived neural progenitors; Biochem. Biophys. Res. Commun., 380 (2009) 230-235.
- 24. K.K.Saju, Reshmi.R, P.S.Sreejith , Jayadas.N.H, Jackson James, M.K.Jayaraj: Polycrystalline coating of Hydroxyapatite on TiAl₆V₄ implant material grown at lower substrate temperatures by hydrothermal annealing after pulsed laser deposition; Proceedings of the Institution of Mechanical Engineers. Part H, Journal of Engineering in Medicine, 223:8 (2009) 1049-1057.
- 25. K.K. Saju, Sasidharan Vidyanand, N.H. Jayadas, Jackson James, M.K. Jayaraj: Effect of surface characteristics of Anodized Ti-6Al-4V implant material on Osteoblast attachment and proliferation, J.Orthopaedics 2009;6(1)e5 (URL: http://www.jortho.org/2009/6/1/e5)
- **26.** A.V. Das, **J. James**, S. Bhattacharya, A.N. Imbalzano, M.L. Antony, G. Hegde, X. Zhao, K. Mallya, F. Ahmad, E. Knudsen, and I. Ahmad: SWI/SNF chromatin remodeling ATPase, BRM regulates the differentiation of early retinal stem cells/progenitors by influencing BRN3B expression and notch signaling: *J. Biol. Chem*, **282** (2007) **35187-201**.
- **27.** G.V. Hegde, **J. James**, A.V. Das, X. Zhao, S. Bhattacharya, and I. Ahmad, Characterization of early retinal progenitor microenvironment: Presence of activities selective for the differentiation of retinal ganglion cells and maintenance of progenitors. *Experimental Eye Research*, 84 (2007) 577-590.

- 28. Ani V. Das , Xing Zhao , Jackson James , Min Kim, Kenneth H. Cowan , Iqbal Ahmad: Neural stem cells in the adult ciliary epithelium express GFAP and are regulated by Wnt signaling: Biochem. Biophys. Res. Commu., 339 (2006) 708–716.
- **29.** Ani V. Das, Sreekumaran Edakkot, Wallace B. Thoreson, **Jackson James**, Sumitra Bhattacharya, and Iqbal Ahmad: Membrane properties of retinal stem cells/progenitors: **Progress in Retinal and Eye Research**, **24** (2005) 663-81.
- 30. Ani V. Das, Jackson James, Jörg Rahnenführer, Wallace B. Thoreson, Sumitra Bhattacharya, Xing Zhao, and Iqbal Ahmad: Retinal properties and potential of the adult mammalian ciliary epithelium stem cells: Vision Research 45 (2005) 1653–1666.
- 31. Jackson James, Ani V. Das, Jörg Rahnenführer and Iqbal Ahmad; Cellular and molecular characterization of early and late retinal stem cells/progenitors: Differential regulation of proliferation and context dependent role of Notch signaling: <u>Journal of Neurobiology</u>, 61(2004) 359-376.
- **32.** Ani V. Das, **Jackson James**, Xing Zhao, Jörg Rahnenführer and Iqbal Ahmad; Identification of c-Kit receptor as a regulator of adult neural stem cells in the vertebrate eye: Interactions with Notch signaling: **Dev. Biol.**, **273** (2004) 87-105.
- 33. Iqbal Ahmad, Ani V. Das, Jackson James, Sumitra Bhattacharya and Xing Zhao; Neural stem cells in the mammalian eye: types and regulation: <u>Seminars in Cell and Developmental Biology</u>, 15(2004) 53-62.
- **34.** Jackson James, Ani V. Das, Sumitra Bhattacharya, David M. Chacko, Xing Zhao and Iqbal Ahmad; *In Vitro* generation of early-born neurons from late retinal progenitors: *Journal of Neuroscience*, 23[23] (2003) 8193-8203.
- **35.** Constance M. Dooley, **Jackson James**, C. Jane McGlade and Iqbal Ahmad; Involvement of Numb in vertebrate retinal development: Evidence for multiple roles of Numb in neural differentiation and maturation: **Journal of Neurobiology**, **54(2003) 313-325.**
- 36. David M. Chacko, Ani Das, Xing Zhao, Jackson James, Sumitra Bhattacharya and Iqbal Ahmad; Transplantation of ocular stem cells: The role of injury in incorporation and differentiation of grafted cells in the retina: <u>Vision Research</u>, 43[8] (2003) 937-946.
- 37. Sumitra Bhattacharya, John D. Jackson, Ani V. Das, Wallace B. Thoreson, Charles Kuszynski, Jackson James, Shantaram Joshi and Iqbal Ahmad; Direct identification and enrichment of retinal stem cells/progenitors by Hoechst dye efflux assay: <u>Investigative Ophthalmology & Visual Science</u>, 44[6] (2003) 2764-2773.
- 38. Xing Zhao, Ani V. Das, Wallace B. Thoreson, Jackson James, Tami E. Wattnem, Jorge Rodriguez-Sierra and Iqbal Ahmad; Adult corneal limbal epithelium: a model for studying neural potential of non-neural stem cells/progenitors: Developmental Biology, 250 (2002) 317-331.

- **39. J.Jackson** and C.S. Paulose; Brain 5HT_{2A} receptor regulation by tryptophan supplementation in streptozotocin diabetic rats: *J. Biochemistry Molecular Biology & Biophysics*, **5 (2000) 1-7.**
- **40. Jackson .J** and Paulose C.S; Enhancement of [*m*-methoxy 3H] MDL100907 binding to 5-HT_{2A} receptors in cerebral cortex and brain stem of streptozotocin induced diabetic rats: **Molecular & Cellular Biochemistry**, **199** (**1999**) **81-85**.
- **41.** Jackson James, Pius S. Padayatti, Thomas Paul and C.S. Paulose; Platelet monoamine changes in diabetic patients and streptozotocin induced diabetic rats: *Current Science*, **72** (1997) 137-139.