

List of Publications

PUBLICATIONS ASSOCIATED WITH THESIS

Research Articles

1. **Patel R**, Palit SP, Rathwa N, Ramachandran AV, Begum R. Genetic variants of Tumor Necrosis Factor- α and its levels: A Correlation with Dyslipidemia and Type 2 Diabetes Susceptibility. *Clinical Nutrition*. 2019;38(3):1414-1422.
2. **Patel R**, Rathwa N, Palit SP, Ramachandran AV, Begum R. Association of melatonin & MTNR1B variants with type 2 diabetes in Gujarat population. *Biomedicine & Pharmacotherapy*. 2018; 103:429-434.

Manuscripts Communicated

1. **Patel R**, Parmar N, Palit SP, Rathwa N, Ramachandran AV, Begum R. Melatonin as a diabetic therapeutant: A boon or a bane?
2. **Patel R**, Parmar N, Rathwa N, Palit SP, Begum R. A novel therapeutic combination of sitagliptin and melatonin: An untrodden path towards replenishing pancreatic β -cells.
3. **Patel R**, Parmar N, Palit SP, Rathwa N, Begum R. A novel combination of sitagliptin and melatonin ameliorates T2D manifestations: Studies on experimental diabetic models.
4. **Patel R**, Garcia-Ocana A, Parmar N, Begum R. Combination of sitagliptin and melatonin induces human β -cell proliferation in humanized euglycemic mouse model of islet transplantation.

OTHER PUBLICATIONS

Research Articles

1. **Patel R**, Dwivedi M, Mansuri MS, Laddha NC, Thakker A, Ramachandran AV, Begum R. Association of neuropeptide-Y (NPY) and interleukin-1 β (IL1 β), genotype-phenotype correlation and plasma lipids with Type-II diabetes. *PloS One*. 2016;11(10):e0164437.
2. Palit SP, **Patel R**, Jadeja SD, Rathwa N, Mahajan A, Ramachandran AV, Dhar MK, Sharma S, Begum R. A genetic analysis identifies a haplotype at adiponectin locus: Association with obesity and type 2 diabetes. *Scientific Reports*. 2020;10(1):1-10.
3. Rathwa N, Parmar N, Palit SP, **Patel R**, Ramachandran AV, Begum R. Intron specific polymorphic site of vaspin gene along with vaspin circulatory levels can influence pathophysiology of type 2 diabetes. *Life Sciences*. 2020; 243:117285.
4. Rathwa N, **Patel R**, Palit SP, Jadeja SD, Narwaria M, Ramachandran AV, Begum R. Circulatory Omentin-1 levels but not genetic variants influence the pathophysiology of Type 2 Diabetes. *Cytokine*, 2019;119:144-151.
5. Rathwa N, **Patel R**, Palit SP, Ramachandran AV, Begum R. Genetic variants of resistin and its plasma levels: Association with obesity and dyslipidemia related to Type 2 Diabetes susceptibility. *Genomics*. 2019;111(4):980-985.

Review Articles

1. Rathwa N, **Patel R**, Palit SP, Parmar N, Rana S, Ansari MI, Ramachandran AV, Begum R. β -Cell Replenishment: Possible Curative Approaches for Diabetes Mellitus. *Nutrition, Metabolism and Cardiovascular Diseases*. 2020; 30(11):1870-1881.
2. Pramanik S, Rathwa N, **Patel R**, Ramachandran AV, Begum R. Treatment Avenues for Type 2 diabetes and Current perspectives on Adipokines. *Current Diabetes Reviews*. 2018;14(3):201-221.
3. Mansuri MS, Singh M, Jadeja SD, Gani AR, **Patel R**, Dwivedi M, Laddha NC, Ansarullah, Ramachandran AV, Begum R. Could ER stress be a major link between oxidative stress and autoimmunity in vitiligo? *Pigmentary Disorders*. 2014;1(123):2376-0427.

List of Oral/Poster Presentations

1. **Patel R**, Palit SP, Rathwa N, Parmar N, Dhimmarr H, Pancholi DA, Ramachandran AV, Begum R. Melatonin and DPP-IV inhibitor. An untrodden path towards regenerating β -cells. Poster presentation delivered at NextGen Genomics, Biology, Biochemistry and Technologies (NGBT) Conference (Sep 30th to 2nd Oct 2019) at Taj Lands End, Mumbai India (***Received Best Poster Award***).
2. **Patel R**, Pramanik S, Rathwa NN, Parmar NR, Dhimmarr H, Pancholi DA, Ramachandran AV, Begum R. Melatonin and DPP-IV inhibitor: A novel combinatorial approach for β -cell regeneration. Poster presentation delivered at American Diabetes Association 79th Scientific Sessions (7-11 June 2019) at Moscone Center, San Francisco-94103, California, USA (***Received DST International Travel Award for poster presentation***).
3. **Patel R**, Rathwa N, Palit SP, Parmar N, Dhimmarr H, Ansarullah, Vasu V, Ramachandran AV, Begum R. β -cell regenerative potential of melatonin and DPP- IV inhibitor in amelioration of T1D. Oral presentation delivered at International Conference on Reproduction, Endocrinology and Development (19-21 January, 2019) at School of Liberal Studies and Education, Navrachana University, Vadodara-391410, Gujarat, India.
4. **Patel R**, Rathwa N, Palit SP, Parmar N, Ansarullah, Ramachandran AV, Begum R. Replenishing β -cells with Melatonin & DPP-IV inhibitor: An in-vivo study. Poster presentation delivered at International Conference on 'Proteins, miRNA and Exosomes in Health and Diseases' held at The M. S. University of Baroda, Vadodara, Gujarat, India on 11th-13th December 2018.
5. **Patel R**, Rathwa N, Palit SP, Parmar N, Dhimmarr H, Ansarullah, Ramachandran AV, Begum R. Assessment of Therapeutic Potential of Melatonin And DPP-IV Inhibitor On β -Cell Regeneration In Diabetic Mouse Model. Oral presentation delivered at International Conference on Reproductive Physiology and Comparative Endocrinology (ICRPCE) and the 36th annual meeting of the Society for Reproductive Biology and Comparative Endocrinology (SRBCE), 20th – 22nd January 2018 held at BITS Pilani, KK Birla Goa Campus, Goa, India.
6. **Patel R**, Ramachandran AV, Begum R. Evaluation of Melatonin, MTNR1B and TNFA in Type II Diabetics. Poster presentation delivered at International Conference on Reproductive Biology and Comparative Endocrinology & The 35th Annual Meeting of The Society for Reproductive Biology and Comparative Endocrinology, 9th - 11 February 2017 held at Department of Animal Biology, University of Hyderabad, Hyderabad, India.
7. **Patel R**, Dwivedi M, Mansuri MS, Ansarullah, Laddha NC, Ramachandran AV, Begum R. Involvement of Neuropeptide-Y and Interlukin-1 beta in pathogenesis of Type 2 Diabetes: A Genotype-Phenotype Correlation Study. Poster presentation delivered at Two-day National Symposium on Omics...to Structural Basis of Diseases, 30th Sept. and 1st Oct. 2016 held at The M. S. University of Baroda, Vadodara, Gujarat, India.
8. **Patel R**, Mansuri MS, Ansarullah, Ramachandran AV, Pathak J, Begum R. Involvement of Melatonin & Melatonin Receptor 1B in the pathogenesis of Type 2 Diabetes in Gujarat population: A Genotype-Phenotype correlation study. Poster presentation delivered at International conference on bioactive chemicals for reproduction and human health, 26-28th February 2015 held at Devangere University, Devangere, India.
9. **Patel R**, Mansuri M, Parasrampur M, Bendre A, Ansarullah, Ramachandran AV, Begum R. Role of Melatonin Receptor 1B (MTNR1B) in Type 2 Diabetes: Case Study in Gujarat Population. Poster presentation delivered at Three days national symposium on Emerging Trends in Biochemical Sciences, Dec 2014 at the Department of Biochemistry, The Maharaja Sayajirao University of Baroda, Vadodara, Gujarat, India. (***Received Second Prize for poster presentation***)