

- **Manna PR.** (2025). Retinoid-mediated restoration of neurosteroidogenesis as a therapeutic target in Alzheimer's disease. Neural Regen. Res., Sep 3. doi: 10.4103/NRR.NRR-D-25-00570
- Yang S., Manna C. and \***Manna PR.** (2025). Harnessing the role of ESR1 in breast cancer: Correlation with microRNA, lncRNA, and methylation. Int. J. Mol. Sci., 26:3101. doi: 10.3390/ijms26073101.
- **Manna PR.** (2025). The multifaceted landscape of the StAR protein in steroid biosynthesis: from development to degeneration. J. Endocrinol., 265: e240380. doi: 10.1530/JOE-24-0380.
- **Manna PR,** Yang S, Manna C, Waters S, Islam MA, Reddy AP, Rawat P. and Reddy PH. (2025). Steroidogenic acute regulatory protein modulated variations of sex neurosteroids in Alzheimer's disease gender-specificity: Relevance to hormonal and neuronal imbalance. Neurosci. Biobehav. Rev., 1871:167667. doi: 10.1016/j.bbadis.2025.167667.
- \***Manna PR,** Molehin D, Ahmed AU, Yang S. and Reddy PH. (2024). Acetylation of Steroidogenic Acute Regulatory Protein Sensitizes 17 $\beta$ -Estradiol Regulation in Hormone-Sensitive Breast Cancer Cells. Int. J. Mol. Sci., 25:8732. doi: 10.3390/ijms25168732.
- Islam MA, Sultana OF, Bandari M, Kshirsagar S, **Manna PR.** and Reddy PH. (2024). MicroRNA-455-3p as a peripheral biomarker and therapeutic target for mild cognitive impairment and Alzheimer's disease. Ageing Res. Rev., 100:102459. doi: 10.1016/j.arr.2024.102459.
- Khemka S, Sehar S, **Manna PR,** Kshirsagar S. and Reddy PH. (2024). Cell-free DNA as peripheral biomarker of Alzheimer's disease. Aging Dis., 16:787-803. doi: 10.14336/AD.2024.0329.
- **Manna PR,** Yang S. and Reddy PH. (2023). Epigenetic dysregulation and its correlation with the steroidogenic machinery impacting breast pathogenesis: Data mining and molecular insights into therapeutics, Int. J. Mol. Sci., 24:16488. doi: 10.3390/ijms242216488.
- **Manna PR,** Bose, C. and Reddy P.H. (2023). Downregulation of StAR driven neurosteroid biosynthesis as a distinctive feature in the brains of Alzheimer's disease patients. Biochim. Biophys. Acta Mol. Basis Dis., 1869:166757. doi: 10.1016/j.bbadis.2023.166757.
- **Manna PR,** Kshirsagar S, Pradeepkiran JA, Rawat P, Kumar S, Reddy AP and Reddy PH. (2023). Protective function of StAR in amyloid- $\beta$  accumulated hippocampal neurotoxicity and neurosteroidogenesis: Mechanistic insights into Alzheimer's disease. Biochim. Biophys. Acta Mol. Basis Dis., 1869:166738. doi: 10.1016/j.bbadis.2023.166738.
- **Manna PR,** Ramachandran S., Pradeepkiran JA, Molehin D, Castro-Piedras I, Pruitt K, Ganapathy V. and Reddy PH. (2022). Expression and function of StAR in cancerous and non-cancerous human and mouse breast tissues: New insights into diagnosis and treatment of hormone-sensitive breast cancer, Int. J. Mol. Sci., 24:758. doi: 10.3390/ijms24010758.
- **Manna PR,** Reddy AP, Pradeepkiran JA, Kshirsagar S. and Reddy PH. (2023). Regulation of retinoid mediated StAR transcription and steroidogenesis in hippocampal neuronal cells: Implications for StAR in protecting Alzheimer's disease. Biochim. Biophys. Acta Mol. Basis Dis., 1869:166596. doi: 10.1016/j.bbadis.2022.166596.
- **Manna PR,** Gray ZC. and Reddy PH. (2022). COVID-19 and its genomic variants: Molecular pathogenesis and therapeutic interventions, EXCLI J., 21: 1196-1221, doi: 10.17179/exli2022-5315.
- **Manna PR,** Ahmed AU, Molehin D, Narasimhan M, Pruitt K. and Reddy PH. (2022). Hormonal and genetic regulatory events in breast cancer and its therapeutics: Importance of the

- steroidogenic acute regulatory protein. Biomedicines, 10:1313, doi: 10.3390/biomedicines10061313.
- **Manna PR**, Gray ZC. and Reddy PH. (2022). Healthy immunity on preventive medicine for combating COVID-19. Nutrients, 14: 1004, doi: 10.3390/nu14051004.
  - Slominski R, **Manna PR**, Tuckey R, Jetten A, Raman C. and Slominski AT. (2020). Extra-adrenal glucocorticosteroidogenesis: Implications for autoimmune and inflammatory disorders. Genes Immun., 2020; 21:150-168, doi: 0.1038/s41435-020-0096-6.
  - **Manna PR**, Ahmed AU, Yang S, Narasimhan M, Cohen-Tannoudji J, Huhtaniemi I, Slominski AT. and Pruitt K. (2019). Genomic profiling of the steroidogenic acute regulatory protein in breast cancer: In silico assessments and a mechanistic perspective. Cancers, 11: E623. doi: 10.3390/cancers11050623.
  - **Manna PR**, Ahmed AU. Vartak D, Molehin M. and Pruitt K. (2019). Overexpression of the StAR protein in breast cancer: Regulation by histone deacetylase inhibition. Biochem. Biophys. Res. Commun., 509:476-482, doi: 10.1016/j.bbrc.2018.12.145. (\*, Corresponding author).
  - Molehin D, Castro-Piedras I, Sharma M, Sennoune SR, Arena D, **Manna PR**. and Pruitt K. (2018). Aromatase acetylation patterns and altered activity in response to Sirtuin inhibition. Mol. Cancer Res., 16:1530-1542, doi: 10.1158/1541-7786.MCR-18-0047.
  - **Manna PR**, Molehin D. and Ahmed AU. (2017). Dysregulation of aromatase in breast, endometrial, and ovarian cancers: An overview of therapeutic strategies. Prog. Mol. Biol. Transl. Sci. 144:487-537, doi: 10.1016/bs.pmbts.2016.10.002.
  - **Manna PR**. (2016). Retinoid regulated macrophage cholesterol efflux involves the steroidogenic acute regulatory protein. Data Brief, 7:940-945, doi: 10.1016/j.dib.2016.03.055.
  - **Manna PR**, Stetson CL, Slominski AT. and Pruitt K. (2016). Role of the steroidogenic acute regulatory protein in health and disease. Endocrine, 51:7-21. doi: 10.1007/s12020-015-0715-6.
  - **Manna PR**, Stetson CL, Daugherty C, Shimizu I, Syapin PJ, Garrel G, CohenTannoudji J, Huhtaniemi I, Slominski AT, Pruitt K. and Stocco DM. (2015). Upregulation of steroid biosynthesis by retinoid signaling: Implications for aging. Mech. Ageing Dev., 15:74-82. doi: 10.1016/j.mad.2015.08.007.
  - Slominski A#, **Manna PR**#. and Tuckey RC (2015). On the role of skin in the regulation of local and systemic steroidogenic activities. Steroids, 103:72-88. doi: 10.1016/j.steroids.2015.04.006. (#, Contributed equally).
  - **Manna PR**, Sennoune SR, Martinez-Zaguilan R, Slominski AT. and Pruitt K. (2015). Regulation of retinoid mediated cholesterol efflux involves liver X receptor activation in mouse macrophages. Biochem. Biophys. Res. Commun., 464:312-317. doi: 10.1016/j.bbrc.2015.06.150.
  - Phy P, Kulkarni A, Huang J-C, Hutson J, Stocco DM. and **Manna PR**. (2014). The role of macrophages and oxysterols in endometriosis. Fertil. Steril., 102: e291, doi: 10.2174/FertSter.126.9835.69.
  - Tu LN, Morohaku K, **Manna PR**, Pelton SH, Butler WR, Stocco DM. and Selvaraj V. (2014). Peripheral benzodiazepine receptor/translocator protein global knockout mice are viable with no effects on steroid hormone biosynthesis. J. Biol. Chem., 289:27444-27454, doi: 10.1074/jbc.M114.578286.

- **Manna PR**, Slominski AT, King SR, Stetson CL. and Stocco DM. (2014). Synergistic activation of steroidogenic acute regulatory protein expression and steroid biosynthesis by retinoids: Involvement of cAMP/PKA signaling. Endocrinology, 155:576-591. doi: 10.1210/en.2013-1694.
- Slominski A#, **Manna PR**# and Tuckey RC#. (2014). Cutaneous glucocorticosteroidogenesis: securing local homeostasis and the skin integrity. Exp. Dermatol., 23:369-74. doi: 10.1111/exd.12376. (#, Contributed equally).
- Janovick JA, Stewart MD, Jacob D, Martin LD, Deng JM, Stewart CA, Wang Y, Cornea A, Chavali L, Lopez S, Mitalipov S, Kang E, Lee H-S, **Manna PR**, Stocco DM, Behringer RR. and Conn PM. (2013). Restoration of testis function in hypogonadotropic hypogonadal mice harboring a misfolded GnRHR mutant by pharmacoperone drug therapy. Proc. Natl. Acad. Sci., USA, 110:21030-21035, doi: 10.1073/pnas.1315194110.
- **Manna PR**, Cohen-Tannoudji J, Counis R, Garner C, Huhtaniemi I, Kraemer FB. and Stocco DM. (2013). Mechanisms of action of hormone-sensitive lipase in mouse Leydig cells: Its role in the regulation of the steroidogenic acute regulatory protein. J. Biol. Chem. 288:8505-8518, doi: 10.1074/jbc.M112.417873.
- Slominski A, Zbytek B, Nikolakis G, **Manna PR**, Skobowiat C, Zmijewski M, Li W, Janjetovic Z, Postlethwaite A, Zouboulis C. and Tuckey RC. (2012). Steroidogenesis in the skin: implications for local immune functions. J. Steroid Biochem. Mol. Biol., 137:107-123, doi: 10.1016/j.jsbmb.2013.02.006.
- **Manna PR**. and Stocco DM. (2012). The role of specific mitogen-activated protein kinase signaling cascades in the regulation of steroidogenesis. J. Signal Transduct., 2011:1-13, doi: 10.1155/2011/821615.
- **Manna PR**, Soh J-W. and Stocco DM. (2011). The involvement of specific PKC isoenzymes in phorbol ester mediated regulation of steroidogenic acute regulatory protein expression and steroid synthesis in mouse Leydig cells. Endocrinology, 152:313-325, doi: 10.1210/en.2010-0874.
- **Manna PR**, Dyson MT. and Stocco DM. (2009). Regulation of the steroidogenic acute regulatory protein gene expression: present and future perspectives. Mol. Hum. Reprod., 15:321-333, doi: 10.1093/molehr/gap025.
- Kowalewski MP, Dyson MT, **Manna PR**. and Stocco DM. (2009). Involvement of peroxisome proliferator-activated receptor gamma (PPAR $\gamma$ ) in gonadal steroidogenesis and steroidogenic acute regulatory protein expression. Reprod. Fertil. Dev., 21:909-922, doi: 10.1071/RD09027.
- **Manna PR**, Huhtaniemi IT. and Stocco DM. (2009). Mechanisms of protein kinase C signaling in the modulation of 3',5'-cyclic adenosine monophosphate-mediated steroidogenesis in mouse gonadal cells. Endocrinology, 150:3308-3317, doi: 10.1210/en.2008-1668.
- **Manna PR**, Dyson MT. and Stocco DM. (2009). Role of basic leucine zipper proteins in transcriptional regulation of the steroidogenic acute regulatory protein gene. Mol. Cell. Endocrinol., 302:1-11, doi: 10.1016/j.mce.2008.12.009.
- Yivgi-Ohana N, Sher N, Melamed-Book N, Eimerl S, Koler M, **Manna PR**, Stocco DM. and Orly J. (2009). Transcription of Steroidogenic Acute Regulatory protein (STAR) in the rodent ovary and placenta: alternative modes of cyclic adenosine 3', 5'-monophosphate dependent and independent regulation. Endocrinology, 150:977-989, doi: 10.1210/en.2008-0541.

- Dyson MT, Kowalewski MP, **Manna PR.** and Stocco DM. (2009). The differential regulation of steroidogenic acute regulatory protein-mediated steroidogenesis by type I and type II PKA in MA-10 cells. Mol. Cell. Endocrinol., 300:94-103, doi: 10.1016/j.mce.2008.11.029.
- **Manna PR,** Dyson MT, Jo Y. and Stocco DM. (2009). Role of dosage-sensitive sex reversal, adrenal hypoplasia congenita, critical region on the X-chromosome, gene 1 in protein kinase A- and protein kinase C-mediated regulation of the steroidogenic acute regulatory protein expression in mouse Leydig tumor cells: mechanism of action. Endocrinology, 150:187-199, doi: 10.1210/en.2008-0368.
- **Manna PR.** and Stocco DM. (2008). The role of JUN in the regulation of PRKCC-mediated STAR expression and steroidogenesis in mouse Leydig cells. J. Mol. Endocrinol., 41:329-341, doi: 10.1677/JME-08-0077.
- Dyson MT, Jones JK, Kowalewski MP, **Manna PR,** Alonso M, Gottesman ME. and Stocco DM. (2008). Mitochondrial A-kinase anchoring protein 121 binds type II protein kinase A and enhances steroidogenic acute regulatory protein-mediated steroidogenesis in MA-10 mouse Leydig tumor cells. Biol. Reprod., 78:267-277, doi: 10.1095/biolreprod.107.064238.
- **Manna PR.** and Stocco DM. (2007). Crosstalk of CREB and Fos/Jun on a single cis-element: transcriptional repression of the steroidogenic acute regulatory protein gene. J. Mol. Endocrinol., 39:261-277, doi: 10.1677/JME-07-0065.
- **Manna PR,** Jo Y, and Stocco DM. (2007). Regulation of Leydig cell steroidogenesis by extracellular signal-regulated kinase 1/2: Role of PKA and PKC signaling. J. Endocrinol., 193:53-63, doi: 10.1677/JOE-06-0201.
- **Manna PR,** Chandrala SP, Jo Y. and Stocco DM. (2006). CAMP independent signaling regulates steroidogenesis in mouse Leydig cells in the absence of STAR phosphorylation. J. Mol. Endocrinol., 37:81-95, doi: 10.1677/jme.1.02065.
- **Manna PR,** Chandrala SP, King SR, Jo Y, Counis R, Huhtaniemi IT. and Stocco DM. (2006). Molecular mechanisms of insulin-like growth factor-1 mediated regulation of the steroidogenic acute regulatory protein in mouse Leydig cells. Mol. Endocrinol., 20:362-378, doi: 10.1210/me.2004-0526.
- Stocco DM, Wang XJ, Jo Y. and **Manna PR.** (2005). Multiple signaling pathways regulating steroidogenesis and STAR expression: More complicated than we thought. Mol. Endocrinol., 19:2647-59, doi: 10.1210/me.2004-0532.
- **Manna PR.** and Stocco DM. (2005). Regulation of the steroidogenic acute regulatory protein expression: Functional and physiological consequences. Curr. Drug Targets-Immune Endocr. Metabol. Disord., 5:93-108, doi: 10.2174/1568008053174714.
- **Manna PR,** Huhtaniemi IT. and Stocco DM. (2004). Detection of hCG responsive expression of the steroidogenic acute regulatory protein in mouse Leydig cells. Biol. Proceed. Online, 6:83-93, doi: 10.1251/bpo76.
- **Manna PR,** Eubank DW. and Stocco DM. (2004). Assessment of the role of activator protein 1 on transcription of the mouse steroidogenic acute regulatory protein gene. Mol. Endocrinol., 18:558-573, doi: 10.1210/me.2003-0223.
- **Manna PR,** Wang XJ. and Stocco DM. (2003). Involvement of multiple transcription factors in the regulation of steroidogenic acute regulatory protein gene expression. Steroids, 68:1125-1134, doi: 10.1016/j.steroids.2003.07.009.
- Irusta G, Parborell P, Peluffo M, **Manna PR,** Gonzalez-Calvar SI, Calandra R, Stocco DM. and Tesone M. (2002). Steroidogenic acute regulatory protein in ovarian follicles of

- gonadotropin-stimulated rats is regulated by a gonadotropin-releasing hormone agonist. Biol. Reprod., 68:1577-1583, doi: 10.1095/biolreprod.102.009944.
- Schwarzenbach H, **Manna PR**, Stocco DM, Chakraborty G. and Mukhopadhyay AK. (2002). Stimulatory effect of progesterone on the expression of steroidogenic acute regulatory protein (STAR) in MA-10 Leydig cells. Biol. Reprod., 68:1054-1063, doi: 10.1095/biolreprod.102.009266.
  - **Manna PR**, Eubank DW, Lalli E, Sassone-Corsi P. and Stocco DM. (2002). Transcriptional regulation of the mouse steroidogenic acute regulatory protein gene by the cAMP response-element binding protein and steroidogenic factor 1. J. Mol. Endocrinol., 30:381-397, doi: 10.1677/jme.0.0300381.
  - King SR, **Manna PR**, Ishii T, Ginsberg SD, Stocco DM, Walsh LP, Parker KL, Smith RG, Syapin PJ. and Lamb DJ. (2002). An essential component in steroid synthesis, the steroidogenic acute regulatory protein, is expressed in discrete regions of the brain. J. Neurosci., 22:10613-10620, doi: 10.1523/JNEUROSCI.22-24-10613.2002.
  - Lamminen T, Jiang M, **Manna PR**, Pakarinen P, Simonsen H, Herrera RJ. and Huhtaniemi IT. (2002). Functional study of a recombinant form of human luteinizing hormone  $\beta$ -subunit variant carrying the Gly<sup>102</sup>Ser mutation found in Asian populations. Mol. Hum. Reprod., 8:887-892, doi: 10.1093/molehr/8.10.887.
  - **Manna PR**, Huhtaniemi IT, Wang XJ, Eubank DW. and Stocco DM. (2002). Mechanisms of epidermal growth factor signaling: Regulation of steroid biosynthesis and the steroidogenic regulatory protein (STAR) protein in mouse Leydig tumor cells. Biol. Reprod., 67:1393-1404, doi: 10.1095/biolreprod.102.007179.
  - Rannikko A, Pakarinen P, **Manna PR**, Beau I, Misrahi M, Aittomaki K. and Huhtaniemi IT. (2002). Functional characterization of the human follicle-stimulating hormone receptor with inactivating Ala189Val mutation. Mol. Hum. Reprod., 8:311-317, doi: 10.1093/molehr/8.4.311.
  - **Manna PR**, Clark BJ, Dyson M, Reinhart AJ, Wang X, Huhtaniemi IT. and Stocco DM. (2002). Diverse signaling in the regulation of StAR expression and steroidogenesis. Mol. Cell. Endocrinol., 33:679-691, doi: 10.11156/mce/6.10.3369.
  - Jiang M, Lamminen T, Pakarinen P, Hellman J, **Manna PR**, Herrera RJ. and Huhtaniemi IT. (2002). A novel Ala(--3) Thr mutation in the signal peptide of human luteinizing hormone beta-subunit: potentiation of the inositol phosphate signalling pathway and attenuation of the adenylate cyclase pathway by recombinant variant hormone. Mol. Hum. Reprod., 8:201-212, doi: 10.1093/molehr/8.3.201.
  - **Manna PR**, Joshi L, Reinhold VN, Aubert ML, Sukanuma N, Pettersson K. and Huhtaniemi IT. (2002). Synthesis, purification, and structural and functional characterization of recombinant form of a common genetic variant of human luteinizing hormone. Hum. Mol. Genet., 11:301-315, doi: 10.1093/hmg/11.3.301.
  - **Manna PR**, Dyson M, Eubank DW, Clark BJ, Lalli E, Sassone-Corsi P, Zeleznik A. and Stocco, DM. (2002). Regulation of steroidogenesis and the steroidogenic acute regulatory protein by a member of the cAMP responsive-element binding protein family. Mol. Endocrinol., 16:184-199, doi: 10.1210/mend.16.1.0759.
  - Tena-Sempere M, **Manna PR**, Zhang FP, Pinilla L, González LC, Casanueva FF, Diéguez C, Huhtaniemi IT. and Aguilar E. (2001). Molecular mechanisms of leptin action in adult rat testis: Targets for leptin-induced inhibition of steroidogenesis and pattern of leptin receptor

- messenger ribonucleic acid expression. J. Endocrinol., 170:413-423, doi: 10.1677/joe.0.1700413.
- Stocco DM, Clark BJ, Reinhart AJ, Williams SC, Dyson M, Dassi B, Walsh LP, **Manna PR**, Wan, X, Zeleznik AJ. and Orly J. (2001). Elements involved in the regulation of the STAR gene. Mol. Cell. Endocrinol., 177:55-59, doi: 10.1016/s0303-7207(01)00423-3.
  - **Manna PR**, Kero J, Tena-Sempere M, Pakarinen P, Stocco DM. and Huhtaniemi IT. (2001). Assessment of mechanisms of thyroid hormone action in mouse Leydig cells: Regulation of steroidogenic regulatory protein, steroidogenesis, and LHR function. Endocrinology, 142:319-331, doi: 10.1210/endo.142.1.7900.
  - **Manna PR**, El-Hefnawy T, Kero J. and Huhtaniemi IT. (2001). Biphasic action of prolactin in the regulation of murine Leydig tumor cell functions. Endocrinology, 142:308-318, doi: 10.1210/endo.142.1.7899.
  - **Manna PR**, Roy P, Clark BJ, Stocco DM. and Huhtaniemi IT. (2001). Interaction of thyroid hormone and steroidogenic acute regulatory (STAR) protein in the regulation of murine Leydig cell steroidogenesis. J. Steroid Biochem. Mol. Biol., 76:165-177, doi: 10.1016/s0960-0760(00)00156-4.
  - **Manna PR**, Joshi L. and Huhtaniemi IT. (2000). A common genetic variant of luteinizing hormone: Physiological and functional consequences. Mol. Cell. Endocrinol., S-07: e253, doi: 10.1016/mce.136.156-29.
  - El-Hefnawy T, **Manna PR**, Luconi M, Baldi E, Slotte JP. and Huhtaniemi IT. (2000). Progesterone action in a murine Leydig tumor cell line (mLTC-1) through a non-classical receptor type. Endocrinology, 141:247-255, doi: 10.1210/endo.141.1.7253.
  - Tena-Sempere M, **Manna PR**. and Huhtaniemi IT. (1999). Molecular cloning of mouse FSH receptor complementary deoxyribonucleic acid: Functional expression of alternatively spliced variants and receptor inactivation by a C566T transition in Exon 7 of the coding sequence. Biol. Reprod., 60:1515-1527, doi: 10.1095/biolreprod60.6.1515.
  - **Manna PR**, Pakarinen P, El-Hefnawy T. and Huhtaniemi IT. (1999). Functional assessment of the calcium messenger system in cultured mouse Leydig tumor cells: Regulation of human chorionic gonadotropin-induced expression of the steroidogenic acute regulatory protein. Endocrinology, 140:1739-1751, doi: 10.1210/endo.140.4.6650.
  - Narula A, Ryhanen R, **Manna PR**, Huhtaniemi I. and Bremner, W. (1999). Development of an in vitro bioassay for follicle-stimulating hormone (FSH) using a cell line expressing FSH receptors. Biol. Reprod., 60:117-127, doi: 10.1145/br.14235.569.
  - **Manna PR**, Tena-Sempere M. and Huhtaniemi IT. (1999). Molecular mechanisms of thyroid hormone-stimulated steroidogenesis in mouse Leydig tumor cells: Involvement of steroidogenic acute regulatory (STAR) protein. J. Biol. Chem., 274:5909-5918, doi: 10.1074/jbc.274.9.5909.
  - **Manna PR**, Pakarainen P, Rannikko AS. and Huhtaniemi IT. (1998). Mechanisms of desensitization of follicle-stimulating hormone (FSH) action in a murine granulosa cell line stably transfected with the human FSH receptor complementary deoxyribonucleic acid. Mol. Cell. Endocrinol., 146:163-176, doi: 10.1016/s0303-7207(98)00156-7.
  - Zhang FP, Rannikko AS, **Manna PR**, Fraser HM. and Huhtaniemi IT. (1997). Cloning and functional expression of the luteinizing hormone receptor complementary deoxyribonucleic acid from the marmoset monkey testis: Absence of sequences encoding exon 10 in other species. Endocrinology, 138:2481-2490, doi: 10.1210/endo.138.6.5196.

- Delahaye R, **Manna PR**, Bérault A, Berreur-Bonnenfant J, Berreur P. and Counis R. (1997). Rat gonadotropin-releasing hormone receptor expressed in insect cells induces activation of adenylyl cyclase. Mol. Cell. Endocrinol., 135:119-127, doi: 10.1016/s0303-7207(97)00194-9.
- **Manna PR**, Biswas R, Banerjee J. and Bhattacharya S. (1995). Thyroid hormone releases progesterone and estradiol from mouse granulosa and human corpus luteal cells. Indian J. Physiol. Alld. Sci., 139:456-549.
- Mukherjee D, **Manna PR**. and Bhattacharya S. (1994). Functional relevance of LH receptor in mouse uterus. Euro. J. Endocrinol., 131:103-108.
- Bhattacharya S. Halder, S. and **Manna PR**. (1994). Current status of endocrine aspects of fish reproduction: An overview. Proc. Indian Natl. Acad. Sci., B60:33-44.
- **Manna PR**. and Bhattacharya S. (1993). <sup>125</sup>I-Gonadotropin binding to the ovary of an Indian major carp, *Catla catla*, at different stages of reproductive cycles. J. Biosci., 18:361-372.
- Bhattacharya S, Banerjee J, Sen S. and **Manna PR**. (1993). Human chorionic gonadotropin binding sites in the human endometrium. Acta Endocrinologica., 129:15-19.
- **Manna PR**, Jana NR. and Bhattacharya S. (1991). Binding of gonadotropin to carp ovary: Physiological consequences. Curr. Dev. Comp. Endocrinol., 8:167-169.
- Bhattacharya S, **Manna PR**, Halder S. and Jamaluddin M. (1990). Requirement of extracellular calcium in gonadotropin releasing hormone action. Prog. Clin. Biol. Res., 342:572-577.
- **Manna PR**, Banerjee PP. and Bhattacharya S. (1989). Homologous radioimmunoassay and radioreceptor assay of a carp gonadotropin, *Catla catla*. Indian J. Exp. Biol., 27:399-403.
- **Manna PR**, Jamaluddin M, Banerjee PP. and Bhattacharya S. (1989). Requirement of extracellular calcium in fish pituitary gonadotropin release by gonadotropin releasing hormone. Gen. Comp. Endocrinol., 74:190-198.