

Recent publication of Book Chapters by the faculty in the Department of Translational Research – COMP

1. **Thankam FG, Radwan MM, Agrawal DK:** Inflammation and epicardial adipose tissue in the pathobiology of atherogenesis and neointimal hyperplasia following coronary intervention. In: *Biochemistry of Cardiovascular Dysfunction in Obesity*; Eds. Tappia PS, Bhullar SK, Dhalla NS; Springer December 2020, pages 235-266.
2. **Rai V, Asensio JA, Agrawal DK:** Danger Associated Molecular Patterns, Complements and other Novel Biomarkers in the Management of Trauma Patients. In: *Current Therapy of Trauma and Surgical Critical Care*, Chapter 101; 3rd edition edited by Juan A. Asensio and Wayne J. Meredith; Elsevier 2021.
3. **Thankam FG, Wilson VED, Agrawal DK:** Animal Models of Inflammatory Musculoskeletal Diseases for Tissue Engineering and Regenerative Medicine: Updates and Translational Application. In: *Advances in Animal Experimentation and Modeling*; Ed. RC Sobti, Elsevier Press 2021 – In press.
4. **Thankam FG, Wilson VED, Agrawal DK:** Preclinical models of intimal hyperplasia and restenosis to predict clinical events and develop novel therapies. In: *Advances in Animal Experimentation and Modeling*; Ed. RC Sobti, Elsevier Press 2021 – In press.
5. Chandrasekhar SK, **Thankam FG, Ouseph JC, Agrawal DK:** Engineered cardiac tissue: Concepts and future. In: *Regenerated Organs: Future Perspectives*; Ed. Sharma CP; Academic Press January 2021; Chapter 7; pp. 133-152.
6. Hati S, Agrawal S, **Rai V:** Vascular regeneration and tissue engineering: Progress, clinical impact, and future challenges. In: *Regenerated Organs: Future Perspectives*; Ed. Sharma CP; Academic Press January 2021; Chapter 8; pp. 153-168.
7. Jose M, Rajagopal V, **Thankam FG:** Oral tissue regeneration: Current status and future perspectives. In: *Regenerated Organs: Future Perspectives*; Ed. Sharma CP; Academic Press January 2021; Chapter 9; pp. 169-188.

Recent research publications by the faculty in the Department of Translational Research – COMP

1. **Rai V** and Agrawal S: Targets (Metabolic Mediators) of Therapeutic Importance in Pancreatic Ductal Adenocarcinoma. *Int J Mol Sci.* 2020 Nov 12;21(22):8502;
□DOI: [10.3390/ijms21228502](https://doi.org/10.3390/ijms21228502)

2. Agrawal S, Nooti SK, Singh H, **Rai V**: Nanomaterial-Mediated Theranostics for Vascular Diseases. *J. Nanotheranostics* **2021**, 2(1), 1-15; <https://doi.org/10.3390/jnt2010001>
3. Singh H, **Rai V**, Nooti SK, **Agrawal DK**: Novel Ligands and Modulators of Triggering Receptor Expressed on Myeloid Cells Receptor Family: 2015-2020 Updates. *Expert Opinion on Therapeutic Patents* – In press January 2021 ; <https://doi.org/10.1080/13543776.2021.1883587>; PMID: 33507843
4. Asensio JA, Dabestani PJ, Miljkovic SS, Wenzl FA, Kessler JJ, Kalamchi LD, Kotaru TR, **Agrawal DK**: Traumatic penetrating arteriovenous fistulas: A collective review. *Eur J Trauma Emergency Surg.* 2021 Jan 2. doi: 10.1007/s00068-020-01574-z. PMID: 33386864
5. Brown SM, Larsen NK, **Thankam FG**, **Agrawal DK**: Fetal cardiomyocyte phenotype, ketone body metabolism, and mitochondrial dysfunction in the pathology of atrial fibrillation. *Mol Cell Biochem.* 2021; 476: 1165-1178; <https://doi.org/10.1007/s11010-020-03980-8>; PMID: 33188453
6. Brown S, Larsen N, **Thankam FG**, **Agrawal DK**: Regulatory role of cardiomyocyte metabolism via AMPK activation in modulating atrial structural, contractile, and electrical properties following atrial fibrillation. *Can J Physiol Pharmacol.* 2021 Jan; 99(1): 36-41. doi: 10.1139/cjpp-2020-0313. PMID: 33049144
7. **Thankam FG**, Ayoub JG, **Radwan Ahmed MM**, Siddique A, Sanchez TC, Peralta RA, Pennington TJ, **Agrawal DK**: Association of hypoxia and mitochondrial damage associated molecular patterns in the pathogenesis of vein graft failure: a pilot study. *Translational Res.* 2021 Mar; 229: 38-52; DOI:<https://doi.org/10.1016/j.trsl.2020.08.010>; PMID: 32861831
8. **Thankam FG**, **Agrawal DK**: Molecular chronicles of cytokine burst in COVID-19 patients with cardiovascular diseases. *J Thoracic Cardiovasc Surg.* 2021 Feb; 161(2):e217-e226. doi: <https://doi.org/10.1016/j.jtcvs.2020.05.083> ; PMID: 32631657

*All bolded names represent the faculty in the Department of Translational Research in COMP.