**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

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.