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**Special Lecture**  
**Jointly organized by**  
**Division of Biochemistry, Faculty of Life Sciences**  
**&**  
**Dept of Biochemistry, JSS Medical College**

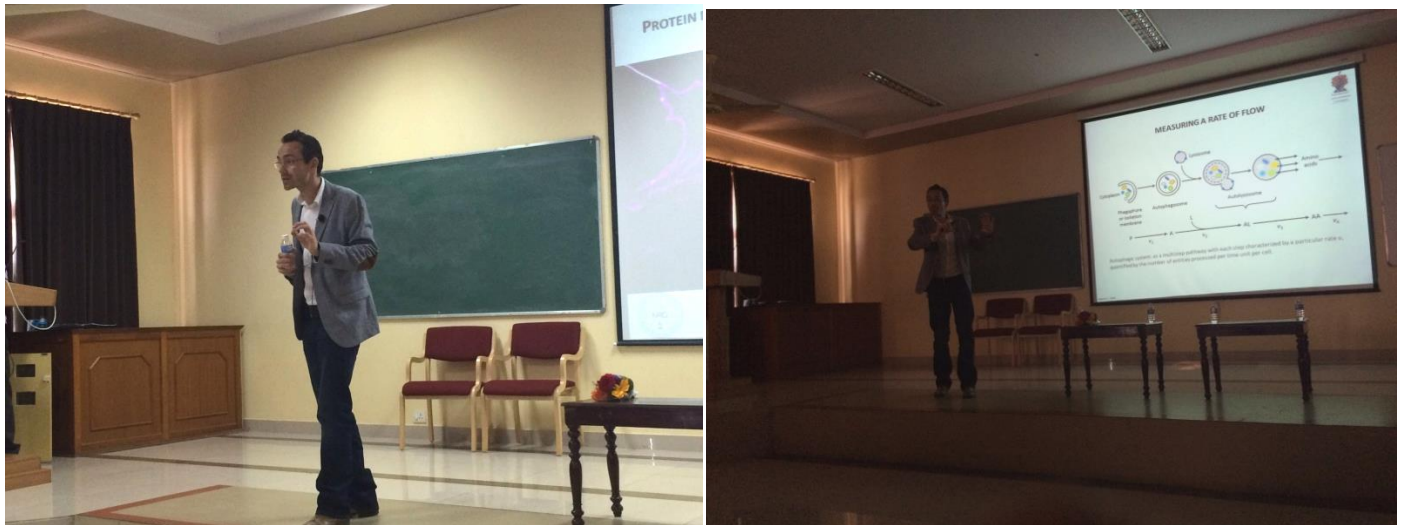
***“Protein degradation through Autophagy-relevance in health and disease”***



**Dr. Ben Loos,**  
**Department of Physiological Sciences**  
**Stellenbosch University, South Africa**  
**at**  
**GALLERY-6, JSS MEDICAL COLLEGE, JSS University**  
**On 22<sup>nd</sup> February 2016, Monday at 12pm.**

The Neuro Research Group (NRG), headed up by Dr Ben Loos, combines cell biology, cell physiology, microscopy and biochemistry approaches to dissect and investigate the relationship and role of protein degradation through macroautophagy and cell death susceptibility in neurodegeneration, neuronal migration and gliomas. The fine balance of proteostasis control, protein aggregation and proteotoxicity is here of major interest, due to its role in disease onset and progression. Autophagy is an essential process that allows cellular survival in stress conditions through the degradation of long-lived proteins. Since the vast majority of proteins in the cell are long-lived, its metabolic contribution is significant. Dysfunction in autophagy is associated with numerous pathologies that are characterized by a shift in cell death susceptibility, such as neurodegenerative diseases or cancer. In order to achieve this, his lab focuses on macroautophagy (MA), chaperone mediated autophagy (CMA), cellular metabolism, mitochondrial morphology and function, tubulin and transport systems, the cytoskeleton and ATP consumption. Central to this approach is a dynamic perspective on the cell's function and its stress response, in context of its current intracellular and extracellular metabolic parameters. Their research findings in the past have demonstrated a clear relationship between the cell's autophagic proficiency and apoptosis/necrosis onset, which demands for a dynamic and integrative approach.

**Photos:**



**1. Dr. Ben delivering the lecture.**



**2. On the dias, (L-R: Dr. Ben Loos, Dr. S Balasubramanian, Dr. Dattatri K. Nagesha and Mr. Jurgen Kriel)**



**3. Mr. Raghu Ram Achar introducing Dr. Ben Loos to the audience.**



**4. Dr. Loos receiving the token of gratitude from an international student of FLS.**



**5. Students and faculties of FLS and JSS Medical College interacting with Dr. Ben Loos.**