

LSC 521 - Metabolic Disorders and Inflammatory Diseases

1. Metabolic syndrome and obesity
2. Basic of Inflammation, regulatory mechanisms to control the initiation progression and resolution of inflammation.
3. Inflammasome and its role in pathogenesis
4. Inflammation associated pathologies, Biomarkers and Therapeutic targets
5. Diabetes — Type I & II diabetes, High glucose — induced complications
6. Cardiovascular complications — Atherosclerosis, endothelial dysfunction cardiomyopathy etc.
7. Asthma — Allergic airway inflammation
8. COPD — Chronic obstructive pulmonary disease
9. Retinopathy, Age — related macular degeneration (AMD)
10. Aging — Alzheimer's disease
11. Septicemia — bacterial infection — induced sepsis and related complications
12. Auto — immune diseases, Inflammatory bowel disease, Rheumatoid arthritis
13. Current therapeutic approaches of some of the common pathologies

Suggested Readings

1. The Metabolic Syndrome, Christopher D. Byrne, Sarah H. Wild; Blackwell Publishing Ltd.
2. Free Radicals in Human Health and Disease. Rani, Vibha, Yadav, Umesh C. S. Yadav; Springer Pvt Ltd.

3. Chronic Inflammation: Molecular Pathophysiology, Nutritional and Therapeutic Interventions. Sashwati Roy, Debasis Bagchi, Siba P. Raychaudhuri; CRC Press.
4. Camps, Jordi (Ed.), Oxidative Stress and Inflammation in Non — communicable Disease — Molecular Mechanisms and Perspectives in Therapeutics — Advances in Experimental Medicine and Biology Vol. 824, 2014. Springer publications ISBN: 978-319-07320-0 5. Research Papers and review articles.