

Department of Biotechnology Ministry of Science and Technology Government of India

DBT



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DBT - AIST International Laboratory for Advanced Biomedicine

DAILAB

Classroom for Advanced & Frontier Education





## Series - 20

Date and Time – July 3, 2017

Venue – Seminar hall, SOLS, Manipal

Speaker – Manjunath B Joshi

Affiliation –School of Life Sciences, Manipal University, Manipal

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## Title - Extracellular Traps: Potential Armamentarium of Neutrophils Abstract

Neutrophils are the most abundant white blood cell type in mammals constituting 55-75% of total blood cells. Neutrophils are classified as "Granulocytes", as their cytoplasm holds three different types of granules – primary, secondary and tertiary and these granules are rich in proteins functioning against pathogens. Neutrophils play a vital role as first line of innate immunity and facilitate in eliminating pathogens such as bacteria, fungi, parasites and virus. These cells eliminate pathogens mainly by three independent mechanisms 1) Phagocytosis 2) Release of soluble antimicrobials 3) Neutrophil Extracellular Traps (NETs). In response to pathological stimuli, neutrophils expel their DNA out decorated with histones and granular proteins and form extracellular traps. Alterations in formation and function of NETs are associated with several diseases. In this seminar we will discuss fate of NETosis under diabetic conditions.



## Series 20

Speaker: Dr. Manjunath B. Joshi Topic: Extracellular traps: potential armamentarium of neutrophils

Date: 3rd July 2017 (15:30-16:30 hours JST)

Host: Manipal University

India

Thanks for participation!

