



HSNC UNIVERSITY, MUMBAI

Kishinchand Chellaram College

Department of Life Sciences

Under the aegis of DBT Star Status Activity



Pannexin1- A Centre Piece in the Puzzle of Alzheimer's Disease

Date: September 23rd, 2020

Resource person: Mr. Chetan Patil

On the 23rd of September 2020, the Department of Life Sciences, Kishinchand Chellaram College, Mumbai, organized a second lecture under the Edu-Link Series on 'Pannexin1 – A Center Piece in the Puzzle of Alzheimer's Disease.' The event, hosted under the aegis of DBT Star Status, engaged 50 participants comprising of second-year and third-year undergraduate students along with the faculty of the department. The guest speaker, Mr. Chetan Patil, an alumnus of the Life Sciences K.C. College and a doctoral student in neurosciences at the University of Manitoba, Canada, spoke about his ongoing research on how Pannexin1 channels are activated and whether its activity results in neuronal cell death leading to Alzheimer's.

Mr. Chetan began by introducing the causes of Alzheimer's, highlighting the two main types of Alzheimer's; Familial which is the result of mutation in the genes (<5% cases) and Sporadic whose reasons are still unknown (>95% cases). Before diving into his lecture, he urged the students to enroll in training programs that focus on enhancing research skills and sharpening laboratory techniques, further emphasizing on how beneficial it has been for him. He then went on to explain the mechanism of synapses, and how their degradation overtime can result in the loss of memory, consequently leading to the onset of the symptoms of dementia.

Through the course of his lecture, sir outlined the functions of NMDA receptors, their role in memory functions, synaptic plasticity, etc. and spoke about the adverse effects of an extended period of activity of these receptors with respect to influx of Ca^{2+} ions in the cytosol of neurons. He then discussed the role of Pannexin1 channels in neurons and further provided evidence of the same from his personal research, giving a detailed explanation of the methodology and techniques used by him. The use of simple language and a well-paced explanation coupled with visual aids made it easier for listeners to understand the topic. On concluding his talk, he patiently addressed several questions of the audience.

FEEDBACK:

The session was hugely appreciated and majority of the audience were left satisfied with a curiosity to know more about Alzheimer's and its causes. The participants received satisfactory answers to their questions while also benefitting in the form of resource material which they felt was relevant to their study. The session also served as an awareness tool for Alzheimer's and dangers associated with it. Overall, the event was a success owing to the presence of such an eminent speaker and an engaging audience.

