



**TITLE: Effect of Yarrow extract (*Achillea millefolium* L.) on the production of BSA Amyloid fibrils**

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**ABSTRACT (upto 300 words)**

Alzheimer's is known as a neurodegenerative disease. This research aimed to investigate the antioxidant effects and inhibition of acetylcholinesterase and the production of amyloid fibrils of Yarrow plant extract and its possible anti-Alzheimer effects. First, the plant was dried and after pulverizing the plant, its hydroalcoholic extract was prepared. DPPH methods were used to measure antioxidant activity, Elman to check the inhibition of acetylcholinesterase enzyme and Congo red spectroscopy to check the inhibition of amyloid fibril production. The presence of Camphor, Achillicin and Azulene in the extract was confirmed. The results showed that yarrow extract has good antioxidant effects. The inhibitory effects on the production of fibrils were also observed. Further investigation is required.

**Presenter Name:** Nakisa Malakooti

**Mode of Presentation:** Poster

**BIOGRAPHY (upto 200 words)**

Dr Nakisa Malakooti is an emerging leader and scientist in cognitive decline. She has expertise in stem cell biology, Down syndrome and Alzheimer's disease. Her dedication to solving the mystery of AD and finding a cure led her to look closer into the connection between DS and AD. She has years of experience in research and teaching. She is passionate about her research and finding a cure for Alzheimer's disease in both DS and non-DS individuals. Since November 2021, she has been a Jerome LeJune research fellow at Monash University, focusing on gene interactions in the cognitive decline in Down syndrome. She aims to understand how structural changes lead to functional changes resulting in cognitive decline. One of the challenges in the field of neuroscience is that the events in the brain cannot be monitored. She employs stem cell biology and brain organoids for her research which is the closest model to the human brain to study these events.

