Role of Relish/NFkB Apoptosis Pathway in Amyloid-beta 42 mediated neurodegeneration in Alzheimer’s disease.

Follow this and additional works at: https://ecommons.udayton.edu/stander_posters

Recommended Citation
https://ecommons.udayton.edu/stander_posters/1233

This Book is brought to you for free and open access by the Stander Symposium at eCommons. It has been accepted for inclusion in Stander Symposium Posters by an authorized administrator of eCommons. For more information, please contact frice1@udayton.edu, mschlangen1@udayton.edu.
Role of Relish/NF-kB Apoptosis Pathway in Amyloid-beta42 Mediated Neurodegeneration in Alzheimer’s Disease

Steven Borchers1,2, Neil Glenn1, Neha Gogia1, Amit Singh1,2,3,4

1) Department of Biology, University of Dayton, 300 College Park Drive, Dayton, OH; 2) Premedical Program, University of Dayton; 3) Center for Tissue Regeneration & Engineering (TREND), University of Dayton, 300 College Park Drive, Dayton, OH; 4) Center for Genomic Advocacy (TCGA), Indiana State University, Terre Haute, IN, USA.

Abstract
Alzheimer’s disease (AD) is a neurodegenerative disease that affects the mental functions of the patients. The disorder progresses with age and is often accompanied by a host of symptoms. One of the reasons for the manifestation of AD is the accumulation of amyloid-β (AB) protein. In our study, we have used Drosophila as our model organism to test the hypothesized role of Relish/NF-kB proteins in the neurodegeneration process. We have identified Relish/NF-kB as a necessary element for the degradation of the β-amyloid protein, which is involved in the pathogenesis of AD. Our results suggest that down-regulating the Relish/NF-kB pathway can be a potential therapeutic target for AD.

We would like to thank Bloomington Stock Center & DSHB for the reagents. AS is supported by NIH 1R15GM124654-01 and Stem Catalyst Grant. NG is supported in part by the University of Dayton, Office for Graduate Academic Affairs through the Graduate Student Summer Fellowship Program (GSSF) and the Department of Biology, University of Dayton. We would also like to thank the University of Dayton Honors program, Berry family, and the Berry Summer Thesis Program for their support and funding.