## 2018 Fisher Alzheimer's Disease Program at NYU Langone Health: Progress Report for the Fisher Alzheimer's Research Foundation

In 2018, Drs. Reisberg and Kenowsky continued researching the health outcomes of our comprehensive, individualized, person-centered management program (CI-PCM) for persons with advanced AD. Data entry and analyses were performed. Results were presented from the study entitled, "Health Outcomes of a 28 Week Comprehensive, Individualized, Patient-Centered Management Program (CI-PCM) in Moderately-Severe Alzheimer's Patients on Memantine".

Dr. Reisberg chaired a Featured Research Section at the Alzheimer's Association International Conference in Chicago, Illinois in July entitled, "Ecopsychosocial Treatments of Dementia: New Findings and Advances in Community and Institutional Settings". Dr. Reisberg presented our findings that participants who received the management program for 28 weeks significantly improved in terms of their mood and behavior while requiring less anxiolytic medication. The rather serious side effects of benzodiazepine anxiolytics in persons living with AD may include: increased risk of falls, paradoxical agitation, increased confusion, delirium, accelerated cognitive decline, pneumonia, stroke and death. According to a recent report in the International Journal of Geriatric Psychiatry, the risk of dying increases 40% for Alzheimer's disease (AD) patients who are prescribed benzodiazepines for symptoms such as agitation, insomnia and anxiety. These findings highlight the importance of using successful nonpharmacologic management of these symptoms. Additionally, persons living with Alzheimer's in the management group were found to have significantly fewer behavioral and psychological disturbances like hitting their caregivers, being agitated, and experiencing night time wakefulness, as measured by two different behavioral assessment tests, whereas, the group which did not receive the management program experienced more of these problems. Dr. Kenowsky reported that the CI-PCM program also decreased the incidence of hospitalization by 67% and emergency room visits by 50% in community-residing advanced AD persons. The citations for the publication of these findings in the prestigious journal, Alzheimer's and Dementia are:

Reisberg, B., Shao, Y., Alshalabi, M., Hasan, M., and Kenowsky, S., Effects of a Comprehencive, Individualized, Person-Centered Management (CI-PCM) Program on anxiolytic medication usage in persons with moderate-to-severe Alzheimer's disease, *Alzheimer's & Dementia*, in press.

Kenowsky, S., Shao, Y., Sommese, K., Alshalabi, M., Heller, S., Vedvyas, A., and Reisberg, B., Comprehensive, Individualized Person-Centered Management Program reduces risk of hospitalization by 67% and emergency room visits by 50% in community residing, advanced AD persons in a 28-week randomized, controlled trial, *Alzheimer's & Dementia*, in press.

Dr. Reisberg also presented a poster at the American College of Neuropsychopharmacology in December showing that cognitive decline precedes the advent of subjective cognitive decline in the course leading to eventual Alzheimer's disease. The citation for the in-press publication is:

Reisberg, B., Bao, J., Arain, F., Vedvyas, A., Torossian, C., Monteiro, I., Boksay, I., Golomb, J., Auer, S., Shulman, M.B., Oo, T., Kluger, A., de Leon, M., Wisniewski, T., and Shao, Y. Cognitive decline precedes the advent of subjective cognitive decline [impairment] in the evolution of eventual Alzheimer's disease.

Neuropsychopharmacology, in press.

Dr. Reisberg described the 2 year outcomes and markers of decline in cognitively normal older persons with subjective cognitive decline with impairment in the publication cited below:

Reisberg, B., ...Kenowsky, S., ..., and Shao, Y., Two year outcomes, cognitive and behavioral markers of decline in healthy, cognitively normal older persons with global deterioration scale stage 2 (subjective cognitive decline with impairment), *Journal of Alzheimer's Disease*, in press.

Dr. Reisberg and others published results on subjective cognitive decline as well as on a novel risk loci for Alzheimer's disease. The publication citations are below:

Sohrabi, H.R.,...Reisberg, B.,... Martins, R.N., "Subjective memory complaints predict baseline but not future cognitive function over three years: results from the Western Australia Memory Study". *International Psychogeriatrics*. 2018, 13 pages, in press.

Slot, R.E.R., ..., Reisberg, B., ..., van der Flier, W.M., "Subjective cognitive decline and rates of incident Alzheimer's disease and non-Alzheimer's disease dementia". *Alzheimer's & Dementia*, 2018, 12 pages, in press.

Kunkle, B.W., ...Reisberg, B., ...Pericak-Vance, M.A. "Meta-analysis of genetic association with diagnosed Alzheimer's disease identifies novel risk loci and implicates Abeta, Tau, immunity and lipid processing". *Nature Genetics*, in press.

Dr. Kenowsky presented several community lectures crediting the Fisher Foundation support as listed below:-

- o How to Manage Persons Living with Dementia, Rockefeller University, May 2, 2018.
- o The Link between Cardiovascular Health and AD, NYU Tisch Hospital, May 22, 2018.
- o How to be a Successful Long Distance Caregiver, Credit Suisse, November 7, 2018.
- o Dr. Kenowsky also did an interview on Doctor Radio entitled, "Healthy lifestyle changes to decrease the risk of AD & cardiovascular disease." May 16, 2018.

Dr. Reisberg did a news story for the Newark Star Ledger and other New Jersey news outlets on the management program which we developed and its implications for persons with cognitive impairment and their care providers. This story should be published in the near future.

In summary, in the past year we have demonstrated important additional positive effects and advantages of our Comprehensive, Management Program. We have also been describing new discoveries with respect to the origins and nature of Alzheimer's disease, which are of relevance for the prevention and also treatment of this major illness affecting, in both its incipient and overt forms, a large proportion of the world wide population.