

Member Spotlight: Undergraduate Student Research Volunteer and AFMR Member Leaves Her Mark at Winthrop-University Hospital

Written By: Courtney Allison



Members of Winthrop-University Hospital's research team recently surprised Hofstra University undergraduate and Floral Park resident Hirra Arain with a celebration to honor her work in Alzheimer's Disease (AD) research. At the gathering, representatives from the Alzheimer's Disease Resource Center (ADRC) presented a Certificate of Appreciation and stipend to the young researcher, who has volunteered at Winthrop since last summer.

Ms. Arain's research focuses on the link between Diabetes and increased risk for AD, and what role a person's environment plays in risk for the brain disorder.

"I love the research and how friendly everyone is here at Winthrop," said Ms. Arain.

Ms. Arain is entering her junior year at Hofstra, where she majors in Biology. She is interested in neurology, and is drawn to AD in particular because of the impact it has on both the patient and families dealing with the disease.

"It's so debilitating for the patient, and for the caregivers who witness it," said Ms. Arain.

Allison B. Reiss, MD, Head, Inflammation Section at the Winthrop Research Institute and Chair-Elect, AFMR Eastern Section, organized the celebration and praised Ms. Arain's hard work, dedication, intelligence and contributions to Winthrop.

"She is totally devoted and very intuitive, skills that you need in order to be a good scientist," said Dr. Reiss. "She does more than just the work, going a step further by asking important questions which is what distinguishes a good scientist. She is always looking for the 'why.'"

This is not the first time Ms. Arain has received recognition for her work: she was honored by the American Federation of Medical Research with the Eastern Region Scholar Award at the organization's meeting in Washington, D.C. in April. There, she presented an abstract of a paper she is

working on with the Winthrop team. The AFMR abstract, “Insulin and Glucose Affect Amyloid Precursor Protein Processing Genes in a Neuronal Cell Culture Model: Linking Diabetes and Alzheimer's Disease” is currently in preparation as a full manuscript. A second paper summarizing our current knowledge in the field of amyloid and the brain, was just pre-approved for submission to *Progress in Neurobiology*, a prestigious medical journal. Dr. Reiss’s strict standards make it unusual for an undergraduate to be listed as an author, but she said: “I am proud to put my name next to Hirra’s. She is invaluable.”

Ms. Arain sought out her volunteer position at Winthrop due to Dr. Reiss’s reputation and after finding news about the Alzheimer’s Foundation of America awarding Winthrop a grant for Dr. Reiss’s study called “Platelet-Rich Plasma in the Study of Alzheimer’s Pathophysiology.”

Members of the Winthrop team are grateful the talented researcher found her way here.

“Winthrop is fortunate to have the skills and commitment of Ms. Arain, who at this early stage of her career is able to help make contributions to the field of neurologic and dementia research,” said Irving Gomolin, MD, Chief of Geriatric Medicine at Winthrop.

“Hirra is an exceptionally gifted young woman who has become an important member of our Alzheimer’s team. The work we are doing here at Winthrop attracts the best talent and gives reason for optimism in our fight for progress against AD,” said John Maesaka, MD, a nephrologist at Winthrop and a distinguished AFMR Member who also studies AD.

At Winthrop, Ms. Arain has had the chance to work with a group of AFMR members including Dr. Mark Stecker, Dr. Lora Kasselmann and Dr. Joshua De Leon. Ms. Arain hopes to keep volunteering at Winthrop, and said the experience has helped her find her focus for the future. After college, Ms. Arain plans to pursue a Medical Degree and continue research.

“The Alzheimer’s Disease Resource Center is pleased to support the important research work that is going on at Winthrop,” said Mary Ann Ragona, Executive Director and Chief Executive Officer of the ADRC. “Bright minds like Hirra Arain’s will be the key to unraveling the mystery of Alzheimer’s Disease. Winthrop has the ability to unlock that mystery and ADRC is proud to be a part of this research process.”



Caption: (L.-R.) Allison B. Reiss, MD, Head, Inflammation Section at the Winthrop Research Institute, presents a Certificate of Appreciation from the Alzheimer's Disease Resource Center to undergraduate researcher Hirra Arain, joined by Mary Ann Ragona, Executive Director and Chief Executive Officer of the ADRC; and Michele Payne, Director of Programs, ADRC.