

News Release

ANF
2621 Superior Dr. NW
Rochester, MN 55901
Contact: Allie Happel
(507) 288-0100
ahappel@aanem.org



FOR IMMEDIATE RELEASE

Mai Yamakawa, MD, Named One of ANF's 2023 Development Grant Recipients

Rochester, Minn. (Dec. 21, 2023)- The American Neuromuscular Foundation (ANF), is excited to announce that Mai Yamakawa, MD, has been selected as one of the 2023 Development Grant recipients for her research project, "Causal Genetic Variation and Transcriptomic Signatures of the Peripheral Immune System in the Central Nervous System Pathology of ALS That Are Conserved or Divergent Among ALS Patients and the Animal Models." Dr. Yamakawa is currently a NM fellow at UCLA David Geffen School of Medicine in Los Angeles, CA.

Dr. Yamakawa's team will build a rigorous data-driven model that describes the role of (natural killer cells (NK cells) in amyotrophic lateral sclerosis (ALS)/frontotemporal dementia (FTD), including their cell surface regulators, target cells and predicted molecular drivers. This work will be the bases for future research, performing human-relevant functional validation in cellular and animal models. Dr. Yamakawa explained, "With novel technology of single-cell RNA sequencing of postmortem brain samples, we have higher resolution for pathophysiology in ALS brains. My research will contribute to a new insight into neuroinflammation as a therapeutic target in ALS, and how it is similar or different from the animal model."

Dr. Yamakawa's goal is to characterize neuroinflammation in brain and spinal cord samples from ALS patients, as neuroinflammation is an increasingly attractive therapeutic target with recent exponential discoveries in cancer immunotherapy. Additionally, she aims to systematically describe the difference in neuroinflammation in ALS patients and the most widely used SOD1 mutant mice, as this discrepancy could hinder further drug discovery and repurposing for immunotherapies. Following completion of the research, Dr. Yamakawa will present her findings at an AANEM Annual Meeting.

About American Neuromuscular Foundation (ANF)

Based in Rochester, MN, ANF is a nonprofit organization dedicated to strengthening the global effort to cure neuromuscular disease. As part of its mission to promote the advancement of scientific research and education, the ANF offers annual development grants intended as seed money to help launch research into muscle and nerve disorders by promising new researchers. For more information about ANF, and previous and current development grant initiatives, visit www.neuromuscularfoundation.org.

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