

StutterSenseAI Therapeutics™

StutterSenseAI Therapeutics is pioneering a novel approach to managing neuropsychiatric and developmental disorders, with an initial focus on stuttering. Our mission is to advance therapeutic solutions that address the needs of People Who Stutter (PWS) by integrating three key components: 1) Drug Development, 2) Artificial Intelligence (AI), and 3) Patient-Healthcare Provider (HCP) Interface. By leveraging AI and precision medicine, we aim to deepen our understanding of the different types of stuttering, their underlying mechanisms, and developing the most effective medicines tailored to every person who stutters.

At *StutterSenseAI Therapeutics*, we are committed to developing medicines that improve speech fluency and enhance the personal and professional lives of PWS. AI plays a central role in optimizing therapy development and guiding clinicians toward the best therapeutic approach for each person's unique needs. Additionally, we are creating and validating web-based applications to strengthen the connection between patients and their healthcare providers, ensuring continuous support and personalized care.

Through innovation and collaboration, *StutterSenseAI Therapeutics* is shaping the future of stuttering treatment, bringing cutting-edge science and technology together to make a meaningful impact on the lives of those affected by speech disorders.

About stuttering

Stuttering, also known as stammering, is a speech disorder characterized by disruptions in the normal flow of speech. Types of stuttering are classified as Developmental stuttering (Childhood Onset), Neurogenic stuttering, and Psychogenic stuttering. In addition to speech disorders, secondary stuttering symptoms include physical tics, rapid eye blinks or lip tremors and emotional responses such as anxiety and avoidance behaviors.

Stuttering affects approximately 1% of adults and is more common in males than females. While it primarily begins in childhood, about 75% recover by adolescence or adulthood. Stuttering has a pervasive negative impact on both personal and professional aspects of life, affecting occupational, academic and social functioning. Despite its prevalence and significant impact, no clearly effective therapy exists for most affected individuals resulting in a significant unmet medical need. Understanding the multifaceted effects of this disorder is crucial for developing effective medicines and support systems for individuals who stutter.

There is growing evidence suggesting that both persistent stuttering and recovery from stuttering have a genetic basis. In addition to heritability and familial aggregation, specific genes are associated with the condition and multiple variants of the genes have been identified. These genetic factors linked to stuttering appear to influence brain development, particularly in regions associated with speech and language. Stuttering involves multiple neurotransmitter systems in the brain. The two primary neurotransmitters being dopamine and GABA.

StutterSenseAI Therapeutics co-founders:

Dr Gerald Maguire



Dr. Gerald A. (Jerry) Maguire is chair and director of residency training in psychiatry at College Medical Center in Long Beach, California, and faculty director of Graduate Medical Education at the Maguire Neuropsychiatric Institute of Oroville Hospital in Oroville, California. Dr. Maguire serves as the founder and chair of the Stuttering Treatment and Research Society (STARS), chief medical officer of Adhere Tech and principal investigator for CenExel in Bellflower, California.

Dr. Maguire is certified by the American Board of Psychiatry and Neurology, is a Distinguished Life Fellow of the American Psychiatric Association and a member of the American College of Psychiatrists. Jerry is Professor Emeritus of UC Riverside School of Medicine and served as the founding Chair of the Department of Psychiatry from 2014 to 2021. He also served as the Senior Associate Dean of the UC Irvine School of Medicine from 2007 to 2014. Dr. Maguire has published over 75 journal articles and has authored several books and book chapters primarily focused on psychopharmacology particularly in the treatment of stuttering, bipolar disorder, schizophrenia and major depressive disorder.

Dr. Maguire earned his medical degree at Saint Louis University in St. Louis, Missouri, and completed his residency in psychiatry at the University of California, Irvine where he served on faculty for 20 years.

Dr George Garibaldi



Trained in child psychiatry, statistics, mathematical modeling, and psychopharmacology, George Garibaldi is a serial therapy development entrepreneur who ideates health innovations and then brokers them to significant medical adoptions. George has gradually brought patients and their loved ones to the table to integrate their perspective in therapy development.

George Garibaldi developed multiple therapies including ocrelizumab, approved in PPMS and RRMS, rivastigmine in AD and Lewi Body Dementia, iloperidone in schizophrenia, risperidone long-acting injectable in bipolar disorders, paliperidone and paliperidone palmitate in patients with schizoaffective disorder.

George developed, validated, and published many patient-centric clinical outcomes including “The Readiness for hospital Discharge Questionnaire in schizophrenia”, “The Patient most Troubling Symptoms scale in Anxiety and Depression”, “The Readiness for Work questionnaire in schizophrenia”, “The Clinical Global Impression for Schizoaffective Disorder”, the “Trigeminal Neuralgia Electronic diary” (TnED), and the “Brief Stuttering Assessment”. Dr Garibaldi is co-founder and past president of the International Society for Central Nervous System Clinical Trials and Methodology (ISCTM), former chairman of the International Society for CNS Drug Development (ISCDD) and a member of the American Academy of Child and Adolescent Psychiatry (AACAP). He is the recipient of multiple awards including the ISCDD award for innovation.

Dr Garibaldi earned his M.D. from the faculty of medicine of Cairo University. He completed his residency in Child and General Psychiatry at the Rene Descartes Medical School in Paris, his studies in statistics and mathematical modeling at the University of Kremlin-Bicêtre, and his studies in Neuropsychopharmacology at the Pitié Salpêtrière.