

Joseph Ahern, Susan Manzi, and Chau-Ching Liu

The Pittsburgh Intellectual Property Law Association (PIPLA) has named Joseph Ahern, Susan Manzi, and Chau-Ching Liu as its 2024 *PIPLA Inventors of the Year*.

Drs. Ahern, Manzi, and Liu are researchers for the Allegheny Health Network (AHN) that focus on autoimmune diseases.

Dr. Ahern is the Chair of the AHN Autoimmunity Institute and Director of the AHN Biobank. He is a graduate of Cornell University and holds a medical degree from Johns Hopkins School of Medicine. He completed his internship, residency, and fellowship at Johns Hopkins as well.

Dr. Manzi is the Chair of the AHN Medicine Institute and Director of its Lupus Center of Excellence within the Autoimmunity Institute. She is a graduate of the University of Notre Dame and holds a medical degree from the University of Pittsburgh School of Medicine, as well as a masters degree in public health from the University of Pittsburgh. She completed her internship and residency at Duke University Medical Center, and a fellowship at UPMC.

Dr. Liu is a senior scientist at the AHN Medicine and Autoimmunity Institute. She holds a medical degree from the National Taiwan University and a Ph.D. in immunology from Rockefeller University.

Together they have been instrumental in some groundbreaking work pertaining to the diagnosis and monitoring of Lupus and other autoimmune diseases. In particular, their research has resulted in applications of cell bound complement activation products as biomarkers for aiding the diagnosis of systemic Lupus Erythematosus, which represents a significant breakthrough in fulfilling a promise of precision medicine. The inventions have demonstrated increased diagnostic sensitivity and specificity for the diagnosis of lupus and the products that use these inventions are crucial for early and accurate diagnosis, allowing for timely intervention that can significantly mitigate the risk of disease progression and reduce delays in diagnosis, which, if not caught early, can result in increase disease activity, organ damage and diminished quality of life.

The novelty of this technology has been recognized with 10 US patents, 22 foreign counterpart patents, several pending patent applications, and dozens of manuscripts that have been published globally.