



Drs. Medina-Bolivar and Dolan received U.S. Patent

Dr. Fabricio Medina-Bolivar, primary inventor, and Dr. Maureen Dolan, co-inventor, received a U.S. Patent on “Production of stilbenes from plant hairy root cultures”. The patent was issued on February 23, 2010. The invention relates to a novel production system of stilbenes (also known as stilbenoids). The most studied of these polyphenolic compounds is resveratrol, a natural product that has been associated with a multitude of health benefits impacting various cancers, diabetes, neurodegenerative diseases and aging. The invention describes a way to produce distinct classes of natural resveratrol analogues by exposing plant hairy root cultures with stress-inducing molecules. These resveratrol analogues are not commercially available and in nature they are produced in very low amounts. Using the hairy root culture technology large quantities of these natural products can be produced and easily purified. The invention has multiple applications in areas such as drug discovery. The work was conducted in the laboratory of Dr. Medina-Bolivar at the Arkansas Biosciences Institute (ABI) at Arkansas State University (ASU). Additional co-inventors in this patent are Dr. Medina-Bolivar’s Ph.D. student Jose Condori, ABI research associate John Hubstenberger as well as Selester Bennett. The patent has been licensed for commercialization to Nature West Inc., a start-up biotechnology company based in Jonesboro, Arkansas.