



EVIDENCE / RESEARCH / SCIENCE

\$1.8 Million Research Grant to Study Herbal Medicine

RESEARCH TEAM TO INVESTIGATE *SHAN ZHU YU* FOR TYPE 1 DIABETES

Editorial Staff

WHAT YOU NEED TO KNOW

- The National Center for Complementary and Integrative Health (NCCIH) has awarded a five-year, \$1.8 million grant to study the effectiveness of *shan zhu yu* in treating type 1 diabetes.
- The study is a multi-institution endeavor led by Dr. Brant Burkhardt from the University of South Florida Department of Molecular Biosciences (co-principal investigator).
- TCM practitioners / researchers Dr. Clare Zhang and Dr. John Chen are also members of the research team conducting the study.

The National Center for Complementary and Integrative Health (NCCIH), the primary federal agency spearheading research on integrative health, has awarded a five-year, \$1.8 million grant to study the effectiveness of *shan zhu yu* (*Fructus corni* / *Cornus officinalis*) in treating type 1 diabetes.

TCM practitioners / researchers Dr. Clare Zhang and Dr. John Chen are members of the research team conducting the study – a multi-institution endeavor led by Dr. Brant Burkhardt from the University of South Florida Department of Molecular Biosciences (co-principal investigator); Dr. Stanley Stevens Jr. and PhD candidate Justin Fletcher (co-principal investigator) from the USF Department of Molecular Biosciences; and Dr. Mark Atkinson from the Department of Pathology and Pediatrics at the University of Florida.

“Our NCCIH proposal aims to explain the mechanism of action, determine effect on T1D onset and progression in-vivo, and reveal the precise biological agents within *Cornus officinalis*,” said Dr.

Burkhardt in a USF press release announcing the grant award. “We hope this study will provide new insights into the clinical use ... and reveal what is needed for pancreatic B-cell survival and function to provide a well-tolerated therapy for early onset T1D.”

According to Dr. Chen, “Traditionally, *Shan Zhu Yu (Fructus corni)*, commonly known as Asiatic Dogwood, is classified as an astringent herb that also has significant effect to nourish Liver and Kidney *yin* to treat various disorders characterized by weakness, atrophy, debility, deterioration and loss of body fluids. More recently, it has been explored to treat diabetes and the associated complications. It also has an excellent anti-inflammatory effect to counter the long-term adverse effects of inflammatory diseases.”

More than 350,000 U.S. children and adolescents under the age of 20 live with diagnosed type 1 diabetes, which manifests when the body’s immune system attacks and destroys pancreatic beta cells, which are responsible for producing insulin. Per Dr. Burkhardt, “Despite strong predictive biomarkers of T1D, there is no cure and only one recently approved interventional therapy to slow disease progression,” underscoring the importance of this research.

AUGUST 2024