

FACULTY DEVELOPMENT ENDOWMENT FUNDS

Nathan Deutsch Development Fund

Award Date: Spring 2018

Proposal Title: ACS meeting presentations: Polysaccharide and Oligosaccharide Compositions
from Rice Bran Fiber

Principal Investigator: Brett J. Savary

College of Agriculture

Department: ABI

ABSTRACT

This Faculty Development Funds Application requests travel support to attend the 255th National Meeting of the American Chemical Society. Two abstracts submitted from my Laboratory were accepted for presentation in the Division of Agricultural and Food Chemistry. These concern the preparation of enzymatically-generated oligosaccharides from rice bran fiber arabinoxylan and their compositional analyses. We hypothesize such biomaterials generated from Arkansas agricultural products can modulate epithelial response in the gastrointestinal tract to pro-inflammatory factors, helping to maintain barrier function integrity. The goal of my research program is to address the need to reduce incidence of diseases such as diabetes, obesity, and colorectal cancer through improved dietary intervention. The current research addresses the need to produce a supply of high-quality biocompatible materials from rice bran for in vitro bioassays to determine immune response in the human gut epithelium. My research program supports the A-State ABI mission to conduct agricultural research with medical implications and for nutrition related research.