

Dr. Rick Brenner

Assistant Administrator in ARS for Technology Transfer, United States Department of Agriculture

16

Under Dr. Rick Brenner's leadership, the Agricultural Research Service (ARS) Office of Technology Transfer (OTT) patents inventions, licenses inventions, markets and coordinates technology transfer, develops Cooperative Research & Development Agreements (CRADA) and coordinates all ARS technology transfer activities

This federal lab is unique in having patent advisors and technology transfer coordinators located throughout the country to assist in technology transfer. The patent advisors are located at three of the four ARS Research Centers and they are within a two-hour driving distance of the fourth research center. Very few agencies have the expertise to write patent applications in-house. The USDA/ARS prepares patent applications ranging in subject matter from nanotechnology, to green technology, to antibiotics and vaccines to sustainability techniques and software systems. From Technology Transfer Coordinators to Patent Advisors to Licensing specialists Dr. Brenner has first line and secondary supervisory authority over these professionals and as such is involved daily in issues that directly affect the technology transfer process.

The organization that Dr. Brenner oversees filed over 100 patent applications, signed twenty-seven licenses and sixty-nine CRADA agreements in the fiscal year ending in 2008.

Dr. Brenner is the architect of the Agricultural Technology Innovation Partnership (ATIP). Partnership Intermediary Agreements (PIAs) are specifically authorized by federal statute as a technology transfer Agreement. The Beltsville Area Office of Technology Transfer of the ARS of the United States Dept. of Agriculture (USDA) and the Maryland Economic Development Corporation (TEDCO) have often "partnered" to bring research programs and developments to the attention of small Maryland companies with an eye towards commercialization of the ARS research results. This partnership was

formalized in a Partnership Intermediary Agreement (PIA) which was signed by Dr. Brenner of ARS-OTT and TEDCO on September 29, 2007 as witnessed by Senator Cardin.

Recognizing the value of the TEDCO partnership Dr. Brenner created the Agricultural Technology Innovation Partnership (ATIP) in December 2008. The goal of this partnership is to increase the likelihood that ARS research outcomes are adopted by private sector firms and to increase the impact of ARS research programs. Another goal is to link economic development groups that have an interest in agriculture allowing them to exchange venture funding contacts, share expertise and resources, and to provide a trusted partner in a particular area of the country. An economic development entity becomes a member of ATIP by formalizing a PIA with ARS. To date TEDCO and the Mississippi Technology Alliance (MTA) are the inaugural ATIP partners and the goals of the Partnership are being realized.

We are not aware of any other federal laboratory in the nation working with regional economic development groups in an effort to organize them in a cooperative manner to assist in the transfer of federal lab technology to the private sector.

This is an innovative approach to the transfer of federal lab technology to the private sector. Dr. Brenner has worked tirelessly to obtain the buy-in from stake holders at the USDA and he has travelled across the country vetting economic development groups worthy of the partnership. Dr. Brenner has also shared his vision with other federal labs at forums within and outside the state of Maryland primarily through the Federal Laboratory Consortium (FLC).

Contact:

Mr. J. Terry Lynch, Sr. Licensing Officer
Office of Technology Partnerships,
Technology Services National
Institute of Standards and Technology
100 Bureau Drive, Stop 2000,
Gaithersburg, MD 20899-2000
301-975-2691
Fax: 301-975-2183
jtlynch@nist.gov

Outstanding Technology Transfer Professional

CrispTek is a start-up company registered to do business in the state of Maryland. The entrepreneurs of this start-up company received entrepreneurial training at Howard Community College, in Howard County, Maryland. In fact, ARS technologies are made available to this program as learning tools for business plan and marketing plan writing.

A group of entrepreneurs at Howard Community College studied US patent 6,224,921 issued to the Secretary of Agriculture entitled Rice Flour based Low Oil Uptake Frying Batters. The group determined that a market existed for such technology and under the encouragement of Rick Brenner and ARS, started a company and licensed the technology from ARS in 2008.

As reported on the Center for Disease Control (CDC) web site, “[d]uring the past 20 years there has been a dramatic increase in obesity in the United States. In 2008, only one state (Colorado) had a prevalence of obesity less than 20%. Thirty-two states had prevalence equal to or greater than 25%; six of these states (Alabama, Mississippi, Oklahoma, South Carolina, Tennessee, and West Virginia) had a prevalence of obesity equal to or greater than 30%.”

This is significant because “obesity-related diseases account for nearly 10 percent of all medical spending in the United States or an estimated \$147 billion a year... obese people spend 40 percent more -- or \$1,429 more per year -- in healthcare costs than people of normal weight.”

“Batters enhance the sensory quality of fried foods, so it’s no surprise [that batters] are popular both commercially and in the home. But high oil consumption from commonly used batters when fried can pose a challenge to healthy weight maintenance.”

Rice flour, however has the unique property of being resistant to oil uptake. When used in a batter for fried foods, rice flour maintains the desired taste of the fried foods and reduces the uptake of oils, thus reducing caloric intake.

CrispTek has formulated a rice batter it calls ChoiceBatter™. In addition, to its wide consumer appeal for reducing calories the batter is also gluten- and cholesterol-free, so it’s safe for those who are gluten intolerant or who require a low cholesterol diet. The product is also manufactured to Kosher and gluten-free Certification Standards. The technology was licensed by CrispTek in 2008 from ARS, a product was formulated under a Maryland Technology Transfer Fund award from TEDCO and the first web sales of the product were generated in June 2009. See <http://choicebatter.com/>

