

Oklahoma State University announces formation of National Institute for Whole Chain Traceability and Food Safety Research™

STILLWATER, Oklahoma, October __, 2011 - Dr. Stephen McKeever, Vice President of Research and Technology Transfer at Oklahoma State University, and Executive Director of the Oklahoma State University Multispectral Laboratories, today announced the founding of the National Institute for Whole Chain Traceability and Food Safety Research™. The Institute directly combines multi-disciplinary research activities between OSU's Division of Agricultural Sciences and Natural Resources and the OSU Computer Science Department. It will focus research on providing real-time information sharing in global agricultural and food supply chains relating to both food safety and food marketability.

"Notwithstanding years of academic research by numerous universities, traceback investigations in agricultural and food supply chains still take weeks and months," said Dr. McKeever. "The FDA and the USDA Food Safety and Inspection Service, have clearly expressed an interest in whole chain systems providing for real-time investigations. There are also reasons to believe that these same systems may be multi-purposed to increase marketing opportunities for producers by, for instance, empowering consumers with mobile applications providing greater supply chain transparency about the foods they demand and purchase."

The founding of the Institute is a milestone made possible by the Whole Chain Traceability Consortium™ (WCTC). The WCTC is comprised at its core of researchers and collaborators from Oklahoma State University, North Dakota State University, Michigan State University, the University of Arkansas, and Pardalis, Inc., an Oklahoma advanced technology company. The WCTC informally coalesced in 2010 during the preparation of funding proposals directed toward food safety and traceability. The founding of the Institute is anticipated to accelerate private and public funding opportunities sought by the WCTC. Letters in support of the Institute have been given by Dr. Deland Myers, Professor and Director, Great Plains Institute of Food safety, School of Food Systems, North Dakota State University, Dr. Steve Pueppke, Director of Michigan State University AgBioResearch, Lawrence Busch, Founding Director, Center for the Study of Standards in Society, Michigan State University, Dr. John V. Stone, Co-Director & Senior Research Scientist, Center for the Study of Standards in Society, Michigan State University, Dr. Jean-Francois Meullenet, Head & Professor, Department of Food Science, University of Arkansas, and Steve Holcombe, Founder and CEO, Pardalis, Inc., Stillwater, Oklahoma.

The Institute's initial research is being funded with a \$543,000 grant under the USDA's National Integrated Food Safety Initiative for a 3-year pilot project entitled "Advancement of a whole-chain, stakeholder driven traceability system for agricultural commodities". This research will compare and contrast an information-centric networking system for supply chains provided by Pardalis with similar methodologies emerging from Project CCNx at the Palo Alto Research Center (PARC), a Xerox company, and the multi-university Named Data Networking Project funded by the U.S. National Science Foundation. Co-directors at Oklahoma State University of this research will be Dr. Brian Adam, Professor, Department of Agricultural Economics, Dr. Michael Buser, Assistant Professor, Department of Biosystems and Agricultural Engineering, Dr. Blayne Mayfield, Associate Professor, Department of Computer Science, and Dr. Johnson Thomas, Associate Professor, Department of Computer Science.

"PARC encourages the investigation and development of the CCNx technology through the work of the National Institute for Whole Chain Traceability and Food Safety Research and other organizations," said Jim Thornton, PARC Principal Engineer and CCN program manager. "PARC works with leading organizations, universities, and government agencies, with the goal of achieving productized CCN solutions."

Future comparisons are being planned regarding the methodologies emerging from the EU funded Smart Food and Agribusiness Project at the University of Wageningen, the Netherlands, and Strategic Research on Key Technology of Agricultural Information Technology funded by National Science Foundation of China.

The Institute's educational, research and outreach functions are to globally promote and accelerate sustainable agricultural and food research in whole chain traceability and information sharing technologies by:

- establishing strategic research partnerships with government organizations, NGOs, additional universities, and large and small industry stakeholders seeking to develop traceability products and services;
- integrating whole chain research activities among research partners including, but not limited to, research relating to sensors, precision agriculture, the "internet of things", social media, cloud computing, security, and trusted identities;
- supporting the standards vital to ensuring interoperability among technical and social dimensions; developing courses to provide training on best practices, technologies and standards for sustainable, whole chain systems in agriculture and food supply chains; and
- fostering an open source software developers' ecosystem among research partners to accelerate a transformation in whole chain information sharing in agricultural supply chains and consumer demand chains.

"The Institute will provide a new way of looking at information sharing in supply chains," said Dr. Brian Adam, speaking for the co-directors of the Institute. "Consumers increasingly expect real-time accessibility to trustworthy information on the Web about their food purchases. This in turn is driving increased focus by international trading partners for more transparent information sharing and data interoperability across complex, global supply chains. The capabilities of the Institute's partners will make this a reality while helping agricultural and food companies improve their supply chain management."

The Division of Agricultural Sciences and Natural Resources (DASNR) at Oklahoma State University, the Robert M. Kerr Food and Agricultural Products Center (FAPC), the National Institute for Microbial Forensics & Food and Agricultural Biosecurity (NIMFFAB), the OSU Computer Science Department, and the OSU Center for Excellence in Logistics and Distribution (CELDi), joined Dr. McKeever in his announcement.

Additional letters of support were provided by Billy Cook, Ph.D., Exec. Vice-President & Director, Agriculture Division, The Samuel Roberts Noble Foundation, Dr. Sjaak Wolfert, Sr. Scientific Researcher on ICT in Agri-Food Supply Chain Networks at the University of Wageningen, the Netherlands, Prof. Maohua Wang, College of Information and Electrical Engineering, Chinese Agricultural University – Beijing, China, Vladimir Krasojevic, Research Director at Gartner, Zurich, Switzerland, Dr. Sam Saguy, Professor of Food Science, Technology, and Innovation, Hebrew University of Jerusalem, Leonardo Bonanni, Founder and CEO, Sourcemap Inc., and John Bailey, Executive Director, Top 10 Produce LLC.

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