

ST. LOUIS, MO, September 25, 2013 **/24-7PressRelease/** -- The Donald Danforth Plant Science Center will host its 15th Annual Fall Symposium, September 25 - 27. The theme of this year's event is PhenoDays: Imaging and Robotics for 21st Century Science.

The event will highlight cutting-edge science that is ramping up the pace of scientific discovery generating increased biological understanding in a wide range of organisms. Leading scientists from the U.S., Canada, the Netherlands, and Australia will share insights into a variety of topics that address how imaging can improve and accelerate scientific understanding of photosynthesis, biomass and growth, root development and dissecting complex traits, with a goal of improving crop yield.

Two members of Danforth Center faculty, Todd Mockler, Ph.D., Geraldine J. and Robert L. Virgil Distinguished Investigator and Ivan Baxter, Ph.D., USDA-ARS research scientist, and principal investigator, are organizing the event that will also showcase the Center's new, one-of-a kind Plant Phenotyping Facility.

In addition, the symposium will feature a special presentation on Thursday, Sept. 26 at 2:15 p.m., New Technologies and Applications for Baseball Analytics, by Chris Correa, director of baseball development, St. Louis Cardinals. Correa leads a group that provides statistical analysis and decision support tools to all areas of Baseball Operations. His presentation will address technological advances that are opening up new opportunities for analysis of the game of baseball, and will include examples of existing research using rich datasets available to major league baseball clubs today as well as an outlook on future technologies and applications.

"Camera-and radar-based systems offer new insights on characteristics of pitches, batted balls, and players on the field. This wave of new data is improving our knowledge of the physics of baseball and complementing many baseball clubs' traditional approaches to developing and evaluating players," Correa said.

"Many fields are integrating diverse rich data sources to build actionable knowledge. There are many common challenges in taking the huge amount of new data that novel technologies are generating, sorting out the real data, and then figuring out what it is telling you. The Cardinals are one of the most fun examples," said Baxter. "The last decade has seen an explosion of digital profiling techniques on the molecular scale. A similar surge in digital profiling of phenotypic outputs driven by advances in imaging and robotics is underway and will grow rapidly over the next decade," said Mockler. "Recent advances allow phenotypes to be measured quantitatively and in high throughput, enabling down stream analytics and the derivation biological knowledge.

A poster session, networking and vendor show will round out the event.

To register, visit, [http://www.danforthcenter.org/fall\\_symposium](http://www.danforthcenter.org/fall_symposium). Keep updated on the event via Twitter, @DanforthCenter & #FallSymposiumSTL.

About The Donald Danforth Plant Science Center Founded in 1998, the Donald Danforth Plant Science Center is a not-for-profit research institute with a mission to improve the human condition through plant science. Research aims to feed the hungry and improve human health, preserve and renew the environment and position the St. Louis region as a world center for plant science. The Center's work is funded through competitive grants and contract revenue from many sources, including the National Institutes of Health, U.S. Department of Energy, National Science Foundation, U.S. Department of Agriculture, U.S. Agency for International Development, the Bill & Melinda Gates and Howard G. Buffett Foundations.

The Danforth Center invites you to visit its website, <http://www.danforthcenter.org>, featuring interactive information on the Center scientists, news, and "Roots & Shoots" blog that help keep visitors up to date with Center's current operations and areas of research. Follow us on Twitter at @DanforthCenter.