

GATERSLEBEN LECTURE



Speaker: Prof. Dr. Scott Allen Jackson

Adjunct Professor, Dept. Crop and Soil Sci.,
University of Georgia and Head of Genetic
Pipeline Design, Bayer Crop Science;
Athens, GA, USA



**Title: Complex traits: a genomic approach
to gene discovery**

Time: Tuesday, September 14, 2021, 3 pm

Place: VCS Zoom: Meeting-ID: 841 6339 2353 Kenncode: 168430

[https://ipk-gatersleben-
de.zoom.us/j/84163392353?pwd=U1VnWWNyRmtiZFhSY3cvTXBTZVh3UT09](https://ipk-gatersleben-de.zoom.us/j/84163392353?pwd=U1VnWWNyRmtiZFhSY3cvTXBTZVh3UT09)

Skype for Business: <https://ipk-gatersleben-de.zoom.us/skype/84163392353>

Abstract:

Fundamental to crop improvement is genetic variation. Genetic variation can be introduced via new germplasm or by biotechnology. A primary limitation to introducing new variation via editing, or other means, is our lack of understanding of the function of most genes in all crop genomes. In my lab at the University of Georgia, we developed a means to identify many genes potentially contributing to traits of interest using variation in gene expression across populations and machine learning algorithms. Using this approach, we are able to catalog potentially 100s of genes where variation in gene expression may associated with observed phenotypes. Interestingly, many of these expression states are established early in plant development. I will also briefly discuss R&D for Breeding at Bayer Crop Science.

Education and Previous/Current Positions

2019 -	Head, Genetic Pipeline Design, Bayer Corp.
2019 -	Adjunct Professor, Dept. Crop and Soil Sci., University of Georgia
2017 - 2019	Director, The Plant Center, Univ. of Georgia
2014 -	Adjunct Professor, Department of Plant Biology, University of Georgia
2014 - 2019	Faculty, Institute of Bioinformatics, University of Georgia
2013 - 2014, 2016	Program Officer, Div. of Biological Infrastructure, National Science Foundation
2012 - 2019	Director, Center for Applied Genetic Technologies, Univ. of Georgia
2012 - 2017	Honorary Professor, Chinese Academy of Agricultural Sciences, Beijing, China
2011 - 2019	Professor, Crop and Soil Sciences, University of Georgia
2011 - 2019	Georgia Research Alliance Eminent Scholar, University of Georgia
2011 - 2014	Adjunct Professor, Purdue University
2010 - 2011	Program Officer, Div. of Biological Infrastructure, National Science Foundation
2009 - 2012	Honorary Scientist, Rural Development Administration, Republic of Korea
2008 - 2011	Professor of Agronomy, Purdue University
2005 - 2011	Wickersham Chair of Excellence in Agricultural Research
2005 - 2008	Associate Professor of Agronomy, Purdue University
2001 - 2005	Assistant Professor of Agronomy, Purdue University
1999 - 2001	Postdoctoral Fellow, University of Minnesota
1996 - 1999	Ph.D. Plant Breeding and Plant Genetics, University of Wisconsin-Madison

Prof. Dr. Nils Stein (*Organizer and Host*)