Plant Sciences/Horticulture

Department Information

- **Department Head:**
  Richard Horsley, Ph.D.
- **Graduate Coordinator:**
  Edward Deckard, Ph.D.
- **Department Location:**
  166 Loftsgard Hall
- **Department Phone:**
  (701) 231-7971
- **Department Web Site:**
  www.ag.ndsu.edu/plantsciences/ (http://www.ag.ndsu.edu/plantsciences/)
- **Application Deadline:**
  International applications are due May 1 for Fall and October 15 for Spring. Domestic applicants should apply at least one month prior to the start of classes.
- **Credential Offered:**
  Ph.D. (Plant Sciences only), M.S.
- **Test Requirement:**
  GRE
- **English Proficiency Requirements:**
  TOEFL iBT 71, IELTS 6

Faculty

**Nonoy Bandillo, Ph.D.**
University of Nebraska-Lincoln, 2016
Research Interests: Pulse Breeding, Genetics

**Marisol Berti, Ph.D.**
North Dakota State University, 2007
Research Interests: Forage and Biomass Crop Production

**Xiwen Cai, Ph.D.**
Washington State University, 1998
Research Interests: Wheat Genetics

**Bingcan Chen, Ph.D.**
University of Massachusetts, 2012
Research Interests: Cereal and Food Chemistry

**Michael J. Christoffers, Ph.D.**
University of Missouri-Columbia, 1998
Research Interests: Weed Science/Genetics

**David Wenhao Dai, Ph.D.**
North Dakota State University, 2001
Research Interests: Woody Plant Physiology, Biotechnology

**Edward L. Deckard, Ph.D.**
University of Illinois, 1970
Research Interests: Crop Physiology

**Elias M. Elias, Ph.D.**
North Dakota State University, 1987
Research Interests: Durum Wheat Breeding, Genetics

**Greta Gramig, Ph.D.**
University of Wisconsin-Madison
Research Interests: Weed Biology and Ecology
Andrew J. Green, Ph.D.
Kansas State University, 2016
Research Interests: Hard Red Spring Wheat, Genetics

Harlene Hatterman-Valenti, Ph.D.
Iowa State University, 1993
Research Interests: High-Value Crop Production

Richard D. Horsley, Ph.D.
North Dakota State University, 1988
Research Interests: Barley Breeding, Genetics

Kirk A. Howatt, Ph.D.
Colorado State University, 1999
Research Interests: Weed Science, Annual Weeds

Joseph Ikley, Ph.D.
Purdue University, 2018
Research Interests: Weed Control

Burton L. Johnson, Ph.D.
North Dakota State University, 1993
Research Interests: Crop Production

Thomas J. Kalb, Ph.D.
Virginia Polytechnic Institute & State University, 1988
Research Interests: Extension Horticulture

Herman J. Kandel, Ph.D.
North Dakota State University, 1995
Research Interests: Crop Production

Chiwon W. Lee, Ph.D.
Purdue University, 1977
Research Interests: Vegetables, Floriculture, Biotechnology

Deying M. Li, Ph.D.
Iowa State University, 2001
Research Interests: Sports Turf Management

Xuehui Li, Ph.D.
University of Georgia, 2009
Research Interests: Statistical Genomics

Frank A. Manthey, Ph.D.
North Dakota State University, 1985
Research Interests: Durum Wheat Quality, Pasta/Noodle Processing

G. Francois Marais, Ph.D.
North Dakota State University, 1979
University of Stellenbosch, 1992
Research Interests: Hard Red Winter Wheat Breeding, Genetics

Phillip E. McClean, Ph.D.
Colorado State University, 1982
Research Interests: Dry Bean Genetics, Biotechnology

Esther E. McGinnis
University of Minnesota, 2013
Research Interests: Extension Horticulture, Native Plants, Perennial Hardiness, Floriculture

Michael S. McMullen, Ph.D.
University of Minnesota, 1976
Research Interests: Oat Breeding, Genetics

Carrie Miranda, Ph.D.
University of Missouri, 2018
Research Interests: Soybean Breeding, Molecular Genetics

Rebekah Oliver, Ph.D.
North Dakota State University, 2006
Research Interests: Genetics

Juan Osorno, Ph.D.
North Dakota State University, 2006
Research Interests: Dry Edible Bean Breeding

Thomas Peters, Ph.D.
North Dakota State University, 1990
Research Interests: Sugarbeet Agronomy, Weed Science

Mukhlesur Rahman, Ph.D.
University of Manitoba, 2007
Research Interests: Canola Breeding

Jiajia Rao, Ph.D.
University of Massachusetts, 2013
Research Interests: Food Chemistry, Ingredient Technology

Andy Robinson, Ph.D.
Purdue University, 2012
Research Interests: Potato Production

Paul B. Schwarz, Ph.D.
North Dakota State University, 1987
Research Interests: Malting Barley Quality

Kalidas Shetty, Ph.D.
University of Idaho, 1989
Research Interests: Food Safety

Senay Simsek, Ph.D.
Purdue University, 2006
Research Interests: Hard Spring Wheat Quality

Asunta L. Thompson, Ph.D.
University of Idaho, 1998
Research Interests: Potato Breeding

Anuradha Vegi, Ph.D.
North Dakota State University, 2008
Research Interests: Teaching Techniques

Todd West, Ph.D.
Southern Illinois University, 2004
Research Interests: Woody Plant Improvement

Qi Zhang, Ph.D.
Kansas State University, 2007
Research Interests: Turfgrass Stress Physiology

Alan J. Zuk, Ph.D.
Kansas State University, 2005
Research Interests: Sports and Urban Turfgrass Management

Adjunct and Affiliate

James V. Anderson, Ph.D.
Virginia Polytech Institute, 1990
Research Interests: Plant Biochemistry

James Beaver, Ph.D.
David Bonnett, Ph.D.  
University of Sydney, 1997  
Research Interests: Wheat Breeding

Patrick M. Carr, Ph.D.  
Montana State University, 1989  
Research Interests: Sustainable Agriculture

Wun Shaw Chao, Ph.D.  
University of California-Davis, 1996  
Research Interests: Perennial Weeds

Munevver Dogramaci, Ph.D.  
Cukurova University, Institute of Natural and Applied Sciences, Adana, Turkey/North Dakota State University, Fargo, ND, USA, 2000  
Research Interests: Sugarbeet and Potato Research

Linda Dykes, Ph.D.  
Texas A&M University, 2008  
Research Interests: Food Science and Technology

Justin D. Faris, Ph.D.  
Kansas State University, 1999  
Research Interests: Wheat Molecular Genetics

Jason Fiedler, Ph.D.  
Scripps Research Institute, 2012  
Research Interests: Cereal Crop Genetics

Shana M. Forster, Ph.D.  
North Dakota State University, 2017  
Research Interests: Crop Production

Jose G. Franco, Jr., Ph.D.  
Texas A&M University, 2015  
Research Interests: Agroecology, Sustainable Food Systems

Karen L. Fugate, Ph.D.  
Ohio State University, 1995  
Research Interests: Sugarbeet Physiology

Russell Gesch, Ph.D.  
Texas A&M University, 1995  
Research Interests: Physiology of Oilseed Crops

Salvador Alejandro Gezan, Ph.D.  
University of Florida, 2005  
Research Interests: Statistic and Quantitative Genetics

Michael Grusak, Ph.D.  
University of California-Davis, 1985  
Research Interests: Crop Nutrient Quality

Yong Q. Gu, Ph.D.  
University of California, Riverside, 1994  
Research Interests: Wheat Genetics

Darrin Haagenson, Ph.D.  
Purdue University, 2001  
Research Interests: Crop Physiology and Ecology

David P. Horvath, Ph.D.  
Michigan State University, 1993
Research Interests: Perennial Weed Physiology

Brent Hulke, Ph.D.
University of Minnesota, 2007
Research Interests: Flax and Sunflower Genetics

Brian Jenks, Ph.D.
University of Nebraska, Lincoln, 1996
Research Interests: Integrated Weed Management

Blaine Johnson, Ph.D.
University of Nebraska, 1986
Research Interests: Quantitative Genetics

Edward C. Lulai, Ph.D.
North Dakota State University, 1978
Research Interests: Potato Physiology

Kevin McPhee, Ph.D.
University of Idaho, 1995
Research Interests: Pulse Crops

Grant Mehring, Ph.D.
North Dakota State University, 2016
Research Interests: Agronomy; Wheat and Corn Research

Mohamed Mergoum, Ph.D.
Colorado State University, 1991
Research Interests: Hard Red Spring Wheat Breeding

Jae-Bom Ohm, Ph.D.
Kansas State University, 1996
Research Interests: Grain Science

Michael Ostlie, Ph.D.
Colorado State University, 2012
Research Interests: Weed Science

Timothy Porch, Ph.D.
Cornell University, 2012
Research Interests: Dry Bean Breeding and Genetics

Gautam Pradhan, Ph.D.
Kansas State University, 2011
Research Interests: Crop Physiology

Lili Qi, Ph.D.
Nanjing Agricultural University, 1997
Research Interests: Wheat Genetics

Calvin Trostle, Ph.D.
Texas A&M, 1996
Research Interests: Row Crops, Peanut, Alfalfa

Gerald J. Seiler, Ph.D.
North Dakota State University, 1980
Research Interests: Sunflower and Sugarbeet Germplasm

Thomas Walk, Ph.D.
Pennsylvania State University, 2005
Research Interests: Plant Physiology, Statistics

Jochum Wiersma, Ph.D.
University of Minnesota, 1995
Research Interests: Small Grains
Steven S. Xu, Ph.D.
North Dakota State University, 1994
Research Interests: Hard Red Spring Wheat Development

Shengming Yang, Ph.D.
North Dakota State University, 1994
Research Interests: Hard Red Spring Wheat Development