

Joseph M. Anderson

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EDUCATION

B.S.	Biology	St. Bonaventure University	1980
M.S.	Microbiology	Iowa State University	1983
Ph.D.	Genetics	Iowa State University	1987

PROFESSIONAL EXPERIENCE:

Department Head and Professor, Department of Agronomy, Purdue University, 2010-present
Lead Scientist, USDA-ARS, Crop Production & Pest Control Research Unit, W. Lafayette, IN, 2000-2010
Research Molecular Biologist, USDA-ARS, Crop Production & Pest Control Research Unit, W. Lafayette, IN. 1994-2000
Adjunct Assistant/Associate/Professor in Departments of Agronomy and Botany Plant Pathology, Purdue University, 1994-2010
Research Geneticist, USDA-ARS, Cereal Crop Improvement and Adjunct Assistant Professor, Department of Plant & Soil Science, Montana State University, Bozeman MT, 1992-1993
Postdoctoral Research Associate, Department of Plant Pathology, Cornell University, 1990-1992
Postdoctoral Research Associate, Institute of Biological Chemistry, Washington State University, 1987-1990

PROFESSIONAL SOCIETIES

- Agronomy Society of America
- Crop Science Society of America
- Soil Science Society of America
- American Society of Plant Biologists
- American Society for the Advancement of Science
- Sigma Xi
- Gamma Sigma Delta
- Eastern Wheat Workers Association
- American Oat Workers

AWARDS AND HONORS

- Purdue University Award for Excellence in Distance Learning For Professional Development, 2015
- Food Systems Leadership Institute –2013-2015

- Committee on Institutional Cooperation - Department Executive Officer Development Workshop 2011
- USDA-ARS Certificate of Merit: Recognition of superior leadership in small grain virus research. 2009
- Federal Agency Leadership Development Program. 2008
- USDA-ARS Certificate of Merit: Recognition of outstanding leadership advancing virus disease resistance in small grains. 2007
- USDA-ARS Certificate of Merit: For superior leadership in planning and execution of research on diseases of small grains. 2006
- USDA-ARS Certificate of Merit: For outstanding leadership of the ARS wheat genomics team and contributions that advanced the knowledge of virus disease resistance. 2005
- USDA-ARS Certificate of Merit: For superior leadership of the wheat genomics group and for research contributions that advanced the understanding of virus resistance in wheat. 2004
- USDA-ARS Certificate of Merit: For superb performance of duties as Research Molecular Biologist and leadership in forging the direction of research in viral disease of small grains. 2002
- Purdue University College of Agriculture Team Award. Small Grains Team: for excellence in interdisciplinary research and education. 2000
- Gamma Sigma Delta, Agriculture Honor Society. 1997
- USDA-ARS Certificate of Merit: Contributions as part of a team working to successfully discover and develop low phytic acid mutants in barley and corn. 1995
- Elected to New York Academy of Sciences as member. 1989

PROFESSIONAL OFFICES AND COMMITTEE ASSIGNMENTS

- Crop Science Society of America Division C-1 Crop Breeding and Genetics- Chair-Elect (2017), Division Chair (2018), and Past Chair (2019)
- Search Committee for College of Ag. Botany & Pathology Department Head – Chair (2016)
- Purdue Corn Showcase Planning Committee (2016 -)
- Search Committee for College of Ag. Communications Department Head (2015)
- Purdue University Soybean Center Development Committee,(2014-2015)
- Agronomy Field Day Co-chair(2013-present)
- Purdue Soybean Showcase Planning Committee,(2015-present)
- Search Committee for College of Ag. Associate Dean of Extension (2013)
- United Way College of Agriculture United Way Campaign –Chair (2013)
- NCAC1 North Central Advisory Cmte for Crops & Soils Rsch (2010-present – Chair-2014)
- Board of Directors Agribusiness Council of Indiana (2010-present)
 - Education Committee – Launched an Emerging Professionals Leadership Program which has now had three cohorts of 20 emerging leaders in agribusinesses across Indiana
 - ACI Foundation Scholarship Committee
- Board of Directors Indiana Crop Improvement Association of Indiana (2010-present)
 - Corn Belt Seed Conference Planning Committee
- CSREES Department of Agronomy Review Advisory Steering Committee & Crops Group - Co-chair (2008-2009)
- USDA-ARS LEAN Review Team for Extramural Agreements Process- member (2005)

- American Phytopathological Society Annual Meeting - Organized and chaired “Virus Genetics: Leading to New Insights in Resistance and Susceptibility” Symposium(July 2005)
- USDA-ARS Plant Disease 303 National Program Strategic Plan Workshop (2000 & 2005)
- Application of Plant Gene Discovery-Host-Pathogen Interaction Forum on USDA-NRI plant-microbe interaction programs. NSF Plant Genome Initiative (2003)
- National Wheat Improvement Committee (2002-2009)
- Eastern Wheat Workers Association-Meeting Co-organizer, St. Louis, MO. (May 2002)
- American Phytopathological Society Virology Committee (2000-2003)
- Eastern Wheat Workers Association -Vice-Chair (1999-2001), Chair (2002-2005)

ADMINISTRATIVE RESPONSIBILITIES

As Head of the Department of Agronomy, I provide leadership and direction for the academic, research and extension activities within the department. It is my responsibility to represent and advocate for the department with the College and University administration and the public, not only within Indiana, but also regionally, nationally and internationally. This includes understanding and advancing each of the faculty's activities and their programs. The Agronomy Department is home to the Indiana State Climate Office, The Agronomy Center for Research and Education, The Water Quality Field Station, Post-harvest Education and Research Center, Purdue Crop Performance Program, and the Crop Diagnostic Training Center, in addition to being a founding member of the newly formed Agricultural Data Coalition. Agronomy faculty are directors or executive committee members for the Center for Global Food Security, Purdue Climate Change Research Center, Purdue Water Community, and Center for the Environment. Agronomy faculty are also directors of the interdisciplinary Natural Resources and Environmental Science undergraduate and the Ecological Sciences and Engineering graduate education programs. Agronomy consistently leads the College in sponsored program funding with an average of \$9.9 million in awards annually over the past 5 years, as well as expenditure of gifts funds averaging over \$2 million annually.

ADMINISTRATIVE ACCOMPLISHMENTS

As one of the preeminent departments within Purdue's esteemed College of Agriculture, Agronomy has a significant role. Some of the accomplishments we have achieved during my tenure as head include:

Focused Department Vision – Reflecting the changing paradigms in agriculture as well as global challenges of food security, climate change and sustainability, we developed a strategic plan and focused our department into three primary areas: Crops and the Changing Environment, Air Water and Climate, and Soil and Land Use. This vision has set the stage for curriculum development, faculty hiring and the research areas in which we develop interdisciplinary activity.

Enhanced Research Funding: The department research funding landscape has developed from primarily USDA funding and single investigator grants to a portfolio that now encompasses a wide range of sources and partnerships, including federal agencies such as (USDA-NIFA, USDA-NRCS, NSF, DoD, DOEnergy, DOEducation, USAID, USA Feed the Future Global Hunger and Food Security Initiative), foundations and other organizations (World Bank, Catholic Relief Services, Bill and Melinda Gates Foundation, Howard Buffet Foundation,

Walton Foundation), national, regional and state corn, soybean and sorghum commodity groups, and corporate partners Dow AgroSciences, DuPont Chemical, DuPont Pioneer, Mosaic Company, Monsanto, Helena Chemical, Agrium, Con Agra, Cargill, and Bayer as examples. While single investigator grants remain important, over 50% of our research funding is now interdisciplinary multi-investigator/multi-institutional grants. We have also had a significant increase in funding for international research.

New Research Facilities: We successfully identified the need for and support of the new Indiana Corn and Soybean Innovation Center. This \$10 million 25,000 ft² research building at the Agronomy Center for Research and Education provides our faculty not only in Agronomy but also across the College with much needed space and resources for their research activities in soil, crop management, plant genetics, and high throughput plant phenomics. It also serves as facility space for interdisciplinary initiatives that brings together our faculty with Purdue engineers, computer scientists, aviation technology and statisticians.

Additional Research Land: With increased demand for field scale and plant breeding research, more land was needed at the Agronomy Center for Research and Education (ACRE). This need was successfully met by negotiating purchase of adjacent land that resulted in a 25% increase in acreage, bringing the research farm to 1,400 acres. Following negotiations with the land owner, a coalition of partners (Purdue University administration, College of Agriculture administration, Agronomy Department and the Purdue Research Foundation) all contributed money to complete this purchase. This will significantly enhance our ability to accommodate the field research needs of our current faculty and also build capacity for future faculty expansion.

Faculty Hiring: The addition of five assistant professors has broadened our teaching mission and addressed succession planning as some of our senior faculty near retirement. These new faculty hires are having a significant positive impact on grant funds into the department, graduate student education and the development of progressive innovative research, teaching and extension programs.

Undergraduate Enrollment and Gender Diversity: The demand for our undergraduates is very strong, with 100% placement by graduation, as evidence of their strong academic preparation and multiple internship opportunities. To meet this demand, we began a strong recruitment effort to increase the size of our incoming freshman and transfer students. In the past two years, we have doubled our entering freshman class size and are well on our way to increasing total department enrollment by 25%. The demand for our highly qualified students will continue to be very strong into the future in spite of the downturn in the agriculture economy. In addition, I am very gratified that the percent of women undergraduates has doubled from 19% to just over 40% during my tenure as department head

International Engagement: Within the global economy, having a highly skilled workforce is essential. We visited a number of universities in China and India to identify education partners to assist in developing this workforce. These meetings resulted in the formal adoption of an undergraduate 2+2 program with China Agricultural University and a graduate program with Punjab University. PAU students will fulfill their course requirements at Punjab University, their primary research at Purdue University, and complete a dual degree with a final year or semester at PAU. A new initiative funded by the World Bank will establish an African Center of Excellence (ACE) in Climate Smart Agriculture and Biodiversity at Haramaya University in Ethiopia. This Center will establish a graduate research and education program at Haramaya covering the Eastern and Southern Africa regions. We anticipate that students from approximately 10 countries within these regions will attend in this program.

Distance Education: An initiative that I am particularly proud of is the development of a very successful Agronomy e-Learning Academy. The Academy was developed to fulfill the educational needs of agricultural companies who recognized the lack of agronomic understanding by many of their employees. The e-Learning Academy has two online courses, Agronomy Essentials and Precision Agriculture, in which over 400 agribusiness professionals have enrolled from 12 companies in 20 different states and 13 countries. In addition to providing much needed education, this program also brings significant revenue into the department.

Faculty Retention: Retaining excellent faculty has been an important task in continuing to grow and strengthen the Department and College. During my leadership tenure in the department, we have successfully negotiated retention packages in all occurrences where it was necessary.

Promotion and Tenure Decisions: All promotion and tenure requests made by the Department on behalf of the faculty have been successfully advanced during my tenure. The faculty promoted and granted tenure were at all ranks. Furthermore, this success was across all of our land grant mission areas- research, teaching and extension.

Fund Raising/Development: In partnership with the College of Ag Development team, we have been successful in soliciting gifts that have averaged \$2.5 million per year during my tenure. The most significant of these have been a \$2.5 million pledge by an alumnus thru an estate provision, \$1.8 million gift from an alumnus for undergraduate and graduate endowed scholarships and facilities, a \$500,000 corporate gift matched by Purdue for the \$1 million AgReliant graduate student endowment, a \$250,000 gift for the Dow AgroSciences graduate student support endowment, a \$300,000 gift by Beck Hybrids matched by the Purdue Plant Science Initiative for a fully remodeled genetics teaching laboratory and a crop resource room, and a \$1 million analytical equipment gift by Dupont Chemical.

RESEARCH INTERESTS

My research has spanned several areas of plant genetics and biomolecular research including transposable elements in maize, starch biosynthesis in rice and potato, and genetic engineering of virus resistance. Most recently my research used genetic, genomic, molecular, cellular and biochemical approaches to elucidate the basis of pathogen resistance in wheat and oat for developing disease resistant cultivars. Specifically this research encompassed areas are: 1) integrating virus resistance genes from related species into wheat and oat, 2) determining the mechanism of resistance to virus and fungal pathogens, 3) develop genome-wide molecular markers for integrating disease resistance traits into elite germplasm and varieties, 4) developing commercially varieties, and 5) investigate the epidemiology of viral diseases in small grain production areas in the United States.

I proposed and led the effort to develop a national program in Genomics of Pest Resistance in Small Grain Cereals in the Crop Production and Pest Control Research Unit at West Lafayette. This effort required support from the ARS national leadership, the National Wheat Improvement Committee, Purdue Administration and federal legislators and resulted in the addition of \$600,000/yr in recurring funds. These funds, added by a congressional appropriation in 2001, were used to create permanent positions for two scientists, a senior staff bioinformatician, and provided support for research expenses and technical resources. Through Specific Cooperative Research agreements that built a USDA-ARS/Purdue research partnership, my research program worked closely with Dr. Herb Ohm, Purdue small grains breeder, to utilize genetics, breeding, and DNA technologies to develop wheat germplasm and commercially successful varieties that are resistant to multiple diseases and pests.

INVITED PRESENTATIONS

National and state invitations

- “Purdue Agronomy – Meeting Today’s and Tomorrow’s Grand Challenges”, Purdue Agriculture Alumni. Lafayette, IN 2015
- U.S. and Global Wheat Markets and Prospects for GM and Hybrid Wheat”, Wheat Quality Conference. Indianapolis, IN 2015
- “Department of Agronomy Overview”, CoAlliance, LLP Board of Directors, Lafayette IN 2014
- “Partnership for Research & Education in Plant Breeding and Genetics”, Plant and Animal Genome XXI. San Diego CA. 2013.
- “Climate Resilient Crops - Using genetics to develop drought, heat, and disease resistant crops”, Elderhostel, West Lafayette, IN 2013
- “Agribusiness employment : Huge Demand - Short Supply”, Lafayette Rotary Club, West Lafayette, IN 2013
- “Purdue Agronomy – Excellence in Global Agriculture”, Deans Advisory Council, Purdue University, West Lafayette, IN. 2012.
- “Purdue Agronomy – A Global Department in Research and Science”, Purdue CARET, (Council for Agricultural Research, Extension, and Training) Washington DC, 2011
- “Epidemiological studies on the presence of viruses in winter wheat in Arkansas, Georgia, Indiana, North Carolina and Wisconsin”, Joint Eastern and Southern Wheat Workers Conference. Baltimore, MD. 2009
- “Multi-plex PCR detection of wheat viruses: detection and epidemiology”, Great Plains Diagnostic Network. 2008
- “New insights into wheat virus detection: epidemiology and resistance”, Department of Crop Science, University of Illinois. Urbana, IL. 2008
- “Multiplexed PCR for detection of common wheat viruses”, Joint NCERA-184-Management of Small Grain Diseases Research Committee and Western Wheat Workers meeting. Davis, CA. 2008
- “Overview of oat microsatellite development”, Plant and Animal Genome XVI conference. San Diego, CA. 2008
- “Resistance to the Ploverovirus *Cereal Yellow Dwarf Virus* in wheat: a two-component system”, Plant and Animal Genome XVI conference. San Diego, CA. 2008
- “Development of a rapid multi-plex PCR method for simultaneously detecting 8 different wheat viruses”, Joint Eastern and Southern Wheat Workers Conference. Tipton, GA. 2007
- “*Barley yellow dwarf virus* in oats: a field and laboratory view”, American Oat Workers Conference. Fargo, ND. 2006

- “*Bdv3* resistance to *Cereal yellow dwarf virus* is a two component system: restriction of virus movement and aphid feeding”, American Phytopathological Society Annual Meeting. San Antonio, TX. 2005
- “Global *Barley and Cereal yellow dwarf virus* genome sequencing project: A multi-institution, state and federal partnership”, USDA-ARS Plant Diseases 303 National Program Strategic Plan Workshop. Orlando, FL. 2005
- “Analysis of the wheat defense-response transcriptome using an unbiased, open-architecture gene-identification system combined with microarrays”, International Triticeae Mapping Initiative Workshop. Minneapolis, MN. 2004
- “*Barley and cereal yellow dwarf virus*: detection and resistance”, Inaugural U.S. National Wheat Workers Workshop. Kansas City, MO. 2004
- “Transcriptional profiling of wheat after treatment with *Septoria tritici* leaf blotch, head scab, barley and cereal yellow dwarf virus, and Hessian fly”, Plant and Animal Genome XI conference. San Diego, CA. 2003
- GMO Benefits for Food Safety. Soil and Water Conservation Society, Hoosier Chapter at Purdue University. 2003
- Virus-plant interactions: defense responses and resistance in wheat and oats to yellow dwarf virus. Horticulture Department. Purdue University, W. Lafayette, IN. 2002
- Yellow dwarf virus resistance in oats in the USDA-ARS/Purdue University Small Grains Program: Present status and future direction. American Oat Workers Conference. Wilmington, North Carolina. 2002.
- Current state of yellow dwarf virus resistance in wheat, Eastern Wheat Workers Conference. St. Louis, MO. 2002.
- Introgression and characterization of wheatgrass-derived resistance to barley yellow dwarf resistance. Joint Meeting of the Eastern Wheat and Southern Small Grain Workers. Wilmington VA. 1999.
- Molecular genetic characterization of wheatgrass-derived resistance to barley yellow dwarf virus in soft red winter wheat. Botany & Plant Pathology. Purdue University, W. Lafayette, IN, 1998.
- Characterization of wheatgrass-derived barley yellow dwarf resistance in soft red winter wheat. April, 1997. Monsanto Co., Ceregen Division. St. Louis, MO.
- Replicase-mediated virus resistance; past to present results and future plans. February, 1994. Agronomy Department, Purdue University.
- Bioengineered virus resistance in plants. February, 1993. Department of Botany and Plant Pathology. USDA-ARS and Purdue University.
- Hill County Agricultural Producers Workshop. February, 1993. Regulation of Starch Synthesis and the Potential Impact on Yield and Grain Quality. Montana State University, Bozeman, MT.
- Engineering virus resistance in plants. October, 1992. Department of Plant Pathology. Montana State University. Bozeman, MT.
- Characterization of potato tuber ADPglucose pyrophosphorylase and genetically engineering virus resistance in plants. October, 1991. Department of Plant Science. Montana State University, Bozeman, MT.
- Molecular and Biochemical Characterization of Rice and Potato adpglucose Pyrophosphorylase. July, 1989. DowElanco, Plant Research Group. Midland, MI.

International invitations

- “Global Agriculture & Virus resistance in Wheat and Oats”, Punjab University, India, 2013
- “Purdue Agronomy - Global Excellence in Research and Science”, China Agricultural University. Beijing, China. 2012
- “Epidemiological analysis of wheat viruses in the Eastern US”, World Congress of Virus and Infections-2010, Busan, South Korea. July 2010
- “Simultaneous diagnosis of eight viruses by a single tube multiplex PCR-based detection method”, BIT 1st Annual World Summit of Antivirals: Combating Severe Viral Infections Conference. Kunming, China. 2008 (Declined due to prior commitments)
- “Virus detection and field management” 8th International Oat Conference: Healthy Foods & Healthy Lives. Minneapolis, MN. 2008
- “Development of a real time PCR technique for virus detection”, New Techniques for Diagnostic Testing for Harmful Organisms in Plants Symposium. Kenitra, Morocco. 2006
- “Analysis of resistance and susceptibility to barley and cereal yellow dwarf virus”, 7th International Oat Conference. Helsinki, Finland. 2004
- “Quantitative analysis of wheat defense-gene expression in response to insect, fungal, and viral pests”, Proceedings of the Tenth International Wheat Genetics Symposium, Paestum, Italy. 2003 (Declined due to prior commitments, presented by Dr. Goodwin)
- “Real-time RT-PCR quantification of yellow dwarf virus accumulation and defense gene expression”, International Symposium, Barley Yellow Dwarf Disease: Recent Advances and Future Strategies. CIMMYT, El Batan, Mexico. 2002
- “Combining liquid chromatography with mass spectrometry to detect differential expression of proteins in plant-pathogen interactions”, International Tritici Mapping Initiative Workshop. Winnipeg, Canada. 2002
- “Elucidation of the mechanism of *Thinopyrum intermedium*-derived resistance to BYDV and breeding for BYDV resistance”, Plenary lecture, International Wheat Genetics and Breeding Symposium. Beijing, China. 2001

FUNDING AND GRANT ACTIVITY

2013-2015	U.S. Wheat and Barley Scab Initiative: Improvement of Soft Winter Wheat that is Resistant to FHB and Adapted to Eastern USA	\$137,472
2012-2013	United Soybean Board. Nested Association mapping to Identify Yield QTL in Diverse High Yielding Elite Soybean Lines- Continued Evolution	\$83,957
2009-2013	USDA-AFRI, Plant Breeding and Education PI: Herb Ohm, CoPIs (13): J. M. Anderson, R. Doerge, G. Ejeta, et al. Project Title: Partnership for Research and Education in Plant Breeding and Genetics at Purdue University.	\$497,672
2009-2012	USDA-AFRI, Plant Genome, Genetics, and Breeding. PIs: Eric Jackson, Don Obert, CoPIs (16): N. Tinker, J. M. Anderson et al Project Title: Oat SNP Development and Identification of Loci Affecting Key	\$475,000

Traits in North American Oat Germplasm Using Association Genetics.
2007-2012 USDA-ARS
Annual Internal Base-Funding Range \$670,000 - \$813,000
Lead Scientist: Joseph M Anderson, CoPI: Steve Scofield
Project Title: Genetic and biochemical mechanisms of resistance to barley and cereal yellow dwarf viruses and fungi.

2007-2012 USDA-ARS & U. Illinois, Specific Cooperative Agreement. \$60,000/yr
CoPIs: Joseph M. Anderson and Fred Kolb
Project Title: Enhancement of oat germplasm for resistance/tolerance to barley and cereal yellow dwarf virus utilizing marker-assisted selection breeding.

2007-2012 USDA-ARS & Purdue Univ., Specific Cooperative Agreement \$60,000/yr
CoPIs: Joseph M. Anderson, and Herb Ohm
Project Title: Utilization of genetics, breeding, and DNA technologies to develop wheat that is resistant to multiple diseases and pests.

2008-2009 US Wheat and Barley Scab Initiative \$60,000
CoPIs: Steve Scofield, Joseph M. Anderson
Project Title: Functional dissection of the pathways contributing to FHB resistance by virus-induced gene silencing.

2007-2008 US Wheat and Barley Scab Initiative \$55,000
CoPIs: Steve Scofield, Joseph M. Anderson, L. Kong, D Garvin
Project Title: Rapid functional identification of genes contributing to FHB resistance.

2006-2007 US Wheat and Barley Scab Initiative \$60,000
CoPIs: Steve Scofield, Joseph M. Anderson
Project Title: Development of a virus-induced gene silencing system for the identification of genes.

2004-2006 USDA-NRI - Microbial Genome Sequencing \$876,000
PI: Allen Miller, CoPIs: Joseph M. Anderson, Stewart Gray
Project Title: Global BYDV/CYDV Sequencing

2002-2007 USDA-ARS, Annual Internal Base-Funding Range \$580,000 - \$670,000
Lead Scientist: Joseph M Anderson, CoPI: Steve Scofield
Project Title: Genetic and biochemical mechanisms of resistance to barley and cereal yellow dwarf viruses and fungi.

2000-2001 Purdue University Showalter Trust \$100,000
PI: Joseph M. Anderson, CoPIs: Fred Regnier, Herb Ohm, Christie Williams, Steve Goodwin
Project Title: New Analytical Tools for Studying Protein Biodynamics in Plants.

2001-2003 USDA-ARS Administrator Postdoctoral Program. \$80,000
PI: Joseph M. Anderson
Project Title: A novel approach to achieving virus resistance in plants by repressing virus gene expression.

1997-2002 USDA-ARS, Annual Internal Base-Funding Range \$250,000 to \$330,000
Lead Scientist: Joseph M Anderson,
Project Title: Genetic and biochemical mechanisms of resistance to barley and cereal yellow dwarf viruses.

1997-1998 Purdue, Agriculture Research. Program Research Assistantship \$24,000
PI: Joseph M. Anderson
Project Title: Isolation and Characterization of *Thinopyrum intermedium*-Specific Repetitive Elements as Molecular Tools for Mapping Barley Yellow

1992-1993	Dwarf Virus Resistance in Wheat. Montana Biotechnology Center of Excellence Principal Investigator: Joseph M. Anderson Project Title: Replicase-mediated Resistance to Barley Yellow Dwarf Virus in Transgenic Barley Plants.	\$75,000
1994-1999	NSF-Epscore. PI Gary Strobel, CoPI: JM Anderson - Chair of Biochemistry and Molecular Biology of Plant Metabolic and Developmental Pathways section and one of 10 Co-PIs. Project Title: Systemic Improvement of an Integrated Center in Excellence in Plant Biosciences and Biotechnology at Montana State University. This grant started just before I transferred to USDA-ARS at Purdue University.	\$7,391,000

TEACHING, EXTENSION AND SERVICE ACTIVITY

As an adjunct faculty member and as a professor, I have taken an active role in education at Purdue University. This has occurred in a number of venues ranging from mentoring high school and undergraduate students in my laboratory, sponsoring a high school science teacher to update his molecular genetics knowledge, mentoring post-doctoral fellows, serving as a member of 24 graduate student committees across five departments, as a major professor for six students (MS and Ph.D.), presenting guest lectures in Plant Breeding and Plant Genetics courses, being a member and chair of Agronomy Graduate Committee for four years, and a member of Purdue Plant Biology Executive Committee since the program's inception until the transition into the Purdue Life Sciences program.

More recently I have been meet with university administrators in India and China through visits in 2013 and 2012 that have resulted in a 2+2 program with China Agricultural University for undergraduate degrees and Punjab Agricultural University for graduate degrees.

Courses Taught:

- Agronomy 320 Genetics 3 credit - Fall 2013 200 Students
- Agronomy 490 Plant Genetics 3 credit - Fall 2012 10 Students
- Agronomy 113 Freshman Orientation – 8 week, 1 credit - 2011-2015
- Agronomy 495 Senior Seminar 1 credit 2014 and 2015
- Agronomy 290 Plant Sciences Freshman Orientation - 8 week, 1 credit course, 2011-2015
- Agronomy 696 Graduate Seminar. Team taught course with Dr. Kladviko. Spring 2005

Invited Class Lectures:

- Agronomy 605 Advanced Plant Breeding. “State of wheat and other cereal crop transformation technology and applications to crop physiology and breeding” Fall 1994, 1996, 1998, 2000; “Application of genomics to plant breeding” Fall 2002, 2006
- Agronomy 530 Plant Genetics. “Cereal crop transformation” Fall, 1994; “Proteomics” Fall 2002, 2004
- Biology 295 Undergraduate special topics. Instructor for a one-semester research project in on regulation of barley yellow dwarf virus gene expression. Spring 1995

Graduate Student Involvement:

Major Professor

- Guohua Zhu MS Agronomy Department 1998
- Lynae Beiningen MS Biology Department 1996
- Hathaithip Wiangjun Ph.D. Agron. Department/Plant Biology 2006
- Elizabeth Buescher Ph.D. Agron. Department/PULSe 2010
- Pasajee Kongsila Ph.D. Agronomy Department/ 2010

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Graduate Committee Member

Major Professor

- Jihad Skaf Ph.D. Plant Path. Montana State U., 1994. Dr. T Carroll
- Vanessa Cook Ph.D. Agronomy, 1998 Dr. H Ohm
- Dennis Halterman Ph.D. Biochemistry 1999 Dr. G Martin
- Carlos Carvalho Ph.D. Agronomy 1999 Dr. J Axtell
- Huabang Chen Ph.D. Agronomy 1999 Dr. R Vierling
- Brenden Riely Ph.D. Purdue Genetics Program, 2001 Dr. G Martin
- James Ng Ph.D. Botany & Plant Pathology, 2001 Dr. K Perry
- Darrin Haagenson Ph.D. Agronomy 2001 Dr. J Volenec
- Bong-Suk Kim Ph.D. Botany & Plant Path 2001 Dr. Loesch-Fries
- James Uphaus MS Agronomy 2001 Dr. H Ohm
- Xioarong Shen Ph.D. Agronomy 2002 Dr. H Ohm
- William Bourdoncle Ph.D. Agronomy 2003 Dr. H Ohm
- Diya Ren Ph.D. Analytical Chem 2004 Dr. F. Regnier
- James Uphaus Ph.D. Agronomy 2007 Dr. H Ohm
- M. Balasubramaniam Ph.D. Botany & Plant Path 2007 Dr. S Loesch-Fries
- Marcelo Giovanini Ph.D. Agronomy 2007 Dr. H Ohm
- David Drake Ph.D. Agronomy 2007 Dr. H Ohm
- Paul Werner MS Agronomy 2007 Dr. H Ohm
- Yangseon Kim Ph.D. Botany & Plant Path 2007 Dr. J-R Xu
- Amir Ibrahim Ph.D. Botany & Plant Path 2008 Dr. S Loesch-Fries
- Hun Kim Ph.D. Botany & Plant Path Current Dr. J-R Xu
- Kristen Reinhart Ph.D. Agronomy 2009 Dr. H Ohm
- Nicholas Seiter MS Entomology 2009 Dr. C Krupke
- Heather Hutchens Ph.D. Botany & Plant Path 2011 Dr. S Loesch-Fries

Postdoctorate Associates Supervised

- Peter McGrath - 1995 Suparna Ray - 2001-2003
- Michael Francki- 1996-1997 Boovaraghan Balaji - 2000-2004
- Oswald Crasta - 1995-1997 Ligia Ayala - 2000-2003
- Ann Greene - 1995-1997 Nicole Thompson - 2001- 2004
- Vijaya Khisty - 1998

Special Activities Contributing to Teaching

- Research mentor for Emily Overton, undergraduate in the Botany & Plant Pathology Department Honors Research Program. “A five state epidemiological study on the presence of viruses in winter wheat.” 2008-2009
- Research mentor for Amanda Platteter, undergraduate in the Biology Department Honors Research Program. “EST-derived SSR markers from defined regions of the wheat genome to identify *Lophopyrum elongatum* specific loci.” 2003-2004
- Employed Phil Pusey, West Lafayette Jr/Sr High School Science teacher, as a laboratory assistant to gain hands-on experience in molecular biology. Summer 1999
- Employed 10 undergraduate students as laboratory assistants during which they received research experience in molecular biology and genetics of virus resistance with each being assigned direct responsibilities on a project.
- Research mentor for Dane Whitaker, West Lafayette High School student. Project to determine if single-feature polymorphisms on a *7E Thinopyrum* chromosome could be converted for use in marker-assisted-breeding. Summer of 2007
- Research mentor for Gregor Siegmund, West Lafayette High School student. *7E Thinopyrum* chromosome polymorphism project and also on a virus epidemiology project in collaboration with Emily Overton. Summers of 2007 and 2008.
- Research mentor for Juliana Kim, West Lafayette High School student. Honors research project “Using Randomly Amplified DNA Fingerprinting to Determine the Genetic Diversity Among Wheatgrass Species”, Lafayette Regional Science and Engineering Fair. 2006
- Research mentor for Robert Arbuckle, Jefferson High School student. “Development of a Rapid Fluorescent PCR Method for Use in Breeding BYDV Resistant Wheat”, Lafayette Regional Science and Engineering Fair. 1998

Extension Activities

- Corn Showcase – Launched this summer of 2016 as a biannual event, to demonstrate to farmers, commodity groups, extension educators and agribusiness the depth and breadth of corn research and education at Purdue
- Soybean Showcase – Launched 2015 as a biannual event to demonstrate to farmers, commodity groups, extension educators and agribusiness the depth and breadth of soybean research and education at Purdue.
- Agronomy Field Day - In partnership with the Area 9 Extension Educators, restarted the Agronomy Field Day in 2014 after a 10 year hiatus. This has been well received by farmers and agribusinesses with participation substantially increasing each year.
- Wheat Field Days at West Lafayette and Vincennes IN 1995-2011
- Developed and provided a training course for Moroccan Plant Pathologists to learn quantitative real-time PCR (Q-PCR) for the detection of pathogens and diagnosis of plant diseases. This was part of the Norman Borlaug International and Agricultural Science Fellows Program, under the direction of Dr. Ron Coolbaugh, Professor in Botany and Plant Pathology with assistance of the Purdue College of Agriculture

International Programs. This also included trips to Morocco to oversee Q-PCR equipment installation/setup and in-house training of staff at three Plant Disease Diagnostic laboratories in three key agricultural areas and meet with the Moroccan Minister of Agriculture and U.S. Agricultural Attaché. 2004 and 2005

- As Chair of Eastern Wheat Workers Association 2002-2005 coordinated milling and baking quality testing of the Uniform Eastern Soft Red Winter Wheat Nurseries.
- Hosted Dr. Ahmed Abo Doma, Ain Shams University, Cairo, Egypt, as a visiting scientist working on a BYDV resistance project. 2000
- Coordinated the Western Regional Spring Barley Nursery and Western Dryland Spring Barley Nursery, Bozeman, MT. Provided leadership in evaluating elite barley germplasm for feed and malting use. 1992-1993

Service

2016	Chair - Search for College of Ag. Botany & Pathology Department Head
2015	Search Committee for College of Ag. Communications Department Head
2013	Search Committee for College of Ag. Associate Dean of Extension
2013	Chair - United Way College of Agriculture United Way Campaign
2010-present	NCAC North Central Advisory Committee for Crops & Soils Research Chair (2014)
2010-present	Board of Directors Agribusiness Council of Indiana Education Committee – Initiated an Emerging Professionals Leadership Program which has now had three cohorts of 20 emerging leaders in agribusinesses across Indiana ACI Foundation Scholarship Committee
2010-present	Board of Directors Indiana Crop Improvement Association of Indiana Corn Belt Seed Conference Planning Committee
2008-2009	CSREES Department of Agronomy Review Advisory Steering Committee & Crops Group co-chair.
2008-2010	PULSe Admissions Committee
2008-present	Chair, Plant and Soils Space Management Committee
2007-2009	Chair, Intermediate Seed Handling Facility Renovation Committee
2007-2010	Small Grains Variety Release Committee
2006-2010	Greenhouse Committee
2006-2007	Patterson Endowed Chair Search Committee, (Drs. Rocheford and Tuinstra)
2006-2010	Shared equipment laboratories, Coordinator
2006-present	Member of the Plant Biology and Virology PULSe Training groups
2005	USDA LEAN team reviewing USDA-ARS Extramural Agreements Process
2002	Chair, USDA-ARS Research Geneticist Search Committee (Dr. Scofield)
2002	USDA-ARS Bioinformatician Search Committee (Dr. Crane)
2001	Maize Geneticist Faculty Search Committee, (Dr. Weil)
2001-2006	Genomic Sequencing Facility Advisory Committee
2000-present	Agricultural Research Programs Hatch Project Reviewer
1998-2000	Chair - Purdue Genetics Qualifying Examination Committee
1999	Botany/Plant Pathology Weeds Biology Faculty Search Committee (Dr. Pruitt)
1999-2006	Patterson Distinguished Lecture Committee
1999-2001	Admissions, Recruitment & Financial Aid Committee, Plant Biology Program

1995-2002	Executive Committee, Purdue University Plant Biology Program
1998-1999	Chair, Agronomy Graduate Committee
1996-1999	Agronomy Graduate Committee
1995	Agricultural Research Programs Assistantship Review Committee

PUBLICATIONS

Refereed Articles

1. Jannink, J- L., A. Kilian, A. Bjornstad, P. Wenzl, C. P. Wight, H. W. Rines, N. A. Tinker, **J. M. Anderson**, K. Heller-Uszynska, and Catherine J. Howarth. New DArT markers for oat provide enhanced map coverage and global germplasm characterization. *BMC Genomics* (2014).
2. Oliver RE, Tinker NA, Lazo GR, Chao S, Jellen EN, Carson ML, Rines HW, Obert DE, Lutz JD, Shackelford I, Korol AB, Wight CP, Gardner KM, Hattori J, Beattie AD, Bjørnstad Å, Bonman JM, Jannink J-L, Sorrells ME, Brown-Guedira GL, Mitchell Fetch JW, Harrison SA, Howarth CJ, Ibrahim A, Kolb FL, McMullen MS, Murphy JP, Ohm HW, Rossnagel BG, Yan W, Miclaus KJ, Hiller J, Maughan PJ, Redman Hulse RR, **Anderson JM**, Islamovic E, Jackson EW (2013) SNP discovery and chromosome anchoring provide the first physically-anchored hexaploid oat map and reveal synteny with model species PLoS ONE 8(3): e58068. doi:10.1371/journal.pone.0058068
3. Maloney, PV., JH Lyerly, DR Wooten, **JM Anderson**, DP Livingston, G Brown-Guedira, D Marshall, JP Murphy. 2011. Marker Development and Quantitative Trait Loci in a Fall-Sown Oat Recombinant Inbred Population. *Crop Science*. 51:490-502.
4. Oliver RE, GR Lazo, JD Lutz, MJ Rubenfield, NA Tinker, **JM Anderson**, NH Wisniewski Morehead, D Adhikary, EN Jellen, PJ Maughan, GL Brown Guedira, S Chao, AD Beattie, ML Carson, HW Rines, DE Obert, JM Bonman, EW Jackson. 2011. Model SNP development for complex genomes based on hexaploid oat using high-throughput 454 sequencing technology. *BMC Genomics*. 12:77.
5. Cowger C, R Weisz, **JM Anderson**, and JR Horton. 2010. Maize Debris Increases Barley Yellow Dwarf Virus Severity in North Carolina Winter Wheat. *Agronomy Journal*. 102:688-696.
6. Ayala-Navarrete, L, N Thompson, H Ohm, and **J Anderson**. 2010. Molecular markers show a complex mosaic pattern of wheat-*Thinopyrum intermedium* translocations carrying resistance to YDV. *Theoretical and Applied Genetics*. 121: 961-970.
7. **Anderson JM**, SB Goodwin, D Bucholtz, N Sardesai, G Gyulai, J Santini, and CE Williams. 2010. Evaluation of *Triticum aestivum* x *Lophopyrum elongata* disomic substitution lines for resistance to *Mycosphaerella graminicola*, *Blumeria graminis*, Barley and Cereal Yellow Dwarf Virus and Hessian fly. *Euphytica*. 172:251-262.
8. Liu X, **JM Anderson** and PM Pijut. 2010. Cloning and characterization of *Prunus serotina* AGAMOUS, a putative flower homeotic gene. *Plant Molecular Biology Reporter*. 28:193–203.
9. Kong L, **JM Anderson**, and HW Ohm. 2009. Segregation distortion in bread wheat of a segment of *Thinopyrum intermedium* chromosome 7E carrying *Bdv3*. *Plant Breeding* 128, 591-597.
10. Tinker NA, A Kilian, CP Wight, K Uszynska-Heller, P Wenzl, HW Rines, A Bjørnstad, Å., CJ Howarth, J-L Jannink, **JM Anderson**, BG Rossnagel, and 15 additional authors. 2009. New DArT markers for oat provide enhanced map coverage and global germplasm characterization. *BMC Genomics*. 10:39.

11. Deb M and **JM Anderson**. 2008. Development of a multiplexed PCR detection method for *Barley and Cereal yellow dwarf viruses*, *Wheat spindle streak virus*, *Wheat Streak Mosaic Virus* and *Soil-borne wheat mosaic virus*. *J. Virol. Methods*. 148:17–24.
12. Kong L, HW Ohm, and **JM Anderson**. 2007. Expression analysis of defense-related genes in wheat in response to infection by *Fusarium graminearum*. *Genome*. 50:1038-1048.
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14. Mullan DJ, A Platteter, NL Teakle, R Appels, TD Colmer, **JM Anderson**, MG Francki. 2005. EST-derived SSR markers from defined regions of the wheat genome to identify *Lophopyrum elongatum* specific loci. *Genome*. 48:811-822.
15. Kong L, **JM Anderson**, and HW Ohm. 2005. Induction of wheat defense and stress-related genes in response to *Fusarium graminearum*. *Genome*. 48:29-40.
16. Balaji B, K O'Connor, JR Lucas, **JM Anderson**, and LN Csonka. 2005. Timing of induction of osmotically controlled genes in *Salmonella enterica serovar typhimurium*, determined with quantitative real-time reverse transcription-PCR. *Appl. & Environ. Microbiol.* 71:8273-8283.
17. Carvalho CHS, UB Zehr, N Gunaratna, **JM Anderson**, HH Kononowicz, TK Hodges, and JD Axtell. 2004. *Agrobacterium*-mediated transformation of sorghum: factors that affect transformation efficiency. *Genet. and Mol. Biol.* 27:259-269.
18. Wangjun H and **JM Anderson**. 2004. The basis for *Thinopyrum*-derived resistance to *Cereal yellow dwarf virus*. *Phytopathology*. 94:1102-1106.
19. Adhikari TB, **JM Anderson**, and SB Goodwin. 2003. Identification and molecular mapping of a gene in wheat conferring resistance to *Mycosphaerella graminicola*. *Phytopathology*. 93:1158-1164.
20. Balaji B, DL Bucholtz, and **JM Anderson**. 2003. *Barley yellow dwarf virus* and *cereal yellow dwarf virus* quantification by real-time PCR in resistant and susceptible plants. *Phytopathology*. 93:1386-1392.
21. Dorsch JA, A Cook, KA Young, **JM Anderson**, AT Bauman, CJ Volkmannc, PN Murthy Pushpalatha, and V Raboy. 2003. Seed phosphorus and inositol phosphate phenotype of barley low phytic acid genotypes. *Phytochemistry*. 62:691-706.
22. Ray S, **JM Anderson**, FI Urmeev, and SB Goodwin. 2003. Rapid induction of a protein disulfide isomerase and defense-related genes in wheat in response to the hemibiotrophic fungal *Mycosphaerella graminicola*. *Plant Mol. Biol.* 53:701-714.
23. Francki MG, WA Berzonsky, HW Ohm, and **JM Anderson**. 2002. Physical location of a *HSP70* gene homologue on the centromere of chromosome 1B of wheat (*Triticum aestivum* L.). *Theoretical and Applied Genetics*. 104:184-191.
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26. Sharma H, MG Francki, O Crasta, G Gyulai, D Bucholtz, HW Ohm, **JM Anderson**, K Perry, and F. Patterson. 1999. Cytological and molecular characterization of wheat lines with *Thinopyrum intermedium* chromosome additions, substitutions and translocations resistant to barley yellow dwarf virus. *Cytologia*. 64:93-100.

27. **Anderson JM**, DL Bucholtz, AE Greene, MG Francki, S M Gray, H Sharma, HW Ohm, and KL Perry. 1998. Characterization of wheatgrass-derived barley yellow dwarf virus resistance in a wheat alien chromosome substitution line. *Phytopathology*. 88:851-855.
28. Francki MG, O Crasta, **JM Anderson**, H Sharma and HW Ohm. 1997. Structural organization of an alien *Thinopyrum intermedium* group 7 chromosome in US soft red winter wheat (*Triticum aestivum* L.). *Genome*. 40:716-722.
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31. **Anderson JM**, P Palukaitis, and M Zaitlin. 1992. A defective replicase gene induces resistance to cucumber mosaic virus in transgenic tobacco plants. *Proc. Natl. Acad. Sci. (USA)*. 89:8759-8763.
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33. **Anderson JM**, R Larson, D Laudencia, WT Kim, D Morrow, and TW Okita. 1991. Molecular characterization of the gene encoding a rice endosperm-specific ADPglucose pyrophosphorylase subunit and its developmental pattern of transcription. *Gene* 97:199-205.
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39. Zaitlin M, P Palukatis and **JM Anderson**. 1999. Implanting disease resistance to plants with viral replicase DNA molecules which do not have a read-through portion. Induction of resistance to viral diseases in plants. Patent 5945581.

Book Chapters

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41. **Anderson JM**, TW Okita, and J Preiss. 1990. Enhancing carbon flow into starch: Role of ADPglucose pyrophosphorylase. In: Vada, M.E., W.D. Parks (eds.) *Molecular and Cellular Biology of the Potato*. pp.159-180. C.A.B. International, Wallingford, UK.

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42. Cowger C, R Weisz, **JM Anderson**, and JR Horton. 2009. Corn debris management and barley yellow dwarf virus severity in winter wheat. Joint Eastern and Southern Wheat Workers Conference. Baltimore, MD. pp. 5-8.
43. Ohm HW and **JM Anderson**. 2007. Utilization and performance in wheat of Yellow Dwarf Virus resistance transferred from *Thinopyrum intermedium*. In: Buck, H.T.; Nisi, J.E.; Salomón, N. (Eds), *Wheat Production in Stressed Environments: Proceedings of the 7th International Wheat Conference, 27 November - 2 December 2005, Mar del Plata, Argentina (Developments in Plant Breeding)*, Springer, Netherlands, pp. 149-152.
44. **Anderson JM**, CE Williams, SB Goodwin, SR Scofield, and HW Ohm. 2003. Quantitative analysis of wheat defense-gene expression in response to insect, fungal, and viral pests. In: *Proceedings of the Tenth International Wheat Genetics Symposium, Paestum, Italy, volume 1.* pp. 323-326.
45. Scofield SR, JM Anderson, CF Crane, SB Goodwin, HW Ohm, CE Williams, TA Lohret, and OR Crasta. 2003. Analysis of the wheat defense transcriptome. In *Proceedings of the Tenth International Wheat Genetics Symposium, Paestum, Italy, volume 1.* pp. 407-410.
46. Ohm HW, JM **Anderson**, H Sharma, L Ayala-Navarrete, and DB Bucholtz. 2002. Spring Oat and Soft Winter Wheat Lines with BYDV Resistance. *Proceedings of International Symposium, Barley Yellow Dwarf Disease: Recent Advances and Future Strategies.* pp. 58-59.
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50. **Anderson JM**. 2009. Epidemiological studies on the presence of viruses in winter wheat in Arkansas, Georgia, Indiana, North Carolina and Wisconsin. Joint Eastern and Southern Wheat Workers Conference. Baltimore, MD.
51. Jackson E, E Jellen, R Oliver, G Lazo, N Tinker, B Rossnagel, **JM Anderson**, and M Bonman. 2009. Resolving the oat mapping story by weaving together a consensus map. *Plant and Animal Genome XVII.* San Diego, CA.
52. Tinker NA, A Kilian, E Jackson, **JM Anderson** and the OAT DArT Consortium. 2008. DArT marker development and applications in oat. *Plant and Animal Genome XVI.* San Diego, CA.
53. Rinehart K, X Shen, L Kong, **JM Anderson**, L Ayala-Navarrete, and HW Ohm. 2008. Combining wheatgrass-derived resistance to Yellow Dwarf Virus and Fusarium Head Blight in common wheat. *ASA Annual Meeting.* Houston, TX.

54. Gillspie M, L Kong, **JM Anderson**, and S Scofield. 2008. A virus-induced gene silencing system for the identification of genes contributing to FHB resistance in wheat. Plant and Animal Genome XVI. San Diego, CA.
55. Kongsila P, **JM Anderson**, and T Housley. 2007. Real-time quantitative PCR of wheat fructan genes induced by cold. American Society for Agronomy Annual Meeting. New Orleans, LA.
56. Scofield S, C Cakir, A Brandt, L Kong, and **JM Anderson**. 2007. Virus-induced gene silencing in hexaploid wheat. Plant and Animal Genome XV. San Diego, CA.
57. Kong L, **JM Anderson**, and HW Ohm. 2007. Segregation distortion in bread wheat of a *Thinopyrum intermedium* 7E segment carrying *Bdv3*. Plant and Animal Genome XV. San Diego, CA.
58. Buescher E, X Cui, and **JM Anderson**. 2007. Detecting single-feature polymorphisms on the 7E *Thinopyrum* Chromosome using the wheat oligonucleotide array. Plant and Animal Genome XV. San Diego, CA.
59. **Anderson JM**. 2006. The susceptibility response to BYDV in *Avena sativa*: Using the wheat gene microarray as a tool for measuring gene expression in oat in response to BYDV infection. American Oat Workers Conference. Fargo, ND.
60. Deb M and **JM Anderson**. 2006. Development of a rapid detection method for Yellow Dwarf Viruses. American Oat Workers Conference. Fargo, ND.
61. Anderson JM and H Wiangjun. 2005. *Bdv3* resistance to *Cereal Yellow Dwarf Virus* is a two-component system: restriction of virus movement and aphid feeding. American Phytopathological Society Annual Meeting, Phytopathology. 95:S123. Austin TX.
62. Kong L, HW Ohm, and **JM Anderson**. 2005. Expression analysis of defense-related genes in wheat in response to infections by *Fusarium graminearum*. National Fusarium Head Blight Forum p. 165. Milwaukee, WI
63. Thompson, N, L Ayala, HW Ohm* **JM Anderson**. 2004. Molecular markers for a *Thinopyrum intermedium* translocation carrying resistance to YDV into wheat and validation by FISH. Plant and Animal Genome XII. San Diego, CA. Wiangjun, H*, and **JM Anderson***. 2003. Examining the Mechanism of Resistance to CYDV in Wheat substitution line P29. American Society for Virology, Annual Meeting. Davis, CA
64. Balaji, B, and **JM Anderson**. 2003. Analysis of gene expression during incompatible wheatgrass-BYDV/CYDV and compatible oat-BYDV/CYDV interactions by real-time PCR. American Society for Plant Biology Annual Meeting. Honolulu, Hawaii. **Anderson, JM**, CE Williams, SB Goodwin. 2003. Transcriptional profiling of wheat after treatment with *Septoria tritici* leaf blotch, head scab, barley and cereal yellow dwarf virus, and Hessian fly. Plant and Animal Genome XI. San Diego, CA. Kong, L*, **JM Anderson**, and HW Ohm. 2003. Identification of scab resistance gene expression in wheat following inoculation with *Fusarium*. Plant and Animal Genome XI. San Diego, CA. Ayala-Navarette, L, **JM Anderson**. 2003. Development of wheat molecular markers using AFLP with RFLP-derived anchored primers. Plant and Animal Genome XI. San Diego, CA.
65. Ray, S, Goodwin, SB, and **JM Anderson**. 2003. Differential expression of genes in compatible and incompatible interactions between wheat and *Mycosphaerella graminicola*. Plant and Animal Genome XI. San Diego, CA. Goodwin, SB, **JM Anderson**, HW Ohm, T Lohret, O Crasta, and CE Williams. 2003. Use of high-throughput transcript analysis in wheat to characterize genes responding to diverse pests and pathogens. Plant and Animal Genome XI. San Diego, CA.
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75. Zaitlin*, M, **JM Anderson**, and P Palukaitis. 1992. Resistance to cucumber mosaic virus is induced in transgenic tobacco plants by a defective replicase gene. American Society for Virology, Cornell University, Ithaca, NY.
76. **Anderson, JM**, DL Bucholtz, T Galli, A Cook, and J Petik. 1995 Molecular and biochemical coordination of starch biosynthesis during barley seed development. *Plant Physiol.* 108S: 30.
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80. **Anderson, J.M.**, O. Crasta, M. Francki, D. Bucholtz, H. Sharma and H.W. Ohm. 1997. Molecular and cytogenetic analysis of barley yellow dwarf virus resistant translocation lines containing *Thinopyrum intermedium* chromosomal segments. *Plant Genome V.* Jan. 12-17, San Diego, CA.
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Technical Publications

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