Curriculum Vitae

David W. Peters, Ph.D.

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By:

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Summary:

- o Extensive project lead experience with documented success.
- Knowledgeable in the latest tools and techniques used in plant breeding and germplasm preservation.
- o Ability to work independently or in a team to accomplish program objectives.
- o Extensive staff recruiting, management and development experience.
- o Extensive knowledge and experience in site and staff safety programs.

Experience:

Research Leader

USDA-ARS

Dec 2020 – Present

- o Research lead for the Plant Introduction Research Unit (PIRU) at Ames, Iowa.
- Managed site budget.
- o Evaluated site personnel performance and assist in employee development.
- Coordinated site activities with Iowa State University Agronomy Department Chairman in supervision of federal and state employees.

Geneticist (GEM Program Coordinator) USDA-ARS GS-440-14

July 2016 – Dec 2020

- Coordinated Germplasm Enhancement of Maize (GEM) Program focused on increasing genetic diversity of U.S. germplasm base. Program focused on use of tropical and subtropical land races and inbred lines to increase diversify of the genetic base for U.S. maize production, via release of useful lines with 25% tropical/sub-tropical and 75% elite temperate-adapted heritage. Introgression of useful traits/genes is a key priority.
- Occordinated the allelic diversity line development program with the Raleigh, North Carolina GEM Program and the Doubled Haploid Facility at Iowa State University. Doubled haploid (DH) lines are derived from land races with U.S. adapted ex-PVP lines and backcrossed to the U.S. line before haploid induction. Lines released to the public as BGEM lines for allelic discovery genetic research.
- Directed yield trial program at 6 sites managed by the GEM Program within the state of Iowa and coordinated in-kind support yield trials conducted by GEM cooperator members.
- O Directed interactions with U.S. and foreign GEM cooperators. Included coordination of cooperator in-kind activities, processed prospective cooperator applications for Technical Steering Committee (TSG) for review and action, and released GEM line seed distribution cooperators. Focused on expanded capture of biotic and abiotic stress resistance knowledge of GEM germplasm performance, especially for diseases not yet known in the United States.
- Supervised maintenance of the GEM Project website hosted by Iowa State University. This included review of website content for accuracy and directing updates to information posted.

- o Conducted annual GEM Program field day held at Ames, Iowa every September.
- Enhanced program operational integrity and quality of germplasm released.
- Coordinated and participated in annual TSG and stakeholder's meetings. Main meetings held annually in December in conjunction with the American Seed Trade Association (ASTA) Meetings held in Chicago, Illinois.
- Facilitated the collaboration with industry to generate hybrids of GEM lines with their own private sector lines, test comprehensively, and publicly share all information. This resulted in the first GCA and SCA performance assessments in GEM's 25 year history.
- Mentored Ph.D. student Adam Vanous and undergraduate students working in the GEM Project.
- o Collaborated with Iowa State University Agronomy Department faculty and their graduate students to accomplish research objectives (T. Lübberstedt and J. Yu labs).

Affiliate Professor Department of Agronomy Oct 2018 - Present Iowa State University

- Participated on graduate student advisory committees and assisted with planning of graduate student projects.
- o Interacted with Agronomy Department projects through faculty meetings and seminar series.

Director of Plant Breeding Epicrop Technologies, Inc. Jan 2015 – June 2016

- O Directed plant breeding operations to model and develop epigenetic breeding systems for corn, soybean, canola, wheat, barley, and sorghum.
- o Procured germplasm for laboratory and field experiments.
- Coordinated greenhouse construction project for early generation development of epigenetic breeding populations.
- Directed greenhouse, grow room, and field operations for generation advance and testing of modified populations

Line Development Corn Breeder Monsanto Company 1983 to 2014

 Directed all facets of line development corn breeding program at the following locations. The relative maturity (RM) of the program focus is listed along with the service dates at each site.

-	Blair, Nebraska	110-115RM	Dec 2005 to Dec 2014
-	Stromsburg, Nebraska	110-115RM	Jan 2003 to Nov 2005
-	Atlantic, Iowa	110-115RM	Apr 1997 to Dec 2002
-	Redwood Falls, Minnesota	95-105RM	Feb 1994 to Mar 1997

-	Kearney, Nebraska	105-115RM	Feb 1991 to Jan 1994
-	Queenstown, Maryland	110-115RM	Feb 1990 to Jan 1991
-	Monmouth, Illinois	105-115RM	Aug 1983 to Jan 1990

- Occorducted line development program utilizing a broad array of breeding systems and approaches. Program focused on pedigree breeding approach during early years of career and expanded as technology developed and was made available. Double haploid (DH) line development and molecular marker assisted breeding systems have become increasingly important in recent years.
- Devoted 15+% of project resources to germplasm diversity through introgression of non-adapted breeding material. Germplasm sources included elite inbred lines from Mexico, Argentina, Brazil, South Africa, Thailand, and the Philippines.
- Directed yield testing system within assigned station territory (1983 to 2002). Duties included site selection, cooperator relations, contract negotiations, plot planting, management, data collection, harvest, data quality review, and data analysis.
- Conducted regulated yield trials from 1998 through 2005. Duties included all local regulatory paperwork, site selection, planting, management, data collection, harvest, data quality review, and site monitoring during the following growing season.
- Assisted in product advancement decision process as part of the North America Corn Breeding Team. Activities included review of companywide trials during the growing season, data review and participation in product advancement meetings.
- O Administrated local breeding project and station budget within strict guidelines. Consistently managed budget within 2-5% of budget throughout fiscal year. Responsible for keeping all capital projects on track and within budget. Site administration included insuring site equipment was maintained and all supplies were available as needed.
- Hired, managed and developed station staff. Full time staff of 2-5 people were directly under my supervision. Part-time and summer help would vary from 2 to 80 people depending on season and workload.
- o Mentored new corn breeders located at other company sites. Responsible for mentoring four breeders at other Nebraska sites and in China over the last 12 years.
- Prepared presentations and lead discussions at regional team and company-wide breeding meetings.

Market Impact:

o Career Market Impact: 30+ Million Units

Key Hybrids (parent developed)

- Asgrow RX601YG Female and Male Parents

RX623 Female Parent RX670YG Female Parent

RX674RR/YGCB Female and Male Parents

		RX690RR	Female Parent
		RX740RR	Female Parent
	DeKalb	DVC50 12	Mala Damant
-	DeKaib	DKC58-13	Male Parent
		DKC59-35	Male Parent
		DKC60-53	Male Parent
		DKC61-50	Female Parent
		DKC61-69/DKC61-72	Male Parent
		DKC63-84	Male Parent
		DKC64-76	Female and Male Parents
		DKC65-44	Female Parent
		DKC69-40	Female Parent

Special Notes:

- RX623 sales from 1992 to 1996 accounted for approximately 25% of Asgrow seed corn sales. Sales held in the 100,000 to 114,000 unit range for 5 years.
- DKC61-69/DKC61-72 sales were major contributors in increasing DeKalb market share in the 110 RM zone. Sales were in excess of 1 million units per year for several years (2005 to 2011).
- Granted 31 patents for corn inbred lines (19) and hybrids (12). Three additional patent applications pending.

Special Assignments:

Solution Isolated Crossing Block (ICB) Coordinator

Directed companywide ICB entry exchange system. Process included coordinating the selection of male parents, assessing capacity of each station based on equipment and field availability, and assigning sets to stations. Developed first company standard operating procedure for ICB management in 1998. Resulted in improved seed quantity and quality throughout the system.

- 1989 to 1997: Asgrow Seed Company
- 1998 to 2002: Monsanto Company

South Africa Corn Breeding Liaison – 2007 to 2012

Traveled to South Africa and hosted South African team members during US visits to coordinate germplasm exchange and improve breeding program effectiveness. Resulted in more efficient germplasm exchange and improved breeding methods for introgression of elite South African lines into US programs and elite US lines into the South African programs. Directly impacted the South African efforts in the irrigated market and increased company market share.

Awards and Recognition:

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0	Commercial Impact Award	Monsanto Company	2011
0	Global Plant Breeding Career Award	Monsanto Company	2010
0	Commercial Impact Award	Monsanto Company	2009
0	Commercial Impact Award	Monsanto Company	2008

0	Commercial Impact Award	Monsanto Company	2007
0	President's Award	Asgrow Seed Company	1992
0	President's Award	Asgrow Seed Company	1990

Education:

0	Doctor of Philosophy Plant Breeding and Genetics	Purdue University Dr. J.R. Wilcox, Major Professor	1981
0	Master of Science Plant Breeding and Genetics	South Dakota State University Dr. D.B. Shank, Major Professor	1979
0	Bachelor of Science Agronomy	University of Wisconsin - River Falls	1977

Leadership and Specialized Training:

- Congressional Briefing Conference ARS 2018
 Conference conducted by The Government Affairs Institute at Georgetown
 University to educate ARS employees on how congress works. Topics included role
 of Congressional committees, observation of hearings, House and Senate floor
 action, the relationship between Congress and the Executive Branch, and the budget
 process.
- People Leader Learning Series (PLLS) Monsanto Company 2009
 Series of seven classes developed for Monsanto by the Gallup Company involving one to two day sessions. Topics included staff interviewing and recruiting, staff development, annual review process, and labor laws.
- Technology Mentoring Program (TMP) Monsanto Company 2004 Selected for program to be mentored by higher-ranking manager from another Monsanto Technology site. Mentor was site manager for Calgene at Davis, California. Focus on improvement of management skills and increasing mentee's understanding of Monsanto Technology.
- Career Track Management Seminar Series Monsanto Company 1997
 Series of five sessions lasting one to two days each. Topics included leadership styles, correcting employee performance problems, communications, and organizational skills.
- Program Management Training
 Training program for all site and people managers by the parent company of Asgrow. Program involved an intense week of training on interviewing, personnel annual reviews, staff development, conflict resolution, decision making, budget management and site management.

Professional Memberships:

- American Society of Agronomy
- o Crop Science Society of America
- National Association of Plant Breeders

References:

- Dr. Walter Trevisan
 GEM TSG Chairman
 Monsanto Distinguished Science Fellow Emeritus
 515-491-9022
- Dr. Thomas C. Hoegemeyer
 Professor of Plant Breeding Practice Retired
 Department of Agronomy & Horticulture
 University of Nebraska Lincoln
 402-419-4426
- Dr. Candice Gardner USDA-ARS 319-330-5830