

## Bruce A. McPheron

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## Education

B.S.	1976	The Ohio State University	Entomology with honors
M.S.	1980	University of Illinois	Biology
Ph.D.	1987	University of Illinois	Entomology

## Academic Employment

1976-80	Teaching Assistant, University of Illinois (biology, ecology, entomology)
1980-83	County Extension Agent, 4-H, The Ohio State University (Clermont County)
1983-87	Teaching Assistant, University of Illinois (biology, ecology, entomology)
1987-88	Postdoctoral Researcher, Louisiana State University, Department of Entomology
1988-94	Assistant Professor, Penn State University, Department of Entomology
1994-2000	Associate Professor, Penn State University, Department of Entomology
2000-12	Professor, Penn State University, Department of Entomology
2000-02	Administrative Fellow, Penn State University Agricultural Experiment Station
2002-09	Associate Dean for Research and Graduate Education, PSU College of Agricultural Sciences Director, Pennsylvania Agricultural Experiment Station
2009-12	Dean, College of Agricultural Sciences, Penn State University
2012-present	Professor, The Ohio State University Department of Entomology
2012-2015	Vice President for Agricultural Administration and Dean, College of Food, Agricultural, and Environmental Sciences, The Ohio State University
2015-2016	Interim Executive Vice President and Provost, The Ohio State University
2016-2021	Executive Vice President and Provost, The Ohio State University

Chief Academic Officer responsible for >7,000 faculty; 68,000 students; 15 academic colleges; 6 campuses; 200 undergraduate majors; 190 graduate majors. Chief Operating Officer for total campus headcount of >100,000 individuals; \$7.5 billion annual budget

- 2021-present Dean's Chair in CFAES International Programs, College of Food, Agricultural, and Environmental Sciences, The Ohio State University
- 2022-present Senior Advisor, Huron Consulting Group higher education practice

## Honors

- 1972 National 4-H Scholarship
- 1974 Undergraduate Honor's Research Award, Ohio State University
- 1975 Floyd Smith Entomology Scholarship, Ohio State University
- 1975 Election to Phi Kappa Phi
- 1975 Election to OSU chapter, Gamma Sigma Delta
- 1983 University Graduate Fellowship, University of Illinois
- 1987 Robert Emerson Graduate Student Award, University of Illinois
- 1988 Alfred P. Sloan Postdoctoral Fellowship in Molecular Evolution (declined to accept tenure-track faculty position at Penn State University)
- 2001 Election to PSU chapter, Gamma Sigma Delta
- 2003 Distinguished Alumnus Annual Recognition and Seminar, Department of Entomology, University of Illinois
- 2006 USDA-CSREES Certificate of Merit for service on the USDA-CSREES – ESCOP Joint Task Force on Hatch Act Allocations
- 2009 Commencement Address, Penn State University Graduate School Spring Commencement
- 2011 Honorary State Degree, Pennsylvania FFA
- 2012 Penn State Ag Council 2012 Leadership Award
- 2012 Outstanding Leadership Award, Association of Public and Land-Grant Universities Board on Agriculture Assembly (leadership of Administrative Heads Section)
- 2014 Outstanding Leadership Award, Association of Public and Land-Grant Universities Board on Agriculture Assembly (leadership of Policy Board of Directors)
- 2014 Agricultural Experiment Station Award for Excellence in Leadership, Association of Public and Land-Grant Universities Experiment Station Section, Northeast Region honoree in inaugural year of award
- 2014 Elected Fellow, American Association for the Advancement of Science
- 2015 Honorary State Degree, Ohio FFA
- 2015 Commencement Address, Ohio State University ATI Annual Commencement
- 2015 Commencement Address, Ohio State University Summer Commencement
- 2016 Outstanding Alumnus Award, Ohio State Stadium Scholarship Alumni Society
- 2016 Elected Member, Hardin County (Ohio) Agriculture Hall of Fame
- 2017 Member of 111<sup>th</sup> class, SPHINX Senior Honorary
- 2018 Ohio Department of Higher Education Chancellor's Award for statewide leadership to enhance Ohio water quality
- 2018 Elected Fellow, Entomological Society of America

- 2019 Member, Mortar Board Senior Honor Society – Mabel C. Freeman Chapter
- 2020 Kenton (Ohio) High School Alumni Hall of Fame
- 2021 Honorary Associate of Science Degree, Columbus State Community College
- 2021 Commencement Address, Ohio State University Summer Commencement

### **Significant Institutional Achievements (as Ohio State EVP & Provost)**

- 2017 Ohio State Framework 2.0 Facilities Master Plan  
Co-lead of team that developed comprehensive capital master plan for Ohio State Columbus campus
- 2017 Ohio State Energy Partnership  
Co-lead of team that created 50-year energy management and efficiency partnership with Ohio State and Ohio State Energy Partners (local working team of Engie and Axium) brought \$1.165 billion in capital to Ohio State
- 2017 Ohio State Time and Change Strategic Plan  
Co-lead of team that developed 7-year strategic plan for the Ohio State University, including its Academic Medical System
- 2017 Digital Flagship University Initiative  
Co-lead of team that partnered with Apple to provide iPads to all incoming Ohio State freshmen and transfer students (55,000 students over four years); access to Swift coding curriculum for all Ohio State students, staff, and faculty; creation of an iOS Design Laboratory on the Ohio State Columbus campus
- 2018 Buckeye Opportunity Program  
Co-lead of team to implement a comprehensive financial aid program to ensure that Pell-eligible Ohio residents do not face a tuition bill for the four years of their undergraduate career; led the effort to expand this program to our open-enrollment regional campuses coupled with student success initiatives
- 2018 Teaching Support Program at Ohio State  
Directed team to design and implement a baseline teacher training initiative for all Ohio State faculty (~4,700 individuals in the 2018-19 academic year), consisting of three components: a teaching style inventory; a series of instructional modules; a curriculum re-imagining, course re-design experience focused on learning outcomes for students
- 2019 Shared Values Initiative  
Co-convener with OHR SVP Susan Basso and VP for Compliance Gates Garrity-Roukos of initiative to evaluate and enhance values-driven leadership and performance throughout Ohio State
- 2020 COVID-19 Response

- Ongoing responsibility for decisions and implementation of COVID response for the Ohio State University
- 2020 Ohio State University leadership transition  
 Provided leadership of the campus, with fellow EVP and Chancellor for Health Affairs Hal Paz, for presidential transition period, including two months where we were fully responsible for campus decisions
- 2021 Ohio State University General Education Curriculum revitalization  
 Oversaw campus-wide engagement to reconfigure General Education curriculum for first time in 30 years, resulting in more flexibility for elective courses, second majors, minors and certificates; creation of theme systems to focus student learning outcomes around cross-cutting issues

## Leadership Development Opportunities

- 1982, 1983 Buckeye Recreation Workshop  
 Annual (7 day) workshop to develop leadership skills among paid and volunteer managers of youth and other community organizations (elected to Board of Directors in 1983; stepped down to return to graduate school)
- 2000-01 ESCOP/ACOP Leadership Development Program, Class 10  
 Phase 1 (Indianapolis, IN, 7 days) – facilitated leadership development training  
 Phase 2 (PSU, full year) – exposure to range of College and Ag Experiment Station leadership activities; particular responsibilities for federal accomplishment and impact reporting, graduate education, intellectual property, and industry-sponsored research policies  
 Phase 3 (Washington, DC, 3 days) – interface between the land grant universities and the federal government
- 2002 USDA-CSREES/NASULGC New Deans and Directors Workshop  
 Washington, DC (3 days) – effective leadership and management of land grant agricultural programs
- 2005 American Council on Education workshop – Chairing the Academic Department  
 Washington, DC (3 days) – leadership and management training for academic leaders within the university environment
- 2005 Excellence in Higher Education Workshop  
 State College (1 day, facilitated by Brent Rubin, Rutgers University) – focus on strategic planning to achieve excellence in the academic environment
- 2005-06 Committee on Institutional Cooperation Academic Leadership Program  
 Session 1 (University of Illinois, 3 days) – leadership

- Session 2 (Michigan State University, 3 days) – human resources  
 Session 3 (University of Michigan, 3 days) – research university of the future
- 2014 White Men as Full Diversity Partners Implicit Bias Training  
 Chicago, IL (4-day immersion experience)
- 2017-20 Ohio State University Academic Leadership Forum – led annual in-service on scholarship of leadership for 150 Ohio State academic leaders

## **Academic Leadership Roles**

### **Ohio Cooperative Extension-**

1982-83 4-H Camp Graham Board of Directors, president

### **Penn State –**

2004-05 Advisory Committee on Graduate Education, chair  
 2006-07 University Research Council, chair  
 2012 Academic Leadership Council, chair-elect

### **Ohio State –**

2015-21 Council of Deans, convener and chair  
 2015-19 Senior Management Council, convener and chair

### **Regional –**

2003-07 Northeast Regional Association of Agricultural Experiment Station Directors, executive committee (chair 2005-06)  
 2003-04 Northeast Regional Center for Rural Development Board of Directors, co-chair  
 2004-07 Northeast Regional Center for Rural Development Board of Directors, chair  
 2010-12 Northeast Regional Administrative Heads Section, executive team (chair-elect 2010-11, chair 2011-12)

### **National –**

2006-09 APLU Board on Agriculture Assembly Experiment Station Committee on Organization and Policy, executive board (secretary 2005-06, chair-elect 2006-07, chair 2007-08, past chair 2008-09)

- Advocacy for passage of 2008 Farm Bill
- Initiation of 2008 Farm Bill implementation (including reorganization of USDA agencies, new funding authorities for USDA competitive grants)
- Implementation of national marketing effort for the land grant agricultural system

- Revitalization of national-level partnership between the research and cooperative extension functions of land grant colleges and universities
  - Implementation of comprehensive educational marketing initiative focused on return on investment of research, education, and outreach in the agricultural and related sciences
- 2009-13 APLU Board on Agriculture Assembly Administrative Heads Section, executive board (secretary 2009-10, chair-elect 2010-11, chair 2011-12, past chair 2012-13)
- 2010-14 Policy Board of Directors of the APLU Board on Agriculture Assembly (chair-elect 2010-12, chair 2012-14)
- 2016-21 APLU Council on Academic Affairs, executive committee
- 2017 AAU Council of Academic Officers annual meeting planning team
- 2018, 2019 APLU Panel manager for Completion Grant Award selection
- 2019-20 APLU-AASCU Voluntary System of Accountability Advisory Board, member

## **Board Membership**

- 2008-11 LEAD21 Leadership Development Program Board of Directors (board vice chair and program committee chair 2009-10; board chair 2010-11)
- 2012-14 Food Systems Leadership Institute Commission
- 2012-14 APLU Board of Directors
- 2016-present Feeding America Board of Directors (3<sup>rd</sup> term) (stewardship committee 2017-19, 2020-present, chair 2022-present; audit and risk management committee 2019-present; executive committee 2022-present)
- 2016-21 Experience Columbus Board of Directors
- 2016-19 Columbus Council on World Affairs Board of Directors
- 2018-21 COSI Board of Trustees

## **Professional Service Experience**

### **Penn State –**

#### ***Department of Entomology (1988-2001)***

- Awards Committee (member and chair)
- Candidacy Committee (member and chair)
- Educational Display Committee
- Graduate Program Council (member and chair)
- Instruction Committee (member and chair)
- Nominations Committee
- Promotion and Tenure Committee (member and chair)
- Recruiting Committee
- Seminar Committee (member and chair)

Social Committee

Advisory Committee to the Head

Entomology AD-14 Review Committee

Search Committees

    Social Insect Geneticist (chair, two searches)

    Molecular Insect Pathologist (chair)

    Department Head

Ad-hoc Committee on general entomology curriculum

Ad-hoc Committee to develop extension associate model

Ad-hoc Committee on department future vision

***College of Agricultural Sciences (1988-2001)***

Library Committee (member and chair)

COAS Representative to Eberly College of Science faculty meetings

Instruction and Curricular Affairs Committee (member and chair)

Faculty Advisory Committee to the Dean (member and chair-elect)

Agroecosystem Sciences Curriculum Development Committee, plant sciences option

Governor's School for the Agricultural Sciences student selection panel

GSD/COAS Graduate and Undergraduate Poster Competition (judge)

Ad-hoc Committee to develop guidelines for post-tenure review

Ad-hoc Review Committee for Environmental Resource Management

***Penn State (1988-2001)***

Graduate Research Exhibition (judge)

Department of Biology Search Committee

Life Sciences Director Search Committee

Joint Science Education Advisory Committee

***College and Penn State (2002-09; in role of Associate Dean and Director)***

College of Agricultural Sciences Diversity Coordinating Council (2001-04)

Advisory Committee on Graduate Education (2001-05)

    Ad hoc committee on postdoctoral salaries

    Ad hoc committee on graduate student teaching credentials

University Research Council (2001-09)

    Ad hoc committee on shared equipment

    Ad hoc committee on limited submissions procedure

    Ad hoc committee on industry F&A policy

    Ad hoc committee on major equipment acquisitions

    Ad hoc committee on greenhouse planning

    Ad hoc committee on animal resource programs

Patent Review Committee (2002-09)

Lake Erie Regional Grape Program Advisory Committee (2002-09)

Social Science Research Institute Research Deans advisory group (2002-09)

Ad hoc committee to review Integrative Biosciences and life sciences IGDPs (2004)

Center for Science and the Schools Research Deans advisory group (2004)  
Penn State Homeland Security Executive Council (2004-06)  
Search Committee, Associate VP for Research (2004, chair)  
Search Committee, Assistant VP for Research and OSP Director (2006)  
Search Committee, PSIEE Director (2007)  
Search Committee, Associate VP for Research (2007, chair)  
University Strategic Planning Council – Task Force on the Land Grant Mission (2008)  
Rockview Master Plan Steering Committee (2008-09)  
AD-14 Committee for Eberly College of Science Dean review (2008-09)

***College and Penn State (2009-2012; in role of Dean)***

Academic Leadership Council (2009-12; see also leadership roles)  
Council of Academic Deans (2009-12)  
Facilities Resource Committee (2009-12)  
Facilities Naming Committee (2012)  
Huck Institutes of the Life Sciences Deans' Advisory Board (2009-12)  
Penn State Arboretum Steering Committee (chair; 2009-12)  
Penn State Institutes of Energy & the Environment Executive Committee (2009-12)  
Search Committee, VP for Research and Dean of the Graduate School (2009)  
Social Science Research Institute Oversight Committee (2009-12)  
University Health Sciences Council (2009-12)

***College and Ohio State (2012-2015; in role of Vice President & Dean; 2015-2021 in role of Executive Vice President & Provost)***

President's Council (2012-13)  
Senior Management Council (2012-15)  
Council of Deans (2012-15)  
Council of Professional Deans (2012-15)  
University Senate (2012-21)  
Ohio State Discovery Theme Executive Team (2012-15)  
BioHio Research Park Board of Directors (chair, 2012-15)  
Ohio Bioproducts Innovation Center Board of Advisors (2013-15)  
Fisher College of Business Dean search faculty advisory committee (2014)  
Wexner Medical Center CEO search faculty advisory committee (chair, 2014)  
Reappointment Review Committee for Dean, College of Engineering (2015)  
But for Ohio State Campaign Transition task force (2015-16)  
Wexner Center for the Arts Board of Trustees (ex-officio, 2015-21)  
John Glenn College of Public Affairs Board of Distinguished Visitors (2016-21)  
Ohio State Comprehensive Cancer Center Internal Advisory Board (chair, 2018-21)



***Ohio State (2021-present; faculty role)***

CFAES International Award Committee (2021-22)  
Department of Entomology Promotion and Tenure Committee (2021-present)  
CFAES Awards Committee (2022-present)  
Entomology Graduate Student Association advisor (2022-present)  
Department of Entomology Ad Hoc Advancement Working Group (2022-present)  
University Senate Honorary Degree Committee (2022-present)  
India Gateway (Office of International Affairs) Director Search Committee (2022)  
International Student Recruiting Committee (2022)  
Ohio State/Voyager-Nanoracks Low Earth Orbit Starlab Space Station and George Washington Carver Science Park initiative (senior advisor in Ohio State steering team, 2022-present)

**State (Pennsylvania) –**

State Horticultural Association of Pennsylvania Research Committee (2002-10)  
Animal Health and Diagnostic Commission (2005-10)  
Pennsylvania Governor's Council on Invasive Species (2005-10)  
Pennsylvania Center for Tree Fruit Excellence (2006-10)  
Pennsylvania Agricultural Land Preservation Board (2009-12)  
Pennsylvania Farm Show Commission (2009-12)  
Pennsylvania Farm Show Scholarship Foundation (2009-12)  
Pennsylvania Sea Grant Statewide Advisory Committee (2010-12)  
State Conservation Commission (2009-12)  
University of Pennsylvania School of Veterinary Medicine Board of Overseers (2009-12)  
Agriculture Advisory Committee to Senator Bob Casey Jr. (2009-12)  
Philadelphia Society for Promoting Agriculture (2010-12)

**State (Ohio) –**

Ohio Livestock Care and Standards Board (2013-15)  
Healthy Water Ohio Steering Committee (2014-15)  
Inter-University Council of Ohio (2015-21s)  
Task Force for Creating Opportunities for Shared Governance on Co-located Campuses (Ohio General Assembly) (2016)  
Undergraduate Mission Study Committee (Ohio General Assembly) (2019)

**Regional –**

Big 10 Academic Alliance Provosts' Council (2015-21) (audit committee 2019-21; executive committee 2020-21)

## **National –**

- Board of Directors, Northeast Regional Center for Rural Development (2001-2009; see also leadership roles)
- Northeast Regional Association of Agricultural Experiment Station Directors (NERA) (2001-2009; see also leadership roles)
- University and Industry Consortium 2001-present; executive committee 2001-03, 2009-11)
- Rockefeller Foundation/McKnight Foundation Genetically Modified Plant Intellectual Property Workshop (2001, New York)
- National Agricultural Biotechnology Council (2002-12; executive committee 2002-04, chair-elect 2007-08, chair 2008-09)
- Northeast Sun Grant Stakeholders Workshop (2002, Washington, DC)
- USDA-CSREES Workshop on Nanoscale Science and Engineering for Agriculture and Food Systems (2002, Washington, DC)
- Viticulture Consortium-East Advisory Committee (2003-07, USDA Special Grant administered by Cornell University)
- USDA Tree Fruit Technology Road Map Workshop (2003, Leesburg, Virginia)
- Homeland Security Symposium sponsored by National Institute for Agricultural Security (2003, Houston, Texas)
- Stony Brook University Forum on Global Security – Preparing Experts to Combat Bioterrorism: Bridging the Science-Policy Divide (2003, New York)
- ESCOPE/ACOP Leadership Development Program Advisory Committee (2004-05)
- Partnership Working Group, Board on Agriculture Assembly and USDA-CSREES (2005-07)
- NERA Executive Director Search Committee (2006, chair)
- USDA-CSREES – ESCOP Joint Task Force on Hatch Act Allocations (2006)
- National Plant Diagnostic Network Review Team (2007)
- USDA Multi-Agency Steering Committee on Colony Collapse Disorder (2007-11)
- Farm Bill Implementation Task Force (2008; participated in initial meeting with USDA-REE leadership as ESCOP representative)
- ESCOPE Budget and Legislative Committee (2008-09, member)
- BioCentury Initiative Review Committee (an ESCOP initiative) (2009)
- Leveraging University Research for Industrial Competitiveness and Growth (NSF Partnerships for Innovation Project) (invited participant, ag/biotech focus group) (2009)
- Council of Deans – BIFAD Conference on Higher Education on a New Stage in Global Agricultural Development (2009, Arlington, VA)
- Association of Public & Land-Grant Universities Board of Directors (ex-officio as Policy Board of Directors chair, 2012-2014)
- USDA-REE Action Plan Meeting (2013)

American Distance Education Consortium (2013-2015, board member)  
APLU-Council on Academic Affairs (2015-21; Executive Committee, 2017-21)  
AAU-Council of Academic Officers (2015-21; annual meeting planning team 2017)  
Big Ten Academic Alliance (2015-21; audit committee 2019-20; executive committee 2021)

**Administrative Advisor to Multistate Research Projects**

NE-1006 – Eradication, Containment, and/or Management of Plum Pox Disease (Sharka)

NE-503 – Development of an Improved Management Program for the Internal Lepidoptera Pest Complex Attacking Apples in the Northeastern United States

NE-1020 – Multi-state Evaluation of Winegrape Cultivars and Clones

NEERA-1000 – Northeast Pasture Consortium

**International –**

Board of Directors, IPM-Innovation Laboratory (formerly IPM-CRSP) (USAID-funded research and development network) (board member 2009-12, board chair 2012-14)

**Presentations (in Administrative Role)**

“Issues in Pest Management Using Genetically Modified Organisms” Center for Rural Pennsylvania Rural Summit (2001, Harrisburg, PA)

“4-H and Opportunities for the Future” Pennsylvania 4-H Ambassadors (2002, University Park, PA)

“Agricultural Biosecurity Issues in Pennsylvania” Testimony to Pennsylvania House of Representatives Veterans Affairs and Emergency Preparedness Committee (2003, State College, PA)

“Agricultural Biosecurity” Ag Issues Forum, Pennsylvania Department of Agriculture (2003, Harrisburg, PA)

“Issues in Agricultural Biosecurity” Pennsylvania Association of Sustainable Agriculture annual meeting (2003, State College, PA)

“The Lake Erie Regional Grape Program – Case Studies of Innovative Operational Planning and Implementation” SAES/ARD Annual Directors’ Workshop (2003, Dearborn, MI) (co-authored with R. Seem)

“Penn State Agricultural Research” Testimony to Pennsylvania House of Representatives Veterans Affairs and Emergency Preparedness Committee (2004, Harrisburg, PA)

“Agricultural Biosecurity Research at Penn State” Keystone Alliance (2004, University Park, PA)

- “Grazing Research and Extension in the Northeast US” Northeast Pasture Research and Extension Consortium (2005, Morgantown, WV) (co-authored with Z. Helsel)
- “Investment in Agricultural Science and Technology in Ukraine” International Select Conference on Ukrainian Science sponsored by the Civilian Research and Development Foundation (2005, Kyiv, Ukraine) (co-authored with D.M. Behring, R.D. Steele, A. Tmanov)
- “Facing the Future of Pest Management” Pennsylvania Pest Management Association (2005, Philadelphia, PA)
- “The Science of Agriculture – Penn State Research” South China Agricultural University (2005, Guangzhou, China)
- “Agricultural Security in the Northeast US” Pennsylvania Agronomic Education Society (2006, State College, PA)
- “Supporting a Scientifically Literate Society – A Mission for Engaged Disciplines” National Outreach Scholarship Conference (2006, Columbus, OH)  
<http://streaming.osu.edu/knowledgebank/outreach06/101006/index.htm>)
- “Research in the College of Agricultural Sciences” Pennsylvania Council of Farm Organizations (2006, Harrisburg, PA)
- “Penn State Research in Agriculture” China Agricultural University (2007, Beijing)
- “Agricultural Research and Its Benefits to Society” Farm-City Days, Lancaster (PA) County Rotary (2007)
- “Maintaining Relevant Agricultural Research in Pennsylvania’s Changing Environment” American Society of Agronomy annual meeting (2007, Indianapolis, IN) (co-author with D. Johnson)
- “Agricultural Research Programs” Farm Bill Testimony to U.S. House of Representatives Committee on Agriculture, Subcommittee on Conservation, Credit, Energy, and Research on behalf of the Board on Agriculture Assembly (NASULGC) (2007)  
[http://www.create-21.org/documents/PDF/House\\_Testimony.pdf](http://www.create-21.org/documents/PDF/House_Testimony.pdf))
- “ESCAP Marketing Plan Implementation” Experiment Station Committee on Organization and Policy (2007, Washington, DC; national web cast)
- “Selected Perspectives from the Research Community Regarding Outreach on Dual Use Research” National Science Advisory Board on Biosecurity on behalf of NASULGC (2008, Bethesda, MD)
- Budget Testimony – Pennsylvania Senate Agriculture and Rural Affairs Committee (2009, Harrisburg, PA)
- “Open Forum Discussion – Access to Genetically Enhanced Seeds for Research” (discussion facilitator) (University and Industry Consortium, 2009, Austin, TX)
- “Northeast Collaboration and Partnerships for Successful Participation in USDA Funding” (speaker and panel member) (Northeast Summer Land Grant Meeting, 2009, Portland, ME)

- “Penn State Partnerships in Conservation” (speaker and panel member) (Annual Pennsylvania Association of Conservation Districts/State Conservation Commission meeting, 2009, State College, PA)
- “The 4-H Pledge” (speaker) (2009 Pennsylvania 4-H State Achievement Days, State College, PA)
- “College of Agricultural Sciences Partnership for Conservation” (speaker) (2009 USDA-NRCS annual statewide employee meeting, State College, PA)
- “Think Again – Reinventing Perceptions of Agriculture” (speaker; coauthors: J. Marcos Fernandez, Marianne Fivek, Mary Wirth, Jillian Stevenson, Thomas B. Gill, Deanna Behring) (6<sup>th</sup> Global Conference of GCHERA, 2009, Nairobi, Kenya) (proceedings chapter available at <http://www.gchera.com/past-global-conferences/2009-nairobi-kenya/>)
- “Students for the Future – How Are We Preparing the Next Generation of Agricultural Leaders?” (speaker) (Pennsylvania Agronomic Education Society, 2010, State College, PA)
- “Greetings from Lilongwe – Half Way Around a Flat World” (speaker; with Thomas Gill) (International Programs Brown Bag, College of Agricultural Sciences, 2010, State College, PA) ([Greetings from Lilongwe](#))
- “Farm Bill and Research Activity” Statement before Members of the U.S. House of Representatives Committee on Agriculture (2010, State College, PA) (<http://agsci.psu.edu/dean/editorials/Holden-US-House-Committee-on-Agriculture-Forum-Aug-17-2010-McPheron.pdf/view>)
- “Chesapeake Bay Ecosystem – Penn State Expertise” Testimony before the Joint Pennsylvania House and Senate Agriculture and Rural Affairs Committees (2010, State College, PA) (<http://agsci.psu.edu/dean/editorials/2010-PA-House-and-Senate-Ag-and-Rural-Affairs-testimony-McPheron.pdf/view>)
- “Feeding Our Children: the Role of Agricultural Extension and Research in the Future of Food” Ag Issues Forum (2010, Lancaster, PA)
- “Building Innovation Capacity for Food Security: At Home and Abroad” 160<sup>th</sup> Meeting of the Board for International Food and Agricultural Development (BIFAD) (2010, Des Moines, IA)
- “BIFAD 2011 and Beyond: The Role of Universities” International Programs Section, APLU (2010, Dallas, TX)
- “Penn State Dairy Research and Outreach” Testimony before the Pennsylvania House Agriculture and Rural Affairs Committee (2011, Harrisburg, PA) (<http://agsci.psu.edu/dean/editorials/Bruce-McPheron-Testimony-House-Agriculture-and-Rural-Affairs-Committee-Feb-10-2011.pdf/view>)
- “International Partnerships – Sharing Institutional Resources” APLU-BAA Joint COPs summer meeting (2011, Boston, MA)
- “Cross-institutional Collaborations through the Eyes of a Senior Administrator” Agricultural & Applied Economics Association & Northeastern Agricultural & Resource Economics Association Joint Annual Meeting (2011, Pittsburgh, PA)

- “Impact of the Brown Marmorated Stink Bug” Testimony before the Pennsylvania House and Senate Agriculture and Rural Affairs Committees (2011, State College, PA)  
<http://agsci.psu.edu/dean/editorials/2011-ag-rural-affairs-testimony-stink-bug.pdf/view>)
- “Retaining Relevance – Floating the Cooperative Extension Ship on a Sea of Information” Epsilon Sigma Phi National Meeting (2011, Syracuse, NY)  
<http://blogs.cornell.edu/espnational2011/2011/10/20/dr-bruce-mcpheron-dean-of-penn-state%E2%80%99s-college-of-agricultural-sciences-%E2%80%9Cretaining-relevance-%E2%80%93-floating-the-cooperative-extension-ship-on-a-sea-of-information%E2%80%9D>)
- “The Penn State Agricultural Sciences Experience” Academic Consolidation and Redesign: Creative Leadership Required - APLU National Meeting Plenary Session (2011, San Francisco, CA)
- “A Unit in Transition” Penn State Academic Leadership Forum (2011, State College, PA)
- “Funding of Agricultural Program in Land-Grant Institutions” Annual Meetings of Northeastern Weed Science Society & American Society for Horticultural Science Northeast Region (2012, Philadelphia, PA)
- “Feeding the Future: from the Lab Bench to the Dinner Table” Penn State Eberly College of Science 2012 Lectures on the Frontiers of Science (2012, State College, PA)  
<http://science.psu.edu/news-and-events/lectures-and-events/frontiers/watch-videos/food/lab-bench-to-dinner-table>)
- “Hemlock Woolly Adelgid: Setting the Stage” Forum on Hemlock Woolly Adelgid Biology & Management, Sponsored by Congressman Glenn Thompson (2012, State College, PA)
- “Accidental Leadership” Pennsylvania Rural-Urban Leadership Program (2011, 2012, Harrisburg, PA)
- “Agricultural Sciences: Penn State’s Founding College” Penn State Black Alumni Reunion (2012, State College, PA)
- “The Land Grant – Celebrating the Past and Looking to the Future; the University Perspective” 2012 North Central & Northeast Land-Grant Joint Summer Session (2012, Burlington, VT)
- “A New Way to See Ohio State” Ohio Corn and Wheat Growers’ Association Board Retreat (2013, Newark)
- “Leadership for the Future” Food Systems Leadership Institute Cohort 8 (2013, Columbus)
- “Emerging Excellence at Ohio State” Ohio Agribusiness Association Annual Meeting keynote (2013, Columbus)
- Budget Testimony – Ohio General Assembly (2013, Columbus)
- “A New Focus in the College of Food, Agricultural, and Environmental Sciences” Springfield Rotary Club (2013, Columbus)
- “Ag Today Radio Program” WQTT AM1270 (2013, Marysville)
- “Progress and Prospects at Ohio State” Ohio Farm Bureau Federation Policy Development Committee (2013, Columbus)
- “Hardin County Fair Hour of Inspiration” (with Marilyn McPheron) (2013, Kenton)
- “Cooperative Extension for a Second Century” Galaxy IV, sponsored by the Joint Council of Extension Professionals ((2013, Pittsburgh)

“Ohio 4-H Excellence” Ohio 4-H Celebration of Youth Fundraising Dinner (2013, Columbus)

“Food for Health” Ohio State Advocates Fall Event (2013, Columbus)

“Ohio State Environmental Priorities” Ohio Sea Grant and Stone Lab Winter Program (2014, Columbus)

“Ohio State’s Role in a Sustainable Food System” Ohio Ecological Food and Farm Association Annual Meeting (2014, Granville)

“Leadership for the Future” Food Systems Leadership Institute Cohort 9 (2014, Columbus)

“Today’s College of Food, Agricultural, and Environmental Sciences” Mt. Vernon Kiwanis (2014, Mt. Vernon)

“Yesterday, Today, and Tomorrow in Ohio State’s College of Food, Agricultural, and Environmental Sciences” Fayette County OSU Alumni Club Annual Meeting (2014, Washington Court House)

“Extension’s Next 100 Years” Extension Centennial Convocation Expert Panel (2014, Washington, DC)

“Growing the Jobs of the Future” Ohio State Northeast Ohio Speaker Series (2014, Cleveland)

“Building an Effective Strategic Communication Team” Association for Communication Excellence Annual Meeting (2014, Portland)

“Discovery Themes at Ohio State” Stone Laboratory Summer Speaker Series (2014, Put-in-Bay)

“Today’s College of Food, Agricultural, and Environmental Sciences” Hardin County OSU Alumni Event (2014, Kenton)

“Ohio State CFAES Focus on Agricultural Production” Fayette County Corn Growers’ Association Summer Field Day (2014, Washington Court House)

“College of Food, Agricultural, and Environmental Sciences Investment in Specialty Crop Research and Extension” Ohio Grape and Wine Field Day (2014, Ashtabula)

“Leadership for the Future” Epsilon Sigma Phi National Extension Professionals’ Annual Meeting (2014, Indianapolis)

“Annual State of the College Address” College of Food, Agricultural, and Environmental Sciences (2014, Columbus)

“Tomorrow’s Food System Leaders” Global Impact Academy STEM School Fundraiser (2014, Springfield)

“Envisioning the Future of Agriculture” Ohio Soybean Council Annual Meeting (2014, Dublin)

“Field to Faucet” Ohio Conservation Partnership Meeting (2015, Columbus)

Budget Testimony – Ohio General Assembly (2015, Columbus)

“Leadership for the Future” Food Systems Leadership Institute Cohort 10 (2015, Columbus)

“Ohio State’s Food and Agriculture Priorities” Ohio Farm Bureau Foundation Town Hall Radio (2015, Columbus)

“Ohio State’s National Championships – Beyond Football” Ag Credit Annual Shareholder Meeting (2015, Upper Sandusky)

“Ohio State’s Pathways to Excellence” Hardin County OSU Alumni Club (2015, Kenton)

“Land-Grant Universities: Yesterday, Today, and Tomorrow Panel” Farm Foundation (2015, Columbus)

“Water, Water Everywhere: Ohio State Water Quality Programming” Stone Laboratory Summer Speaker Series (2015, Put-in-Bay)

“Annual State of the College Address” College of Food, Agricultural, and Environmental Sciences (2015, Columbus)

“The Engaged University – CFAES Priorities Provide Solutions to Today’s Needs” President’s Football Pre-Game Event (2015, Columbus)

“Vision 2020: Tomorrow’s Extension” Epsilon Sigma Phi Extension Professionals’ Annual Meeting (2015, Coeur d’Alene)

“Programs of Excellence at the Ohio State University’s College of Food, Agricultural, and Environmental Sciences” China Agricultural University (2015, Beijing)

“Advancing Partnerships Among Ohio’s Universities to Address Water Quality Issues” Ohio Department of Higher Education Forum on Water Quality (2015, Wilberforce)

“Moderator of Discussion between Cardinal Peter Turkson and President Michael Drake on the Laudato Si and Environmental Stewardship” (2015, Columbus)

“The Future of Extension” OSU Extension Annual Conference (2015, Columbus)

“Leadership for the Future” Food Systems Leadership Institute Cohort 11 (2016, 2018, Columbus)

“Moderator of Discussion between His Serene Highness Prince Albert II of Monaco and President Michael Drake on Sustainability” (2016, Columbus)

“Moderator of Discussion between Former Surgeon General David Satcher and President Michael Drake on Health Disparities” Provost’s Discovery Themes Lecture (2016, Columbus)

“New Faculty Hiring Strategies to Advance Innovation” Association of Public and Land Grant Universities Annual Meeting (co-presenter with SVP for Research Caroline Whitacre) (2016, Austin)

“Keynote on Research Integrity” Ohio State Office of Research Seeking Solutions in Research Integrity: A View from All Perspectives (2018, Columbus)

Keynote Address “Insights on Research Integrity” Northwestern University Research Integrity Conference (2019, Chicago)

“Leading Up – Lessons Learned from Senior Administrative Leaders about Organizational Change to Advance IPE” National Center for Interprofessional Practice and Education Nexus Summit 2021 (2021, virtual)

“Teaching and Learning – The Scholarship of” North American College and Teachers of Agriculture (NACTA) National Conference (2022, virtual; keynote address)

“Leading Up, Down, and Sideways – Advice to Deans” Big Ten Academic Alliance Deans Leadership Program (2023, virtual)

## **Popular Press Editorials & Opinion (in Administrative Role)**

[Harrisburg Patriot-News Op-Ed: Swine flu outbreak underscores importance of agriculture research](#) (May 28, 2009)

Centre Daily Times Op-Ed: Penn State has a vision for Rockview property (October 12, 2009)

[Harrisburg Patriot-News Op-Ed: We must invest in agriculture](#) (April 23, 2010)



[Minneapolis Star-Tribune Op-Ed: Pioneers of Bioengineering Deserve Their Recognition](#)

(October 15, 2013)

[New York Times Letter: The cancer research: Ohio State responds](#) (March 10, 2017)

## **Popular Media - Video Presentation (in Administrative Role)**

[Pennsylvania Farm Bureau & Pennsylvania Cable Network: From the Farms to the Table:](#)

[Penn State College of Agricultural Sciences](#) (2011; produced by the Pennsylvania Cable Network)

## **Grant Funding for Administrative Programs**

Pennsylvania Department of Community and Economic Development (2004-2005)

“Pennsylvania Department of Health Bioterrorism Preparedness Training”

\$511,000, co-PIs B. Jayarao, D. Filson

Centers for Disease Control, Center for Public Health Preparedness (2005-2006)

“PSU Institute for Comprehensive Food & Water Resource Security (ICFWRs)”

\$9,500 subcontract on \$99,000 prime to Battelle Memorial Institute

Responsible for submitting Congressional requests, conducting down-selects, and impact reporting for Special Research Grants administered through USDA-CSREES; project work was managed by faculty selected in competitive reviewed process

-Milk Safety (\$771,000 in FY09)

-Improved Dairy Management Practices (\$243,000 in FY09)

-Enhanced Dairy Profitability (\$349,000 in FY09)

-Sustainable Agriculture and Natural Resources (\$133,000 in FY09)

Responsible for managing internal seed grant program that provided \$300,000 annually to Penn State College of Agricultural Sciences faculty and educators for education, extension, and research projects that will demonstrably enhance success in subsequent extramural funding applications

Initiated competitive grant program for Penn State College of Agricultural Sciences Ph.D.

candidates (defined as students advised by College faculty, thus including students in Intercollege Graduate Degree Programs and various other degree programs in which our faculty are graduate faculty members)

Partnered with Ohio Board of Regents (now Ohio Department of Higher Education) to develop and implement a plan to utilize \$4 million (\$2 million in 2014-15, \$2 million in 2016; subsequent to my involvement, \$2 million additional investment) in State of Ohio funds for collaborative research support of water quality initiatives

National Science Foundation – Louis Stokes Alliances for Minority Participation (NSF-LSAMP) (2018-2023) Co-PI, \$4.5 million, (\$900,000 per year contingent upon satisfactory progress)

## Teaching

### Penn State University

#### *Resident Education Instruction*

ENT 202GN	The Insect Connection (team)	1996, 1998-99
ENT 313	Introduction to Entomology (team)	1998-2001 (twice in 1999)
ENT 316	Field Crops Entomology	1998, 2001
ENT 412	Insect Taxonomy	1993-2001, 2007
ENT 541	Taxonomy, Ecology, and Evolution of Insects (team)	1989-92
ENT 542	Systematics (team)	1997
ENT 597	Molecular Methods in Biology (team)	1990-92, 1996
INTAG 497	Comparative US and European Agriculture (team) (included students from Univ. of Illinois)	2008 – 2010

ENT 202, 313, and 316 were taught during their first year under experimental numbers

ENT 412 was taught in 2007 under an experimental number

INTAG 497 contains a 2-week embedded international experience, conducted in Paris, France, in collaboration with colleagues at AgroParisTech and INRA

Graduate seminar courses in Resistance Genetics, Transgenic Crops, and Invasive Species were each taught once, the latter two as part of a faculty team

Many sections of independent studies in Entomology, International Agriculture, Genetics

### The Ohio State University

#### *Resident Education Instruction*

ENTMLGY 2400H Evaluating Evidence in Biology & Medicine 2022-2023

Numerous guest lectures in a variety of courses have been offered at Penn State and at Ohio State

#### *Resident Education Course Development*

Key member of team that developed ENT 202GN, a general education course for non-science majors; major feature of course is use of insects to convey scientific principles; interactive assignments. This course is now taught FA and SP semesters to 150 students per offering

Key member of team that developed ENT 313, 314, 315, 316, 319, 397F, 397I core and track system; ENT 313 is 8 week core entomological knowledge; remaining courses are 7 week focus courses designed for horticulture/landscape contracting, elementary education, crop science, agroecosystem science, forest science, and students interested in apiculture (turf is now offered separately)

Developed ENT 412 as a core course in Entomology graduate programs; developed field-based collection requirement and multiple field trips as component of course

### ***Other Teaching Roles***

Agriculture 150S (Freshman Seminar) lecture on agricultural research and the land grant mission (UP, Altoona, and New Kensington sections)

Agriculture 160GH (Ethics) discussion of research funding from industry and issues of intellectual property protection (UP, Altoona, and Mont Alto sections)

Agriculture 294 (LEAP seminar) lecture on agricultural research

AEE 501 (Foundations in Ag and Extension Education) lecture/discussion on the land grant mission

YFE 211 (Foundations of Civic and Community Engagement) lecture discussion on the land grant mission and its relation to service learning

Pennsylvania Governor's School for the Agricultural Sciences, special presentation on international agricultural research opportunities

Pennsylvania Governor's School for the Agricultural Sciences, developed and co-taught elective entomology course (multiple years)

One-week lecture/laboratory course on insecticide resistance at Universidad del Zulia, Maracaibo, Venezuela

Team-taught one-week lecture/laboratory course on insecticide resistance at in Kingston, Jamaica

Organized and team taught one-week laboratory course in insect taxonomy for Jamaican quarantine officers, University Park

One-week lecture/laboratory course on phylogenetic methods at Universidade de São Paulo

Team-taught two-day in-service training session on Genetically Modified Food to PSU Extension Staff, University Park

One-week lecture/laboratory course on genetic fingerprinting of fruit flies to train Chilean officers from Servicio Agrícola y Ganadero (under contract to UN-FAO, Santiago, Chile)

Mentor in Ohio State STEP (Second-year Transformational Experience Program) 2017-18, 2018-19

Mentor in Ohio State Stadium Scholarship Dormitory mentoring program 2020-22

Mentor in Ohio State Buckeye Leadership Fellows program 2021-22

### **Research Supervision**

5 M.S. degrees supervised

10 Ph.D. degrees supervised

2 Ph.D. degrees co-supervised with faculty colleagues from Universidade de São Paulo

7 Postdoctoral Scholars supervised

17 undergraduate research projects sponsored

8 additional graduate students hosted for significant components of their thesis research

## Research Publications

### *Refereed Publications:*

- Price, P. W., Bouton, C. E., Gross, P., McPheron, B. A., Thompson, J. N., & Weis, A. E. 1980. Interactions among three trophic levels: influence of plants on interactions between insect herbivores and natural enemies. *Annual Review of Ecology and Systematics* 11: 41-65. (This paper has been cited 1792 times as of January, 2022; ISI Web of Science Citation Index)
- Bouton, C. E., McPheron, B. A., & Weis, A. E. 1980. Parasitoids and competition. *American Naturalist* 116: 876-881.
- McPheron, B. A. 1985. Parasitoids of the leafmining beetles *Sumitrosis inaequalis* and *S. rosea* (Coleoptera: Chrysomelidae) in east-central Illinois. *Journal of the Kansas Entomological Society* 58: 367-369.
- McPheron, B. A. & Berlocher, S. H. 1985. Segregation and linkage of allozymes of *Rhagoletis tabellaria*. *Journal of Heredity* 76: 218-219.
- Sheppard, W. S. & McPheron, B. A. 1986. Genetic variation in honey bees from an area of racial hybridization in western Czechoslovakia. *Apidologie* 17: 21-32.
- McPheron, B. A., Jorgensen, C. D., & Berlocher, S. H. 1988. Low genetic variability in a Utah cherry-infesting population of the apple maggot, *Rhagoletis pomonella*. *Entomologia Experimentalis et Applicata* 46: 155-160.
- McPheron, B. A., Smith, D. C., & Berlocher, S. H. 1988. Microgeographic genetic variation in the apple maggot *Rhagoletis pomonella*. *Genetics* 119: 445-451.
- McPheron, B. A., Smith, D. C., & Berlocher, S. H. 1988. Genetic differences between host races of *Rhagoletis pomonella*. *Nature* 336: 64-66.
- McPheron, B. A., & Schiff, N. M. 1988. New distribution records for three dragonfly species (Odonata: Anisoptera) in Illinois. *Journal of the Kansas Entomological Society* 61: 494-495.
- Bush, G. L., Feder, J. L., Berlocher, S. H., McPheron, B. A., Smith, D. C., & Chilcote, C. A. 1989. Sympatric origins of *R. pomonella*. *Nature* 339: 346.
- McPheron, B. A. 1990. Genetic structure of apple maggot (Diptera: Tephritidae) populations. *Annals of the Entomological Society of America* 83: 568-577.
- Carlini, E. J., McPheron, B. A., Felland, C. M., & Hull, L. A. 1991. Elevated esterase activity in resistant tufted apple bud moth, *Platynota idaeusalis*. *Comparative Biochemistry and Physiology* 99C: 375-377.
- Berlocher, S. H., Bouseman, J. K., McPheron, B. A., & Lyons, S. 1992. An electrophoretic study of the red and black morphs of *Euderces picipes* (Fabricius) (Coleoptera: Cerambycidae). *Journal of the Kansas Entomological Society* 65: 403-409.
- Dominguez-Gil, O. E. & McPheron, B. A. 1992. Arthropods associated with passion fruit in western Venezuela. *Florida Entomologist* 75: 607-612.
- Sheppard, W. S., Steck, G. J., & McPheron, B. A. 1992. Geographic populations of the medfly may be differentiated by mitochondrial DNA variation. *Experientia* 48: 1010-1013.
- Pashley, D. P., McPheron, B. A., & Zimmer, E. A. 1993. Systematics of holometabolous insect orders based on 18S ribosomal RNA. *Molecular Phylogenetics and Evolution* 2: 132-142.
- Berlocher, S. H., McPheron, B. A., Feder, J. L., & Bush, G. L. 1993. Genetic differentiation at allozyme loci in the *Rhagoletis pomonella* (Diptera: Tephritidae) species complex. *Annals of the Entomological Society of America* 86: 716-727.

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- White, L. M., McPheron, B. A., & Stauffer, J. R. 1994. Identification of freshwater mussel glochidia on host fishes using restriction fragment length polymorphisms. *Molecular Ecology* 3: 183-185.
- Han, H., & McPheron, B. A. 1994. Phylogenetic study of selected tephritid flies (Insecta: Diptera: Tephritidae) using partial sequences of the nuclear 18S ribosomal DNA. *Biochemical Systematics and Ecology* 22: 447-457.
- Hunter, M. D., Biddinger, D. J., Carlini, E. J., McPheron, B. A., & Hull, L. A. 1994. Effects of apple leaf allelochemistry on tufted apple bud moth (Lepidoptera: Tortricidae) resistance to azinphosmethyl. *Journal of Economic Entomology* 87: 1423-1429.
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- Gasparich, G. E., Sheppard, W. S., Han, H., McPheron, B. A., & Steck, G. J. 1995. Analysis of mitochondrial DNA and development of PCR-based diagnostic molecular markers for Mediterranean fruit fly (*Ceratitis capitata*) populations. *Insect Molecular Biology* 4: 61-67.
- Frazier, M. T., Finley, J., McPheron, B., Harkness, W., & Stiles, G. 1995. Evaluating honey bee lines for tracheal mite resistance in the northeastern United States. *American Bee Journal* 135: 635-638.
- Berlocher, S. H. & McPheron, B. A. 1996. Population structure of the apple maggot fly, *Rhagoletis pomonella*. *Heredity* 77: 83-99.
- White, L. R., McPheron, B. A., & Stauffer, J. R. 1996. Molecular genetic identification tools for the unionids of French Creek, Pennsylvania. *Malacologia* 38: 181-202.
- Biddinger, D. J., Hull, L. A., & McPheron, B. A. 1996. Cross-resistance and synergism in azinphosmethyl resistant and susceptible strains of tufted apple bud moth (Lepidoptera: Tortricidae) to various insect growth regulators and abamectin. *Journal of Economic Entomology* 89: 274-287.
- Gasparich, G. E., Silva, J. G., Han, H., McPheron, B. A., Steck, G. J., & Sheppard, W. S. 1997. Population genetic structure of Mediterranean fruit fly (Diptera: Tephritidae) and implications for worldwide colonization patterns. *Annals of the Entomological Society of America* 90: 790-797.
- Ro, K. E. & McPheron, B. A. 1997. Phylogeny of the *Aquilegia* group (Ranunculaceae) based on internal transcribed spacers and 5.8S nuclear ribosomal DNA. *Biochemical Systematics and Ecology* 25: 445-461.
- Ro, K. E., Keener, C. S., & McPheron, B. A. 1997. Molecular phylogenetic study of the Ranunculaceae: Utility of the nuclear 26S ribosomal DNA in inferring intrafamilial relationships. *Molecular Phylogenetics and Evolution* 8: 117-127.
- Hull, L. A., McPheron, B. A., & Lake, A. M. 1997. Insecticide resistance management and integrated mite management in orchards: can they coexist? *Pesticide Science* 51: 359-366.
- Han, H. & McPheron, B. A. 1997. Molecular phylogenetic study of Tephritidae (Insecta: Diptera) using partial sequences of the mitochondrial 16S ribosomal DNA. *Molecular Phylogenetics and Evolution* 7: 17-32.

- McPheron, B. A. & Han, H. 1997. Phylogenetic analysis of North American *Rhagoletis* (Diptera: Tephritidae) and related genera using mitochondrial DNA sequence data. *Molecular Phylogenetics and Evolution* 7: 1-16.
- Dominguez-Gil, O. E. & McPheron, B. A. 1997. Diet effects on survivorship and developmental parameters of tufted apple bud moth, *Platynota idaeusalis* (Walker) (Lepidoptera: Tortricidae). *Revista Facultad de Agronomia (LUZ)* 14: 207-223.
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- Chen, H., McPheron, B. A., Krawczyk, G., & Hull, L. A. 2003. Laboratory evaluation of surface residue toxicity of insecticides to apple maggot flies. *International Pest Control* 45: 92-93, 97.
- Schwarz, D., McPheron, B. A., Hartl, G. B., Boller, E. F., & Hoffmeister, T. S. 2003. A second case of genetic host races in *Rhagoletis*? A population genetic comparison of sympatric host populations in the European cherry fruit fly, *Rhagoletis cerasi*. *Entomologia Experimentalis et Applicata* 108: 11-17.
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- fraterculus* complex (Diptera: Tephritidae) and recognition of a distinct Mexican morphotype. *Bulletin of Entomological Research* 94: 487-499.
- Barr, N. B., Cui, L., & McPheron, B. A. 2005. Molecular systematics of nuclear gene period in genus *Anastrepha* (Tephritidae). *Annals of the Entomological Society of America* 98: 173-180.
- Schwarz, D., Matta, B. M., Shakir-Botteri, N. L., & McPheron, B. A. 2005. Host shift to an invasive plant triggers rapid animal hybrid speciation. *Nature* 436: 546-549.
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- Han, H., Ro, K., & McPheron, B. A. 2006. Molecular phylogeny of the subfamily Tephritinae (Diptera: Tephritidae) based on mitochondrial 16S rDNA sequences. *Molecules and Cells* 22: 78-88.
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- Wu, Y., Y. Li, R. Ruiz-Arce, B. A. McPheron, J. Wu, & Z. Li. 2011. Microsatellite markers reveal population structure and low gene flow among collections of *Bactrocera cucurbitae* (Diptera: Tephritidae) in Asia. *Journal of Economic Entomology* 104: 1065-1074.
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- Wu, Y., B. A. McPheron, J. Wu, & Z. Li. 2012. Genetic relationship of the melon fly, *Bactrocera cucurbitae* (Diptera: Tephritidae) inferred from mitochondrial DNA. *Insect Science* 19: 196-204.

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#### **Books Edited:**

- Kim, K. C. & McPheron, B. A. 1993. *Evolution of Insect Pests: Patterns of Variation*. New York, NY: John Wiley.
- McPheron, B. A. & Steck, G. J. 1996. *Fruit Fly Pests: A World Assessment of Their Biology and Management*. Delray Beach, FL: St. Lucie Press.

#### **Articles in Books:**

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- Kim, K. C. & McPheron B. A. 1993. Biology of variation: epilogue. Pp. 453-468 in Kim, K. C. & McPheron, B. A. 1993. *Evolution of Insect Pests: Patterns of Variation*. New York, NY: John Wiley.
- McPheron, B. A. 1993. Recent advances and future directions in tephritid population genetics. Pp. 59-64 in Aluja, M. & Liedo, P. (eds.). *Fruit Flies: Biology and Management*. New York: Springer-Verlag.
- McPheron, B. A. & Han, H.-Y. 1993. Effect of phenology on allele frequency divergence in apple maggot fly populations. Pp. 65-70 in Aluja, M. & Liedo, P. (eds.). *Fruit Flies: Biology and Management*. New York: Springer-Verlag.
- McPheron, B. A., Sheppard, W. S., & Steck, G. J. 1995. Genetic research and the origin, establishment, and spread of Mediterranean fruit fly. Pp. 93-107 in Morse, J. G., Metcalf, R. L., Carey, J. R., & Dowell, R. V. (eds.). *The Mediterranean Fruit Fly in California: Defining Critical Research; Proc., University of California Center for Exotic Pest Research Workshop*. Riverside, CA: University of California, College of Agriculture and Natural Science.
- Steck, G. J., Gasparich, G. E., Han, H.-Y., McPheron, B. A., & Sheppard, W. S. 1996. Distribution of mitochondrial DNA haplotypes among *Ceratitidis capitata* populations worldwide. Pp. 291-296 in McPheron, B. A. & Steck, G. J. (eds.). *Fruit Fly Pests: A World Assessment of Their Biology and Management*. Delray Beach, FL: St. Lucie Press.
- Han, H.-Y. & McPheron, B. A. 1999. Nucleotide sequence data as a tool to test phylogenetic relationships among higher groups of Tephritidae: a case study using mitochondrial ribosomal DNA. Pp. 115-132 in Aluja, M., & Norrbom, A. L. (eds.) *Fruit Flies (Tephritidae): Phylogeny and Evolution of Behavior*. Boca Raton, FL: CRC Press.
- McPheron, B. A., Han, H.-Y., Silva, J. G., & Norrbom, A. L. 1999. Phylogeny of the genera *Anastrepha* and *Toxotrypana* (Trypetinae: Toxotrypanini) based upon 16S rRNA mitochondrial DNA sequences. Pp. 343-361 in Aluja, M., & Norrbom, A. L. (eds.) *Fruit Flies (Tephritidae): Phylogeny and Evolution of Behavior*. Boca Raton, FL: CRC Press.
- McPheron, B. A. 2000. Population genetics and cryptic species. Pp. 483-490 in Tan, K. (ed.) *Area-Wide Control of Fruit Flies and Other Insect Pests*. Penang, Malaysia: Penerbit Universiti Sains Malaysia.
- De Meyer, M., Copeland, R. S., Wharton, R. A., & McPheron, B. A. 2004. On the geographic origin of medfly *Ceratitidis capitata* (Wiedemann) (Diptera: Tephritidae). Pp. 45-53 in Barnes, B. (ed.) *Proceedings of the 6th International Symposium on Fruit Flies of Economic Importance*. Irene, South Africa: Iste Scientific Publications.
- McPheron, B. A. 2015. Foreword in Ricroch, A., Chopra, S., & Fleischer, S. (eds.) *Plant Biotechnology – Experience and Future Prospects*. Springer.

***Non-refereed publications:***

- McPheron, B. A., Smith, D. C., & Berlocher, S. H. 1986. Microgeographic variation in allele frequencies in the apple maggot fly, *Rhagoletis pomonella*. *Genetics* 113: s73. (abstract)

- McPheron, B. A., Smith, D. C., & Berlocher, S. H. 1987. Host plant-associated genetic differences in apple maggot flies (*Rhagoletis pomonella*). *Genetics* 116: s21. (abstract)
- McPheron, B. A. 1987. Presumed hybridization between the sibling species *Rhagoletis pomonella* and *R. zephyria*. *Isozyme Bulletin* 20: 33.
- Knight, A. L., Hull, L. A., McPheron, B. A., & Rajotte, E. G. 1989. Azinphosmethyl resistance studies with tufted apple bud moth. *Pesticide Resistance Newsletter* 1(2): 11.
- McPheron, B. A. & Carlini, E. J. 1990. Elevated esterase activities in resistant tufted apple bud moths. *Pesticide Resistance Newsletter* 2(2): 22.
- Simelane, T. L., Rajotte, E. G., Hull, L. A., & McPheron, B. A. 1991. The influence of host species on the developmental rate of tufted apple bud moth *Platynota idaeusalis* (Walker) (Lepidoptera: Tortricidae) larvae. *Pennsylvania Fruit News* 71(2) 65-70.
- McPheron, B. A. & Carlini, E. J. 1991. Molecular genetics of insecticide resistance in a leafrolling lepidopteran. *American Chemical Society* 202: 116. (abstract)
- McPheron, B. A. 1992. Insecticide resistance and insect genetics. *Pennsylvania Fruit News* 72(4): 88-90.
- Simelane, T. L., Rajotte, E. G., Hull, L. A., & McPheron, B. A. 1992. The dispersal behaviour of early instar tufted apple bud moth, *Platynota idaeusalis* (Walker) (Lepidoptera: Tortricidae) larvae. *Pennsylvania Fruit News* 72(2): 18-24.
- Simelane, T. L., Rajotte, E. G., Hull, L. A., & McPheron, B. A. 1993. The dispersal behaviour of early instar tufted apple bud moth, *Platynota idaeusalis* (Walker) (Lepidoptera: Tortricidae) larvae. *Pennsylvania Fruit News* 73(2): 101-104.
- Dominguez-gil, O. E., McPheron, B. A., & Hull, L. A. 1994. Host plant effects on tufted apple bud moth. *Pennsylvania Fruit News* 74(2): 35-39.
- Felland, C. M., Valley, K. R., & McPheron, B. A. 1997. Apple maggot, *Rhagoletis pomonella*(Walsh) (Diptera: Tephritidae), survey in Pennsylvania apple orchards. *Pennsylvania Fruit News* 77(2): 18-25.
- Hull, L. A., Huang, H., Felland, C. M., & McPheron, B. A. 1997. Methomyl resistance in tufted apple bud moth: extent, stability, and field efficacy. *Pennsylvania Fruit News* 77(2): 58-63.
- Harper, J. K., Hull, L. A., Krawczyk, G., & McPheron, B. A. 1997. Economic performance of tebufenozide, mating disruption, and conventional spray programs for tufted apple bud moth and leafroller management in processing apples. 73rd Proceedings of the Cumberland-Shenandoah Fruit Workers Conference, Winchester, VA, 5 pp.
- Chen, H., Felland, C. M., & McPheron, B. A. 1998. Monitoring apple maggot and flowering dogwood flies in Adams County in 1998. 74th Proc. Cumberland-Shenandoah Fruit Worker Conference, Winchester, VA, 10 pp.
- Harper, J. K., Hull, L. A., Krawczyk, G., & McPheron, B. A. 2000. Economic performance of tebufenozide, mating disruption, and conventional spray programs for tufted apple bud moth and leafroller management in processing apples. Penn State University Department of Agricultural Economics and Rural Sociology Staff Paper 323, 9 pp.
- Schwarz, D. & McPheron, B. A. 2002. Hybrid speciation is favored by a *Rhagoletis* host shift. *Zoology (Supplement V, D.Z.G.)* 105: 95. (abstract)
- Chen, H., McPheron, B. A., Felland, C. M., & Hull, L. A. 2002. The apple maggot fly in southcentral Pennsylvania. *Pennsylvania Fruit News* 82(4): 20-21.
- McPheron, B. A. & Barr, N. B. 2007. Tephritid barcoding initiative. Program and Abstracts, University of California Exotic Fruit Fly Workgroup, Fresno, CA, 1 p. (abstract)

- Bi, C., Saunders, M. C., & McPheron, B. A. 2008. A neuro-fuzzy system applied to classification of the *Rhagoletis pomonella* species group. Proceedings of the IEEE 2008 Symposium on Computational Intelligence in Bioinformatics and Computational Biology. (abstract)
- McPheron, B. A. 2008. Letter from the Chair. National Agricultural Biotechnology Newsletter, Fall 2008, # 37. ([http://nabc.cals.cornell.edu/newsletter/NABCnews\\_Fall2008.pdf](http://nabc.cals.cornell.edu/newsletter/NABCnews_Fall2008.pdf))
- McPheron, B. A. 2009. Letter from the Chair. National Agricultural Biotechnology Newsletter, Spring 2009, # 38. ([http://nabc.cals.cornell.edu/newsletter/NABCnews\\_current.pdf](http://nabc.cals.cornell.edu/newsletter/NABCnews_current.pdf))

## Research Presentations

- 80 submitted papers at professional meetings (20 international)
- 20 invited papers at professional meetings (7 international)
- 49 invited research seminars at universities, government agencies, and industry (16 international)

## Research Grant Support

(total award value \$3.1 million)

- Alfred P. Sloan Foundation (1988-90, postdoctoral funding awarded but declined to join PSU faculty)
- “Phylogeny of insect orders using ribosomal RNA sequences”
- \$80,500 (submitted and funded through Louisiana State University)
- California Department of Food and Agriculture (1987-89)
- “Measurements of genetic change in the apple maggot fly, *Rhagoletis pomonella*, associated with its colonization of the western United States”
- \$10,500, co-PI S. Berlocher (submitted and funded through University of Illinois; graduate project)
- California Department of Food and Agriculture (1991-1992)
- “Mitochondrial and nuclear DNA markers for detecting sources of medfly infestation and dynamics of colonizing populations”
- \$121,121, Co-PI W. S. Sheppard
- California Department of Food and Agriculture (1993-1995)
- “DNA markers for Mediterranean fruit fly source identification”
- \$153,389, Co-PI W. S. Sheppard
- California Department of Food and Agriculture (1996)
- “Microsatellite DNA variation in the Mediterranean fruit fly”
- \$116,228, Co-PI W. S. Sheppard
- California Department of Food and Agriculture (1998-2001)
- “DNA analysis of *Anastrepha ludens*: a single species or species complex?”
- \$167,588
- California Department of Food and Agriculture (ongoing from 1998-2003)
- “DNA analyses of Mediterranean fruit fly”
- \$2,500 per year
- California Citrus Research Board (1994)
- “Genetic analysis of medfly”
- \$24,675

California Citrus Research Board (1994-1995)  
“Genetic fingerprinting of Mediterranean fruit fly: specimen collection”  
\$14,000

California Citrus Research Board (1998)  
“Genetic analysis of medfly population genetics”  
\$8,000

California Citrus Research Board (1998-1999)  
“Collection and analysis of Mediterranean fruit fly samples from Central America”  
\$52,697

California Citrus Research Board (2007-2008)  
“Tephritid barcode initiative”  
\$5,000

Campana Nacional contra Moscas de la Fruta SAGAR-IICA, Mexico (1997)  
“Variabilidad morfológica, genética, conductual y preferencias alimentarias en las poblaciones de *Anastrepha fraterculus*”  
\$19,350, co-PIs V. Hernández-Ortiz, M. Aluja, J. Piñero (McPherson minor role)

Florida Citrus Production Research Advisory Council (1999)  
“Genetic markers in support of exclusion and eradication efforts for Florida medflies”  
\$21,580, Co-PI G. J. Steck

Florida Department of Agriculture and Consumer Services (1998)  
“Microsatellite analysis of Florida Mediterranean fruit fly specimens”  
\$8,926

International Apple Institute (1996-1998)  
“Development of an optimal control and resistance management strategy for the lepidopteran pest complex in apple orchards to minimize pesticide use and risk”  
\$120,000, Co-PIs L. A. Hull, J. K. Harper

International Atomic Energy Agency (1998-2000)  
“Coordinated sampling and genetic and behavioral analyses of South American fruit fly, *Anastrepha fraterculus*”  
\$22,000

National Science Foundation (1995-1997)  
In vivo and in vitro effects of plant allelochemicals on glutathione transferase expression and function – Doctoral Dissertation Improvement Grant”  
\$10,000, Co-PI E. J. Carlini

National Science Foundation (2004-2007)  
“Ecologically mediated hybrid speciation in a diploid, bisexual animal”  
\$336,000, Co-PIs O. Bjornstad, W. Roelofs  
\$6,000 REU supplement (2004)  
\$6,000 REU supplement (2005)  
\$6,000 REU supplement (2006)

Penn State University Research Initiation Grant Program (1989-90)  
“Molecular genetic markers for the analysis of gene flow patterns in the apple maggot fly, *Rhagoletis pomonella*”  
\$7,000

Pennsylvania Department of Agriculture (1989-1990)

“The implementation of rational management strategies to reduce pesticide use for tufted apple bud moth: pheromone-mediated mating disruption, ground cover management, and molecular genetic approaches to resistance management”

\$98,532, Co-PIs L. A. Hull, E. G. Rajotte

Pennsylvania Department of Agriculture (1989-1990)

“Development of an integrated approach to tufted apple bud moth management: understanding pest/predator ground cover dynamics, mating disruption, and resistance development”

\$64,913, Co-PIs L. A. Hull, E. G. Rajotte, B. A. Barrett

Pennsylvania Department of Agriculture (1998-1999)

“Apple maggot management and exclusion tactics in commercial export orchards”

\$74,588, Co-PI C. M. Felland

Pennsylvania Wild Resources Conservation Fund (1993-1996)

“Mayflies (Ephemeroptera) of Pennsylvania”

\$28,196, Co-PI G. A. Hoover

Rohm & Hass, Co. (1995-1996)

“Development of an optimal control and resistance management strategy for the lepidopteran pest complex in apple orchards to minimize pesticide use and risk”

\$57,935; Co-PIs L. A. Hull, J. K. Harper

State Horticultural Association of Pennsylvania (1990)

“Influence of host species on the developmental rate of tufted apple bud moth larvae”

\$2,500, Co-PIs T. L. Simelane, E. G. Rajotte, L. A. Hull

State Horticultural Association of Pennsylvania (1992)

“Dispersal behavior of tufted apple bud moth larvae in the field”

\$2,000, Co-PIs T. L. Simelane, E. G. Rajotte, L. A. Hull

State Horticultural Association of Pennsylvania (1993)

“Effect of host plant on insecticide resistance in tufted apple bud moth”

\$5,000, Co-PI O. E. Dominguez, L. A. Hull

State Horticultural Association of Pennsylvania (1996)

“Distribution and threat of apple maggot and its sibling species in regions of commercial apple production in Pennsylvania”

\$9,520; Co-PIs C. M. Felland, K. Valley

State Horticultural Association of Pennsylvania (1996)

“Methomyl resistance in tufted apple bud moth: extent, stability, and field efficacy”

\$5,389; Co-PIs L. A. Hull, H. Huang

USDA-APHIS-PPQ (2007-2010)

“Tephritid barcoding initiative”

\$50,000

USDA-APHIS-PPQ-CPHST (2005)

“Development of molecular diagnostic tools for identification of pest fruit fly geographic origin”

\$6,600

USDA-APHIS-PPQ-CPHST (2006-2010)

“Molecular diagnostic tools for the genus *Anastrepha*”

\$157,669

USDA-Horticultural and Sugar Crops (1991)

“Characterizing mechanism of resistance in Colorado potato beetle for managing insecticide resistance”

\$36,920, Co-PI Z. Smilowitz

USDA-Initiative for the Future of Food and Agricultural Systems (2000-2004)

“African Tephritidae: invasive species threatening US fruit and vegetable products”

\$906,141, Co-PIs R. A. Wharton, M. De Meyer, I. White

USDA-Low Impact Sustainable Agriculture (1990)

“Honey bee breeding for tracheal mite resistance in the northeast United States”

\$40,000, Co-PIs M. Tomasko, K. Webster, R. Drutchas, D. Keeney

USDA-National Research Initiative (1995-1998)

“Mitochondrial DNA and systematics of fruit flies in the genus *Anastrepha*”

\$120,000, Co-PI A. L. Norrbom

USDA-Northeast IPM Special Grant Program (1991-1993)

“Novel tactics in apple IPM to manage OP resistance and biological control”

\$150,000, Co-PIs L. A. Hull, M. Hunter, G. Greene

USDA-Northeast IPM Special Grant Program (1994-1996)

“A new approach for apple IPM to enhance bio-control and resistance management”

\$75,000, Co-PI L. A. Hull

## Current Professional Affiliations

American Association for the Advancement of Science (Member) 2004-present (elected fellow 2014)

Entomological Society of America (Member) 1976-80, 1983-present (elected fellow 2018)

Society for the Study of Evolution (Member) 1976-80, 1983-present

## Service to the Profession

Entomological Society of America

Member, National Committee on Systematic Resources (1992-1994)

Chair, National Committee on Systematic Resources (1994-1995)

Member, Eastern Branch Linnaean Games Committee (1994)

International Organization for Biological Control

Vice-chair, IOBC Working Group on Fruit Flies of Economic Importance (1994-1998)

Chair, IOBC Working Group on Fruit Flies of Economic Importance (1998-2002)

International Symposium on Fruit Flies of Economic Importance

Ex-officio Member, Organizing Committee for Fourth International Conference (1994)

Working Group on Fruit Flies of the Western Hemisphere

Member, International Consultative Board (2000-2002)

Tephritid Barcoding Initiative (affiliated with the Consortium for the Barcode of Life)

Chair (2006-2009)

Reviewer for 21 journals

International Editorial Board for Neotropical Entomology (2003-present)  
Reviewer for 8 different granting agencies (multiple panels for NSF and multiple program areas for USDA)  
External reviewer for 7 promotion and tenure decisions and 3 USDA-ARS reviews  
Panel member for USDA-NRICGP (Entomology and Nematology) (1993, 1994)  
Panel member for USDA-NRICGP (Strengthening) (1998, 1999)  
Panel manager for USDA-NRICGP (Entomology and Nematology, organismal) (2002) (partial year service, stepped down due to illness)  
Panel member for USDA-SCRI competitive grants program (2008)  
Consultant to International Atomic Energy Agency, Vienna, Austria, to develop multi-year project on South American fruit fly and review publication on South American fruit fly  
Consultant to Agencia Nacional de Promoción Científica y Tecnológica, FONCYT, Buenos Aires, Argentina, for external review of research project  
Panel member for USDA-NIFA (ABIC-HBCU program) (2022)  
External reviewer for ACE Learner Success Laboratory program (2022)

## **International Activities**

### ***International research experience:***

Latin America

Mexico, Guatemala, Honduras, Nicaragua, Costa Rica, Venezuela, Ecuador, Peru, Chile, Brazil, Argentina

Caribbean

Jamaica

Africa

Malawi, Kenya, Ghana

Australia

### ***International teaching experience:***

Venezuela, Jamaica, Brazil, Chile, France (see “Teaching” for further course descriptions)

### ***Other international contributions:***

Invited participant and presenter, International Select Conference on Ukrainian Science sponsored by the Civilian Research and Development Foundation (2005, Kyiv, Ukraine)  
Participated in/led delegations to China (South China Agricultural University, China Agricultural University) to develop/strengthen bilateral relationships between these institutions and Penn State University (2005, 2007)  
Participated in delegation to China (China Agricultural University, Chinese Academy of Agricultural Sciences) to develop/strengthen bilateral relationships between these institutions and the Ohio State University (2015)

Invited keynote speaker at 6<sup>th</sup> Global Conference of Global Consortium of Higher Education and Research for Agriculture (GCHERA) (2009, Nairobi, Kenya)

Visited partners, decision-makers, funding organizations, international research centers, and agricultural universities in Malawi, Kenya, and South Africa (2009)

Represented Penn State at 7<sup>th</sup> Global Conference of Global Consortium of Higher Education and Research for Agriculture (GCHERA) (2011, Beauvais, France)

Visited research and educational partners and student study-abroad venues in South Africa (2012)

Chair, Board of Directors of USAID-funded IPM-IL (cross-referenced in Professional Service Experiences) (2013, site visits and board meeting in Menado, Indonesia)

Site visit to Sokoine Agricultural University, Morogoro, Tanzania in support of USAID-funded iAGRI project (2013)

Site visit to Addis Ababa to review Ohio State Global One Health initiative (2017)

Site visit to Mumbai and Delhi, India, to review Ohio State India Gateway (2020)

See also “Service to the Profession” for international activities in support of scientific infrastructure and government agency programs

Multiple presentations (invited and submitted) at international conferences and symposia and to international universities and government agencies