

DARRELL W. DONAHUE, PhD, CQE

Curriculum Vita

LEADERSHIP STATEMENT

A leader with more than 28 years of experience linking innovative initiatives across academia and industry, and expanding job opportunities/experiential learning for students, private research funding for faculty, and long-term career options for graduates. A decisive decision-maker, I lead by example and am a team player who recognizes, develops, and moves strategic initiatives forward, always looking to the future while learning from my worldview.

HIGHLIGHTS AND COMPETENCIES

I have held three significant administrative leadership roles at diverse Land Grant and public institutions: West Virginia University (WVU), Michigan State University (MSU), and University of Maine (UMaine) as well as Maine Maritime Academy (MMA), a public maritime academy. I had fiscal and operational control and oversight of faculty, staff, and students to deliver vision and mission strategies in challenging budgetary and pandemic times.

Research and stewardship: Since 1996 I have been involved in research, education, and outreach in two broad focus areas: food and natural resources engineering. My research and education programs have been focused on holistically addressing processing and operational challenges in pulp/paper and food processing for companies in northern New England. My research work enabled companies to be more efficient and competitive in a global marketplace. I have continued that support and focus as I have moved into administration at Land Grant institutions and internationally as a member of the United Nations Food Safety Commission.

Economic opportunity and industry focus: I have used my platform as an engineer and faculty member to help small and medium companies be more globally competitive. I have led identification of industry/company needs and determined strategic partnership opportunities between industry and academia, allowing me to create experiential learning opportunities for undergraduate and graduate students. As engineering consultant for Fortune 100 companies, I provided consulting in process engineering as well as training in high-performing teams and led strategic planning efforts for four Fortune 100 companies.

Educational access, excellence, and research leadership: At UMaine, I was a participant and PI of four NSF REUs; participant in a NSF GK-12 program and PI for one NSF GK-12. In all NSF programs we had a STEM teacher outreach component to enhance K-12 STEM education in Maine. I have mentored over 80 students (high school through doctoral). Personally responsible for ~\$41MM in external research funding. In 2012-2015, I developed the inaugural Office of Sponsored Programs at MMA. At MSU, I served as the Director of the Institute of Water Research, creating citizen scientist access opportunities. Throughout my career, I have been very active and led supporting high school to community college / university transition for traditional and non-traditional learners, developing pathways of success for individuals.

Development/advancement experience: Since 1999, I have been involved in development activities for various organizations. I have been involved in areas of development, strategic alliances, and successful entrepreneurship, raising over \$61MM funds in building capacity, supporting activities, scholarships and programming as well as 'brick-n-mortar' research, education and outreach facilities.

EMPLOYMENT HISTORY

WEST VIRGINIA UNIVERSITY, Morgantown, WV Jul. 2020-present

Dean and Director, Davis College of Agriculture, Natural Resources and Design

Leader responsible for all administrative, operational, and fiscal functions of academic college. Member of Provost's Leadership Team, responsible for university-level decision-making. Directed pandemic response in teaching, research, and outreach.

Accomplishments: Increased grants submitted over the last three years, resulting in increased research expenditures approximately 10%; member of WVU Modernization executive committee, new financial and student support systems; developing new budget model, consisting of enrollment, research, and outreach priorities; exceeded college development goals by 30% each year since arriving at WVU.

MICHIGAN STATE UNIVERSITY, E. Lansing, MI Jul. 2015-Jun. 2020

Professor and Chair, Biosystems & Agricultural Engineering (BAE) and Director, Institute of Water Research (IWR). Leader of engineering academic unit, responsible for undergraduate and graduate programs, increasing research funding, and advancement/development. Led non-traditional student focused recruitment efforts. Director of national Water Research Institute.

Leader of engineering academic unit, responsible for undergraduate and graduate programs, increasing research funding, and advancement/development. Led non-traditional student focused recruitment efforts. Director of national Water Research Institute.

Accomplishments: **BAE:** Increased undergraduate and graduate growth, focusing on non-traditional students; increase of approximately 12% in research expenditures; increased annual alumni giving about 20%. **IWR:** Increased breadth of research applications, resulting in approximately 15% increase in expenditures; responsible for bringing faculty together working on water research collaboration teams, 185+ faculty/staff in State of Michigan. Supported spin-off company support through VP-Research office.

MAINE MARITIME ACADEMY, Castine, ME Aug. 2012-Jun. 2015

Vice-President for Operations and Founding Research Director, Center for Applied Research and Education. Founding director of a research center to foster extramural research funding for faculty. As VP for Operations, managed all non-academic units for MMA (responsible for 70% of MMA overall budget).

Accomplishments: **Research Director:** Established first-ever grants/contracts management office, operational procedures for pre- and post-award grantsmanship, training/education workshops for faculty; resulted in ~\$9MM funding in two years. Spin-off company development and research support. **VP-Operations:** Developed new budget model involved consensus budget decision-making managing ~\$39MM budget and oversight of ~\$60MM in research/education vessels. Involved in alumni and stakeholder development, delivered \$32MM in private donations for a new STEM building.

UNIVERSITY OF MAINE, Orono, ME Feb. 1995-Jul. 2012

Department of Chemical and Biological Engineering

Professor and Associate Director, Forest Bio-products Research Institute, Mar. 2009-Jul. 2012; Professor and Research Leader of FBRI, Sep. 2006-Mar. 2009; Associate Professor and Coordinator of Biological Engineering, Aug. 2000-Aug. 2006; Assistant Professor of Bio-Resource Engineering, Feb. 1995-Aug. 2000. Developed research program in systems process engineering; designed biological engineering undergraduate program; worked with Maine stakeholders to develop engineering support for small operators and startups. Served as Extension engineer for 12 years.

Accomplishments: PI / co-PI of \$41+MM funded research grant and contracts support. Supported four start-up companies through research development. Developed processes for budgeting and managing contracts/grants for FBRI Research Institute. Developed and

delivered Innovation Engineering curriculum. Focused on non-traditional student recruitment for Engineering College. Led college and university level strategic planning.

DEPARTMENT OF HOMELAND SECURITY, Washington, DC Sep. 2007-Aug. 2008
Fellow, American Association for the Advancement of Science, DHS - Office of Health Affairs.
Scientific/Technical Advisor supporting Assistant Secretary of OHA and Director, S&T Directorate.
Accomplishments: Developed new operational and management plan for Threats and Countermeasures division of OHA. Leader for OHA in overall DHS budget process. Developed and managed \$180MM BioWatch program. Developed DHS budget and programs that facilitated financial support of projects such as MBAF and others.

NORTH CAROLINA STATE UNIVERSITY, Raleigh, NC Feb. 1993-Jan. 1995
Director of Information Systems, The Graduate School.
Directed all electronic information systems for the graduate school.
Accomplishments: Developed first-ever digital records database system that enabled electronic submission of graduate school applications. Developed first-ever electronic budget system for budget and grants management.

EDUCATION AND PROFESSIONAL DEVELOPMENT

NORTH CAROLINA STATE UNIVERSITY, Raleigh, NC
Ph.D., Operations Research and Engineering. Minor: Statistics
M.S., Engineering and Mathematics
B.S., Zoology and Chemistry, Minors: Chemical Engineering, Mathematics
FOOD SYSTEMS LEADERSHIP INSTITUTE (Cohort 15)
Development of individual leadership skills and institutional leadership effectiveness
AMERICAN SOCIETY OF QUALITY
Certified Quality Engineer (CQE)
U. S. FDA – HACCP Train the Trainer program

RESEARCH AREAS

Quantitative risk modeling and assessment
Process engineering design and engineering economics; Engineering Systems Analysis
Business startups: engineering design, development, and operational support
Near-infrared spectroscopy of biological materials

TEACHING

Graduate

Risk Assessment in Biological and Chemical Systems
Computer Simulation and Analysis of Industrial Processes

Undergraduate

Innovation Engineering (university-wide interdisciplinary major)
Chemical Engineering Capstone Sequence (senior engineering course, unit operations I & II)
Process Systems Analysis (upper level/graduate engineering)
Statistical Process Control and Analysis (upper-level engineering)

GRADUATE ADVISING

Chair for 12 MS students and 4 PhD students; Committee member for 12 MS and 10 PhD students.

SERVICE

Professional, Government, and International

- American Society of Quality, 2008-present. Certified Quality Exam referee. Assisted with developing CQE exam.
- FAO/WHO, 2013-present. Expert consultancy on statistical and mathematical basis for microbiological criteria in foods; continual reviews.
- International Committee on Microbiological Specifications for Foods, 2011-present, 2011-2016 - expert consultant; 2016-present, member, 2022-present, Committee Secretary.
- NSF, NSF/SBIR, DOE, USDA, USDA/SBIR, Research proposal review member, 1999-present.
- Council of Canadian Academies, 2009-2011. Expert Panel on Evaluation of Risk Assessment Methods for the Canadian Food Inspection Agency.
- AOAC International, 2004-2006, microbiological best management practices.
- USDA/US EPA, Nov. 2011. Chair, Microbiological Risk Assessment Guidance document technical review panel.
- US EPA, 2003-2004. National Center for Environmental Assessment, Science Advisory Board.
- US FDA, 2003-2004. *Vibrio parahaemolyticus* risk assessment model review team.
- US Army Center for Health Promotion and Preventive Medicine, 2003-2008; anthrax risk assessment.
- National Academy of Sciences, Expert Panel on Risk Assessment, Main and subcommittee chair appointments, 2002-2004.

Professional Societies

- Society for Risk Analysis, member, 2003-2019; editorial board, 2011-2018; conferences/workshops committee, 2005-2019.
- American Indian Science and Engineering Society, Professional Member, 2009-2018.
- American Association for the Advancement of Science, member, 2006-present; Fellow and Fellowship application reviewer, 2008-present.
- American Society of Agricultural and Biological Engineers, member, 1984-2020.
- American Society of Quality, CQE, member, 2000-present, statistics and education divisions.
- Institute for Operations Research and Management Science, member, 1990-2004.
- International Association of Food Protection, member, 2003-present; editorial board, 2008-present.
- Institute of Food Technologists, 1995-2004; professional member; associate editor-JFSE, 2000-2003.

University

- WVU Modernization Executive Committee, 2022-present.
- Tau Beta Pi Engineering Honor Society, member, 1986-present; Chief Faculty Advisor, 2000-2010; Scholarship & Fellowship Board, 2010-2014.
- UME Faculty Representative for three university-wide programs, 1999-2008.
- College of Engineering Research Committee, member, 1999-2007.
- Graduate School Governing Board, member, 1999-2005.
- University-wide search committees, 22 committees, between 1996-2012, six as chair.

Local Industry

- Savannah Process Control, LLC, 2015-present. Founder and Principal Engineer.
- Process Design Consultant: Provided process design and engineering services to small local businesses in North Carolina, Maine, Michigan, Pennsylvania, West Virginia, 1992-present.
- Extension Engineer: Supported small private operators with Extension engineering support, 1996-present.

National Non-Profit & Community

BOY SCOUTS OF AMERICA: continuous membership since 1971; adult leader since 1977.

- Troop level: Assistant Scoutmaster, 1977-2003; Scoutmaster 2003-2006.
- District level: Various Training Committees, 1982-2002; District fund-raising 2000-2006.
- Council level: Council Executive Board, 2002-present; Council Endowment Committee, 2013-2020; OA Lodge Advisor: 1983-2007; JYLT Scoutmaster 1990, WoodBadge, 2005; Training Committees, 1984-2015.
- National level: National Health & Safety Committee, 2006-2012; National Order of the Arrow Committee, 2008-2022.

HIGH SCHOOL BOOSTERS CLUB support, Old Town, ME, 1998-2007.

FRIENDS OF THE LIBRARY, Old Town, ME, 2000-2007.

PROFESSIONAL AND VOLUNTEER AWARDS

Professional

AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE:

Science and Technology Policy Fellow, Department of Homeland Security, 2007-08

UNIVERSITY OF MAINE COLLEGE OF ENGINEERING: Dean's Award for Excellence, 2006

GOLDEN KEY HONOUR SOCIETY: Honorary member, Mar. 2004

US ARMY: Commander's Medal, Mar. 2004

USDA: USDA Research Honor Award, Jun. 2003

Volunteer

AMERICAN FOLK FESTIVAL, Bangor, ME

2011 Gerry Turner Excellence in Volunteerism Award

BOY SCOUTS OF AMERICA

- National Distinguished Service Award, 2009
- Silver Beaver, 2002
- District Award of Merit, 1987
- Vigil Honor, 1981
- Eagle Scout, Gold Palm, 1975

GRANTS AND CONTRACTS

Summary: Interdisciplinary research program. Over \$41MM total funding applied for as PI or Co-PI since 1995; over 84 proposals submitted.

Funded/not funded (partial list)

USDA/USFS-Innovation Program. 2023. Design of a Hardwood CLT Research and Education Building. \$150,000. PI: Donahue, D., co-PI: McNeel, J. funded.

USDA/AFRI: Education and Workforce Development program. 2020-2025. Food Processing, Technology and Safety Workforce Development: Dual Certificate and Associate Degree Program. \$499,999. PI: Millenbah, K., co-PI: Donahue, D., funded.

USGS NIWR grants program, 2017-2019. Water Quality and Quantity in the Great Lakes Region. \$1,237,541. PI: Donahue, D., co-PI: Asher, A., funded

Explore it! Building the Next Generation of Sustainable Forest Bioproduct Researchers, 2014. NSF-REU, \$540,000. PI: D. Gardner (UMaine), co-PIs: Donahue, Kimball., funded.

Development of Methodology to Measure and Assess Ship Emissions. International Association of Maritime Universities, \$60,000. March, 2015. PI: V. Garaniya (AMC), co-PIs: Kimball, Donahue., funded.

Marine Engine Testing and Emissions Laboratory. Department of Transportation / UTC, \$2,990,000. November, 2014. Pls: R. Kimball, D. Donahue., not funded.

Maine Hydro Kinetic Energy Cluster Grant, Maine Technology Institute, \$483,000. August, 2012. Pls: Donahue, Armstrong/MMA; von Vogt/MCA., funded.

Engineering analysis of biomaterial and nanocomposites, IDEXX Laboratories Inc, \$220,100, May, 2011-May, 2012. PI: Donahue, co-PIs: Neivandt, Mason., funded.

Explore It! Building the Next Generation of Sustainable Forest Bioproducts Researchers, NSF-REU program, \$564,545. August, 2010. Neivandt, D; Donahue, D. (co-PI)., funded.

CREATE GK-12, NSF GK-12 program, \$3,063,074. June, 2010. PI: D. Donahue, co-PI: M. Bird., funded.

Entrepreneurship in Maine. Maine US Congressional Delegation. \$3,000,000. January, 2010. Harkins, J (Business), Donahue, D (Engineering), McConnon, J (Extension)., funded.

Explore It! Building the Next Generation of Sustainable Forest Bioproducts Researchers, NSF-REU program, \$544,327. October, 2009. Neivandt, D; Donahue, D. (co-PI)., funded.

Life Cycle Assessment of Macro Algae as a Bio-Fuel Feedstock Source. \$263,316. Northeast Region Aquaculture Center. December, 2009. PI: D. W. Donahue, co-PIs: P. van Walsum, A. Halog, C. Yarish (UConn), C. Neefus (UNH)., funded.

American Association for the Advancement of Science, Science and Technology Policy Fellowship. \$125,000. March, 2007. D. W. Donahue., funded.

Explore it! Building the next Generation of Sustainable Energy Researchers. \$350,008. NSF-REU program. December, 2006- November, 2009. D. W. Donahue, co-PIs: D. Neivandt, and D. Gardner., funded.

Bioproducts through Forest Biorefinery Development, \$21,000,000. NSF/DOE-UIRC. December, 2006. H. Pendse, Donahue (co-PI)., funded.

Sustainable Bioproducts through Forest Biorefinery Principles. \$6,800,000. NSF-EPSCoR. November, 2004. Shaler and Pendse, PDs; (Donahue Co-PI)., funded.

Mechanical Properties of bone and implant materials after orthopedic implant surgery. \$71,033. (Stryker Biomedical, Inc.) DIC portion of grant to perform materials testing. March, 2005. I. D. Dickey and D. W. Donahue., funded.

Wild Blueberry processing technologies. \$245,000. USDA-CSREES-Blueberry tax funds. November, 2004. D K. Bell, D. Donahue (co-PI)., funded.

Wild Blueberry processing technologies. \$241,000. USDA-CSREES-Blueberry tax funds. November, 2003. D K. Bell, D. Donahue (co-PI)., funded.

Development of Ultrasonic Rotary Pulsation (URP) Technology for Improving Human and Industrial Wastewater Treatment. \$116,000. Maine Technology Institute. January, 2003. IPET, Inc. (Jim Shue, principle), Co-PIs: D. W. Donahue, A. Amirbahaman., funded.

Wild Blueberry technology. \$241,000. USDA. February, 2003. D K. Bell, D. Donahue (co-PI)., funded.

Ultrasonic Rotary Pulsation (URP) Processing of Liquid Food: A seed grant. \$30,200. Maine Technology Institute. February, 2003. IPET, Inc. (Jim Shue, principle) and D. W. Donahue (co-PI)., funded.

Maine Space Grant Consortium, Travel Funds Program. \$1,500. NASA-MSGC. July, 2002 – October, 2002. D. W. Donahue., funded.

Maine Space Grant Consortium, Undergraduate Fellowship Program. \$6,700. NASA-MSGC. April 2002. September 2002 – May 2003. D. W. Donahue., funded.

GK-12: Sensors!. \$1,494,860. NSF-GK-12. October 2001. May, 2002 – April, 2005, UMaine: College of Engineering, J. F. Vetelino, co-PI: D. W. Donahue., not funded.

Examining NIRS for blueberry quality. \$240,000. USDA-CSREES: Wild Blueberry Production and Processing Technologies. February, 2002. D K. Bell, D. Donahue (co-PI)., funded.

Using NIR for Maggot Identification. \$18,000. USDA-CSRS: Wild Blueberry Commission of Maine, February, 2001. D. W. Donahue., funded.

Separation Methods of Maggot-Infested Blueberries in the IQF Processing Line. \$16,836. USDA-CSRS: WildBlueberry Commission, June, 2000. D.W. Donahue., funded.

Evaluation and Design of a Packaging System for Chocolate-covered Maine Wild Blueberries. \$6,300. MaineAgriculture Center. March, 2000. D. W. Donahue and A. A. Bushway., funded.

Key equipment needs – enhancement of current near-infrared (NIR) laboratory unit. \$4,000. College of NSFAR&D Funds Competition. December, 1999. D. W. Donahue., funded.

Lobster Stock Assessment using GIS/GPS Techniques. \$50,000. Maine Science and Technology Foundation. August, 1999. Maine Department of Marine Resources, R. C. Bayer, and D. W. Donahue., funded.

Partial support for Native American High School Student Involvement in Research Activities. \$1,000. NortheastBlueberry Company, Columbia Falls, Maine. June, 1999. G. Sockabasin and D. W. Donahue., funded.

UV Pasteurization with the Model 5300 Cider Unit. \$5,300. MAFES R&D Research Funds (Department of Biosystems Science and Engineering). December, 1998. D. W. Donahue., funded.

Separation Methods of Maggot-Infested Blueberries in the IQF Processing Line. \$12,836. USDA-CSRS: Wild Blueberry Commission, November, 1998. D.W. Donahue and F. A. Drummond., funded.

Instrumented Flow Control for Laboratory. \$5,000. UMaine Regular Faculty Research Funds Competition -University of Maine, November, 1998. D. W. Donahue., funded.

Wild Blueberry Production and Processing Technologies. \$29,860. USDA-CSRS: Wild Blueberry Commission, November, 1997. D.W. Donahue., funded.

Development of an Escherchia coli Detection System for Liquid Food Applications. \$99,929. NSF/STTR. February, 1998. J. C. Andle (BIODE, Inc.) and D. W. Donahue., funded.

A Prototype Liquid Food Sampling System for Biosensing Applications. \$50,000. USDA-Seed Grants. December1998. D. W. Donahue., not funded.

Investigations of Physical Properties of Biological Materials. \$24,030. USDA-NRI Equipment Grants Program, February, 1997. D. W. Donahue., funded.

Equipment Evaluation for Field Moisture Removal in Maine Wild Blueberries. \$5,000. UMaine Summer FacultyResearch Funds, February, 1997. D. W. Donahue., funded.

Assessment of Near Infrared Photographic Images on IPM for Maine Wild Blueberries. \$2,695. UMaine Agriculture and Forestry Experiment Station, January, 1997. D. W. Donahue, F. A. Drummond, D. E. Yarborough and S. A. Sader., funded.

Process Design for the Application of Gum Surfactant to IQF Maine Wild Blueberries. \$10,800. USDA-WildBlueberry Commission, November, 1996. D. W. Donahue and A. A. Bushway., funded.

Determination of Aeration Rates, End-product Quality and Economic Analysis of In-vessel Composting of Crab Processing Wastes. \$87,960. US Dept. of Commerce/NOAA, May, 1996. R. M. Seymour and D. W. Donahue., funded.

Evaluating Hands-on Design Courses for First Year Students. \$3,300. UMaine Student Retention Grant Program, February, 1996. L. E. Katz and D. W. Donahue., funded.

Summary: 40 refereed journal articles, **over half with undergraduates as co-authors**; 12 refereed proceedings, two book chapters, 10 technical engineering reports and reviews, and 150+ professional scientific/engineering presentations. Most all these works were with graduate and/or undergraduate students as co-authors.

PUBLICATIONS, REPORTS AND PROCEEDINGS

Published (Refereed)

- Microorganisms in Foods 7: Microbiological Testing in Food Safety Management, 2nd edition, 2018. International Commission on Microbiological Specifications for Foods. (Co-Author: D. Donahue). Springer, USA.
- FAO/UN. Statistical Aspects of Microbiological Criteria Related to Foods: A Risk Managers Guide (#24, Microbiological Risk Assessment Series). 2016. Food and Agriculture Organization of the United Nations.(Co-Author: D. Donahue).
- FAO/WHO. 2015. Development of statistical process sampling methods for Ready-to-Use Foods (RUF) for Management of Moderate and Severe Acute Malnutrition in developing nations (D.W. Donahue, FAO). Coleman, M.E., H.M. Marks, T. A. Bartrand, D. W. Donahue, S. A. Hines, J. E. Comer and S. C. Taft. 2017. Modeling Rabbit Responses to Single and Multiple Aerosol Exposures of *Bacillus anthracis* Spores, *Risk Analysis*, 37:5, pp. 943-957.
- Council of Canadian Academies (Donahue, Co-Author, Panelist). 2011. Healthy Animals, Healthy Canada: The Expert Panel on Approaches to Animal Health Risk Assessment. Council of Canadian Academies, Ottawa, Canada.
- Dickey, ID, Donahue, DW, Peshlov, B, Nohe, A, Khalil, A, Mason, M, Zhang, R, Aponte, C, Davisson, TH, Engelman, D, Hawkins, M. 2009. Pore size modulates strength of soft-tissue in-growth and growth factor expression into novel porous titanium implants, *Transactions of the Orthopaedic Research Society*.
- Peshlov, B., Dowell, F., Lu, R., and D. Donahue. 2009. Comparison of three NIR spectrophotometers for infestation detection in wild blueberries using multivariate calibration models, *Journal of Near-Infrared Spectroscopy*, 17:203-212.
- Dickey, ID, Donahue, DW, Peshlov, B, Aponte, C, Davisson, TH, Hawkins, M. 2008. Pore size and morphology modulate strength of soft tissue in-growth into porous titanium implants, *Transactions of the Orthopaedic Research Society*, #1865, Vol. 33.
- Donahue, D.W., Peshlov, B., Dowell, F.E., Drummond, F.A. 2006. Detecting infestation in Maine wild blueberries using NIRS, *The NIR Spectrum*, 1, 6-9.
- Food and Drug Administration (FDA). 2005. Quantitative Risk Assessment on the Public Health Impact of Pathogenic *Vibrio parahaemolyticus* in Raw Oysters. (Chair of technical/analytical review team: D. W. Donahue). July.
- Eastern Research Group (Editors). 2005. Microbial Risk Assessment Workshop. EPA Contract No. 68-C-02-060. Lexington, MA. February. (Presenter and author: D. W. Donahue).
- Donahue, D. W., N. Canitez, and A. A. Bushway. 2004. Evaluation of a Low-cost UV treatment for Apple Cider. *Journal of Food Processing and Preservation*, 28:368-387.
- Wentworth, D.S., Skonberg, D., Donahue, D.W., and Ghanem, A. 2004. Application of Chitosan Entrapped β -galactosidase in a Packed Bed Reactor System. *Journal of Applied Polymer Science*, 91(2): 1294-1299.
- Institute of Medicine, National Research Council. 2003. Scientific Criteria to Ensure Safe Food. Institute of Medicine, The National Academies. Washington, DC: National Academies Press. (Steering

- committee and co-author: D. W. Donahue).
- Benoit, P. W. and D. W. Donahue. 2003. Review: Methods for Rapid Separation and Concentration of Bacteria in Food that Bypass Time-consuming Cultural Enrichment. *Journal of Food Protection*, 66(10):1935-1948.
- Ziegler, C. R., D. W. Donahue, F. A. Drummond, and S. N. Smith. 2002. The Ecological Economics of Insecticide Use Associated with the Maine Potato Industry Based Upon a Producer Survey. *Journal of Alternative Agriculture*, 17(4):159-166.
- Wentworth, D. S., D. W. Donahue, and R. M. Seymour. 2002. Economic Analysis of Composting Crab Processing Waste. *Compost Science and Utilization*, 10(1): 47-56.
- Ziegler, C. R., D. W. Donahue, F. A. Drummond, and S. N. Smith. 2002. The Ecological Economics of Insecticide Use Associated with the Maine Potato Industry Based Upon a Producer Survey. *Journal of Alternative Agriculture*, 17(4):159-166.
- Wentworth, D. S., D. W. Donahue, and R. M. Seymour. 2002. Economic Analysis of Composting Crab Processing Waste. *Compost Science and Utilization*, 10(1): 47-56.
- Skonberg, D. I., D. W. Donahue, R. C. Bayer, E. Floreto, and J. G. Riley. 2001. Quality Evaluation of American Lobsters Fed Diets Containing Crab Processing Waste. *Journal of Aquatic Food Product Technology*, 10(2):17-29.
- Seymour, R.M., D. W. Donahue, M. Bourdon, J. R. Evans, and D. Wentworth. 2001. Intermittent Aeration for In-vessel Composting of Crab Processing Waste. *Compost Science and Utilization*, 9(2):98-106.
- Ziegler, C.R., D.W. Donahue, F.A. Drummond, and S.N. Smith. 2000. Agrelation: a computerized decision-making tool for Colorado potato beetle population management and environmental quality concerns. *Maine Agricultural and Forest Experiment Station Technical Bulletin No. 176*.
- Donahue, D. W. and P. W. Benoit, B. J. Lagasse, and W. R. Buss. 2000. Sensory, Instrumental and Neural Network Evaluation of Maine Wild Blueberries for the Fresh Pack Market. *Postharvest Biology and Technology*, 19: 221-228.
- Benoit, P. W., D. W. Donahue, A. A. Bushway, J. A. Storey, and T. M. Player. 2000. Surfactant Application System to Prevent Anthocyanin Leakage of IQF Blueberries. *Journal of Food Quality*, 23(3):271-282.
- Long, D. W., F. A. Drummond, E. Groden, and D. W. Donahue. 2000. Modeling *Beauveria bassiana* Horizontal Transmission. *Agricultural and Forest Entomology*, 2:19-32.
- Long, D. W., F. A. Drummond, E. Groden, and D. W. Donahue. 1999. Modeling Insect-Pathogen Dynamics. *Trends in Entomology*, 2:55-62.
- McKeage, K. K, D. K. Skinner, R.M. Seymour, D. W. Donahue, and T. Christensen. 1999. Implementing an Interdisciplinary Marketing/Engineering Course Project: Project Format, Preliminary Evaluation and Critical Factor Review. *Journal of Marketing Education*, 21(3):217-231.
- Donahue, D. W., A. A. Bushway, J. M. Smagula, P. W. Benoit, R. A. Hazen. 2000. Assessment of Pre-harvest Treatments on Maine Wild Blueberry Fruit Shelf-life and Processing Quality. *Small Fruits Review*, 1(1):23-34.
- Donahue, D. W., A. A. Bushway, K.E. Moore, and B. J. Lagasse. 1999. Evaluation of Current Wining Systems for Maine Wild Blueberries. *Applied Engineering in Agriculture*, 15(5):423-427.
- Donahue, D. W., R. C. Bayer, J. G. Riley, A. A. Bushway, P. B. Brown, R. A. Hazen, K. E. Moore, and D. A. deBruyne. 1999. The Effect of Soy-based Diets on Weight Gain, Shell Hardness and Flavor of the American Lobster (*Homarus americanus*). *Journal of Aquatic Food Product Technology*, 8(3):69-77.
- Donahue, D. W., A. A. Bushway, K. E. Moore, and B. J. Lagasse. 1999. Maine Wild Blueberries Field Wining Systems. *MAFES Technical Bulletin No. 174*, University of

- Maine, Orono.
- Donahue, D. W., D. A. deBruyne, J. D. Fecteau, J. A. Storey, and R.A. Hazen. 1999. Consumer Preference and Mechanical Property Assessment of Maine Wild Blueberries for the Fresh Pack Market. *Journal of Food Quality*, 22(5):545-551.
- Seymour, R. M., D. W. Donahue and K.K McKeage. 1999. Teaching Team-work Through Interdisciplinary Projects. Chapter One, American Institute of Chemical Engineers. February, p.1-3.
- Donahue, D. W., A. A. Bushway, K. E. Moore, R. A. Hazen. 1999. Forced Air Removal of Surface Moisture from Maine Wild Blueberries for the Fresh Pack Market. *Applied Engineering in Agriculture*, 15(2):147-152.
- Garland, M. P. and D. W. Donahue. 1998. Review of Potential Pasteurization Methods for Apple Cider. MAFESTechnical Bulletin No. 847, University of Maine, Orono.
- Donahue, D. W., R. C. Bayer, and M. Loughlin. 1998. Examination of Lead Levels in the American Lobster, *Homarus americanus*, from Three Sites in Maine. *Journal of Shellfish Research*, 17(4):1247-49.
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