# Tammy M. Bray, M.S., Ph.D.

Professor of Global Health and Nutrition, and Dean Emeritus
School of Biological and Population Health Sciences
College of Public Health and Human Sciences (CEPH Accredited)
Oregon State University

## EDUCATION

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| **Ph.D.** | Nutrition and Biochemistry, Washington State University, Pullman, WA |
| **M.S.** | Human Nutrition, Washington State University, Pullman, WA |
| **B.S.** | Nutrition and Food Science, Fu-Jen University, Taipei, Taiwan |
| **Certificate** | Senior University Administrators & Leadership Training Program, University of Manitoba, Winnipeg, Manitoba (1995) |
| **Certificate** | Gallup-Certified Strengths Leadership Coach (2017) |

## ACADEMIC APPOINTMENTS AND POSITION HELD

*2017 – Present* **Professor** in Global Health and Nutrition, and Dean Emeritus
School of Biological and Population Health Sciences
College of Public Health and Human Sciences
Oregon State University, Corvallis, OR

*2009 – 2015* **Executive Dean**
Division of Health Sciences
Oregon State University, Corvallis, OR

*2011 – 2016* **Dean and Professor (inaugural)**
College of Public Health and Human Sciences (CEPH Accredited)
Oregon State University, Corvallis, OR

*2002 – 2011* **Dean and Professor**
College of Health and Human Sciences,
Oregon State University, Corvallis, OR

*2002 – 2016* **Member of Linus Pauling Research Institute**
Oregon State University, Corvallis, OR

*2003 – 2016* **Clinical Professor**, Department of Medicine, Division of Endocrinology, Diabetes, and Clinical Nutrition, Oregon Health & Science University, Portland, OR

*1999 – 2002* **Associate Dean for Research and International Studies**
College of Human Ecology
The Ohio State University, Columbus, OH

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| *1995 - 1999* | **Chair and Professor**<br>Department of Human Nutrition and Food Management<br>College of Human Ecology<br>The Ohio State University |
| *1996 - 2002* | **Professor**<br>Department of Molecular & Cellular Biochemistry<br>College of Medicine and Public Health<br>The Ohio State University |
| *1994 - 1995* | **Greenberg Scholar and Member**<br>Oklahoma Medical Research Foundation, Oklahoma City, OK |
| *1992 - 1994* | **Interim Associate Vice President Academic Affairs**<br>University of Guelph, Guelph, Ontario, Canada |
| *1991 - 1992* | **Interim Chair**<br>Department of Nutritional Sciences, University of Guelph,<br>Guelph, Ontario, Canada |
| *1988 - 1992* | **Graduate Studies Chair**<br>Department of Nutritional Sciences, University of Guelph,<br>Guelph, Ontario, Canada |
| *1989 - 1995* | **Professor**<br>Department of Nutritional Sciences, University of Guelph,<br>Guelph, Ontario, Canada |
| *1985 - 1986* | **Visiting Professor**<br>Department of Food Sciences and Nutrition, Fu-Jen University, Taipei, Taiwan (1/2 year)<br>Department of Veterinary Pharmacology and Toxicology, School of Veterinary Medicine, University of California, Davis, CA (1/2 year). |
| *1983 - 1989* | **Associate Professor**<br>Department of Nutritional Sciences, University of Guelph,<br>Guelph, Ontario, Canada |
| *1978 - 1983* | **Assistant Professor**<br>Department of Nutritional Sciences, University of Guelph,<br>Guelph, Ontario, Canada |
| *1974 - 1978* | **Post-Doctoral Research Associate**<br>Department of Animal Sciences, Washington State University,<br>Pullman, Washington PROFESSIONAL APPOINTMENTS***2016-*** |

## PROFESSIONAL APPOINTMENTS

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| *2015 -* | Member of Board of Trustees, Good Samaritan Hospital Foundation |
| *2018 -* | Member of Erkkila Endowment Committee |
| *2018 -* | Member of Board of Director, Benton Community Foundation |
| *2019 -* | Member of Board of Trustees, Fu-Jen University Foundation |
| *2015 - 2019* | Member, National Community Advisory Board, Kaiser Permanente Health Plan Foundation, Inc., (KPHP), Oakland, CA |
| *2013 – 2015* | Member of Advisory Board for North West Region Kaiser Permanente Community Fund, Portland, OR |
| *2012 - 2016* | Member of External Advisory Board, Northwest Health Foundation, Portland, OR |
| *2012 - 2015* | Board of Director*,* Board of Human Sciences, American Public and Land Grant Universities (APLU) |
| *2003 - 2014* | Member of External Advisory Council, National Space Biomedical Research Institute (NSBRI), NASA, Houston, TX |
| *2005 - 2008* | Member of NIH Study Session, National Clinical Nutrition Research Unit Initiative, NIDDK |
| *2009 - 2010* | Co-Chair*,* Oregon Health Improvement Plan, Oregon Health Authority appointed committee |
| *1998 - 2004* | Member on Grant Review Panel of NIH Nutrition Study Section |
| *1998 - 2003* | Member of Review Panel, USDA Higher Education Challenge Grant |
| *1999 – 2000* | President, The Oxygen Society (Society for Free Radical Biology and Medicine) |
| *1997 - 1999* | President-elect, The Oxygen Society (Society for Free Radical Biology and Medicine) |
| *1997 - 2000* | Treasure, Society of Experimental Biology & Medicine |
| *1997 -1998* | Executive Committee Member, Association of National Nutrition Program and Department Administrators |
| *1996 – 1997* | Chair, Association of National Nutrition Program and Department Administrators |

*1999 - 2009* Member, Editorial Board, Journal of Free Radical Biology & Medicine

*1994 - 1996* Appointed Member of Selection Committee for Prime Minister's Award for Teaching Excellence in Science, Technology and Mathematics, Canada

*1993 - 1997* Member of Scientific Advisory Council, appointed by the National Institute of Nutrition (NIN)

*1993 -1995* Appointed Member of Ontario Council on Graduate Studies (OCGS) Appraisal

*1993 – 1996* Vice-Chair, Science Policy Committee, Canadian Federation of Biological Sciences, Canada

*1993* Appointed Chair of Program Evaluation for IDRC and Canadian International Development Agency (CIDA) projects in China

*1992 - 1999* Member of Editorial Board, Proceeding for Society of Experimental Biology and Medicine

*1992 – 1995* Member of the Board and Councilor, The Oxygen Society

*1991 -* Appointed Member, Canadian Network of Toxicology Centers, Canadian Government Green Plan Initiative: Inaugural Research Planning and Priority Setting Workshop

*1991 – 1993* Member of Scientific Advisory Board of the Program in Food Safety, University of Toronto, Ontario, Canada

*1991 – 1992* President, Canadian Society for Nutritional Sciences, Canada

*1990 – 1991* Vice-President, Canadian Society for Nutritional Sciences, Canada

*1989 – 1991* Representative on Science Policy Committee, Canadian Federation of Biological Societies, Canada

*1986 – 1992* Member of the Editorial Board, Journal of the Life Science Advances

*1984 – 1987* Councilor, Board of Directors, Canadian Society for Nutritional Science, Canada

*1984 – 1996* Associate Editor, Canadian Journal of Physiology and Pharmacology, Canada

## PROFESSIONAL MEMBERSHIPS

*2002 - Present* Member of Oregon Public Health Association
*2002 - Present* Member of American Public Health Association
*2002 - Present* Member of American Society of Nutritional Sciences

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| *2002 - 2016* | Member of Association of Schools and Programs of Public Health (Accredited Institution membership) |
| *2002 - 2016* | Member of Board of Human Sciences (BoHS), American Public Land Grant University (APLU) |
| *1995 - 2016* | Member of Society of Toxicology |
| *1987 - 2016* | Member of Society of Free Radical Biology and Medicine |
| *1980 - 2010* | Member of Society of Experimental Biology and Medicine |

## PROFESSIONAL RECOGNITIONS AND AWARDS

*2019* *Honorary Lifetime Member,* Center for Innovation and Development, Fu- Jen University, Taipei, Taiwan

*2018* *International Service Award,* in recognition of exemplary contribution to the internationalization of Oregon State University

*2018* *Fulbright Specialist,* appointed by the US Department of State, Bureau of Educational and Cultural Affairs

*2017* *Service Award, National Community Advisory Board, Kaiser Permanente,* nominated by Kaiser Permanente NW

*2017* *Distinguished Alumni and Professor,* appointed by the President of Fu-Jen University, Taipei, Taiwan

*2015* *OSU Moore Family Center Red Plate Award* for Promoting Life Long Health and Wellbeing

*2014* *OSU Beaver Champion Award* presented by OSU President Ray in recognition of Achievement of Excellence for performance of the highest quality

*2013* *DeMuro Award for Design Excellence* – Hallie Ford Center for Preservation, Reuse, and Revitalization of Building for Academic

*2010* *Administrative Leadership Award,* Association for Gerontology in Higher Education (AGHE)

*2009* *Women Pioneering Hall of Fame Award*, College of Agricultural, Human, and Natural Resource Sciences, Washington State University, Pullman, WA

*2007* *Boss of the Year Award*, presented by the Professional Faculty Association, Oregon State University, Corvallis, OR

*2002* *Woman Pioneering Award,* College of Agricultural, Human and Natural Resource Sciences, Washington State University, Pullman, WA

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| *2001* | *Selected Member* to testify before the Congress, Subcommittee on Appropriations For American Society for Nutritional Sciences |
| *1999* | *Outstanding Alumni Award*, Fu-Jen University, Taipei, Taiwan |
| *1999-2000* | *Selected Excellent Faculty Member* for NSF Short Courses for College Teachers, Faculty Development Program, National Science Foundation |
| *1998* | *Distinguished Alumni Award,* presented by the College of Human Ecology, Fu-Jen University |
| *1994* | *Greenberg International Scholar Award*, Oklahoma Medical Research Foundation, Oklahoma City, OK |
| *1992* | *Excellence in Teaching Award*, College of Biological Sciences, University of Guelph, Ontario, Canada |
| *1990* | *Certificate of Innovation Award*, University of Guelph, Ontario, Canada |
| *1991* | *Excellence in Research Award*, presented by the Sigma XI, University of Guelph Chapter, Ontario, Canada |
| *1983-1998* | *Graduate Student Award* for Outstanding Research from the Canadian Society for Nutritional Sciences for three graduate students who were under my supervision: *Stan Kubow* (*1983*), *Jim Kirkland* (*1985*), and *Carla Taylor* (*1989*). *Carla Taylor* was a recipient of the Finalist of AIN Procter Gamble Graduate Student Research Award (*1990*). *Karen Acton* received the Award of Distinction for her thesis presentation and defense (*1989*), *Karen Iles* received the Young Investigator Award – The Oxygen Society: Free Radical Biology and Medicine (1997), *Emily Ho* received Young Investigator Award – Oxygen Club of California (1998) |
| *1974* | *First Place Awards*, Competition Paper for graduate student, American Society of Animal Sciences |
| *1973* | *Award of Merit* for the best graduate student paper presented at the 16th Annual Meeting of the Society for Experimental Biology and Medicine |

## ACADEMIC ADMINISTRATIVE ACTIVITIES

### At Oregon State University

1. Dean of College of Health and Human Sciences at Oregon State University (2002 – 2011), Dean of College of Public Health and Human Sciences (2011- 2016) and Executive Dean of Division of Health Sciences (2009 – 2015).

- Restructured and built a newly merged College of Health and Human Sciences (2002 – 2008) from College of Home Economics and College Health and Human Performance

- Built research and outreach Centers:
    - ***Hallie Ford Center for Healthy Children and Families***, established 2009, with a new building named Hallie Ford Center (received $8M from donors, and $5M from State building fund);
    - ***Center for Healthy Aging Research***, established 2004 (one of 6 selected Provost Strategic Investment Awards for $1.5M each), received funding for naming one Endowed Director ($2M) and one Endowed Chair ($2M)
    - ***Moore Family Center for Whole Grains Foods, Nutrition, and Preventive Health***, established 2012 (received $5M from Bob Moore Family and state matching fund $675,000), named one Endowed Director ($3M) and one endowed Professor of Practice ($1M)
    - ***Center for Global Health***, established January 2014, cultivated funding to name one Endowed Professor ($2M).
    - ***OSU Center for Health Innovation***, established September 2015 (received $1.2 M funding from health industry support).

- Responsible for the first ever OSU Capital Campaign for the College of Public Health and Human Sciences surpassing the $40 M goal (2007-2014).

- Leading the transformation of the college to become the first CEPH accredited College of Public Health and Human Sciences in the state of Oregon (2009-2014)

- Assisted OSU central administration to select leaders for the University
    - Search Committee member for President of Oregon State University (2003)
    - Chair of Search Committee for Vice President of University Advancement (2004)
    - Member of Search Committee for CEO and President of OSU Foundation (2004)
    - Chair of Search Committee for the Dean and Director of OSU Extension Service (2005)
    - Chair of Search Committee for the Dean of College of Liberal Art (2007)
    - Chair of Search Committee for the Dean of College of Pharmacy (2009-2010)
    - Chair of Search Committee for the Dean of College of Engineering
    - Appointed as the Executive Dean of Division of Health Sciences at OSU (2009)
    - Chair of Search Committee for the Dean of College of Engineering (2012)

- Services to OSU in shaping new and innovative initiatives:
    - Committee member of University Budget Committee (2003 – present)

- Committee member of University International Strategies Council (2012-present)
- Committee member of Executive Commercialization Advisory Committee (2012 – 2015)
- Council member of Presidential Charged Leadership Council for Equity, Inclusion, and Social Justice (2012 – 2015)

- Developed College Leadership Development Programs for Faculty and Students.
  - Faculty Leadership Development Workshop (2010, 2012, 2015 and 2016) with 10 selected faculty participants for 6-months duration.
  - Graduate Student Leadership Development Workshop (2013 and 2014) with selected 12 students (MS/MPH/PHD) for one day.
  - Undergraduate Student Leadership Development Workshop (2009, 2012, 2014) with 10 selected undergraduate students for one day.

- Integrated Extension Programs, Family and community Health and 4-H into the accredited College of Public Health (2011- 2016)

- Established the College Committee on Enhancement for Equity, Inclusion and Diversity and awarded four faculty positions from the Provost's Initiatives on Faculty Diversity Hiring (2015).

- Established taskforce for future directional guidance of the college and produced a blueprint of CPHHS Vision 2025 (2016).

**At The Ohio State University**

1. Chair of the Department of Human Nutrition and Food Management (1995 – 1999).

- The overall goal as the chair was to increase the quality of departmental programs, to enhance the student learning experience, to build the reputation and visibility of the department, and to hold everyone together in positive morale and high spirits. The followings are a few specific working examples:

  - Established the first Interdisciplinary Ph.D. program in nutrition in the state of Ohio – OSU PhD Program in Nutrition (OSUN) with faculty from four colleges – Human Ecology; Food, Agricultural and Environmental Sciences; Veterinary Sciences; Public Health and Medicine. This program allows faculty and students from various departments and colleges to work collaboratively together

  - Restructured the Hospitality Management curriculum to allow direct admission and completion of a bachelor degree within two years for students who previously completed two years of community college. Established the first "Two + Two Consortium Hospitality Management" program with five community colleges and two regional campuses in the state of Ohio. This project increased the

accessibility and diversity of our program. It also increased the visibility of our program across the state.

- Established an Industrial-Academic Research Link Program with research scientists from industry to become Industrial Adjunct Faculty or Executive in Residence of the department. This Adjunct Faculty collaborated with faculty in the graduate program to conduct research, supervise graduate students, or provide research funding and project for graduate and honor students.

- Established a new and unique Dietetic Internship Program linked with Graduate Program to produce high quality dietitians with research and industrial experiences. This new program was approved by the ADA.

- Raised the visibility and impact of the department across the state and among the health professions, a new publication "Nutrition Communiqué to Health and Education Professionals", which covers the cutting edge research, practice and application of nutrition research with faculty in Extension was initiated. We introduced the research and teaching activities of faculty in the department in this publication. This publication was sent to dieticians, high school science teachers, and prime care physicians in the state of Ohio.

- Working with the Comprehensive Cancer Centre, we published a cookbook "Champions in the Kitchen – Great Food for Healthy Living". We applied nutrition principles to help cancer survivors. This cookbook has won the Publisher Award. It raised money and visibility for the department.

- Promoted departmental diversity through recruitment and hiring. I have worked with the Vice-Provost of Minority Affair to obtain financial support to recruit an established minority faculty member with tenure. I also worked with Personnel Director and Vice President of Student Affairs to support an Academic Professional position for minority students. I worked with the Dean to establish Kennedy Associateship for actively recruiting minority students for nutrition.

- The most time consuming challenge was to cultivate a scholastic and research culture where the interdepartmental and interdisciplinary research projects and programs would flourish. It took many small steps to do this, including inviting speakers from various disciplines on campus and from industry to the graduate seminar series, providing opportunities for faculty, and students to broaden their contacts, forming journal club, providing funding for attending national meetings, and positively reinforce all big and small accomplishments.

2. As Associate Dean of Research and International Studies (1999 – 2002).

   I was asked by the Dean to take on a newly structured position as Associate Dean of Research and International Studies to meet the need of the college. As part of the OSU university-wide Academic Plan, I was able to complete the following:

- Increased the quantity and quality of faculty research in the college – each faculty is expected to publish an average of two refereed journal articles per year and at least 25% of each faculty member's publications placed in top-tier peer-reviewed journals.

- Increased and diversified revenue in the college – increased revenue generated from external grants and contracts by 50% and increases to 50% the number of faculty securing extramural funding.

- Enriched and diversified the student experience for undergraduate and graduate students by adding two new international/global awareness activities including study abroad program.

- Collected baseline data for the quantity and quality of faculty research in the college – using ISI citation index and journal citation report system to assess the baseline.

- Conducted Grantsmanship Workshops for selected faculty members to ensure success of their proposals to NIH, USDA and other federal funding agencies. This program increased revenue generated from external grants and contracts by more than 50%, and the number of faculty submitting grant proposals to federal agencies have also increased significantly.

- Established study abroad program with four areas of the Pacific Rim – Taiwan, Hong Kong, Japan and Korea.

- Received $200,000 Interdisciplinary and Multi-Institutional program for establishing the Ohio Bionutrition Research Institute from the Office of Vice-President for Research, as one of 8 selective research foci of investments at OSU.

**At the University of Guelph**

1. Graduate Studies Coordinator, Department of Nutritional Sciences (1988-1992).

- Streamlined the admission, curriculum requirements and graduate guidelines
- Standardized the process for admission, progress report and evaluation and completed the departmental graduate handbook
- Organized the Graduate Student Club, Journal Club, Get-to-Gather Friday Seminar Series, the Annual Graduate Student 3Rs Seminar (Rules, Rights, & Responsibilities), and Annual Career Nights.
- Developed recruitment strategies with faculty and graduate student representatives and doubled the enrolment numbers
- Developed and established a new non-theses knowledge-based Master Nutrition Science (MNS) graduate program for health professionals.
- Developed a database of past graduate students and conducted self-study for Ontario Council on Graduate Studies Appraisal.
- In 1992, the graduate program in Nutritional Sciences at the University of Guelph was rated in the top category and was considered the #1 nutrition department in Canada.

2. Interim Chair of the Department of Nutritional Sciences (1991-1992).

- I was selected to be the Interim Chair for one year while I still hold the chair of the departmental graduate studies when the Chair of the department was on sabbatical leave.
- I had administrative responsibility for 14 tenure track faculty members, 4 non-tenure track research associates, 35 GTA/GRA, 4 clerical staff and 4 technical staff and 200 undergraduate and 40 graduate students.
- Immediately we faced a university-wide 15% budget cut. I learned how to use an open budget flowchart and completed the departmental budget reduction with all faculty and staff working together.
- To compensate the reduction of the departmental resources, I worked with the food industry to increase external funding to support the department and with members of council at OMAF (Ontario Ministry of Agriculture and Food) and increased our budget by 10%.
- Worked with the University Toxicology Program Council and developed a Nutritional Toxicology Program at the undergraduate and graduate levels in the department.
- The department initiated the first Community Forum on specific nutrition topics, and the first series of Continuing Education courses in nutrition.
- At the end of year, we were allowed to hire the first faculty member in Molecular Nutrition and offered a new graduate course in Nutrition and Gene Expression. With a strong sense of collaboration and open communication, I feel the spirit of the department was high even in a climate of budget reduction.

3. Interim Associate Vice President of Academic Affairs (1992-1994).

- At the end of my one-year interim chair, I was asked to become the Interim Associate Vice President of Academic Affairs.
- I spent 20 months in this position and responsible for all undergraduate programs, physical and space facilities, the Registrars, the Admission Office, the University Senate, Teaching Service and Support, International Programs, Study-Abroad Programs, Co-op Internship Programs, etc. And, despite the ongoing period of budget reductions, I initiated many projects, including:
    - Consolidation and streamlining of the staff of all university teaching support and services under one roof to become Teaching Resource Centre (TRC) to provide the university community with an enhanced teaching culture.
    - Development of Learning Media Centre Program, as part of TRC, using new media and interactive learning resources and technologies to develop more self-directed learners and to reform the curriculum.
    - Life-long Learning Council, an initiative to open distance education courses to life-long learners and open-learning students.
    - Summer Global Village at Guelph, an initiative to enhance international education activities through the summer at Guelph.
    - Guelph Automated Academic Student Service (GAASS), an initiative to convert and enhance the Guelph Student Information System for the preparation of total

automated academic services, including telephone registration and electronic transcripts.
- Guelph University Unified Card, an initiative to unify university ID cards with multifunctional capacity, including library ID, building security, hospitality credit, and athletic center for students, staff and faculty.
- Worked with the Vice President and University Administration to respond to the first Nation-wide University Rankings in Canada. The University of Guelph was ranked number 3 among all comprehensive universities in Canada.

## RESEARCH INTERESTS

I have developed the following areas of research foci during various stages of my research career.

### Global Health and Nutrition

My research's current focus is to help turn the tide against child malnutrition worldwide. Child malnutrition is a critical global challenge, and India has the highest prevalence. With growing awareness of the impact of food production on the ecosystem, we find alternative protein sources as a feasible, environmentally sustainable protein supplement to combat childhood malnutrition in India. One possibility is a fish protein isolated from the underutilized fish discarded (by-catch or waste fish) in the ocean each year because of the overfishing of particular fish species for commercial culinary consumption. We will evaluate the effectiveness of this ocean-based protein on various biological and health indicators. We will also conduct a protein nutrition intervention study in India's malnourished children by collaborating with a local non-profit organization and a California company that provides the ocean-based fish protein. We further design an approach that promotes Sustainability, Community Ownership, Partnership, and Empowerment (SCOPE) to supplement protein in a culturally appropriate manner to combat child malnutrition in India's resource-limited communities.

### Antioxidants and free radical metabolism in health and disease

The focus of this research is to use ‘whole food’ approach in investigating the role of antioxidants and anti-inflammatory properties of food in the prevention of chronic diseases including diabetes and cancer. The specific aims of the research are: 1) to elucidate the mechanisms by which antioxidant and anti-inflammatory nutrients reduce oxidative stress and prevent free radical-induced diseases, and 2) to understand how nutritional deficiency in quantity and quality exacerbates the oxidative stress and enhances the susceptibility to free radical mediated diseases.

### Nutrition and gene expression

The focus of this area of research is to investigate the interaction of nutritional status and genetic expression in disease prevention and health promotion. The specific aims are: 1) to

understand the importance of nutrients in controlling the gene expression of transcription factors, NF-κB and AP-1, which influences the immune defense system, and 2) to study the interaction of nutrition and the expression of the first line antioxidant enzymes in normal and disease states.

**Food borne toxin in the pathogenesis of diseases**

The goal of this research is to understand the role of food born toxin in the pathogenesis of diseases including acute pulmonary edema and emphysema or shipping fever in ruminants. We focus on the interaction of nutrition and microbial ecology, mechanism of action, sequence of toxicological events and tissue selectivity of toxicity and prevention strategies for lung disease in cattle.

## PUBLICATIONS

### Refereed Journal Articles And Book Chapters Published

Yang, KP, Wong, CP, Khanna, SK, and **Bray, TM**, (2020) Supplementation of Ocean-Based Advance Protein Powder (APP) for Restoration of Body Growth, Bone Development and Immune Functions in Protein Malnourished Mice: Implications for Preventing Child Malnutrition. *Ecology of Food and Nutrition* 55(5): 552-574. https://doi.org/10.1080/03670244.2020.1754811

Wong, CP, **Bray TM** and Khanna, S, (2019) Growth, Bone Health, and Cognition: Nutritional Evaluation of a Sustainable Ocean-Based Advance Protein Powder (APP), *Ecology of Food and Nutrition* 58(2): 80-92. https://doi.org/10.1080/03670244.2019.1565759

Wong, CP, Nguyen, LP, Noh, S, **Bray, TM**, Bruno, RS and Ho, E. (2011). Induction of T-regulatory cells by green tea polyphenol EGCG. *Immunol Letters*, 30; 139(1-2): 7-13.

Hsu, A., Bruno, R.S., Lohr, C.V., Dashwood, R.H., **Bray, TM**., and Ho, E. (2011) Dietary soy and tea mitigate chronic inflammation and prostate cancer via NFkB pathway in the Noble rat model, in vivo. *J. Nutr. Biochem*; 22(5): 502-10

Hsu, A., **Bray, TM**, Helferich, WG, Doerge, D. and Ho, E. (2010) Differential effects of whole soy extract and soy isoflavones on apoptosis in prostate cancer cells. *Exp. Biol. Med*. 235(1): 90-97.

Hsu, A., **Bray, TM** and Ho, E. (2010) Anti-inflammatory effects of soy and tea in prostate cancer prevention. *Exp. Biol. Med*; 235(6): 659-67.

Wong, CP, **Bray, TM** and Ho E (2008) Induction of proinflammatory response in prostate cancer epithelial cells by activated macrophages. *Can Letters*, 276(1): 38-46. PMCID: PMC2684862

Colgate, EC, Miranda, C. Stevens, JF, **Bray, TM**., and Ho, E. (2007) Xanthohumol, a prenylflavonoid derived from hops, inhibits NF-kappaB activation and induces apoptosis in BPH-1 and PC3 prostate epithelial cells. *Cancer Letters*. 246(1-2): 201-9

Bruno, R.S., SW Leonard, R Ramakrishnan, J Atkinson, TJ Montine, **TM Bray**, MG Traber. (2006). Vitamin C supplementation prevents faster vitamin E disappearance in smokers. *Free Rad Biol Med*; 40:689-697.

Lim, Y.S., Levy, M.A., and **Bray, TM**. (2006) Dietary supplementation of N-acetylcysteine enhances early inflammatory responses during cutaneous wound healing in protein malnourished mice. *J Nutr Biochem*. 17(5): 328-36.

Standford, K., McAllister, T.A., Ayroud, M., **Bray, TM**., and Yost G. S. (2006) Effect of dietary melengestrol acetate on the incidence of acute interstitial pneumonia in feedlot heifers. *Can. J. Vet. Res.* 70: 218-225.

Ohtsu, H., Ho, E.,Huang, YS., Chuang, LT and **Bray, TM**. (2005) Conjugated Linoleic Acid Modulates Proliferation and Activation of NFkB and AP1 in Prostate Cancer Cells. *Nutr. Res*. 25: 655-662.

Hathcock, JN, Azzi, A. Blumberg, J. **Bray, TM.,** Dickinson, A. Frei, B. Jialal, I., Johnston, C.S., Kelly, F.J. Kraemer, K., Packer, L., Parthasarathy, S. Sies, H., and Traber, M.G. **(2005) Vitamins E and C are safe across a broad range of intakes.** ***Am. J. Clin. Nutri.*** **81 (4): 736-745.**

Bruno RS, Ramakrishnan, R., Montine, TJ., **Bray, TM**., Traber, MG. (2005). Alpha-Tocopherol disappearance is faster in cigarette smokers and is inversely related to their ascorbic acid status. *Am. J. Clin. Nutr*, 81(1): 95-103.

Bruno, R.S., SW Leonard, J Li, **Bray**, **TM,** Traber, MG. (2005). Lower plasma alpha-CEHC following deuterium labeled alpha-tocopherol supplementation demonstrates decreased vitamin E metabolism in smokers. *Am J Clin Nutr*; 81(5): 1052-9.

Chuang, L.T., Thurmond, J.M., Liu, J.w., Mukerji, P., **Bray, TM**., and Huang, Y.S. (2004). Effect of conjugated linoleic acid on delta-5 desaturase activity in yeast transformed with fungal delta-5 desaturase gene. *Mol. Cell. Biochem.* 265:11-18.

Ho, E., Boileau, TMW and **Bray, TM**. (2004) Dietary influences on endocrine-inflammatory interactions in prostate cancer. *Arch. Biochem. Biophys.* 428: 109-117.

Lim, Y.S. Levy M.A. and **Bray, TM**. (2004). Dietary zinc deficiency alters early inflammatory responses during cutenous wound healing in weanling CD-1 mice. *J. Nutr*. 134:811-816.

**Bray, TM**. and Levy, M.A. (2004) Dietary zinc in brain development, behaviour and neuropathology. In Nutritional Neuroscience: Overview of an Emerging Field. Editor: Chandan Prasad. CRC Press, pp. 273-286.

Leonard, SW, Bruno, RS, Ramakrishnan, R, **Bray, TM,** Traber, MG. (2004). Cigarette smoking increases human vitamin E requirements as estimated by plasma deuterium-labeled CEHC. *Ann NY Acad Sci*; 1031: 357-360.

Leonard, SW, Bruno, RS, Paterson, E, Schock, BC, Atkinson, J, **Bray, TM**, Cross, CE, and Traber MG. (2003). 5-Nitro-g-Tocopherol Increases in Human Plasma Exposed to Cigarette Smoke In-Vitro and In-Vivo. *Free Radical Biology and Medicine* 35:1560-1567.

Boileau, Thomas W.M., **Bray, T.M.**, and Bomser J.A. (2003) UVA radiation modulates nuclear factor kappa B (NFkB) activation in human lens epithelial cells. *J. Biochem. Molecular Toxicology* 17:108 -113.

**Bray, TM**. and Li, J. 2003. Nutrition and Phase II reaction: the role of glutathione. In *Oxidative Stress and Aging: Advances in Basic Science, Diagnostics and Intervention.* Eds. Richard Cutler and Henry Rodrigues. World Scientific Publishing Company, New Jersey, USA.

Loneragan, GH, Morley PS, Wagner JJ, Mason GL, Yost GS, Thoren, MA, Wittum,TE, and **Bray TM**. 2002. Effects of feeding aspirin and supplemental vitamin E on plasma concentrations of 3-methylindole, 3-methyleneindolenine-addut concentrations in blood and pulmonary tissues, lung lesions and growth performance in feedlot cattle. *Amer. J. Vet. Res*. 63: 1641-1647.

Li Jun, Wang H., Stoner, G.D., and **Bray, TM.** 2002**.** Dietary supplementation with cysteine prodrugs selectively restores tissue glutathione levels and redox status in protein-malnourished mice. *J. Nutr. Biochem*. 13:625-633.

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## INVITED PROFESSIONAL PRESENTATIONS OR KEYNOTE SKEAKER OF CONFERENCE OR WORKSHOP

| Year | Invited by | Title and Responsibility |
|---|---|---|
| *2020* | Office of Vice President, Linn-Benton Community College | *Conducted one 3 hour workshop on "Discovery the Talents and Strengths for Leadership" to the selected young faculty at LBCC* |
| *2020* | Office of Human Resources, Oregon State University | *Conducted three 4-hour workshops on "Leading through a Deep Understanding of Your Talents" and "The Role of Listening and Heighted Self-Awareness in Leadership" in the "Journey into Leadership" to faculty and staff at OSU* |
| *2019* | Office of Financial Aid, OSU | *Conducted one 2 hour workshop on "How to Use My Strengths and Talents for the Success of the Students at OSU" to the staff (~20) in the Office of Financial Aid* |
| *2019* | CEO and President of Lumina, Hospice Care for Mid-Valley, Oregon | *Conducted one 2 hour workshop on "How to Work as a Team to Advance the Greater Good Agenda for All" to the Healthcare workers in Lumina* |
| *2017-2019* | Vice Provost's Office, Oregon State University | *Appointed Peer Mentoring Facilitator for leadership. Conducted Workshops on "Distinguishing Leadership and Management" and "Tools for Managing Changes during Crisis" for School Heads, Chairs or Associate Deans at OSU* |
| *2019* | Distinguished Lecture, Vice-President for Research, Washington State University | *Live Long and Live Well – An Interdisciplinary Approach to Study 'Healthy Life'* |
| *2019* | Office of Human Resources, Oregon State University | *Conducted 2 4-hour workshops on "Leading through a Deep Understanding of Your Talents" in the "Journey into Leadership" to faculty and staff at OSU* |
| *2018* | Fulbright Taiwan | *As a Fulbright Specialist, conducted 6 workshops on "Academic Leadership Development and Capacity Building" at Fu-Jen University* |
| *2017* | Fu-Jen University as the Keynote Speaker at the Conference on Multi-Country Collaboration – USA-Taiwan-India | *Global Education in Higher Education from the OSU Perspective* |
| *2017* | The Taiwan Society of Nutritional Sciences as the Keynote Speaker at the Annual Conference in Tai-Chung. Taiwan | *Live Long and Live Well – What are the crucial factors influencing the quality of life?* |

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| *2016* | Invited speaker to the Nutrition Program in Fu-Jen University, Taipei, Taiwan | *Flipped Classroom Discussion on 'Biggest Losers and the Health Implication'.* |
| *2014* | Fu-Jen University as the Keynote speaker, Celebration of 25th year Anniversary of Human Ecology in Taiwan | *Journey to Leadership – Innovation and Transformation from Good to Great* |
| *2014* | Board of Human Sciences and Board of Agricultural Assembly as the Keynote speaker at their Annual Meeting, San Diego, CA | *Healthy Food System and Healthy People* |
| *2013* | OSU Foundation as invited speaker at the OSU Destination with Alumni and Stakeholders | *Presentation on Healthy Aging* |
| *2010* | Oregon Health Authority to chair the Committee on Oregon Health Improvement Plan – in response to Health Care Reform in Oregon | *Presentation to the Oregon Health Authority* |
| *2009* | The Society of Nutrition in Taiwan as the Keynote speaker for the 36th Annual Meeting in Taipei, Taiwan. | *Nutrition and Aging population* |
| *2006* | OSU Foundation as invited speaker at the Golden Jubilee Alumni Event, Oregon State University | *Live Long and Live Well* |
| *2005* | International Conference for 'The Original Spirit and Future Prospect of University, Taipei, Taiwan | *How do we prepare our students of tomorrow in a flat world* |
| *2005* | Fu-Jen University as Guest Lecture, Taipei, Taiwan | *Free Radical Metabolism in Health and Diseases* |
| *2004* | International Conference on 'Globalization of Academe for Future Competitiveness' Taipei, Taiwan | *Building Exchange Program of International Studies with Structure, Intention and Long View* |
| *2004* | American Dietetic Association as a keynote Speaker of Symposium at the Annual Meeting | *Putative function of anti-inflammation of lycopene in prevention of cardiovascular diseases* |
| *2004* | International Society for Free Radical Research at Austin – Invited speaker | *Anti-inflammatory function of conjugated linoleic acids* |
| *2004* | Oregon State Alumni Presentation, Portland, OR | *Taking care of life – healthy children to healthy aging* |
| *2004* | Invited speaker at Oxygen Club of California | *Effect of nutrition on the wound healing process during the complication stage of diabetes* |
| *2003* | New Century for Health Care Promotion Foundation, as the Keynote speaker for National Symposium on Free Radical Biology and its Health Implications | *Recent Advances in Free Radicals and Oxidative Stress* |

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| *2003* | NIH NCI workshop on Critical Sulfhydryl switches, Diet and Cancer Prevention | *Summary of the role of diet in balancing the switches in cancer prevention* |
| *2003* | American Aging Society Annual Meeting, Baltimore, MD | *Antioxidants and wound health in progression of diabetes* |
| *2003* | Linus Pauling Institute at the Diet and Optimum Health Conference, Portland, Oregon | *The roles of antioxidants, NFkB activation and diabetogenesis* |
| *2003* | National Taiwan University Taipei, Taiwan | *Three presentations on current research:*<br>*1. Antioxidants, NFkB and diabetes*<br>*2. Protein energy malnutrition and impaired immune defense*<br>*3. Delayed wound healing in diabetic patients* |
| *2002* | International Society for Free Radical Research – Paris, France | *The role of GSH on NFkB activation and immune response* |
| *2001* | International Conference on Biomedical Science and Food Nutrition: Nobel Prize Forum, Taipei, Taiwan | *Oxidative Stress and Health Food* |
| *2001* | South American Group for Free Radical Research, II Congress, Buenos Aires, Argentina | *The role of antioxidants and signal transduction in type 1 diabetes* |
| *2001* | The Second International Symposium on Natural Antioxidants: Molecular Mechanisms and Health Effects, Beijing, China | *The role of antioxidants in prevention of acute and chronic diseases* |
| *2001* | National Institute of Environmental Health Sciences (NIEHS) | *Site visit for Program grant review at Texas A&M – Nutrition and Environment* |
| *2001* | Ross Division, Abbott Laboratory, Columbus OH | *Seminar on the Role of Inflammation in the initiation of Type 1 diabetes and intervention of antioxidants* |
| *2001* | Department of Nutritional Sciences, University of Toronto, Toronto, ON Canada | *Assessment of Nutrition Academic Program* |
| *2001* | Second International Conference on Oxidative Stress and Aging, Technologies for Assessment and Intervention Strategies, Maui, Hawaii | *Nutrition and Phase 2 reaction: the role of glutathione* |
| *2001* | National Institute of Environmental Health Sciences (NIEHS) | *Antioxidants and Environmental Influences on Health and Diseases* |
| *2001* | Department of Anatomy and Medical Education, College of Medicine & Public Health, Columbus, OH | *Antioxidants inhibit pancreatic activation of NF-kB and prevent diabetogenesis* |

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| *2001* | American Society for Nutritional Sciences, Washington DC | *Testifying before Subcommittee on Appropriations of US Congress on Nutrition Research on Natural Supplements* |
| *2000* | Division of Nutritional Sciences, University of Illinois, Urbana-Champion, IL | *Antioxidants, NFκB and Diabetogenesis* |
| *2000* | The Oxygen Society, Annual Meeting at San Diego, CA | *Chair of Scientific Program Committee – organized the annual meeting.*<br>*Chair of Workshop on 'In vivo Assessment of Oxidative Stress and Antioxidant Status: From Concepts to Validations.* |
| *2000* | A Conference on Third-Party Review of the Evidence for Food and Supplement Claims, LSRO, Washington DC | *Invited chair of workshop* |
| *2000* | Aging and Natural Antioxidants - Satellite Symposium, Okinawa, Japan | *Antioxidants, NFκB and diabetogenesis* |
| *2000* | 10th Biennial Meeting of the International Society for Free Radical Research, Kyoto Japan | *Chair of session on Nutrition and Diseases* |
| *2000* | Department of Nutrition, Case Western Reserve University, Cleveland, OH | *Assessment of Antioxidant Status and Oxidative Stress in Health and Diseases* |
| *2000* | NSF Short Courses for College Teachers- Faculty Development Program | *Understanding the science behind nutrition (15 hours of lecture)* |
| *1999* | International Conference on Human Ecology | *Past, Present and Future of the Role of Food and Nutrition Inn Health Promotion and Disease Prevention* |
| *1999* | Annual Meeting – The Oxygen Society, New Orleans, LA | *Chair of Scientific Program Committee – organized the annual meeting* |
| *1999* | Annual Meeting – Experimental Biology – invited by the American Society for Nutritional Sciences, Washington DC | *Overview – Assessment of antioxidant properties of phytochemicals and functional food in vitro and in vivo – speaker, chair and scientific organizer of the session* |
| *1999* | Annual Meeting Experimental Biology – invited by the Society of Physiology, Washington DC | *Antioxidant defense, NfKB activation and diabetogenesis – speaker, chair and scientific organizer of the session* |
| *1999* | Ohio Food and Dairy Industry Association, Columbus, Ohio | *The antioxidant function of photochemical and functional food.* |
| *1999* | Ohio Grape and Wine Association, Toledo, Ohio | *The visible and the invisible antioxidants in the grape and wine.* |
| *1998* | Combined Annual Meeting of Nutrition Society and Food Science and Technology, Taipei, Taiwan | *Functional Food for Prevention of Cancer* |
| *1998* | Nanyang Technological University First Symposium on Free Radicals, | *Antioxidants and Nutrition: Disease Prevention and Amelioration* |

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| | Antioxidants and Oxidative Stress in Humans, Singapore | |
| *1998* | FASEB Summer Conference - Micronutrients: Trace Elements, Oregon | *Role of metals as pro and antioxidant* |
| *1998* | IX Biennial Meeting of International Society for Free Radical Research, Sao Paulo, Brazil | *Nutrition, Antioxidants and Health (chair and speaker* |
| *1997* | European Association of Nutritional Sciences Workshop, Nice, France | *Importance of vitamins beyond recommended dietary allowances* |
| *1997* | 16th International Congress of Nutrition, Montreal, Canada | *Glutathione supplementation in protein energy malnutrition (Chair and speaker)* |
| *1997* | 88th Annual Meeting of America Oil Chemist Society, Seattle | *Free radical and diseases in premature infants* |
| *1996* | Ninth International Symposium on Trace Elements in Man and Animals, Banff, AB | *Zinc nutrition and free radical mediated diseases* |
| *1996* | Second International Symposium on Soy Brussels, Belgium | *The Role of Soy in Preventing and Treating Chronic Disease (Invited Chair and discussant)* |
| *1996* | Central Ohio Diabetes Association, Columbus, OH | *Antioxidants, The Good, The Bad and The Ugly* |
| *1996* | President's Club, The Ohio state University, Columbus, OH | *Antioxidants, the Fountain of Youth?* |
| *1995* | Department of Animal Sciences, Washington State University, Conference on Nutrition and Cancer. Pullman, WA | *Lecture on Free Radical Biology and Its Relation to Carcinogenesis.* |
| *1995* | Sunnybrook Health Science Centre, University of Toronto, Conference on the Current Topics in Pharmacy Practice. | *Antioxidant Vitamins, Science or Science Fiction* |
| *1995* | National Institute of Nutrition of Canada sponsored conference on the Nutrition Recommendations - Ottawa, ON | *Building bridges for Canada-U.S. Harmonization for nutrient requirement* |
| *1995* | Gordon Research Conference, Ventura, CA | *Carotenoids, Foods and Health Perspectives* |
| *1994* | College of Pharmacy, Oklahoma University, Oklahoma City, OK | *From free radical to pneumotoxicity* |
| *1994* | Presbyterian Hospital Continued Education Courses, Oklahoma City, OK | *Antioxidants, free radicals and diseases* |
| *1994* | National Science and Technology Lecture, Ontario, Canada | *Free Radicals in Heart Disease and Cancer* |
| *1993* | FDA Public Conference Washington DC | *Antioxidant Nutrients and Cancer and Cardiovascular Disease* |

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| *1993* | The 1st annual Meeting of the Oxygen Society, Charleston, SC | *In vivo measurement of oxidative damage (chair and moderator of discussion)* |
| *1993* | 4th International Congress on Trace Elements in Medicine and Biology, Chamonix, France | *Protection against pancreatic damage by zinc* |
| *1993* | School of Dietetics and Human Nutrition, McGill University | *Interaction of nutrition and toxicology* |
| *1993* | Department of Pharmacology, University of Toronto | *Mechanism of 3-methylindole-induced lung disease* |
| *1992* | FASEB Summer Conference - Micronutrients, Copper Mountain, CO | *Chair and moderator in the session of trace element nutrition and oxidative stress.* |
| *1992* | Canadian Society for Nutritional Sciences, Annual Meeting, Victoria, BC | *Glutathione: its role in antioxidation and detoxification* |
| *1992* | Society of Toxicology Annual Meeting, Seattle, Washington | *Free radical is the cause of 3-methylindole-induced lung toxicity* |
| *1992* | Department of Nutritional Sciences, University of Toronto, Scientific Advisory Committee for Program of Food Safety, Nutrition and Regulatory Affairs | *Nutrition and toxicology - a matter of balance?* |
| *1991* | Department of Biochemistry, University of Western Ontario, London, Ontario | *Zinc deficiency and free radical metabolism* |
| *1991* | Department of Toxicology and Pharmacology, Queen's University, Kingston, Ontario | *Cell specificity and selectivity of 3-methylindole toxicity* |
| *1991* | Department of Biological Sciences, Sun-Yat Sen University, Guangdong, China | *Zinc, copper, calcium and iron, deficiency and toxicity* |
| *1991* | Department of Occupational Health, Beijing Medical University, Beijing, China | *Nutrition, drug metabolism and diseases* |
| *1991* | Sixth Heinz Institute of Nutritional Sciences (HINS), International Symposium on Maternal and Infant Nutrition, Harbin, China | *Calcium metabolism and diseases* |
| *1991* | First International Conference on Food, Nutrition and Chemical Toxicity. Surrey, England | *Effect of nutrition on chemical toxicity* |
| *1990* | Division of Nutritional Sciences, University of Illinois | *New aspects of physiological functions of zinc* |

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| *1990* | 32nd Rocky Mountain Conference, 13th International EPR, Symposium, Denver | *In vivo trapping of free radical in large animal* |
| *1990* | Dept. of Pathology, University of Michigan | *Mechanism of 3-methyloindole-induced lung toxicity* |
| *1990* | Department of Pediatrics, McMaster University, Canada | *Using modern techniques to study zinc function in the biological system* |
| *1989* | FASEB Summer Conference - Micronutrients | *Zinc function as antioxidant* |
| *1989* | Second International ESR Spin Trap Conference | *In vivo trapping nitrogen-centered free radical of 3-methylindole in the lung of goats* |
| *1989* | Department of Nutrition, McGill University, Canada | *Zinc nutrition and antioxidant function* |
| *1988* | Department of Biological Sciences, University of Montreal, Canada | *Free radical species of 3-methylindole causes lung toxicity* |
| *1989* | FDA, Washington, DC | *Is Zn physiological function as an antioxidant?* |
| *1988* | Scientific Nutrition Group, Texas A&M University | *From nutrient to toxin - effect of nutritional status* |
| *1988* | College of Pharmacy, University of Saskatchewan, Saskatoon, Saskatchewan, Canada | *Interaction of nutrition and drug metabolism* |
| *1987* | Microbiology and Nutrition Research Group, Upjohn Company | *3-Methylindole is the possible culprit for the onset of shipping fever in cattle* |
| *1987* | Symposium on Recent Advances in Nutrition Research, Taipei, Taiwan | *Using animal model for studying nutrient function in human health and disease* |
| *1986* | Eleventh Annual Meeting of the Chinese Nutrition Society, Taipei, Taiwan | *Nutrition, free radical and diseases* |
| *1985* | First International ESR Spin Trapping Meeting | *Using spin trapping agents to trap free radical in vivo* |
| *1984* | Institute of Comparative and Environmental Toxicology, Cornell University, Ithaca, N.Y. | *Nutrition and Toxicology - Food-born toxin in the pathogenesis of diseases* |

## RESEARCH GRANTS AND CONTRACTS

| Year Applied or Granted | Source | Title | Amount |
|---|---|---|---|
| *2020* (Preparation for deadline February 12, 2021) | Preparation for submission to NIH RO3 Proposal | *Proof of Concept and Testing and Positioning for Scale: Using Ocean-based Bycatch Fish to Eradicate Hunger and Protein Malnutrition in School Children* | Proposed for $100,000 |

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|---|---|---|---|
| *2019*<br>*(not funded)* | Bill and Melinda Gates Foundation (Collaborator with Sunil Khanna, PI) | *Sustainable Community Ownership, Partnership, and Empowerment (SCOPE) to Combat Childhood Malnutrition* | $100,000 for 1.5 years |
| *2019*<br>*(Not funded)* | Ministry of Education, Taiwan | *Using a Culturally Sensitive and Community Empowered Model to Reduce Malnutrition in Children of Indigenous Villages in Taiwan* | $35,000/year for 3 years |
| *2019* | Advance International, Inc | *Alternative Protein Source for Supplementing Malnourished Children in India using an Ocean-based Fish Protein* | $10,000 |
| *2017* | Advance International, Inc. | *Humanitarian Research: Evaluation of an Ocean-based fish protein in restoring Growth, Bone and Immune Health in a Mouse Model of Protein Malnutrition* | $40,000 |
| *2004 – 2009* | NIH – RO1CA107693 (PI) | *Diet, Endocrine-Immune Interactions & Prostate Cancer* | $1,300,000 |
| *2000 –2005* | NIH – RO1 DK55847 (PI) | *Antioxidants and NFκB Activation in the Initiation of IDDM* | $1,277,500 |
| *2001 – 2005* | NIH – RO1 HL53333 (Co-PI with Thomas Clanton) | *Redox Mechanisms of Respiratory Muscle Stress Adaptation* | $1,468,000 |
| *2002-2004*<br>*Not transferable to Oregon State University* | USDA-IFAFS – Multidisciplinary Graduate Education Training (PI) | *Bionutirtion – An Integrated Graduate Program linking Agriculture to Public Health at The Ohio State University* | $2,200,000 |
| *2002-2003* | Army Medical Research | *Antioxidant therapy for men with asymptomatic prostate cancer* | $97,902 |
| *2001-2002* | Central Ohio Diabetes Association | *Induction and Prolongation of Remission of IDDM* | $35,000 |
| *2001 – 2003* | Office of Vice President for Research, OSU | *The Ohio Bionutrition Research Institute – a Multidisciplinary Research Centre for Nutrition* | $200,000 |
| *1999 - 2000* | Kraft Food | *Fighting Hunger in Ohio* | $34,000 |
| *2000 – 2001* | North American Life Centre Heinz Company | *Bioavailability of Lycopene from Processed Tomato Products and its Efficacy in Modulation of Prostate Cancer* | $100,000 |
| *November, 2000* | NIH – A National Conference Grant | *The 2000 Annual Meeting of the Oxygen Society, San Diego, CA* | $30,000 |
| *July 2000 – June 2005* | NIH - An Interdisciplinary Training Program for M.D. and Ph.D. Fellows (Co-PI | *Molecular Mechanisms of Lung Inflammation* | $852,524 |

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| | with Tom Clanton and Mark Wevew) | | |
| *1999 - 2000* | Academic Enrichment Proposal. OSU – Bionutrition Center | *Three academic faculty positions in nutrition, public health and medicine* | |
| *1999 -2000* | USDA – Higher Education Challenge Grant | *Extending Nutrition as a General Education Course beyond classroom Wall* | $99,193 |
| *1999 - 2000* | OSU Graduate School (Co-PI with Dr. Larry Berliner, Chemistry) | *Graduate School Interdisciplinary Research Seminar Grant – Nitric Oxide and it's Biological Significance* | $5,000 |
| *1999* | NIH – A National Conference Grant | *The 1999 Annual Meeting of the Oxygen Society, New Orleans, LA* | $35,921 |
| *1999 - 2001* | USDA – National Research Initiative, with Drs. Tom Wittum and Paul Morley, College of Veterinary Medicine, OSU | *Mitigation of disease in feedlot cattle caused by 3-methylindole, a rumen generated toxin* | $220,000 |
| *1999-2003* | NIH – RO1 NS38315 (PI) | *Zinc Functions as Antioxidant in the BBB and protects against Oxidants* | $830,482 |
| *1998-99* | Ohio Soybean Council | *Soy Components Improve Antioxidant Status and Prevent diabetes in Children* | $112,402 |
| *1998-99* | Ross Division, Abbott Laboratory | *Tissue Distribution and Metabolism of CLA and its Antioxidant Properties* | $90,000 |
| *1998-99* | OARDC Interdisciplinary Team Research Competition - Collaboration with Drs. Tom Wittum and Paul Morley, College of Veterinary Medicine, OSU | *The Prophylactic Effects of Vitamin E and Aspirin on 3MI and BRSV Induced Respiratory Disease in Cattle* | $50,500 |
| *1998-99* | OSU Graduate School (applied with Dr. Jean Snook) | *Graduate School Interdisciplinary Research Seminar Grant* | $4,850 |
| *1997-1999* | USDA - Higher Education Challenge Grant (applied with Dr. Wayne Johnson) | *Articulation Program of Hospitality and Food Service Education in the State of Ohio* | $78,000 |
| *1997-1998* | OSU CARES (Networking Seed Grant, applied with Dr. L.J. Berliner, Dept. of Chemistry and T. Clanton, Internal Medicine) | *Free Radicals and Anti-Oxidants in Nutrition and Health Maintenance* | $6,000 |
| *1996-1997* | Central Ohio Diabetes Foundation | *The role of superoxide and nitric oxide in the pathogenesis of Type 1 diabetes* | $16,100 |

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| *1994-1995* | Ault Food Limited | *Impact of whey-based nutriceuticals on physiological defense functions in adult mice* | $57,700 |
| *1994-1997* | International Juvenile Diabetes Foundation | *Protection of Antioxidant Nutrients against Free Radicals in the Pathogenesis of Diabetes* | $100,000 |
| *1994-1999* | Natural Sciences and Engineering Research Council, Canada | *Unique Antioxidant Functions of Zn/GSH in Free Radical-mediated Diseases* | $250,000 |
| *1992-1993* | International Atomic Energy Agency | *Zinc, Metallothionine and Pathogenesis of Diabetes* | $ 20,000 |
| *1992* | National Live Stock & Meat Board | *Unique Health Promotion and Therapeutic Effects of Red Meat Consumption on Free Radical Defense and Immune Functions: Glutathione and Sulphur Amino Acids* | $ 40,000 |
| *1990-1993* | National Institute of Health, USA | *Nutrition and Free Radical Metabolism* | $300,000 |
| *1989-1992* | Natural Sciences and Engineering Research Council Innovation Grant, Canada | *Development of a Toxoid and a Diagnostic Tool for Bovine Respiratory Disease Complex* | $210,000 |
| *1979-1982*<br>*1982-1985*<br>*1985-1988*<br>*1988-1991*<br>*1991-1994* | Natural Sciences and Engineering Research Council, Canada (continuously renewed every 3 years) | *Biochemical Mechanisms of Tryptophan and 3-Methylindole Toxicity in the Lung – a prototype of chemical-induced pneumo-toxicity* | $ 37,000<br>$ 63,000<br>$ 76,000<br>$105,000<br>$126,000 |
| *1986-1989* | National Institute of Health, USA | *Zn/Cu Nutrition and Free Radical Generation in Lung* | $175,000 |
| *1986-1988* | Natural Sciences and Engineering Research Council, Canada | *In vivo detoxification of canola meal glucosinolates by dietary manipulation* | $120,000 |
| *1985* | Natural Sciences and Engineering Research Council, Canada | *Equipment grant - Spectrophotometer* | $ 14,000 |
| *1981-1982* | Ontario Cattlemen's Association, Ontario, Canada | *Effect of Potassium, Vitamin A and Antibiotics in Shipping Fever of Cattle* | $ 14,000 |
| *1980-1981* | Agriculture Canada | *3-Methylindole-induced Pulmonary Edema and Emphysema in Ruminants* | $ 16,000 |
| *1981* | President Equipment Fund, University of Guelph | *Equipment grant - Gamma Counter* | $ 15,000 |
| *1979* | Equipment Fund, University of Guelph | *Equipment grant - Ultracentrifuge* | $ 15,000 |
| *1984* | Natural Sciences and Engineering Research Council, Canada | *Equipment grant - Liquid Scintillation Counter* | $ 47,200 |

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| *1984* | Natural Sciences and Engineering Research Council, Canada (Co-PI with Dr. Janzen) | *Equipment Grant - ENDOR, an EPR spectrometer for analysis of free radicals* | $275,000 |
| *1981* | Research Advisory Board, University of Guelph | *Effect of Vitamin A on Respiratory Disease in Ruminants* | $8,000 |
| *1979* | Research Advisory Board, University of Guelph | *The Role of Nutrition in Drug Metabolism* | $7,000 |

## TEACHING AND ADVISING

### Courses Taught at Universities

| Course Titles | Year Taught | Student Levels | Class Size |
|---|---|---|---|
| **At Oregon State University** | | | |
| HHS 440/540 Public Health Nutrition (ECampus) | 2020 (Sp) | Undergraduate and graduate students | 10 |
| H 333 Global Health | 2020 (Sp) | Undergraduate students | 20 |
| H 599/699 Health Leadership and Innovation | 2018 (Sp),<br>2019 (Sp),<br>2020 (Sp) | Graduate Students (MS, MPH, PhD) | 12, 21 |
| NUTR 312 Issues in Nutrition and Health (E-Campus course) | 2018 (W)<br>2019 (W)<br>2020 (F) | Undergraduate | 20, 20, 40 |
| NUTR 599 Health Benefit of Phytochemicals and Functional Foods | 2003 (Sp)<br>2004 (Sp) | Graduate students (MS, PhD) | 15 |
| | | | |
| **At The Ohio State University** | | | |
| *Fundamentals of Human Nutrition (310)* | 1996 (F)<br>1997 (F)<br>1998 (Su) | Junior | 35 |
| *Advanced Mineral Nutrition (830.02)* | 1996 (F) | Ph.D. | 14 |
| *Advanced Vitamin Nutrition (830.04)* | 1997 (W)<br>1999 (W) | Ph.D. | 14 |
| *Physiological Basis for Food Utilization (710)* | 1998 (W) | Senior/MSc./Ph.D. | 11 |
| *Interdepartmental Seminar Series (898)* | 1998 (Sp) | Ph.D. | 15 |
| *The Science of Human Nutrition (210)* | 1998 (Sp) | Freshmen | 320 |
| *Food and Nutritional Toxicology (694)* | 1999 (Sp)<br>2001 (Sp) | Senior/MSc/PhD | 15 |
| *Graduate Seminar in Nutrition (895)* | 1998 (W)<br>1999 (F), | M.Sc./Ph.D. | 25 |

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|---|---|---|---|
| | 2000 (F, W)<br>2001 (W) | | |
| *Nutrition in Medicine* | 2000 (Sp),<br>2001 (Sp) | Medical students | 140 |
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| **At the University of Guelph** | | | |
| *Introduction to Nutritional Sciences* | 1983 (F)<br>1984 (F)<br>1987 (F) | Sophomore | 60 |
| *Principle in Toxicology* | 1988 (F)<br>1989 (F)<br>1990 (F)<br>1991 (F) | Sophomore | 150 |
| *Fundamentals of Nutrition* | 1979 (F)<br>1980 (F)<br>1987 (F)<br>1988 (F)<br>1990 (F)<br>1992 (F) | Junior | 350 |
| *Fundamentals of Nutrition Lab* | 1979 (F)<br>1980 (F)<br>1987 (F)<br>1988 (F)<br>1990 (F)<br>1992 (F) | Junior | 150 |
| *Vitamins and Minerals* | 1982 (Sp)<br>1984 (Sp)<br>1987 (Sp) | Junior | 70 |
| *Nutrition & Metabolic Control of Diseases* | 1980-85 (F)<br>1988-91 (F) | Senior | 45 |
| *Seminar in Nutrition* | 1982-85 (F)<br>1988-91 (F) | Senior | 15 |
| *Nutrition Research (Honors Program)* | 1987-92 (F) | Senior | 10 |
| *Nutrition and Toxicology* | 1983-85 (F)<br>1988-91 (F) | Senior/M.Sc. | 85 |
| *Assessment of Nutritional Status* | 1985 (F)<br>1990 (F)<br>1991 (F) | Senior/M.Sc./Ph.D. | 14 |
| *Graduate Seminar* | 1988-92 (F) | M.Sc./Ph.D. | 30 |
| *Nutrition and Diseases (8 lectures/year)* | 1987-92 (F) | Medical Students at Univ. of Toronto | 35 |
| **At Fu-Jen University** | | | |
| *Advanced Nutritional Sciences* | 1986 | Senior/M.Sc. | 25 |
| *Nutrition and Biochemistry* | 1986 | Senior/M.Sc. | 35 |

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| *Nutrition and Toxicology* | 1986 | M.Sc./Ph.D. | 10 |
| *Leadership and Health Innovation* | 2017 | M.Sc./PhD | 15 |

**New Course Development**

*2019* Participated in the Summer Course to learn how to develop an ECampus course followed by developed and taught an Undergraduate/Graduate combination course HHS 440/540 Public Health Nutrition to meet the need of undergraduate minor in Global Health Program.

*2019* Developed a Faculty-led Study Abroad Program entitled "*Taiwan and India: From Classroom to Community – Learning Beyond Borders*" with Dr. Khanna. This is a 16 credit hours, 12-weeks Super Term Program. This program has been approved by OSU Global Opportunity and CPHHS Dean's Office. The Program is scheduled for September 6, 2019 to November 24, 2019. Unfortunately, the program is postponed by COVID.

*2017* Developed and taught a graduate course H599/699 Health Leadership and Innovation that meets the need of Global Health Graduate Program.

**Major Professor (Chair of the Committee) of Graduate Students**

| Name | Degree | Year of Completion | Research Thesis Or Project Title | Last Known Position |
|---|---|---|---|---|
| Iris Xuebin Li | MPH | 2019 - Present | | |
| Maddie Kasimanickam | MPH | 2020 - Present | | |
| Kristen Yang | PhD | 2018 to Present | | |
| Yingzi Li | MPH | 2019 | *Planning and Management of Elderly Organizations in China* | Looking for OPT position |
| Courtney Jost | MPH | 2019 | *Disability in Bostwana* | Ph.D. Student at OSU |
| Sahra Ingwersen | MPH | 2019 | *Refugee Assistance in Resettlement with Information Network (RAIN) International* | Public Health at Colorado |
| Anna Hsu | PhD | 2009 | *Effect of Green Tea and Soy on the Prevention of Prostate Cancer* | Research Scientist at the *PacificSource*, a Health Plan Company |
| Richard Bruno | PhD | 2004 | *Vitamin E status in smokers* | Professor at The Ohio State University |
| Mark Levy | Ph.D. | 2003 | *Zinc, oxidative stress and brain metabolism* | Research scientist at Florida State University |

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| Yunsook Lim | PhD | 2002 | *Effect of nutrition on cutaneous wound healing* | Professor in the University of Soule, South Korea |
| Amy Long | MSc | 2001 | *Comparison of antioxidant effect of vitamin E and phytochemical in prevention of type 1 diabetes in rats* | Pursuing PhD degree |
| Luther Chuang | Ph.D. | 2001 | *Investigation of the biological functions of conjugated linoleic acid (CLA).* | Professor in Peng-Tung University, Taiwan |
| Jordan Jun Li | Ph.D. | 2001 | *Effect of supplementation of GSH and the susceptibility of lung tumorigenesis* | Attorney at Law in DC |
| Briana Durica | M.Sc. | 2000 | *Effect of zinc nutrition on wound healing* | Doctor of Pharmacy |
| Emily Ho | Ph.D. | 2000 | *Free radical, nutrition and Type 1 diabetes* | Professor at Oregon State University |
| Ilea Mathis | M.Sc. | 1999 | *Antioxidants modulate cell death in cell culture exposed to $H_2O_2$* | Tufts University |
| Karen Iles | Ph.D. | 1998 | *The role of Cu/Zn SOD on the susceptibility of Type 1 diabetes* | Professor at University of Alabama at Birmingham, |
| Kyoke Kim | Ph.D. | 1998 | *Comparison of dietary antioxidant content between Korean and Korean American in relation to the incidence of stomach cancer* | Research Scientist at University of Chicago |
| Mike Noseworthy | Ph.D. | 1997 | *Brain oxidative stress following zinc deficiency and hyperoxia exposure* | Professor at University of Western Ontario |
| Aida Ethiopia | M.Sc. | 1993 | *The interaction of 3-methylindole with DNA: a possible mechanism of pneumotoxocity* | Physician in Sick Kids Hospital, Toronto, Canada |
| Zhaoming Xu | Ph.D. | 1993 | *The effect of dietary zinc deficiency on the hepatic* | Professor, University of British Columbia |

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| | | | *microsomal P-450 enzyme system in rats* | |
| Petra Goss | M.Sc. | 1993 | *Glutathione metabolism in protein energy malnourished rats* | Technical saleswoman in Procter & Gamble |
| Tanja McCutchon | M.Sc. | 1992 | *Comparison of vitamin E and zinc deficiency on the susceptibility of hyperoxia induced lung injury* | High school science teacher, Ontario, Canada |
| Bozena Sikorski | M.Sc. | 1992 | *Supplementation of cysteine prodrug protect hyperoxia induced lung damage* | Director of Gerontology Progrtam, Simco Hospital, Toronto, Canada |
| Carla Taylor | Ph.D. | 1990 | *Effect of dietary zinc or copper deficiency and hyperoxia on oxygen free radical-induced damage in rat lung.* | Professor, University of Manitoba, Winnipeg, Manitoba |
| Jutta Hammermueller | Ph.D. | 1989 | *Effect of dietary zinc or copper deficiency on the free radical metabolism in lung and liver of rats.* | Research Scientist in Veterinary Medicine, University of Guelph |
| Andrea Wong | M.Sc. | 1989 | *Development of 3-methylindole monoclonal antibody.* | Physician in Canada |
| Karen Acton | M.Sc. | 1989 | *The role of prostaglandin and thromboxane biosynthesis in the pathogenesis of 3-methylindole-induced lung disease.* | High school science teacher in Ontario, Canada |
| Pauline Bauman | M.Sc. | 1988 | *Effect of dietary protein and supplementation of Sulphur amino acid on glutathione metabolism.* | Mennonite missionary |
| Peter Formosa | M.Sc. | 1987 | *Involvement of arachidonic acid-dependent prostaglandin H synthase and NADPH-dependent mixed function oxidases in the metabolism of 3-methylindole* | General Manager, GE, Canada |
| Jim Kirkland | Ph.D. | 1987 | *Altered phospholipid metabolism in the progression of 3-methylindole induced pulmonary toxicity.* | Professor, University of Guelph Canada |

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|---|---|---|---|---|
| Stan Kubow | Ph.D. | 1984 | *Synergistically effect of vitamin E and glutathione on the protection against chemical-induced lung disease.* | Professor, McGill University, Montreal, Canada |
| Jill Merrill. | M.Sc. | 1982 | *Effect of glutathione and sulphur amino acids on drug metabolism and toxicity* | Toxicologist in Gillette, Inc. |
| Fern Burley | M.Sc. | 1981 | *Protection against chemically-induced lung disease by dietary carotenoids* | Consultant at Hoffman LaRoch, Canada |
| Joanne Sorfleet | M.Sc. | 1980 | *Effect of electrolytes on the wet-belly disease in minks.* | Veterinarian |

**Major Professor of Undergraduate Students in Honors Program or International Exchange**

| **Names** | **Year** | ***Title of Honor Project*** | **Last Known Position** |
|---|---|---|---|
| Jessica Leu (FJU Scholar Exchange Program) | 2018 | *Nutrition, Health and Wellness* | |
| Joan Han (FJU Scholar Exchange Program) | 2018 | *Nutrition, Health and Wellness* | |
| Obiageli Ntukogu | 2001-2003 | *Effect of soy protein and active component in reducing IDDM in NOD mice* | Medical student in University of Illinois |
| Hsiao-Wen Lin | 2000-2001 | *Effect of zinc on blood brain barrier integrity* | PhD student in Penn State University |
| Marcus Kirkpatrick | 2000 - 2001 | *Effect of vitamin E and C on the pathogenesis of IDDM* | Northwestern School of Medicine, before being a dermatologist in OR |
| Shiva Daneshmand | 1998 - 1999 | *Effect of 1,4-phenylenebis(methylene)-selenocyanate (p-XSC) on N-nitrosomethylbenzylamine-induced esophageal tumorigenesis* | OSU medical school student, and then Cardiologist Physician |

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| Mandi Povovich | 1998 - 1999 | *Evaluation of plant derived extracts for the stimulation of alternative chloride channels in cell lines with and without normal chloride channel activity* | OSU medical school student, and then practice Pediatrician in OH |
| Malti Pathak | 1998 - 1999 | *The genetic and nutritional modulation of antioxidants to overcome alloxan-induced IDDM* | OSU medical student before being a family physician in IL |

## MAJOR SERVICES TO THE UNIVERSITIES

### At Oregon State University in the Capacity as a Faculty (2017 – Present)

*2020 -* Personnel Committee, School of Biological and Population Health Sciences
*2020 -* Graduate Admission Committee, OSU Senate Office
*2019* CPHHS Center for Global Health Restructuring Committee
*2019 - 2021* OSU Faculty Senate
*2017 - 2019* Co-organizer for OSU Journey into Leadership Program, OSU Human Resources.

### At Oregon State University in the Capacity of Dean (2002 – 2016)

- Outreach Collaborative for a Healthy Oregon (OCHO) Initiative – integration of Extension Service of Family and Community Health, 4-H, and Public Health Practice Programs to align with the mission of USDA's Family, Youth and Community Programs and to serve the citizens of the state of Oregon and beyond (2011)
- Chair of Search Committee for the Dean of College of Engineer (2014)
- Chair of Search Committee for the Dean of College of Pharmacy (2009-2010)
- Chair of Search Committee for the Dean of College of Liberal Art (2007)
- Chair of Search Committee for Dean and Director of OSU Extension Service (2005)
- Committee Member of University Budget Committee (2003 – 2010)
- Search Committee member for President and CEO for OSU Foundation (2004)
- Chair of Search Committee for Vice President for University Advancement (2004)
- Search Committee Member for President of Oregon State University (2003)

### At The Ohio State University (1995 – 2002)

- Search committee member for Associate Dean of Extension and Outreach for The College of Human Ecology (1999 - 2000)
- Search committee member for Associate Vice President for Agricultural Administration and Director of OARDC (1998 - 1999)
- Search committee member for Vice Provost for Minority Affairs (1997)
- Member of OSU Nutrition Council (1996-98)

- Member of Project Reinvent, College of Food, Agriculture and Environmental Science (1996-1997)
- Member of Focus Group for Assessment of General Education Courses (GEC) in Natural Sciences (1999)
- Search Committee Chair for three positions in Academic Enrichment in Bionutrition (2000)
- Search Committee for Associate Dean for Outreach and Engagement, College of Human Ecology (2000)
- Search Committee Member of faculty position in Nutrition and Genomics in Department of Animal Sciences, OSU (2001)
- Research Committee member, OARDC-REGCP (2000 – 2003)

**At University of Guelph (1978 – 1995)**

- Member of University Strategic Planning Commission (*1994-1995*)
- Member of University Senate (*1983-1985, 1992-1994*)
- Member of University Board of Undergraduate Studies (BUGS) (*1991-1994*)
- Member of University BUGS sub-committee on Study Abroad and Exchange Program (*1991-1994*)
- Member of University BUGS sub-committee on Co-op/Work Study Program (*1991-1994*)
- Member of University BUGS sub-committee on Policies and Procedures (*1991-1994*)
- Member of University Senate Committee on Student Development (*1991-1994*)
- Member of University Senate Committee on By-Law (*1983-1985*)
- Member of University Senate Ad Hoc Committee on Academic Freedom (*1990-1991*)
- Chair of University Spring Semester Advisory Council (*1992-1994*)
- Member of University Educational Equity Advisory Committee (*1989-1993*)
- Toxicology Program Counselor, graduate and undergraduate (*1986-1994*)
- Member of University Food Council (*1991-1995*)
- Member of University Animal Care Committee (*1979-1985*)
- Member of University Judicial Hearing Committee (*1988-1990*)
- Departmental Tenure, Promotion and Merit Committee (*1986-1988, 1991-1994*)
- College Royal, faculty supervisor, University of Guelph (*1982-1983*)
- Library Representative (*1987-1988*)
- Liaison Officer (*1987-1989*)
- Information Technology Representative (*1987-1988*)
- Scholarship and Awards Committee (*1988-1992*)
- Department Curriculum Committee (*1986-1992*)
- Research Advisory Committee for the Dean of College of Biological Science (*1987-1993*)
- Search Committee Chairperson for new faculty positions in the Department of Nutritional Sciences (*1986, 1988*)
- Search Committee member for Chairs of Department of Zoology (*1989*), Department of Molecular Biology and Genetics (*1990*) and Department of Botany (*1990*)