CURRICULUM VITAE

Thomas J. Montville, Ph.D., F.A.A.M., F.I.F.T.

Contact Information

Consulting:

121 Riverbend Drive
North Brunswick, NJ, 08902

tom.montville@gmail.com
732-794-4005

Academic:

School of Environmental and Biological Sciences
Department of Food Science
Rutgers, the State University of New Jersey
65 Dudley Road
New Brunswick, NJ 08901-18520

Thomas.montville@rutgers.edu
732-794-4005

Position

Professor *Emeritus*, Department of Food Science,
School of Environmental and Biological Sciences (formerly Cook College)
Rutgers – the State University of New Jersey, New Brunswick, NJ, USA

Research Interests

Food Science and Technology, Food Safety, Biosecurity, *Bacillus anthracis*, *Clostridium botulinum*, *Listeria monocytogenes*, Microbial Physiology, Novel Antimicrobials.

Education

Massachusetts Institute of Technology, Cambridge, Massachusetts, Ph.D., (1979) Food Science and Technology (microbiology emphasis), biology minor.

Rutgers University, Cook College, New Brunswick, New Jersey, B.S., with high honors, (1975) Food Science major.

Experience

Professor *Emeritus* (2015 – present). Department of Food Science, School of Environmental and Biological Sciences, Rutgers University, New Brunswick, New Jersey

Distinguished Professor (1998 – 2015) (Retitled from "Professor II " in 2013)

Professor of Food Science (1991-1998)

Associate Professor of Food Science (1984-1991, tenured 1989)

Senior Editor, *Journal of Industrial Microbiology and Biotechnology* (2015-2016)

Professor-Investigador Extraordinario, Universidad Technológica de la Mixteca, Huajuapan de León, Oaxaca, Mexico (2012-present)

International Visiting Professor, Universidad Technológica de la Mixteca, Huajuapan de León, Oaxaca, Mexico (2011)

Chairman, Department of Food Science (1997-2000)

Member, the Graduate Program in Food Science (1987-2015)

Member, the University of Medicine and Dentistry of New Jersey/Rutgers University Joint Graduate Program in Microbiology and Molecular Genetics (1991-2015)

Editor, *Journal of Food Safety*, Food and Nutrition Press, Trumbull, CT, (1993-2003); Co-editor (1988-1993)

Chair, Review Panel of the USDA ARS Intramural Food Safety National Program, Molecular Biology. (2010)

Special Government Employee, (Food Advisory Committee member) the U.S. Food and Drug Administration, Washington, D.C. (1999-2002)

Director, Graduate Program in Food Science, Rutgers University, New Brunswick, New Jersey, (1991-1994)

Panel Manager (GS-15), USDA CSRS NRI FY92 Competitive Grants Program in Food Safety, Washington, D.C. (1992- 1993)

Course Director, Center for Professional Advancement, East Brunswick, NJ (1988-1998, 2010)

Consultant and Expert Witness, Various major food companies and law firms.

Research Microbiologist, U.S. Department of Agriculture, Eastern Regional Research Center, Philadelphia, PA, GS-12 (1980-1982), GS-13 (1982-1984)

Research Staff, Department of Nutrition and Food Science, Massachusetts Institute of Technology, Cambridge, MA (1975-1980)

Professional Activities and Honors

Fellow, American Academy of Microbiology (Elected 1991)

Fellow, Institute of Food Technologists (Elected 2001)

International Association for Food Protection's President's Lifetime Achievement Award (2016)

Institute of Food Technologists' Bernard L. Oser Award for Food Ingredient Safety (2008)

Selman A. Waksman Honorary Lectureship (2004)

Editorial Board, IFT Press (2004- 2016)

Editorial Advisory Board, Springer Food Safety Series (2001-present)

Editorial Board of *Journal of Food Protection* (1985-1998, 2005-present)

Editorial Board of *Probiotics and Antimicrobial Peptides* (2009 – present)

Editorial Board of *Process Biochemistry* (England) (1993-1998)

Editorial Board of *Journal of Industrial Microbiology and Biotechnology* (1995-2017)

Editorial Board of *Applied Microbiology and Biotechnology* (2001 –2010)

Board of Editors, Food and Nutrition Press (1988- 2004)

GRAS (Generally Recognized as Safe) Expert Panel (2018)

U.S.- Israel Binational Agricultural Research and Development Fund (BARD) Chair, U.S. Post Harvest Review Panel, (2005-2006)

Panel Member, USDA CSREES NRI FY06 Competitive Grants Program, Improving Food Quality and Value. (2006-2007)

Awards Commission of the XXIII Brazilian Congress of Microbiology (2005)

Institute of Food Technologists Expert Panel on Antimicrobial Resistance (2004-2006)

Organizing Committee, Second International Symposium on Antimicrobial Peptides Food, Veterinary, Medical and Novel Applications Saint-Milo, France (2009) Institute of Food Technologists, Annual Meeting Symposium Review Committee (2008) Institute of Food Technologists, Annual Meeting Volunteered Paper Review Committee (2008) Institute of Food Technologists, Graduate Student Research Competition, Abstract Judge (2004-2006)

National Institutes of Health, SBIR Study Section Member (1999-2001)

USDA National Needs Fellowships Panel (2001-2004)

Board of International Professors, University of São Paulo, São Paulo, Brazil (graduate courses, 1994, 2001)

Who's Who in Science and Engineering (First Edition, 1992)

Who's Who in the World (15th Edition, 1997)

Distinguished Fellow, 14th International Symposium and Workshop on Rapid Methods and Automation in Microbiology (1994)

Panel Member, USDA CSRS NRI FY91 Competitive Grants Program in Food Safety (1991)

American Academy of Microbiology, Nominating Committee, (2002 –2003)

Executive Committee, Food Microbiology Division, Institute of Food Technologists (2000-02; 2006-2008)

Chair, Biotechnology Division, Institute of Food Technologists (1991-92)

McGraff Lectureship, Long Island University (1991)

Interagency Botulism Research Coordinating Committee (1981 – 2003)

Cook College/NJAES Research Excellence Award for a Significant Body of Original Research (1997)

Cook College/NJAES Team Award – for role in initiating Distance Learning Via Interactive Videoconference as a teaching medium at Rutgers University (1997)

The Professor Endel Karmas Teaching Award (1991)

Rutgers University Merit Awards, (all eligible years 1986-2015)

External Evaluator for Tenure and Promotion at the Ohio State University, University of California- Davis, University of Minnesota, University of Georgia, Univeristy of Colorado, University of Delaware, Mississippi State University, Purdue University, University of Maryland, Drexel University, Louisiana State University, Hebrew University of Jerusalem, National Chiao Tung University (Taiwan), Technion - Israel Institute of Technology, Kuwait University.

External Review Committee for Departments of Food Science: University of Georgia, University of Maryland

Ad hoc reviewer for *PNAS, Journal of Biological Chemistry, Applied and Environmental Microbiology, FEMS Microbiology Letters, Journal of Food Safety, Journal of Food Science, Journal of Food and Agricultural Chemistry, Journal Food Processing and Preservation, Food Biotechnology, Journal of Bacteriology, Antimicrobial Agents and Chemotherapy, Biotechnology Progress, European Journal of Applied Microbiology and Biotechnology, Journal of Dairy Science,* and *Food Microbiology,* NSF Competitive

Grants Program, BARD Grant Program, NIH SBIR Grants Program, USDA NRI Competitive Grants Program, USDA ARS CRIS Research Program, National Research Council (Canada) Grant Program, Field Reviewer for FDA Special Grants Program, North Carolina Biotechnology Center Academic Research Initiation Program.

Funding

"Understanding Spore Destruction of Enhance Non-thermal Processing," 6/1/09- 5/31/11. $45,000, Center for Advanced Food Technology. PI, R. Ludescher, M.Karwe, Co-PI.

"Multi-sector Training of Doctoral Candidates in Food Safety Microbiology," 11/15/2006 – 11/14/2011. $153,000. USDA CSREES National Needs Fellowship Program. PI, K. Matthews, Co-PI.

"A Bioenergetic Approach for Control of *Listeria monocytogenes*," 9/1/06-8/31/08. $374,715. USDA CREES National Research Initiative Competitive Grant Program. PI, M. Tchikindas, Co-PI.

"Validation of Spore Surrogates to Assure Safety and Security of Processed Foods." 8/1/03-7/31/06, $139,229 total support. USDA CREES National Research Initiative Competitive Grant Program. PI.

"Food and Agricultural Sciences National Needs Fellowship Grants Program- Food Safety." $138,000 support and five student years of tuition waivers from Rutgers. USDA CSREES, 12/01/99-11/30/04. PI M. Tchikindas, Co-PI.

"A Membrane Fluidity Model for Sensitivity of Foodborne Pathogens to Preservatives." 9/1/99-8/30/02, $230,000 total support. USDA CREES National Research Initiative Competitive Grant Program in Food Safety. Co-PI, with M. Tchikindas.

"Improving Food Safety through More Realistic Models of Spore Germination." 9/1/96-8/31/01. $153,000 total support. USDA CSRS National Research Initiative Competitive Grant Program in Food Safety. Co-PI, with D. W. Schaffner.

"Mechanism of Multiple Antimicrobial Resistance in Food-borne Pathogenic Bacteria." 9/1/94-8/31/98. $230,000 total support. USDA CSRS National Research Initiative Competitive Grant Program in Food Safety. PI.

"Mechanisms and Food Safety Applications for Antimicrobial Proteins from Lactic Acid Bacteria." 1/97-12/02. ~$30,000 per year. New Jersey State Agricultural Experiment Station/Hatch Project #10131.

"Molecular Engineering of Pediocin "A" to Establish Structure/Function Relationships for Mechanistic Control of Foodborne Pathogens" 8/18/93-8/17/96. $275,000 total support. United

States - Israel Binational Agricultural Research and Development Fund (BARD). PI. with R. Shapira, Israeli Co-PI.

"Mechanism by Which Antimicrobial Proteins Kill Psychrotrophic Pathogens." 9/1/92-8/31/94. $175,000 total support. USDA CSRS National Research Initiative Competitive Grant Program in Food Safety. PI.

"Distance Learning in the Food Science Graduate Program." 1/1/93-12/31/95. $140,326. Kraft General Foods.

"Microbial Preservation Systems for Safety Assurance of Refrigerated Meat." 1/1/90-12/31/92. $246,142 total support. National Live Stock and Meat Board. PI.

"Use of Bicarbonates to Improve Shrimp Quality." 3/1/90-12/30/92. $82,516 first year. $139,039 total support. The Church and Dwight Co., Inc. PI.

"Antimicrobial Activity of Sodium Bicarbonate." $139,021. 4/88-4/90. Church and Dwight Company, Inc. PI.

"Feasibility Study on the Use of Sodium Bicarbonate to Reduce Aflatoxin Contamination". 4/87-4/88. $30,957. Church and Dwight Company, Inc. PI.

"Antimicrobial Activity of Sodium Bicarbonate." $27,953. 4/87-4/88.Church and Dwight Company, Inc. PI.

"Feasibility Study on The Use of Sodium Bicarbonate to Reduce Aflatoxin Contamination of Grain." $30,000. 4/86-4/87. Church and Dwight company, Inc. PI.

"Advanced Strategies for Microbial Surveillance of Foods." $3,050. Grant from N.J. State Board of Health to develop one day workshop for public health officials. 2/85-6/85. Co-P I.

"Bioregulation of Metabolites Produced by lactic Acid Bacteria." $4,500. 1984-85. Rutgers University Research Council. PI.

"Bioregulatory Mechanisms of *Lactobacillus* species." New Jersey State Agricultural Experiment Station/Hatch Project 10112. 1985-1993.

Papers in Peer Reviewed Journals

1. Montville, T.J., Cooney, C.L. and Sinskey, A.J. 1977. Measurement and synthesis of insoluble and soluble dextran by *Streptococcus mutans*. J. Dent. Res. 56:983-989.

2. Montville, T.J., Cooney, C.L. and Sinskey, A.J. 1977. Distribution of dextransucrase in *Streptococcus mutans* and observations on the effect of soluble dextran on dextransucrase activities. Infect Immun. 8:629-635.

3. Lee, C.H., Montville, T.J. and Sinskey, A.J. 1979. Comparison of the efficacy of steam sterilization indicators. Appl. Environ. Microbiol. 37:113-117.

4. Gomez, R.F., Montville, T.J., and Blais, K. 1980. Toxic effect of cysteine against *Salmonella typhimurium*. Appl. Environ. Microbiol. 39:1051-1053.

5. Montville, T.J. 1981. Effect of plating medium on heat activation requirement of *Clostridium botulinum* spores. Appl. Environ. Microbiol. 42:734-736.

6. Montville, T.J. and Sapers, G.M. 1981. Thermal resistance of spores from pH-elevating strains of *Bacillus licheniformis*. J. Food Science 46:1710-1711.

7. Montville, T.J. 1982. Metabiotic effect of *Bacillus licheniformis* on *Clostridium botulinum:* implications for home-canned tomatoes. Appl. Environ. Microbiol. 44:334-338.

8. Montville, T.J. and Conway, L.K. 1982.Oxidation-reduction potentials of canned foods and their ability to support *Clostridium botulinum* toxigenesis. J. Food Science 47:1879-1882.

9. Montville, T.J. 1983. Dual-substrate plate diffusion assay for proteases. Appl. Environ. Microbiol. 45:200-204.

10. Montville, T.J. 1983. Dependence of *Clostridium botulinum* gas and protease production on culture conditions. Appl. Environ. Microbiol. 45:571-575.

11. Parris, N., Palumbo, S.A. and Montville, T.J. 1983. Evaluation of inosine monophosphate and hypoxanthine as indicators of bacterial growth and spoilage in stored red meat. J. Food Protection 46:614-617.

12. Montville, T.J. 1983. Interaction of pH and NaCl on the culture density of *Clostridium botulinum* 62A. Appl. Environ. Microbiol. 46:961-963.

13. Linfield, W.M., Michich, T.J., Montville, T.J., Simon, J.R., Murray, E.B. and Bistline, R.G. 1983. Antibacterially active substituted anilides of carboxylic and sulfonic acids. J. Medicinal Chem. 26:1741-1746.

14. Montville, T.J., Conway, L.K., and Sapers, G.M. 1983. Inherent variability in the efficacy of the USDA raw-pack process for home-canned tomatoes. J. Food Science 48:1591-95, 1597.

15. Montville, T.J. 1984. Quantitation of pH and salt tolerant subpopulations from *Clostridium botulinum*. Appl. Environ. Microbiol. 47:28-30.

16. Montville, T.J. 1984. Characterization of a halo-acid tolerant variant of *Clostridium botulinum* B-aphis. Appl. Environ. Microbiol. 48:311-316.

17. Montville, T.J., Parris, N. and Conway, L.K. 1985. Influence of pH on organic acid production by *Clostridium sporogenes* in test tube and fermentor cultures. Appl. Environ. Microbiol. 49:733-736.

18. Montville, T.J., Jones, S.B., Conway, L.K. and Sapers, G.M. 1985. Germination of spores from *Clostridium botulinum* B-aphis and Ba410. Appl. Environ. Microbiol. 50:795-800.

19. Montville, T.J., Meyer, M.E. and Hsu, A.H.-M. 1987. Influence of carbon substrates on lactic acid, cell mass, and diacetyl-acetoin synthesis in *Lactobacillus plantarum* J. Food Protection 50:42-46.

20. Montville, T.J. and Hsu, A.H.-M. 1987. Modified glucose oxidase/peroxidase residual glucose assay for use with anaerobic bacteria. J. Microbiol. Methods 6:95-98.

21. Montville, T.J., Hsu, A.H.-M. and Meyer, M.E. 1987. High efficiency conversion of pyruvate to acetoin by *Lactobacillus plantarum* during pH-controlled and fed-batch fermentations. Appl. Environ. Microbiol. 53:1798-1802.

22. Montville, T.J. and Goldstein, P.K. 1987. Sodium bicarbonate reduces viability and alters aflatoxin distribution of *Aspergillus parasiticus* in Czapek's agar. Appl. Environ. Microbiol. 53:2302-2307.

23. Montville, T.J., Meyer, M.E., Hsu, A.H.-M. and Huang, G.T.-C. 1987. High pressure liquid chromatography and wide-bore capillary gas-liquid chromatography methods for quantification of acetoin and diacetyl from bacterial cultures. J. Microbiol. Methods 7:1-8.

24. Wasserman, B.P., Montville, T.J., and Korwek, E. 1988. Food Biotechnology: An IFT Scientific Status Summary of the Expert Panel on Food Safety and Nutrition. Food Technology 42(1)133-146.

25. Corral, L.G., Post, L.S. and Montville, T.J. 1988. Antimicrobial activity of sodium bicarbonate. J. Food Science 53:981-982.

26. Montville T.J., Koch, G.H., and Johnston, S.J. 1988. Partial biochemical characterization of tetrazolium red-reactive *Lactobacillus plantarum* mutants. Food Biotechnol. 11:81-105.

27. Montville, T.J. and Goldstein, P.K. 1989. Sodium bicarbonate inhibition of aflatoxigenesis in corn. J. Food Protect. 52:45-48.

29. Curran, D.M. and Montville, T.J. 1989. Bicarbonate inhibition of *Saccharomyces cerevisiae* and *Hansenula wingei* growth in apple juice. International J. Food Microbiol. 8:1-9.

30. McFall, S.M. and Montville, T.J. 1989. pH-mediated regulation of pyruvate catabolism in *Lactobacillus plantarum* chemostat culture. J. Industrial Microbiol. 4:355-340.

31. El-Nabarawy, A., Hartman, T., Rosen, J.D. and Montville, T.J. 1989. *Aspergillus parasiticus* accumulates averufin and versicolorin in the presence of bicarbonate. J. Food Protect. 52:493-496.

32. Curran, D.M. and Montville, T.J. 1989. Multiwell most-probable-number method for determining death kinetics of salmonella immobilized by entrapment in agar. J. Microbiol. Meth. 10:33-38.

33. Montville, T.J. 1989. The evolving impact of biotechnology on food microbiology. J. Food Safety. 10:87-97.

34. Montville, T.J. and McFall, S.M. 1989. Oxygen sensitivity of *Lactobacillus plantarum* catabolite distribution in chemostat culture. Microbios Letters. 42:61-67.

35. DePasquale, D.A., El-Nabarawy, A., Rosen, J.D. and Montville, T.J. 1990. Ammonium bicarbonate inhibition of mycotoxigenic fungi and spoilage yeast. J. Food Protect. 53:324-328.

36. Tsau, J.-L., and Montville, T.J. 1990. Relationship between pyruvate utilization and acetoin production by *Lactobacillus plantarum*: influence of carbon source, pyruvate concentration, and metabolic inhibitors Food Biotechnol. 4:727-738.

37. DePasquale, D.A. and Montville, T.J. 1990. Mechanism by which ammonium bicarbonate and ammonium sulfate inhibit mycotoxigenic fungi. Appl. Environ. Microbiol. 56:3711-3717.

38. Tseng, C.-P. and Montville, T.J. 1990. Enzymatic activities affecting endproduct distribution by *Lactobacillus plantarum* in response to changes in pH and O_2. Appl. Environ. Microbiol. 56:2761-2763.

39. Curran, D.M., Tepper, B. J. and Montville, T.J. 1990. Use of bicarbonates for microbial control and texture improvement in cod fillets. J. Food Science 55:1564-1566.

40. Lewus, C.B. and Montville, T.J. 1991. Detection of bacteriocins produced by lactic acid bacteria. J. Microbiol. Meth. 13:145-150.

41. Rogers, A. M. and Montville, T.J. 1991. Improved agar diffusion assay for nisin quantification. Food Biotechnol. 5:161-168.

42. Lewus, C.B., Kaiser, A., and Montville, T.J. 1991. Inhibition of foodborne bacterial pathogens by bacteriocins from lactic acid bacteria and meat isolates. Appl. Environ. Microbiol. 57:1683-1688.

43. Okereke, A. and Montville, T.J. 1991. Bacteriocin inhibition of *Clostridium botulinum* spores by lactic acid bacteria. J. Food Protect. 54:349-353.

44. Montville, T.J. and Shih, P.L. 1991. Inhibition of mycotoxigenic fungi in corn by ammonium and sodium bicarbonate. J. Food. Protect. 54:295-297.

45. Tseng, C.-P., J.-L. Tsau and Montville, T.J. 1991. Bioenergetic consequences of catabolic shifts by *Lactobacillus plantarum* in response to environmental oxygen and pH shifts in chemostat cultures J. Bacteriol. 173:4411-4416.

46. Okereke, A.O. and Montville, T.J. 1991. Bacteriocin mediated inhibition of *Clostridium botulinum* spores by lactic acid bacteria at refrigeration and abuse temperatures. Appl. Environ. Microbiol. 57:3423-3428.

47. Tseng, C.-P. and Montville, T.J. 1992. Enzymatic regulation of glucose catabolism by *Lactobacillus plantarum* in response to pH shifts in an anaerobic chemostat. Appl. Microbiol. Biotechnol. 36:777-781.

48. Tseng, C.-P. and Montville, T.J. 1992. Enzymatic regulation of glucose catabolism by *Lactobacillus plantarum* in an aerobic chemostat. Biotechnol. Progress 18:126-131.

49. Tsau, J.-L., Guffanti A.A, and Montville, T.J. 1992. Conversion of pyruvate to acetoin helps maintain pH homeostasis in *Lactobacillus plantarum*. Appl. Environ. Microbiol. 52:891-894.

50. Montville, T.J., Rogers, A.M., and Okereke, A. 1992. Differential sensitivity of *Clostridium botulinum* strains to nisin is not biotype-associated. J. Food Protect. 56:444-448.

51. Lewus, C.B., Sun, S., and Montville, T.J. 1992. Production of an amylase-sensitive bacteriocin by *Leuconostoc paramesenteroides*. Appl. Environ. Microbiol. 58:143-149.

52. Lewus, C.B. and Montville, T.J. 1992. Further characterization of bacteriocins Plantaricin BN, Bavaricin MN and Pediocin A. Food Biotechnol. 6:153-174S.

53. Tsau, J.-L., Guffanti A.A, and Montville, T.J. 1992. Pyruvate is transported by a proton symport mechanism in *Lactobacillus plantarum*. Current Microbiol. 25:47-50.

54. Bruno, M.E.C. Bruno, Kaiser, K. and Montville, T.J. 1992. Depletion of proton motive force by nisin in *Listeria monocytogenes* cells. Appl. Environ. Microbiol. 58:2255-2259.

55. Okereke, A. and Montville, T.J. 1992. Nisin dissipates the proton motive force of the obligate anaerobe *Clostridium sporogenes* PA3679. Appl. Environ. Microbiol. 58:2463-2467.

56. Winkowski, K. and Montville. T.J. 1992. Use of a meat isolate, *Lactobacillus bavaricus* MN, to inhibit *Listeria monocytogenes* growth in a model meat gravy system. J. Food Safety 13: 19-31.

57. Tseng, C.-P. and Montville, T.J. 1993. Metabolic regulation of end product distribution in Lactobacilli: affectors and implications. Biotechnol. Prog. 9: 113-121.

58. Crandall, A.D. and Montville, T.J. 1993. Inhibition of *Clostridium botulinum* growth and toxigenesis in a model gravy system by coinioculation with bacteriocin producing lactic acid bacteria. J. Food Protect. 56: 485-488, 492.

59. Winkowski, K., Crandall, A.D. and Montville, T.J. 1993. Inhibition of *Listeria monocytogenes* by *Lactobacillus bavaricus* MN in meat systems at refrigeration temperatures. Appl. Environ. Microbiol. 59:2552-2557.

60. Bruno, M.E.C. and Montville, T.J. 1993. Common mechanistic action of bacteriocins from lactic acid bacteria. Appl. Environ. Microbiol. 59:3003-3010.

61. Roinestad, K.S., Montville, T.J., and Rosen, J.D. 1993. Inhibition of trichothecene biosynthesis in *Fusarium tricintum* by sodium bicarbonate. J. Ag. Food Chem. 41:2344-2346.

62. Kaiser, A.L. and Montville, T.J. 1993. The influence of pH and growth rate on production of the bacteriocin bavaricin MN in batch and continuous culture. J. Appl. Bacteriol. 75:536-540.

63. Crandall, A.D., Winkowski, K., and Montville, T.J. 1994. Inability of *Pediococcus pentosaceus* to inhibit *Clostridium botulinum* in a *sous vide* type beef system at 4 and 10°C. J. Food Protect. 57:104-107

64. Rogers, A.M. and Montville, T.J. 1994. Quantification of factors influencing nisin's inhibition of *Clostridium botulinum* 56A in a model food system. J. Food Sci. 59:663-668, 686.

65. Roinestad, K.S., Montville, T.J., and Rosen, J.D. 1994. The mechanism of inhibition of trichothecene biosynthesis in *Fusarium tricintum* by sodium bicarbonate. J. Ag. Food Chem. 42:2025-2028.

66. Winkowski, K., Bruno, M.E.C., and Montville, T.J. 1994. Correlation of bioenergetic parameters with cell death in *Listeria monocytogenes* cells exposed to nisin. Appl. Environ. Microbiol. 60:4186-4187.

67. Montville, T.J. and Bruno, M.E.C. 1994. Evidence that dissipation of proton motive force is a common mechanism of action for bacteriocins and other antimicrobial proteins. Int. J. Food Microbiol. 24:53-74.

68. Klima, R. and Montville, T.J. 1995. The regulatory and industrial response to listeriosis in the United States: a paradigm for dealing with emerging foodborne pathogens. Trends in Food Sci. Technol. 6:87-93.

69. Chen, Y. and Montville, T.J. 1995. Efflux of ions and ATP depletion induced by pediocin PA-1 are concomitant with cell death in *Listeria monocytogenes* Scott A. J. Appl. Bacteriol. 79:684-690.

70. Montville, T.J., Winkowski, K. and Ludescher, R.D. 1995. Models and mechanisms for bacteriocin action and application. Internat. Dairy J. 5:797-814.

71. Baker, C., K. Winkowski and Montville, T.J. 1996. Use to pH-controlled fermentors to increase production of Leuconocin S by *Leuconostoc paramesenteroides*. Process Biochem. 31:225-228.

72. Winkowski, K.., Ludescher, R.D., and Montville, T.J. 1996. Physico-chemical characterization of the nisin-membrane interaction using liposomes derived from *Listeria monocytogenes.* Appl. Environ. Microbiol. 62:323-327.

73. Kaiser, A. l., and Montville, T. J. 1996. Purification of the bacteriocin bavaricin MN and characterization of its mode of action against *Listeria monocytogenes* cells and lipid vesicles. Appl. Environ. Microbiol. 62:4529-4535.

74. Chen, Y., Shapira, R., Eisenstein, M. and Montville, T.J. 1997. Functional characterization of pediocin PA-1 binding to liposomes in the absence of a protein receptor and its relation to predicted secondary structure. Appl. Environ. Microbiol. 63:524-531.

75. Mazzotta, A.S. and Montville, T. J. 1997. Nisin induces changes in membrane fatty acid composition of *Listeria monocytogenes* nisin-resistant strains at 10°C and 30°C. J. Appl. Microbiol. 82:32-38.

76. De Martinis, E., Crandall, A.D., Mazzotta, A., and Montville, T.J. 1997. Influence of pH, salt, and temperature on nisin resistance in *Listeria monocytogenes*. J. Food Protect. 60:420-423.

77. Kantor, A., Montville, T.J., Mett, A. and Shapira, R. 1997. Molecular characterization of the replicon of the *Pediococcus pentosaceus* FBB-61 pediocin A plasmid pMD136. FEMS Microbiology Ltts. 151:237-244.

78. Mazzotta, A.S., Crandall, A.D. and Montville, T. J. 1997. Nisin resistance in *Clostridium botulinum* spores and vegetative cells. Appl. Environ. Microbiol. 63:2654-2659.

79. Campos, C.A., Mazzotta, A. and Montville, T.J. 1997. Inhibition of *Listeria monocytogenes* by *Carnobacterium piscicola* in chicken at refrigeration temperatures. J. Food Safety 17:151-160.

80. Chen, Y., Ludescher, R.D. and Montville, T.J. 1997. Electrostatic, but not the YGNGV consensus motif, govern the binding of pediocin PA-1 and its fragments to phospholipid vesicles. Appl. Environ. Microbiol. 63:4770-4777.

81. Crandall, A. D. and Montville, T.J. 1998. Nisin resistance in *Listeria monocytogenes* ATCC 700302 is a complex phenotype. Appl. Environ. Microbiol. 64:231-237.

82. Chen, Y., Ludescher, R.D. and Montville, T.J. 1998. Influence of lipid composition on pediocin PA-1 binding to phospholipid vesicles. Appl. Environ. Microbiol. 64:3530-3532.

83. Schaffner, D. W., Ross, W.H. and Montville, T.J. 1998. Analysis of the influence of environmental parameters on *Clostridium botulinum* time to toxicity using three modeling approaches. Appl. Environ. Microbiol. 64:4416-4422.

84**.** Chen, Y., and Montville, T.J. 1998. Mechanistic action of pediocin and nisin: new insights and unresolved questions. Appl. Microbiol. Biotechnol. 50:511-519.

85. Mazzotta, A.S and Montville, T. J. 1999. Characterization of fatty acid composition, germination, and thermal resistance in a nisin resistant mutant of *Clostridium botulinum* 169B, and the wild-type strain. Appl. Environ. Microbiol.65:659-664.

86. Montville, T.J., Chung, H.-J., Chikindas, M.L., and Chen, Y. 1999. Nisin A depletes intracellular ATP and acts in a bactericidal manner against *Mycobacterium smegmatis*. Ltts. Appl. Microbiol. 28:189-193.

87. Nilsson, L., Chen, Y., Chikindas, M.L., Huss, H.H., Gram, L. and Montville, T.J. 2000. Carbon dioxide and nisin act synergistically on *Listeria monocytogenes.* Appl. Environ. Microbiol 66:769-774.

88. Belles, A.M, Montville, T.J., and Wasserman, B.P. 2000. Enzymatic removal of zeins from the surface of maize starch granules. J. Ind. Microbiol. Biotech. 24:71-74.

89. Modi, K., Chikindas, M.L., and Montville, T.J. 2000. Sensitivity of nisin-resistant *Listeria monocytogenes* to heat and the synergistic action of heat and nisin. Ltts. Appl. Bacteriol. 30:249-253.

90. Chea, F.P., Chen, Y., Montville, T.J., and Schaffner, D.W. 2000. Modeling the germination kinetics of *Clostridium botulinum* spores as affected by temperature, pH and sodium chloride. J. Food Protection 63:1071-1079.

91. Mazzotta, A.S., Modi, K., Chikindas, M.L., and Montville, T.J. 2000. Inhibition of nisin-resistant (Nis^r) *Listeria monocytogenes* and Nis^r *Clostridium botulinum* by common food preservatives. J. Food Sci. 65: 888-890.

92. Chung, H.-J., Chikindas, M. L and Montville, T. J. 2000. Nisin shares a common mechanism to inhibit mycobacteria yet the kinetics of the events in mycobacterial cell death may differ from that of foodborne pathogens. Ltts. Appl. Microbiol. 31:1-7.

93. Zhao, L.-H., Montville, T.J., and Schaffner, D.W. 2000. Inoculum size of *Clostridium botulinum* 56A spores influences time-to-detection and percent growth-positive samples. J. Food Sci. 65:1369-1375.

94. Herrandez, C., Chen, Y., Chung, H.J., Cintas, L.M., Hernandez, P.E., Montville, T.J., and Chikindas, M.L. 2001. Enterocin P selectively dissipates the membrane potential of *Enterococcus faecium* T136. 2001. Applied. Environ. Microbiol. 67:1689-1692.

95. Cleveland, J., Montville, T.J., Nes, I.F., and Chikindas, M.L. 2001. Bacteriocins: safe natural antimicrobials for food preservation. Int. J. Food Microbiol. 71:1-20 .doi.org/10.1016/S0168-1605(01)00560-8

96. Rosa, C.M., Franco, B.D.G.M., Montville, T.J., and Chikindas, M.L. 2002. Purification and mechanistic action of a bacteriocin produced by a Brazilian sausage isolate, *Lactobacillus sake* 2a. J. Food Safety. 22:39-54.

97. Zhao, L.-H., Montville, T.J., and Schaffner, D.W. 2002. Time to detection, percent-growth-positive and maximum growth rate models for *Clostridium botulinum* 56A at multiple temperatures. Int. J. Food Micro. 77:187-197.

98. Cleveland, J., Chikindas, M., Nes, I.F. and Montville, T.J. 2002. Multi-method assessment of commercial nisin preparations. J. Ind. Microbiol. Biotechnol. 29:228-232.

99. Zhao, L.-H., Montville, T.J., and Schaffner, D.W. 2002. Computer simulation of *Clostridium botulinum* 56A behavior at low spore concentrations. Appl. Environ. Microbiol. 69:845-851.

100. Li, J., Chikindas, M. L., Ludescher, R.D., and Montville, T.J. 2002. Temperature and surfactant induce membrane modifications that alter *Listeria monocytogenes* nisin sensitivity by different mechanisms. Appl. Environ. Microbiol. 68: 5904-5910.

101. Yamazaki, K., Suzuki, M., Kawai, Y. Inoue, N. and Montville, T.J. 2003. Inhibition of *Listeria monocytogenes* in cold-smoked salmon by *Carnobacterium piscicola* CS526 isolated from frozen Surimi. J. Food Protect. 66:1420-1425.

102. McEntire, J.C., Montville, T.J. and, Chikindas, M. 2003. Synergy between nisin and select lactates against *Listeria monocytogenes* is due to the metal cations. J. Food Protect. 66:1631-1636.

103. McEntire, J.C., Carman, G. C. and Montville, T. J. 2004. Increased ATPase activity is responsible for acid sensitivity of nisin-resistant *Listeria monocytogenes* ATCC 700302. Appl. Environ. Microbiol. 70:2717-2721.

104. Yamazaki, K., Suzuki, M., Kawai, Y, Inoue, N, and Montville, T.J. 2005. Purification and characterization of a novel class IIa bacteriocin, piscicocin CS526, from surimi-associated *Carnobacterium piscicola* CS526. Appl. Environ. Microbiol. 71:554-557.

105. Bonnet, M. and Montville, T.J. 2005. Acid tolerant *Listeria monocytogenes* persist in a fermented model system containing nisin. Ltts. Appl. Microbiol. 40:237-242.

106. Montville, T.J., Dengrove, R., De Siano, T., Bonnet, M. and Schaffner, D.W. 2005. Thermal resistance of spores from virulent strains of *Bacillus anthracis* and potential surrogates. J. Food Protect 68:2362-2366.

107. Zhao, L., Montville, T.J. and Schaffner, D.W. 2005. Evidence for quorum sensing in *Clostridium botulinum* 56A. Ltts. Appl. Microbiol. 42:54-58.

108. Bonnet, M., Rafi, M., Chikindas, M.L. and Montville, T.J. 2006. A bioenergetic mechanism for nisin resistance induced by the acid tolerance response of *Listeria monocytogenes*. Appl. Environ. Microbiol.72:2556-2563.

109. De Siano, T., Padhi, S., Schaffner, D.W., and Montville, T. J. 2006. Growth characteristics of virulent *Bacillus anthracis* and potential surrogate strains. J. Food Protect. 69:1720-1723.

110. Montville, T.J., De Siano, T., Nock, A., Padhi, S. and Wade, D. 2006. Inhibition of *Bacillus anthracis* and potential surrogate growth from spore inocula by nisin and other antimicrobial peptides. J. Food Protect. 69:2529-2533.

111. Doyle, M.P., Busta, F., Cords, B.R., Davidson, P.M., Hawke, J. Hurd, H.S., Isaacson, R.E., Matthews, K., Maurer, J., Meng, J. Montville, T.J., Shryock, T.R., Sofos, J.N., Vidaver, A.K., Vogel,. L. 2006. Antimicrobial resistance: Implications for the food system: An expert report, Comprehensive Reviews in Food Science and Food Safety 5:71 - 137

112. Badaoui Najjar, M, Chikindas, M. and Montville, T.J. 2007. Changes in *Listeria monocytogenes* membrane fluidity in response to temperature stress. Appl. Environ. Microbiol.73:6429-6435.

113. Cruz, J. and Montville, T.J. 2008. Influence of nisin on the resistance of *Bacillus anthracis* Sterne spores to heat and hydrostatic pressure. J. Food Protect. 71:196-199.

114. Black, D.G., Taylor, T.M., Kerr, H.J., Padhi, S., Montville, T.J. and Davidson, P.M. 2008. Decontamination of fluid milk containing *Bacillus* spores using commercial household products. J. Food Protect. 71:473-478.

115. Badaoui Najjar, M.Z., Chikindas, M.L., and Montville, T.J. 2009. The acid tolerance response alters membrane fluidity and induces nisin resistance in *Listeria monocytogenes.* Probiotics Antimicrob. Prot. 1:130-139.

116. Montville, T.J. 2012. Biosafety challenges for the food microbiology laboratory. J. Food Safety. 32:184-188. DOI:10.1111/j.1745-4565.2012.00366.x

117. Valadez-Blanco, R., Bravo-Villa, G., Santos-Sánchez, N.F., Velasco-Almendarez, S.I. and Montville, T.J. 2012. The artisanal production of pulque, a traditional beverage of the Mexican highlands. Probiotics Antimicrob. Prot. 4:140-144. DOI: 10.1007/s12602-012-9096-9

118. Rothenbacher, F., Suzuki, M., Hurley, J., Montville, T.J., Kirn, T., Ouyang, M., and Woychik, N. 2012. *Clostridium difficile* MazF toxin exhibits selective, not global, mRNA cleavage. J. Bacteriol. 194:3467-3474. doi: 10.1128/JB.00217-12

119. Voss, D., and Montville, T.J. 2013. 1,6-diphenyl-1,3,5-hexatrine as a reporter of inner spore membrane fluidity in *Bacillus subtilis* and *Alicyclobacillus acidoterrestris*. J. Microbiol. Methods. 96:101-103. DOI:10.1016/j.mimet.2013.11.009

120. Merle, J., and Montville, T.J. 2014. *Alicyclobacillus acidoterrestris*: the organism, the challenge, potential interventions. J. Food Proc. Preserv . 38:153-158 . DOI:10.1111/j.1745-4549.2012.00758.x

121. Mota-Pacheco, L.E., Guadarrama-Mendoza, P.C., Salas-Coronado, R., Escalante, A., Montville, T.J., Valadez-Blanco, R. 2019. Adaptation of Bacillus licheniformis to molasses for improved production of a biofertilizer strain. Agrociencia 53:1183-1201.

Books

1. Montville, T.J. (ed.) 1987. *Food Microbiology Volume I: Concepts in Physiology and Metabolism.* CRC Press, Boca Raton, FL.

2. Montville, T.J. (ed.) 1987. *Food Microbiology Volume II: New and Emerging Technologies*. CRC Press, Boca Raton, FL.

3. Sheridan, J. J., Buchanan, R.L., and Montville, T.J. (eds.) 1996. *HACCP: An Integrated Approach to Assuring the Microbial Safety of Meat and Poultry*. Food and Nutrition Press, Trumbull, CT.

4. Doyle, M. P., Beuchat, L. R. and Montville, T.J. (eds.) 1997. *Food Microbiology Fundamentals and Frontiers*. American Society for Microbiology Press, Washington, D.C.

5. Doyle, M. P., Beuchat, L. R. and Montville, T.J. (eds.) 2001. *Food Microbiology Fundamentals and Frontiers, 2nd edition*. American Society for Microbiology Press, Washington, D.C.

6. Doyle, M. P., Beuchat, L. R. and Montville, T.J. (eds.) 2001. *Microbiologia de los Alimentos Fundamentos y Fronteras.* Editorial ACRIBIA, S.A.

7. Montville, T.J. and Matthews, K. R. 2004. *Food Microbiology an Introduction*. American Society for Microbiology Press, Washington, D.C.

8. Montville, T.J. and Matthews, K. R. 2008. *Food Microbiology an Introduction*. 2nd edition. American Society for Microbiology Press, Washington, D.C.

9. Montville, T. J. and Matthews, K.R. 2009. *Microbiología de los alimentos. Introducción*. Editorial Acirbia, Zaragoza, Spain. 478 pages.

10. Montville, T. J. and Matthews, K.R. 2012. 기초 식품 미생물학 Science Press, Seoul Korea.

11. Montville, T.J., Matthews, K.R. and Kniel, K.E. 2012. *Food Microbiology an Introduction*. 3rd edition. American Society for Microbiology Press, Washington, D.C.

12. Matthews, K.R., Kniel, K.E. and Montville, T.J. 2017. *Food Microbiology an Introduction*. 4th edition. American Society for Microbiology Press, Washington, D.C.

Chapters

1. Montville, T.J., Cooney, C.L. and Sinskey, A.J. 1978. *Streptococcus mutans* dextransucrase: a review. *Advances in Applied Microbiology*. Academic Press. 24:55-84.

2. Montville, T.J. 1987. Continuous culture: theory and applications. in T.J. Montville (ed), *Food Microbiology Volume II: New and Emerging Technologies*, CRC Press, 1987. pages 165-186.

3. Wasserman, B.P. and Montville, T.J. 1989. Biotechnology in the flavor and food industry- a scientific beginning point. in R.C. Lindsay and B.J. Willis, (eds.), *Biotechnology Challenges for the Flavor and Food Industry*. Elsevier Applied Science, New York, pages 1-12.

4. Montville, T.J. 1992. Food Microbiology, entry for *McGraw-Hill Encyclopedia of Science and Technology.*

5. Montville, T.J. and Kaiser, A. 1993. Antimicrobial proteins: classification, nomenclature, diversity, and relationship to bacteriocins. in D.G. Hoover and L.R. Steenson (eds) *Bacteriocins of Lactic Acid Bacteria*. Academic Press, New York. pages 1-22.

6. Montville, T.J. 1997. Principles which influence microbial growth, survival, and death in foods. in Doyle, M. P., Beuchat, L. R. and Montville T.J. (eds.) *Food Microbiology: Fundamentals and Frontiers*. American Society for Microbiology Press, Washington, D.C. pages 13-29.

7. Montville, T.J. and Winkowski, K. 1997. Biologically-based preservation systems and probiotic bacteria. in Doyle, M. P., Beuchat, L. R. and Montville T.J. (eds.) *Food Microbiology: Fundamentals and Frontiers*. American Society for Microbiology Press, Washington, D.C. page. 559

8. Montville, T.J. 1999. U.S. Perspective of food borne disease in a global market. In Enfermedades Transmitidas por Alimentos. *Serie de la Academia Nacional de Agronomia y Veterinaria*. No 28, pages 120-132.

9. Chikindas, M.L. and Montville, T.J. 2001. Perspectives for application of bacteriocins as food preservatives. Chapter 11 in Juneja, V.J. (ed.) *Control of Foodborne Microorganisms*. p 303-321.

10. Montville, T.J. and Matthews, K.R. 2001. Principles which influence microbial growth, survival, and death in foods. in Doyle, M. P., Beuchat, L. R. and Montville T.J. (eds.) *Food Microbiology: Fundamentals and Frontiers, 2nd Edition* American Society for Microbiology Press, Washington, D.C. pages 13-32.

11. Montville, T.J., Winkowski, K., and Chikindas, M.. 2001. Biologically-based preservation systems. in Doyle, M. P., Beuchat, L. R. and Montville T.J. (eds.) *Food Microbiology:*

Fundamentals and Frontiers, 2nd Edition. American Society for Microbiology Press, Washington, D.C. page. 629-647.

12. Montville, T.J. and Matthews, K.R. 2007. Growth, survival and death of microbes in foods. in Doyle, M. P. and Beuchat, L. R. (eds.) *Food Microbiology Fundamentals and Frontiers, 3rd Edition.* American Society for Microbiology Press, Washington, D.C. page 3-22.

13. McEntire, J.C. and Montville, T.J. 2007. Antimicrobial resistance. in Doyle, M. P. and Beuchat, L. R. (eds.) *Food Microbiology Fundamentals and Frontiers, 3rd Edition*. American Society for Microbiology Press, Washington, D.C. page 23-34.

14. Montville, T.J. and M.L. Chikindas. 2007. Biopreservation of foods. in Doyle, M. P., Beuchat, L. R. and Montville T.J (eds.) *Food Microbiology:Fundamentals and Frontiers, 3rd Edition*. American Society for Microbiology Press, Washington, D.C. page 747-766.

15. Montville, T.J. and Matthews, K.R. 2013. Physiology, growth and inhibition of microbes in food. in Doyle, M. P. and Buchanan (eds.) *Food Microbiology: Fundamentals and Frontiers, 4rd Edition.* American Society for Microbiology Press, Washington, D.C. page 3-18.

16. Montville, T.J. and Chikindas. 2013. Biological control of foodborne bacteria. in Doyle, M. P. and Buchanan (eds.) *Food Microbiolog: Fundamentals and Frontiers, 4rd Edition.* American Society for Microbiology Press, Washington, D.C. page 3-18.

Patent

Montville, T.J. and Curran, D. Process for inhibiting the growth of bacteria on seafood. U.S. Patent Number 5,196,221. Issued March 23,1993.

Dissertation

Montville, T.J. 1979. The dynamics of *Streptococcus mutans* insoluble and soluble dextransucrase activities. Ph.D. Dissertation. Massachusetts Institute of Technology.

Abstracts

1. Pellon, J.R., Montville, T.J., Hecht, S.M. and Gomez, R.F. 1980. Bleomycin A2 damage to the folded chromosome of *Escherichia coli*. Abs. Ann. Mtg. American Soc. Microbiol., page 16.

2. Montville, T.J. and Sinskey, A.J. 1980. A one enzyme model for the synthesis of water-soluble and water-insoluble dextrans by the dextransucrase of *Streptococcus mutans* GS-5. Abs. Ann. Mtg. American Soc. Microbiol., page 148.

3. Montville, T.J. and Sapers, G.M. 1981. Thermal resistance of pH-elevating strains of *Bacillus licheniformis* spores. Abs. 41st Ann. Mtg. Inst. Food Technol., page 97.

4. Montville, T.J. 1982 Effect of pH and glucose concentration on gas and toxin production by *Clostridium botulinum* 62A. Abs. Ann. Mtg. American Soc. Microbiol., page 206.

5. Montville, T.J. and Conway, L.K. 1983. USDA raw-pack process for home-canned tomatoes: variable lethality to bacteria. Abs. 43rd Ann. Mtg. Inst. Food Technol., paper 205.

6. Montville, T.J. 1983. Temporal observations of the pH/NaCl interactions on *Clostridium botulinum* growth and lysis in broth culture. Abs. 43rd Ann. Mtg. Inst. Food Technol., paper 387.

7. Palumbo, S.A. and Montville, T.J. 1983. Evaluation of inosine monophosphate and hypoxanthine as indicators of bacterial growth in stored meat. Abs. 43rd Ann. Mtg. Inst. Food Technol., paper 307.

8. Montville, T.J. 1984. Characterization of a halo-acid tolerant variant derived from *Clostridium botulinum* B-aphis. Abs. Ann. Mtg. American Soc. Microbiol., page 200.

9. Montville, T.J. 1984. Biphasic germination kinetics of spores from *Clostridium botulinum* B-aphis and Ba410. Abs. 44th Ann. Mtg. Inst. Food Technol., paper 96.

10 Montville, T.J. 1984. Environmental influence on phenotypic characteristics of clostridia. (invited) Gordon Research Conference, "Microbiological Safety of Foods," Plymouth, NH July 16-20.

11. Meyer, M.E. and Montville, T.J. 1986. Differences in fermentation characteristics and diacetyl production among *Lactobacillus plantarum* strains. Abs. N.Y. Inst. Food Technol. Student Res. Poster Session.

12.Montville, T.J. 1986. Fermentation in wine making. Proceedings of Grape Exp.- the NJ Viticult. and Enol. Symp.

13. Hsu, A.H.-M. and Montville, T.J. 1986. A modified glucose oxidase/peroxidase for the determination of glucose in anaerobic cultures. Abs. Ann. Mtg. American Soc. Microbiol., page 287.

14. Montville, T.J., Hsu, A.H.-M. and Meyer, M.E. 1986. Fermentation characteristics of pyruvate-grown *Lactobacillus plantarum* pH-stat cultures. Abs. Ann. Mtg. American Soc. Microbiol., page 262.

15. Meyer, M.E., Hsu, A.H.-M. and Montville, T.J. 1986. Differences in fermentation characteristics and diacetyl production in *Lactobacillus plantarum* strains. Abs. 46th Ann. Mtg. Inst. Food Technol., paper 96.

16. Koch, G.E. and Montville, T.J. 1987. Hyperproduction of acetoin by *Lactobacillus plantarum* mutants. Abs. N.Y. Inst. Food Technol. Student Res. Poster Session.

17. Goldstein, P.K. and Montville, T.J. 1987. Sodium bicarbonate inhibition of *Aspergillus parasiticus* growth on Czapek's agar. Abs. N.Y. Inst. Food Technol. Student Res. Poster Session.

18. Hsu, A.H.-M. and Montville, T.J. 1987. Acetoin and diacetyl synthesis in *Lactobacillus plantarum* pH-controlled and fed-batch fermentations. Abs. N.Y. Inst. Food Technol. Student Res. Poster Session.

19. Goldstein, P.K. and Montville, T.J. 1987. Influence of sodium bicarbonate on growth and aflatoxin production of *Aspergillus parasiticus* in Czapek's agar. Abs. 47th Ann. Mtg. Inst. Food Technol., paper 136.

20. Koch, G.E., Johnston, S.J. and Montville, T.J. 1987. Hyperproduction of acetoin by *Lactobacillus plantarum* mutants. Abs. 47th Ann. Mtg. Inst. Food Technol., paper 40.

21. Tsau, J.-L., and Montville, T.J. 1988. Mechanisms of pyruvate transport in *Lactobacillus plantarum*. Abs. Ann. Mtg. American Soc. Microbiol., page 267.

22. McFall, S. and Montville, T.J. 1988. Effect of pH on catabolism of exogenous and endogenous pyruvate in continuous culture. Abs. Ann. Mtg. American Soc. Microbiol., page 267.

23. Curran, D.M. and Montville, T.J. 1988. Inhibition of yeasts in apple juice by sodium bicarbonate. Abs. 48th Ann. Mtg. Inst. Food Technol., page 341.

24. Montville, T.J. 1988. Metabolic regulation of "homolactic" fermentations- diverting carbon flow from lactate to commercially important metabolites (invited). Abs. 48th Ann. Mtg. Inst. Food Technol., page 484.

25. Tsau, J.-L., and Montville, T.J. 1988. Mechanisms of pyruvate transport in *Lactobacillus plantarum*. Abs. Ann. Mtg. American Soc. Microbiol., page 267.

26. McFall, S. and Montville, T.J. 1988. Effect of pH on catabolism of exogenous and endogenous pyruvate in continuous culture. Abs. Ann. Mtg. American Soc. Microbiol.,
27. page 267.

28. Curran, D.M. and Montville, T.J. 1988. Inhibition of yeasts in apple juice by sodium bicarbonate. Abs. 48th Ann. Mtg. Inst. Food Technol., page 341.

29. Montville, T.J. 1988. Metabolic regulation of "homolactic" fermentations- diverting carbon flow from lactate to commercially important metabolites. Abs. 48th Ann. Mtg. Inst. Food Technol., page 484.

30. Curran, D.M. and Montville, T.J. 1989. Bicarbonate control of microbial growth and texture properties associated with fish. Abs. 49th Ann. Mtg. Inst. Food Technol. paper 672.

31. Montville, T.J. 1989. Food microbiology and biotechnology- converging fields? (invited) Abs. 49th Ann. Mtg. Inst. Food Technol. paper 653.

32. Curran, D.M. and Montville, T.J. 1989. Multiwell most- probable- number method for determining death kinetics of immobilized *Salmonella*. Abs. N.Y. Inst. Food Technol. Student Res. Poster Session. (competition winner)

33. DePasquale, D.A. and Montville, T.J. 1989. Ammonium bicarbonate inhibits the growth of fusaria, aspergilli, and penicilli. Abs. N.Y. Inst. Food Technol. Student Res. Poster Session. (competition winner)

34. Shih, P.L. and Montville, T.J. 1989. Bicarbonate inhibition of corn natural mycoflora. Abs. N.Y. Inst. Food Technol. Student Res. Poster Session.

35. Curran, D.M. and Montville, T.J. 1989. Multiwell most probable number method for determining death kinetics of salmonella immobilized by entrapment in agar. Abs. Theobald Smith Society (NJ section of ASM) 1989 Meeting in Miniature.

36. DePasquale, D.A. and Montville, T.J. 1989. Ammonium bicarbonate inhibits the growth of mycotoxigenic fungi. Abs. Theobald Smith Society (NJ section of ASM) 1989 Meeting in Miniature.

37. DePasquale, D.A. and Montville, T.J. 1990. Ammonium bicarbonate inhibits mycotoxigenic fungi by acting as a delivery system for toxic, free ammonia. Abs. N.Y. Inst. Food Technol. Student Res. Poster Session. (competition winner)

38. Tseng, C.-P. and Montville, T.J. 1990. Enzymatic regulation of glucose catabolism by *Lactobacillus plantarum* in response to Changes in pH and O_2 levels. Abs. Theobald Smith Society (NJ section of ASM) 1990 Meeting in Miniature.

39. Lewus, C.B., Rogers, A.M., and Montville, T.J. 1990. Detection of bacteriocins produced by lactic acid bacteria. Abs. Theobald Smith Society (NJ section of ASM) 1990 Meeting in Miniature.

40. Rogers, A.M., Lewus, C.B., and Montville, T.J. 1990. Optimization of plate agar diffusion assay for quantification of bacteriocins. Abs. Theobald Smith Society (NJ section of ASM) 1990 Meeting in Miniature.

41. DePasquale, D.A. and Montville, T.J. 1990. Mechanism of ammonium bicarbonate's antifungal activity. Abs. Ann. Mtg. Amer. Soc. Microbiol. paper P3.

42. Tseng, C.-P. and Montville, T.J. 1990. Enzymatic regulation of glucose catabolism by *Lactobacillus plantarum* in response to Changes in pH and O_2 levels. Abs. Ann. Mtg. Amer. Soc. Microbiol. paper 046.

43. Shih, P.-L. and Montville, T.J. 1990. Inhibition of mycotoxigenic fungi in corn by ammonium bicarbonate and sodium bicarbonate. Abs. 50th Ann. Mtg. Inst. Food Technol. paper 716.

44. Roinestad, K.S., Montville, T.J., and Rosen, J.D. 1990. Determining the site of trichothecene inhibition by sodium bicarbonate in *Fusarium tricinctum*. Abs. 50th Ann. Mtg. Inst. Food Technol.

45. Montville, T.J. 1991. An overview of antimicrobial proteins- bacteriocins, colicins, and defensins. (invited) Abs. 51th Ann. Mtg. Inst. Food Technol. paper 227.

46. Lewus, C.B., Kaiser, A., and Montville, T.J. 1991 Inhibition of foodborne bacterial pathogens by bacteriocins from lactic acid bacteria meat isolates. Abs. 51th Ann. Mtg. Inst. Food Technol. paper 526.

47. Okereke, A. and Montville, T.J. 1991. Inhibition of *Clostridium botulinum* spores by bacteriocins produced by lactic acid bacteria. Abs. 51th Ann. Mtg. Inst. Food Technol. paper 642.

48. Rogers, A.M. and Montville, T.J. 1991. Contribution of nisin to *Clostridium botulinum* inhibition in model food systems. Abs. 51th Ann. Mtg. Inst. Food Technol. paper 397. (Winner, John C. Ayres Graduate Poster Competition)

49. J.L. Tsau, and Montville, T.J. 1991. Transport of pyruvate in *Lactobacillus plantarum*. Abs. 1991 Ann. Mtg. American Soc. Microbiol.

50. Roinstead, K.S., Montville, T.J., and J.D. Rosen. 1991. Sodium bicarbonate inhibits formation of tricothecenes in *Fusaria* by causing oxidation of mevalonic acid lactone. Gordon Research Conference in Mycotoxins and Phycotoxins, Plymouth, NH, June 1991.

51. Bruno, M.E.C., Kaiser, A. and Montville, T.J. 1992. Mechanism of nisin action on *Listeria monocytogenes* cells. Abs. N.Y. Inst. Food Technol. Student Res. Poster Session. (competition winner)

52. Sun, S. and Montville, T.J. 1992. The partial characterization of an amylase-sensitive bacteriocin produced by *Leuconostoc paramesenteroides*. Abs. N.Y. Inst. Food Technol. Student Res. Poster Session. (undergraduate competition winner)

53. Crandall, A.D., Okereke, A., and Montville, T.J. 1992. Potential use of bacteriocins and lactic acid production to inhibit *Clostridium botulinum* growth and toxin production in a model gravy system. Abs. N.Y. Inst. Food Technol. Student Res. Poster Session. (graduate scholarship winner)

54. Bruno, M.E.C., Kaiser, A. and Montville, T.J. 1992. Proton motive force of *Listeria monocytogenes* and its depletion by the bacteriocin nisin. Abs. Theobald Smith Society (NJ section of ASM) 1992 Meeting in Miniature.

55. Crandall, A.D., Okereke, A., and Montville, T.J. 1992. Potential use of a biopreservation system inhibit *Clostridium botulinum* growth and toxin production in a model gravy system. Abs. Theobald Smith Society (NJ section of ASM) 1992 Meeting in Miniature.

56. Sun, S. and Montville, T.J. 1992. The partial characterization of characteristics of an amylase-sensitive bacteriocin produced by *Leuconostoc paramesenteroides*. Abs. Theobald Smith Society (NJ section of ASM) 1992 Meeting in Miniature.

57. Crandall, A.D., Okereke, A., and Montville, T.J. 1992. Potential use of bacteriocins and lactic acid production to inhibit *Clostridium botulinum* growth and toxin production in a model gravy system. Abs. 52nd Ann. Mtg. Inst. Food Technol. paper 88.

58. Montville, T.J., Rogers, A.M., and Okereke, A. 1992. Differential Sensitivity of *Clostridium botulinum* strains to nisin is not bio-type associated. Abs. 52nd Ann. Mtg. Inst. Food Technol. paper 660.

59. Bruno, M.E.C., Kaiser, A. and Montville, T.J. 1992. Mechanism of nisin action on *Listeria monocytogenes* cells. Abs. 52nd Ann. Mtg. Inst. Food Technol. paper 662. (Winner of the John Z. Ordall Competition for best graduate paper oral presentation.)

60. Bruno, M.E.C., and Montville, T.J. 1993. Common antilisterial mechanism of bacteriocins from lactic acid bacteria. Abs. 53rd Ann. Mtg. Inst. Food Technol.

61. Winkowski, K., Crandall, A.D. and Montville, T.J. 1993. Use of bacteriocin-producing *Lactobacillus bavaricus* MN to inhibit *Listeria monocytogenes* growth in minimally processed refrigerated meat. Abs. 53rd Ann. Mtg. Inst. Food Technol.

62. Kaiser, A.L. and Montville, T.J. 1993. Characterization of the bacteriocin, bavaricin MN. Abs. 1993 Ann. Mtg. Amer. Soc. Microbiol. paper P39.

63. Montville, T.J. and Bruno, M.E.C. 1993. Common mechanism of bacteriocin action. (invited) 15th International Symposium of the International Committee on Food Microbiology and Hygiene, "Novel Approaches towards Food Safety Assurance" Bingen Germany, August 31-September 3, 1993.

64. Roinestad, K.S., Montville, T.J. and Rosen, J.D. 1994. Mechanism of bicarbonate inhibition of mycotoxin inhibition in *Fusarium tricinctum*. 1994 Meeting of the American Chemical Society.

65. Winkowski, K., and Montville, T.J. 1994. Kinetics of nisin's action on *Listeria monocytogenes* cells and liposomal derived systems. (Winner Biotechnology Division Graduate Poster Competition). Abs. 53rd Ann. Mtg. Inst. Food Technol. page 168.

66. Crandall, A.D. and Montville, T.J. 1994. Frequency and genetic instability of nisin insensitivity of *Clostridium botulinum* spores. Abs. 53rd Ann. Mtg. Inst. Food Technol., page 170.

67. Montville, T.J., Rogers, A.M., Bruno, M.E.C., and Winkowski, K. 1994. Models and mechanisms for bacteriocins produced by lactic acid bacteria. (invited) Society for Industrial Microbiology, Annual Meeting, Boston, MA, August 1-5.

68. Montville, T.J. 1994. Bacteriocins and their applications in food science. Graduate course at the Universidade de São Paulo, São Paulo, Brazil, June 9-17.

69. Montville, T.J. 1994. Bacteriocins in the control of microorganisms in food. (invited). 14th Brazilian Conference of Food Science and Technology, São Paulo, Brazil, June 17-20.

70. Montville, T.J. 1995. Mechanisms and models for bacteriocin action and application. (invited) International Dairy Lactic Acid Bacteria Conference, New Zealand.

71. Winkowski, K, Ludescher, R.D., and Montville, T.J. 1995. Binding affinity of the bacteriocin nisin to lipid bilayers derived from *Listeria monocytogenes*. Abs. 54th Ann. Mtg. Inst. Food Technol. (Winner Microbiology Division Best Graduate Student Poster Award.)

72. Mazzotta, A.S. and Montville, T.J. 1995. *Listeria monocytogenes* resistance to nisin at 10°C and 30°C. Abs. 54th Ann. Mtg. Inst. Food Technol.

73. Mazzotta, A.S., Crandall, A.D., and Montville, T.J. 1995. Resistance of *Clostridium botulinum* spores and vegetative cells to nisin. Abs. 1995 Ann. Mtg. Amer. Soc. Microbiol.

74. Kaiser, A.L. and Montville, T.J. 1995. Purification of bavaricin MN, a bacteriocin from *Lactobacillus bavaricus* and further characterization of its effect on proton motive force in energized cells of *Listeria monocytogenes*. Abs. 1995 Ann. Mtg. Amer. Soc. Microbiol.

75. Chen, Y.H. and Montville, T.J. 1995. Efflux of ions and ATP depletion induced by Pediocin PA-1 are concomitant with cell death in *Listeria monocytogenes*. Abs. 1995 Ann. Mtg. Amer. Soc. Microbiol.

76. Winkowski, K., R.D. Ludescher and T.J. Montville. 1995 Nisin Binding to *Listeria monocytogenes* derived lipid bilayers. Abs. Workshop on Bacteriocins of Lactic Acid Bacteria, Applications and Fundamental, Banff, Alberta, Canada.

77. Montville, T. J. 1995.Bacteriocins of lactic acid bacteria- potential and limitations as microbial agents for the safe guarding of foods. IX World Congress of Food Science and Technology, July 30- August 8, 1995, Budapest, Hungary.

78. Montville, T.J. 1995. Physiological and regulatory hurdles for bacteriocin applications- what can we learn from mechansitic models? XV Food MIcrobiology Research Conference, November 8-10, Chicago, IL (invited).

79. Winkowski, K., Ludescher, R.D., and Montville, T.J. 1996. Physico-chemical characterization of the action of the antimicrobial protein nisin with liposomes derived from *Listeria monocytogenes*, a foodborne pathogen. Abs. Biophysical Society Annual Meeting.

80. Mazzotta, A.S., E. De Martinis, A.D. Crandall, and T.J. Montville. 1996. Effect of pH, salt, temperature, and surfactants on nisin resistance in *Listeria monocytogenes.* Abs. 55th Ann. Mtg. Inst. Food Technol. (Winner John Ayres Graduate Paper Competition).

81. Chen, Y. and T.J. Montville. 1996. Characterization of pediocin PA-1 interaction with liposomes derived from *Listeria monocytogenes.* Abs. 55th Ann. Mtg. Inst. Food Technol.

82. Montville, T.J. 1996. Use of probiotics to improve human health: evidence and potential. 96th Annual Meeting of the American Society for Microbiology. New Orleans, May 19-22. (invited).

83. Montville, T.J. 1996. *Listeria monocytogenes*: a paradigm for dealing with emerging foodborne pathogens. Hebrew University of Jerusalem, Rohovot, Israel. March. (invited lecture).

84. Montville, T.J. 1996. Biopreservation and the use of bacteriocins to assure food safety. Ohio Valley Section IFT. March 19. Sharonville, Ohio. (invited lecture).

85. Montville, T.J. and A. Mazzotta. 1996. Management of nisin resistance in *Clostridium botulinum*. Abs. 1996 Mtg. of the Interagency Botulism Res. Coord. Comm. Fredrick, MD, Nov. 6 - 8. p. 71.

86. De Martinis, E., Mazzotta, A.S., A.D. Crandall, T.J. Montville and B.D.M. Franco. 1996. Effect of pH, salt concentration, temperature, and surfactants on development of nisin resistance in *Listeria monocytogenes.* 15th Brazilian Congress of Food Science and Technology. Minas Gerais, Brazil, Aug 4.

88. Montville, T.J. 1996. Bacteriological warfare- models and mechanisms for antimicrobial proteins produced by lactic acid bacteria. Theobald Smith Society Lecture (NJ section of the ASM), Nov. 21. (invited lecture).

89. Chen, Y.H., R.D. Ludescher, R. Shapira, M. Eisenstein, and T.J. Montville. 1997. Binding of pediocin PA-1 and its fragments to phospholipid vesicles probed by intrinsic tryptophan fluorescence. Abs. 56th Ann. Mtg. Inst. Food Technol.

90. Mazzotta, A.S. and T.J. Montville. 1997. Resistance to the antimicrobial nisin in *Clostridium botulinum* spores and cells. Abs. 56th Ann. Mtg. Inst. Food Technol.

91. Campos, C.A., A.S. Mazzotta, and T.J. Montville. 1997. Inhibition of *Listeria monocytogenes* by *Carnobacterium piscicola* in chicken at refrigerated temperatures. Abs. 56th Ann. Mtg. Inst. Food Technol.

92. Chea, F.P., T.J. Montville, and D.W. Schaffner. 1998. Modeling the germination kinetics of *Clostridium botulinum* spores as affected by temperature, pH and sodium chloride. Abs. 57th Ann. Mtg. Inst. Food. Technol. p 106, no. 46B-15.

93. Montville, T.J. 1998. U.S. Perspective on Food Safety in a Global Market Place. Argentinean National Academies of Medicine and Veterinary Sciences International Symposium on Food-borne Disease. November 20. Buenos Aires, Argentina.

94. Montville, T.J. 1998. Control of pathogenic microorganisms using biological systems. Vth Latin American Congress on Food Microbiology and Hygiene. November 23. Aguas de Linda, Sao Paulo State, Brazil.

95. Chung, H.J., Y. Chen, M.L. Chikindas, and T.J. Montville. 1999. Nisin is bactericidal for *Mycobacterium smegmatis*. Book of Abstracts, 1999 IFT Annual Meeting, Chicago, IL, July 24-28. Abstract 37D-25, p. 99.

96. Nilsson, L., Y. Chen, M.L. Chikindas, H.H. Huss, L. Gram, and T.J. Montville. 1999. The combined action of nisin and CO_2 atmosphere on the cytoplasmic membrane of *Listeria monocytogenes* Scott A. Proceedings of the Seventeenth International Conference of the International Committee on Food Microbiology and Hygiene (ICFMH) (FoodMicro 99), Veldhoven, the Netherlands, September 13/17, 1999, p. 195-198.

97. Montville, T.J., A. Mazzotta, A. Crandal, K. Modi and M.L. Chikindas. 1999. Mechanism of nisin resistance does not confer resistance to heat, preservatives, and antibiotics in *L. monocytogenes* and *C. botulinum*. Proceedings of the 17th International Symposium of the International Committee on Food Microbiology and Hygiene (ICFMH), (Food Micro 99) Veldhoven, The Netherlands, 13 - 17 September, 1999.

98. Herranz, C., Y. Chen, L. Cintas, P.E. Hernandez, T.J. Montville, and M. L. Chikindas. 1999. Mode of action of enterocin P against *Enterococcus faecium.* Proceedings of the Sixth Symposium on Lactic Acid Bacteria, FEMS, Veldhoven, The Netherlands, 19-23 September, 1999.

99. Modi, K. D., M. L. Chikindas and Montville, T. J. 1999. Sensitivity of nisin-resistant and wild-type *Listeria monocytogenes* Scott A to heat and preservatives. Proceedings of the Sixth Symposium on Lactic Acid Bacteria, FEMS, Veldhoven, The Netherlands, 19-23 September, 1999.

100. Montville, T. J. 1999. Critical Role of membranes in bacteriocins, antibiotics, and preservative resistance. 1999 IAMFES Annual Meeting, Dearborn, MI.

Invited Lectures

Montville, T.J. 1984. Environmental influence on phenotypic characteristics of clostridia. Gordon Research Conference, "Microbiological Safety of Foods," Plymouth, NH July 16-20.

Montville, T.J. 1988. Metabolic regulation of "homolactic" fermentations- diverting carbon flow from lactate to commercially important metabolites. Abs. 48th Ann. Mtg. Inst. Food Technol., page 484.

Montville, T.J. 1989. Food microbiology and biotechnology- converging fields? 49th Annual Meeting of the Institute of Food Technologists.

Montville, T.J. 1991. An overview of antimicrobial proteins- bacteriocins, colicins, and defensins. Abs. 51th Ann. Mtg. Inst. Food Technol. paper 227.

Montville, T.J. and Bruno, M.E.C. 1993. Common mechanism of bacteriocin action. 5th International Symposium of the International Committee on Food Microbiology and Hygiene, "Novel Approaches towards Food Safety Assurance" Bingen Germany, August 31- September 3, 1993.

Montville, T.J., Rogers, A.M., Bruno, M.E.C., and Winkowski, K. 1994. Models and mechanisms for bacteriocins produced by lactic acid bacteria. Society for Industrial Microbiology, Annual Meeting, Boston, MA, August 1-5.

Montville, T.J. 1994. Bacteriocins and their applications in food science. Graduate course at the Universidade de São Paulo, São Paulo, Brazil, June 9-17.

Montville, T.J. 1994. Bacteriocins in the control of microorganisms in food. 14th Brazilian Conference of Food Science and Technology, São Paulo, Brazil, June 17-20.

Montville, T.J. 1995. Mechanisms and models for bacteriocin action and application. International Dairy Lactic Acid Bacteria Conference, New Zealand.

Montville, T. J. 1995. Bacteriocins of lactic acid bacteria- potential and limitations as microbial agents for the safe guarding of foods. IX World Congress of Food Science and Technology, July 30- August 8, 1995, Budapest, Hungary.

Montville, T.J. 1995. Control of spore-formers by prevention of growth and toxin production. 95th Annual Meeting American Society for Microbiology, Washington, D.C.

Montville, T.J. 1995. Biocontrol in foods- using lactic acid bacteria and their bacteriocins to improve food safety. presented as part of Roundtable on "Biological control: science and policy issues of natural antimicrobials in food, turfgrass and agriculture" 95th Annual Meeting American Society for Microbiology, Washington, D.C.

Montville, T.J. 1995. Physiological and regulatory hurdles for bacteriocin applications- what can we learn from mechanistic models? XV Food Microbiology Research Conference, November 8-10, Chicago, IL .

Montville, T.J. 1996. Applications and limitations to the use of bacteriocins in the biopreservation of foods. Ohio Valley Section, Institute of Food Technologists.

Montville, T.J. 1996. *Listeria monocytogenes*: a paradigm for dealing with emerging foodborne pathogens. Hebrew University of Jerusalem, Rohovot, Israel. March.

Montville, T.J. 1996. Use of probiotics to improve human health: evidence and potential. 96th Annual Meeting of the American Society for Microbiology, New Orleans.

Montville, T.J. 1997. Food microbiology- a three day course. Center for Professional Advancement. March 21-24. Amsterdam, the Netherlands.

Montville, T.J. 1998. U.S. Perspective on food safety in a global market place. Argentinean National Academies of Medicine and Veterinary Sciences International Symposium on Food-borne Disease. November 20. Buenos Aires, Argentina.

Montville, T.J. 1998. Control of pathogenic microorganisms using biological systems. Vth Latin American Congress on Food Microbiology and Hygiene. November 23. Aguas de Linda, Sao Paulo State, Brazil.

Montville, T. J. 1999. Critical Role of membranes in bacteriocins, antibiotics, and preservative resistance. 1999 IAMFES Annual Meeting, Dearborn, MI.

Montville, T.J., A. Mazzotta, A. Crandal, K. Modi and M.L. Chikindas. 1999. Mechanism of nisin resistance does not confer resistance to heat, preservatives, and antibiotics in *L. monocytogenes* and *C. botulinum*. 17th International Symposium of the International Committee on Food Microbiology and Hygiene (ICFMH), (Food Micro 99) Veldhoven, The Netherlands, 13 - 17 September, 1999.

Montville, T.J. 2000. Guess who's coming to dinner? Uninvited guests. Combined meeting of the NY and CNJ section of the IFT. March 11. Edison, NJ.

Montville, T.J. 2001. The Importance of microbes in agriculture, University of Chiapas, April 5, Chiapas, Mexico.

Montville, T.J. 2001. The microbial safety of foods. University of Chiapas, April 6, Chiapas, Mexico.

Montville, T.J. 2001. The Importance of Microbes in Agriculture, EcoSur Research Institute, April 8, San Cristobal, Mexico.

Montville, T.J. and M.L. Chikindas. 2001. Principles and applications of bacteriocinigenic lactic acid bacteria in foods. International Seminar on Lactic Acid Bacteria in Food and Health. April 6. University of Sao Paulo, Sao Paulo, Brazil.

Montville, T.J.2001. Emerging foodborne pathogens. 3rd Congress of Pharmaceutical Sciences. April 9. Aguas de Linda, Sao Paulo State, Brazil.

Montville, T.J.2001. The microbiological safety of foods. 3rd Congress of Pharmaceutical Sciences. April 10. Aguas de Linda, Sao Paulo State, Brazil.

Montville, T.J. and Franco, B. 2001. Bacteriocins, Applications and Mechanisms in Food Safety. Graduate Course (4 Credits) University of Sao Paulo, May 5-27, S◈o Paulo, Brazil.

Montville, T.J. 2001. Emerging and re-emerging foodborne pathogens. 21st Congress or the Brazilian Society for Microbiology. Foz do Iguacu, Brazil.

Montville, T.J. 2001. Use of probiotics to improve health: 21st Congress or the Brazilian Society for Microbiology. Foz do Iguacu, Brazil.

Montville, T.J. 2001. Guess who's coming to dinner? Univited Guests. Department of Food Science and Technology. University of San Catarina, Brazil

Montville, T.J. 2001. Applications and mechanisms of bacteriocins to improve food safety. Department of Food Science and Technology. University of San Catarina, Brazil.

Montville. T. J. 2003 After dinner conversations – quorum sensing in foodborne bacteria.University of Sabat, 2nd International Biotechnology Symposium.

Montville, T.J. 2005. The changing face of foodborne pathogens. International Society of Horticultural Science, International Symposium on Natural Preservatives in Food Systems, Princeton, NJ.

Montville, T. J. 2005. Biosafety challenges for the microbiology laboratory. "Microorganism for Human Well-Being," (the 2005 International Symposium of the Korean Society for Microbiology). Seoul, Korea.

Montville, T.J. 2005. Thermal resistance of *Bacillus anthracis* spores: is an unvalidated surrogate better than a guess? 1st Annual IFT Food Protection and Defense Research Conference, Atlanta, GA.

Montville, T.J. 2007. (Food Microbiology Division Distinguished Lecturer). We don't know squat, but we know a lot. Annual Meeting of the Institute of Food Technologists. Chicago, IL.

Montville, T.J. 2007. At the edge of ignorance. American Society for Microbiology. 42nd Annual Region I Meeting. Boston, MA.

Montville, T.J. 2008. Biosecurity, biosafety, and research of *Bacillus anthracis*. Fairleigh Dickenson University. Teaneck, NJ.

Montville, T.J. 2009. The role of membrane fluidity and transcriptional regulation on the F_0F1ATPase of *Listeria monocytogenes*. Second International Symposium on Probiotics and Antimicrobial Peptides. St-Malo, France.

Montville, T.J. 2009. On the edge of ignorance. Taiyo Kagaku Co. ltd, Yokkaichi, Japan.

Montville, T.J. 2009. Membrane fluidity regulates *Listeria monocytogenes'* ATPase. Tokyo Institute of Technology. Toyko, Japan.

Montville, T.J. 2009. Look who's talking now- communication among foodborne microbes. Hokkaido University, Hokudai, Japan.

Montville, T.J. 2011. Mechanismos y methodos para entender la accion de bacteriocinas en contra de *Listeria monocytogenes*. Universidad Teológica de la Mixteca, Huajuapan de León, Oaxaca, Mexico.

Montville, T. J. 2013. Food Safety (not) a laughing matter. Congresso Brasilerio do Micrrobiologia, Natal, Brazil.

Montville, T. J. 2013. Personal, scientific, and academic integrity. Congresso Brasilerio do Microbiologia, Natal, Brazil.

Montvillet.T. J. 2013. Food Safety, (not) a laughing matter. Universidade de São Paulo Faculdade de Ciências Farmacêuticas de Ribeirão Preto, Ribeirão Preto, Brazil.

Montville, T. J. 2013. Personal, Scientific, and Academic Integrity. Universidade de São Paulo Faculdade de Ciências Farmacêuticas de Ribeirão, Preto Ribeirão Preto, Brazil.

Montville, T. J. 2013. Use of antimicrobials from lactic acid bacteria for food safety. Universidade de São Paulo Faculdade de Ciências Farmacêuticas de Ribeirão Preto Ribeirão Preto , Brazil.

Montville, T.J. 2014. Pediatric Grand Rounds – Foodborne pathogens of pediatric significance. Robert Wood Johnson Medical School, New Brunswick, NJ.

Montville, T.J. 2015. The trajectory of food microbiology. Kuwait University, Kuwait.

Montville, T.J. 2016. Personal, scientific, and academic integrity. Online video produced by the American Society for Microbiology.

Montville, T.J. 2017. Food safety (not) a laughing matter. Online video produced by the American Society for Microbiology.

Thesis and Dissertations Supervised:

Xiuqi Liu. M.S. 2014. Membrane rigidity in vegetative cells and spores of *Bacillus* species.

Savreet Bains, M.S. 2014 (nonthesis).

Jennifer M. Merle. M.S. 2012. Growth behavior *of Alicyclobacillus acidoterrestris* as a funtion of strain and culture conditions.

Mohamed Z. Badaoui Najjar. Ph.D. 2009. *Listeria monocytogenes* adjusts its membrane fluidity, ATPase activity, and *atp*E transcription levels in response to cold and acid stress.

Marcelo Bonnet, Ph.D. 2005. Acid tolerance response of *Listeria monocytogenes:* bioenergetics and mechanisms of resistance to the antimicrobial nisin.

Rebecca Dengrove, M.S. 2005. Thermal resistance of *Bacillus anthracis* spores and potetial surrogates.

Jennifer Cleveland McEntire, Ph.D. 2003. Relationship between nisin resistance and acid sensitivity of *Listeria monocytogenes*.

Jie Li, Ph.D. 2003. Influence of cold, surfactant or CO_2 adaptation on the sensitivity of *Listeria monocytogenes* to nisin: a mechanistic study on the membrane composition and physical properties. (Co-advised with Prof. M. Tchikindas).

Lihui Zhao, Ph.D. 2002. Mathematical modeling, computer simulation, and microbiological study of the behavior of *Clostridium botulinum* 56A spores. (Co-advised with Prof. D. Schaffner).

Kshutuj D. Modi, M.S. 1999. Sensitivity of nisin-resistant and wild-type *Listeria monocytogenes* to heat and preservatives. (Co-advised with Prof. M. Tchikindas).

Justin M. Belles, M.S. 1999. Enzymatic removal of surface components from maize starch granules. (Co-advised with Prof. B. Wasserman).

Fabiola P. Chea, M.S. 1999. Modeling the germination kinetics of Clostridium botulinum spres as affected by temperature, pH and sodium chloride. (Co-advised with Prof. D. Schaffner).

Hyun-Jung Chung, M.S. 1999. Nisin's inhibition and more of action against *Mycobacteria*. (Co-advised with Prof. M. Tchikindas).

Alejandro Mazzotta, Ph.D. 1998. Mechanistic action of the antimicrobial nisin on *Clostridium botulinum* spores and management of nisin.

Yuhuan Chen, Ph.D. 1998. Physicochemical characterization and structure function relationship of pediocin PA-1 action with *Listeria monocytogenes* cells and lipid vesicles.

Chea, F. M.S. 1998. Computer modeling of *Clostridium botulinum* spore germination and outgrowth. (Co-advised with Prof. D. Schaffner).

Allison D. Crandall, Ph.D. 1997. Resistance to the bacteriocin nisin in *Listeria monocytogenes*.

Karen Winkowski, Ph.D. 1996. Mechanistic action of the antimicrobial peptide nisin.

Alan L. Kaiser, Ph.D. 1996. The bacteriocin MN: production, purification, and mode of action (Graduate Program in Microbiology and Molecular Genetics).

Mu Li, M.S. 1996. Immunomagnetic separation-enzyme linked immunosorbent assay for rapid capture and detection of *Bacillus stearothermophilus* spores.

Hui-Ying (Amy) Chang, M.S. 1996. Rapid detection of bacterial spores by polymerase chain reaction (PCR).

Robert Baker, M.S. 1995. Production of Leuconocin S in pH controlled *Leuconostoc paramesenteroides* fermentations.

Maria E.C. Bruno, Ph.D. 1994. Common mechanism of action of bacteriocins from lactic acid bacteria.

Allison Crandall, M.S. 1994. Potential use of *Pediococcus pentosaceus* to inhibit *Clostridium botulinum* in refrigerated *sous vide* beef.

Karen Winkowski, M.S. 1993. Use of bacteriocin-producing *Lactobacillus bavaricus* MN to inhibit *Listeria monocytogenes* growth in refrigerated meat systems.

Catherine Lewus, Ph.D. 1991. Characterization of bacteriocins produced by lactic acid bacteria isolated from meat.

A.M. Nancy Rogers, Ph.D. 1991. Contribution of nisin to the inhibition of *Clostridium botulinum* in a model food system.

Ching-Ping Tseng, Ph.D. 1991. Enzymatic regulation of glucose catabolism by *Lactobacillus plantarum* and its bioenergetic consequences in response to oxygen and pH changes. (Graduate Program in Microbiology and Molecular Genetics).

Pei-Ling Shih, M.S. 1990. The inhibition of fungal growth and mycotoxin production by ammonium bicarbonate and sodium bicarbonate.

David DePasquale, Ph.D. 1990. Antifungal activities of bicarbonates with particular emphasis on the ammonium form.

Donna Curran, M.S. 1989. Antimicrobial activity of ammonium bicarbonate and sodium bicarbonate in model and applied food systems.

Jya-Li Tsau, Ph.D. 1988. Transport and metabolism of pyruvate in Lactobacillus plantarum.

Sally McFall, M.S. 1988. Environmental regulation of *Lactobacillus plantarum* catabolite distribution in chemostat cultures.

Peter Goldstein, M.S. 1988. The influence of sodium bicarbonate on growth and aflatoxin production of *Aspergillus parasiticus* in Czapeks agar and corn.

Amy Hsu, M.S. 1987. Synthesis of acetoin and diacetyl in pH- controlled and fed-batch *Lactobacillus plantarum* cultures.

Mary Meyer, M.S. 1987. Influence of carbon substrates on lactic acid, cell mass, and diacetyl-acetoin production in lactobacilli.

Laura Corral, M.S. 1987. Antimicrobial activity of sodium bicarbonate against food-related bacteria and yeasts.

Teaching:

The Science of Food (undergraduate),~200 students, every fall, 2001 - 2015.

Food Microbiology (undergraduate), 2018.

Introduction to Food Science, the Major and the Discipline (undergraduate), 2013 - 2015.

Food Fermentation and Biotechnology (graduate), alternate years, 1991 - 2006.

Colloquium in Food Safety: Fad, Facts, and Politics (undergraduate),

with J. Rosen, 1997 – 2003, single instructor 2003 - 2015.

Facets of Food Science (undergraduate, single instructor), 2009 - 2015.

Principles of Food Science (undergraduate), 7 lectures. 1998 - 2003.

Food Science Fundamentals II (graduate), every spring, Coordinator, and 10 lectures

(1993 - 1997), 8 lectures 1998, 4 lectures 1999.

Perspectives in Agriculture & the Environment (undergraduate), Fall 1990, 1989.

Biochemistry and Molecular Biology (graduate), 2 lectures, 1993 - 1996.

Microbial Life, one lecture, 2006 - 2015.

Research in Food Science, supervise 2 - 6 graduate students.

Laboratory Rotation in Molecular Genetics, supervise 1 or 2 student for a 6 week rotation.

each year (1991 – 2015).

Undergraduate Research, usually supervise 1 student per semester.

George H. Cook Honors Program, usually supervise 1 student per year.

Cook Honors Seminar, 2 lecture periods, 2009.

Food Microbiology Short Course, 1992 - 2009.

Better Process Control School (Short Course), varied yearly.

"In plant" instruction on HACCP and GMPs, varied yearly.

Service:

Legal Community

Grow Co. v. Choski, No. C-280-05 (N.J. Super. Ct.), deposed and testified at trial

Anderson v. Jamba Juice Co., No. C 12-01213 YGR (N.D. Cal.) *Coyle v. Hornell Brewing Co.*, No. 11-cv-02183-JBS-JS (D.N.J.) *Covington v. Hornell*, No. 08-21894-Civ-Seitz/O'Sullivan (S.D. Fla.) *Holk v. Snapple Beverage Co.*, No. 3:07-cv-03018-MJC-JJH (D.N.J.) *Ries v. Arizona Beverages USA LLC*, No-CV10-01139-JF (N.D. Cal.)

Robinson v. Hornell Brewing Co., No-cv-02183-JBS-JS (D.N.J.)

Weiner v. Snapple Beverage Co., No. 1:07-cv-08742 (DLC) (S.D.N.Y.)

Brazil v. Dole Packaged Foods, LLC, No. CV12-01831

Lilly v. Jamba Juice Co., No. 3:13-cv-02998-JST (N.D. Cal.)

Stephens v. Hamilton. No. 60-CV-2014-90005, deposed

Kivirist v. Wis. Department of Agriculture, No. 16-CV-06 (Lafayette Cir. Ct.) deposed

Russonko v. the New Jersey Department of Health, MER-L-505-18.

University

Biosafety Committee (1991-1995, Chair 1995-1997)

University Health Safety Council (1995-1997)

University Senator (1994-97)

Ad hoc Distance Learning Group (1995)

Science & Engineering Resource Center II Program Planning Committee (1995-1997)

New Brunswick Faculty Council Committee on Teaching (1994-95)

Graduate School, Biological Sciences Area Committee (1992-95)

School/College

Vice-Chair, Academic Forum (2006-2012)

Judicial Panel (2005-2006)

Advisory Committee on Professor II (2005-2007)

Teaching Effectiveness, Evaluation, and Improvement Committee (2005-2007)

Scholastic Standards and Standing (2002-2008, 2011-2013)

Cook General Honors Committee (2003-2005, 2007, 2008)

Cook College Committee on Evaluating and Rewarding Teaching (1996-1997)

Search Committee for Executive Dean and Executive Director, Cook College (1995-96)

CTY Biotechnology Day, developed and presented hands-on laboratory (1994)

Cook General Honors Interviewer (1991-95, 97, 2002, 2003-2015)

Represented Food Science and Cook College at First National Conference on Evaluating and Rewarding Teaching, University of Nebraska (1996)

Professional Affiliations:

American Academy of Microbiology, Institute of Food Technologists, American Society for Microbiology, Phi Tau Sigma, American Association for the Advancement of Science, International Association for Food Protection