**W. T. Evert Ting, Ph.D.,**Department of Biological Sciences
Purdue University Northwest

### Education

* Ph.D. Microbiology, The Ohio State University, Columbus, Ohio,1986
* M.S. Microbiology, The Ohio State University, Columbus, Ohio, 1983
* B.S.A. Plant Pathology, National Taiwan University, Taipei, Taiwan, 1978

**POSITIONS HELD**

* Professor, Department of Biological Sciences, Purdue University Calumet/ Northwest, Hammond, Indiana, 1998-present.
* Graduate Program Coordinator, Department of Biological Sciences, Purdue University Calumet/ Northwest, Hammond, Indiana, 2013-present.
* Interim Head, Department of Biological Sciences, Purdue University Calumet, Hammond, Indiana, 2011-2016
* Acting Head, Department of Biological Sciences, Purdue University Calumet, Hammond, Indiana, 2006
* Associate Professor, Department of Biological Sciences, Purdue University Calumet, Hammond, Indiana, 1993-1998
* Assistant Professor, Department of Biological Sciences, Purdue University Calumet, Hammond, Indiana, 1988-1993
* Visiting Assistant Professor (1987-1988), Department of Biological Sciences, Purdue University Calumet, Hammond, Indiana, 1987-1988

**Publications**

**Peer-Reviewed Journals**

**Ting**, **W.T.E.,** C.H. Chang\*, B. Szonyi, and D. Gizachew. 2020. The growth and aflatoxin B1, B2, G2, and G2 production by *Aspergillus flavus* and *A. parasiticus* on ground flax seeds (*Linum usitatissimum*). J. Food Prot. (Accepted on Feb.1, 2020 for publication.)

Gizachew, D., C.H. Chang\*, B. Szony, B. Szony, S. De La Torre\*\*, and **W. T. E. Ting**. 2019. Aflatoxin B1 (AFB1) production by *Aspergillus flavus* and *Aspergillus parasiticus* on ground Nyjer seeds: *the effect of water activity and temperature*. Int. J. Food Microbiol. 296:8-13. DOI:[10.1016/j.ijfoodmicro.2019.02.017](https://doi.org/10.1016/j.ijfoodmicro.2019.02.017).

Gizachew, D., Y.C. Hsu\*, B. Szonyi, and **W.T.E. Ting**. 2019. Effect of water activity, temperature and incubation period on fungal growth and ochratoxin A production on Nyjer seeds. Mycotoxin Research. 35:1-8. <https://doi.org/10.1007/s12550-018-0325-2>

**Ting**, **W.T. E.,** S.Y. Yuan, S.D. Wu\*, B.V. Chang. 2011. Biodegradation of phenanthrene and pyrene by *Ganoderma* *luciden.* International Biodeterioration & Biodegradation 65:238-242.

Byappanahalli, R.L. Whitman, D. A. Shively, **W. T. Evert Ting**, C. C. Tseng, and M. B. Nevers. 2006. Seasonal persistence and population characteristics of *Escherichia coli* and enterococci in deep backshore sand of two freshwater beaches. Journal of Water and Health 04:313-320*.*

**Ting, W.T.E**. and K.E. Deibel. 1992. Sensitivity of *Listeria monocytogenes* to spices at two temperatures. J. Food Safety. 12:129-137.

**Ting, W.-T.** and G.J. Banwart. 1985. Enumeration of enterococci and aerobic mesophilic plate count in dried soup using three reconstitution methods. J. Food Prot. 48:770-771.

**Ting. W.-T**. and G.J. Banwart. 1985. Detection of *Bacillus cereus* diarrheagenic toxin using a rat ligated intestinal loop assay. J. Food Safety. 7:57-63.

**Peer Reviewed Conference Proceedings and Papers**

**Ting, W.T.E**., C-H. Chiu\*, and C.-C. Chen, 2018 Screening of sporulation media for concrete healing bacteria. Proceeding of The Final Conference of Microorganisms-Cementitious Materials Interactions**. ISBN: 978-2-35158-210-7 (Volume 2)** 491-500.

Chen, C.-C., M.B. Cucolotto\*, M. Balac\*, S. Wang\*, C-H. Chiu\*, and **W.T. E. Ting**. 2018 Evaluations of effects of nutrients, calcium precursors, and bacteria on mechanical properties of mortar specimens. Proceeding of The Final Conference of Microorganisms-Cementitious Materials Interactions. **ISBN: 978-2-35158-210-7 (Volume 2)**:455-463.

Chiu\*, C.-H., C.-C. Chen, and **W.T. E. Ting.** 2018. Protective effect of lightweight aggregates to enhance survival of bacterial spores in self-healing concrete. Proceeding of The Final Conference of Microorganisms-Cementitious Materials Interactions. **ISBN: 978-2-35158-210-7 (Volume 2)**: 465-473.

Kramer, R., Pelter, L., Patterson, J., Kmiotek, K., **Ting, E**. and J. Patterson. 2011. Modular waste/ renewable energy system for production of electricity, heat, and potable water in remote locations. Proceedings of 2011 IEEE Global Humanitarian Technology Conference, p.30-35

**Conference Abstracts**

Wang\*, P.W. and **W.T. E. Ting**. 2019. *Comparison of Gastrointestinal Tolerance and Antimicrobial Effects of Probiotic Bacteria Isolated from Dietary Supplements*. J. of Food Prot. Supplement. 82:152.

Chang\*, C.H., **W.T. Evert Ting** and Dawit Gizachew. 2019. *Aflatoxin Production by Aspergillus flavus and Aspergillus parasiticus on Nyjer Seed Cake*. J. of Food Prot. Supplement. 82:251.

Gizachew, D. C.H. Chang\* and **W.T. Evert Ting**. 2019. *Studies of Aflatoxin Production by Aspergillus flavus and Aspergillus parasiticus on Ground Flax Seeds*. J. of Food Prot. Supplement. 82:72.

Hsu\*, Y.C, D. Gizachew, and **W. T. E. Ting.**2018. Effect of Temperature, Low Water Activity on Growth and Ochratoxin A Production by *Aspergillus fresenii* and *Aspergillus sulphureus* on Niger seeds.Abst. P2-67. J. Food Prot. Supplement A. 81:173.

Gizachew, D. C.H. Chang\*\*, and **W.T. E. Ting.** 2018. Studies of Aflatoxin B1 (AFB1) Production by *Aspergillus parasiticus* on Niger Seeds. Abst. P2-68. J. Food Prot. Supplement A. 81:173.

Hsu, Y.C. \*\*, D. Gizachew, and **Ting, W-T. E.** 2017. Effect of Water Activity and Temperature on Growth and Ochratoxin A Production by *Aspergillus fresenii* and *Aspergillus* *sulphureus* on Niger seeds. Abst. P1-105. J. Food Prot. Supplement A. 80:118.

Hernandez\*, J. F., Hernandez, F\*\*, Gizachew, D., and **Ting, W-T. E**. 2017. Effect of Temperature on Mycelia Growth and Aflatoxin B1 production of *Aspergillus flavus* and *Aspergillus parasiticus* on Niger seeds. Abst. P1-107. J. Food Prot. Supplement A. 80:118.

Panta, D\*, H-W. Liang\*, L. Chen\*\*, C.H. Chiu\*\*, and **W-T. E. Ting**. 2016. Inactivation of Salmonella on Fresh-cut Cantaloupes and Strawberries Using Citric Acid and Ultraviolet-C. Abst. P3-151. [Online Program Proceeding](https://iafp.confex.com/iafp/2016/webprogram/Paper11630.html) of 2016 International Association for Food Protection Conference.

Hartman\*, C. and **W. T.** **E. Ting**. 2013. Reduction of Artificial *Salmonella* Typhimurium Contamination on Stainless Steel by Application of Bacteriophage. Abstr. P2-115. J. Food Prot. Supplement 76:163.

**W.-T. E. Ting**, S. Susoreny\*, L. S. Pelter, and R. Kramer, 2008. “Production of Hydrogen by Dark Fermentation of Food Waste” Abstr. O-012. *In* Abstracts of the 105th General Meeting of the American Society for Microbiology, American Society for Microbiology, Boston, MA.

**Ting**, **W.T.E**., D. S. Johnson, M. N. Byappanahalli, R. L. Whitman, C. C. Tseng. 2005. Genetic Diversity of *Escherichia coli* isolated from backshore sand of two freshwater beaches of southern Lake Michigan. Abst. Q326.  *In* Abstracts of the 105th General Meeting of the American Society for Microbiology, American Society for Microbiology, Washington D.C.

**Ting**, **W.T.E**., D.S. Johnson, and C. C. Tseng. 2004. A comparison of riboprint patterns of *Escherichia coli* isolated from cows, deer, horses, and sewage in two different geographic areas. Abst. Q247. *In* Abstracts of the 104th General Meeting of the American Society for Microbiology, American Society for Microbiology, Washington D.C.

**Ting, W.T.E**., D.S. Johnson, A.M. Holler\*, K.T. Tran\*\*, and C.C. Tseng. 2003. A Study of the sources of *E. coli* contamination at Marquette Park Beach by random amplified polymorphic DNA typing. Abstr. Q414, p.589  *In* Abstracts of the 103th General Meeting of the American Society for Microbiology, American Society for Microbiology, Washington D.C.

**Ting, W.T.E.,** D.S. Johnson, G.A. Thomas, A.M. Holler\*, and C.C. Tseng. 2002. Discriminant analysis of random amplified polymorphic DNA (RAPD) patterns of *Escherichia coli* isolated from different human and non-humean sources. Abstr. Q108 , p.396 *In* Abstracts of the 102th General Meeting of the American Society for Microbiology, American Society for Microbiology, Washington D.C.

Tseng, C.C., D. Johnson, and **W.T. E. Ting**. 2002. Comparison of ribotypes of *Escherichia coli* from sewage, humans, and animals. abstr. Q-59, p.388. *In* Abstracts of the 102th General Meeting of the American Society for Microbiology, American Society for Microbiology, Washington D.C.

Tseng, C.C, D.J. Johnson, and **W.T.E. Ting**. 2002. Differentiation of *E coli* isolated from human and nonhuman sources using automated ribotyping method. *In* Proceeding of 2002 Great Lakes Beach Conference, Chicago.

**Ting, W.T.E.,** J. Vander Hoogt\*\* and R. Whitman. 2001. Growth and survival of *Escherichia coli* O157:H7 and a lake water *Escherichia coli* isolate in wet beach sand and water from Lake Michigan.  Abstr. Q364, p.658. *In* Abstracts of the 101th General Meeting of the American Society for Microbiology 2001, American Society for Microbiology, Washington D.C.

Tseng, C, **E. Ting**, D. Johnson, M. Saluta, and R. Dunst. 2001. RAPD fingerprinting as a potential means for differentiating human and animal *E. coli*. Life Sci. News 7:10-11.

Tseng, C. C. D. Johnson, and **W. T. E. Ting**. 2001. Automated ribotyping of *Escherichia coli* isolates from human and animals. Abstr. Q-330, p.650. *In* Abstracts of the 101th General Meeting of the American Society for Microbiology 2001, American Society for Microbiology, Washington D.C.

Tseng, C. C. D. Johnson, and **W. T. E. Ting**. 2000. Efficacy of RAPD Analysis for Differentiating Human from Animal E. coli Isolates. Abstr. Q-304. *In* Abstracts of the 100th General Meeting of the American Society for Microbiology 2000, American Society for Microbiology, Washington D.C.

**Ting, W.T.E**., D. Johnson and C.C. Tseng. 2000. Genomic diversity of *Escherichia col*i isolated from Lake Michigan water, beach sand and Seagull droppings as revealed by Radom Amplified Polymorphic DNA Fingerprints. Abstr. Q-305. . *In* Abstracts of the 100th General Meeting of the American Society for Microbiology 2000, American Society for Microbiology, Washington D.C.

Tseng, C.C. **W. T. E. Ting,** Y. Chen, D. Johnson, M. Koonce\*, M. Saluta. 1999. A comparative study of RAPD Fingerprints of Escherichia coli isolates from humans and animals. Abstr. Q-69, p.546. *In* Abstracts of the 99th General Meeting of the American Society for Microbiology 1999, American Society for Microbiology, Washington D.C.

Tseng, C.C. M. Koonce\*, **W. T. E. Ting,** and M. Saluta. 1998. Fingerprints of Escherichia coli isolates from humans and Canadian geese. Abstr. R-2, p.480. *In* Abstracts of the 98th General Meeting of the American Society for Microbiology 1998, American Society for Microbiology, Washington D.C.

Tseng, C.C. **W. T. E. Ting,** and M. Saluta. 1997. Random Amplified Polymorphic DNA (RAPD) analysis of dynamic human *Escherichia coli* genome. Abstr. H-220. *In* Abstracts of the 97th General Meeting of the American Society for Microbiology 1997, American Society for Microbiology, Washington D.C.

Ting. W.T.E., E. M. Nelson\*, and C.C. Tseng. 1997. The use of viraffinity to concentrate waterborne polioviruses for RT-PCR. Abstr, Q-169. Byappanahalli, R. L. Whitman, D. A. Shively, **W. T. Evert Ting**, C. C. Tseng, and M. B. Nevers. 2006. Seasonal persistence and population characteristics of *Escherichia coli* and enterococci in deep backshore sand of two freshwater beaches. Journal of Water and Health 04:313-320*.*

**Ting, W.T.E**., D. Johnson, D. George\*, and D. Warner\*. 1996. Comparing three selective media for enumeration of *bifidobacteria* in untreated waste water. Abstr. Q-451. *In* Abstracts of the 96th General Meeting of the American Society for Microbiology 1996, American Society for Microbiology, Washington D.C.

**Ting, W.T.E.** 1993. Effect of food grade phosphates on the growth of Listeria monocytogenes. Abstr. 656. *In* 1993 IFT Annual Meeting Technical Program: Book of Abstracts. Institute of Food Technologists. Chicago, IL.

**Ting, W.T.E**. and J. G. Alb\*\*. 1991. Combined effect of spices and lactic acid on the growth and survival of Listeria monocytogenes. Abstr. 523. P.216. *In* 1991 IFT Annual Meeting Program and Exhibit Directory. Institute of Food Technologists. Chicago, IL.

**Ting, W.T.E**. and G.J. Banwart. 1989. The growth and survival of freeze-thaw-injured Salmonella in various pre-enrichment broths. Abstr, p-49. *In* Abstracts of the 89th General Meeting of the American Society for Microbiology 1989, American Society for Microbiology, Washington D.C.

Butkiewicz\*, R.A. and **W.T.E. Ting**. 1989. The effect of rehydration methods on the recovery of Bacillus cereus and Staphylococcus aureus from dried milk. Abstr. P-56. . *In* Abstracts of the 89th Annual Meeting of the American Society for Microbiology 1989, American Society for Microbiology, Washington D.C.

**Ting, W.T.E**. and K.E. Deibel. 1989. Sensitivity of Listeria monocytogenes to spices at two temperatures. Abstr. 474. P. 208. *In* 1989 IFT Annual Meeting Program & Abstracts. Institute of Food Technologists. Chicago, IL.

**Ting, W.T.E.** and G. J. Banwart. 1986. Effect of Pre-enrichment and enrichment of frozen meat on the growth of Salmonella and other organisms. Abstr.80. *In* 146th Annual IFT Meeting Program & Abstracts. Institute of Food Technologists. Chicago, IL.

Deibel, K.E., **W.T.E. Ting** and G. J. Banwart. 1985. Survival of *Campylobacter jejuni* in bovine feces. Abstr. Q100. *In* Abstracts of the Annual Meeting of the American Society for Microbiology 1985, American Society for Microbiology, Washington D.C.

**Ting, W.T.E**. and G. J. Banwart. 1984. Effect of three reconstitution methods on the enumeration of enterococci and aerobic plate count in dried soup. Abstr. 30. *In* 44th Annual IFT Meeting Program & Abstracts. Institute of Food Technologists. Chicago, IL

*\* Graduate students, \*\* Undergraduate students*

**External Grants and Research Contracts**

* *Effect of water activity and Temperature on mold growth and mycotoxin production on Ground Flax seeds.* (Co-PI, Collaborated with D. Gizachew) $3000, funded by Indiana Academy of Sciences. 2019.
* *Microbial Quality of Fresh Cut Fruits Stored in Modified Atmosphere at 4°C for 28 days*. Funded by Bill’s Produce, Inc., Griffith, IN.
* *Virtual Microbiology Lab for Design and Optimization*. (Co-PI, collaborated with C. Zhou and J. Moland) Funded by Alverno Clinical Laboratories, Hammond, IN.
* *3D Alverno Clinical laboratories Virtual Tour*. Funded by Alverno Clinical Laboratories, Hammond, IN.
* *Hu Bi-Jiang International Scholar Grant, Received from Soochow University. 2009.*
* *Production of Hydrogen using Anaerobic Biological Process for Local Generation of Electricity*. (Co-PI, Collaborated with R. Kramer, L. Pelter, J. Patterson, and M. Ladisch.) Funded by U.S. Dept. of Energy
* *Comparison of random amplified polymorphic DNA patterns of Escherichia coli isolates form East Bay Municipal Utility District Laboratory*. (Co-PI, collaborated with C. Tseng) Funded by East Bay Municipal Utility District Laboratory, CA.
* *Rapid E*. coli Tests Using Rapid Bacteria Detector (RBD 2000): Suitability for Swimming Beach Area. Funded by EPA and USGS. 2000-2001.
* *Genomic Typing of E*. coli Isolated from Beach Sand and Lake Water by Random Amplified Polymorphic DNA Analysis. (Co-PI, collaborated with C. Tseng) Funded by USGS. 1998-1999.
* *DNA Fingerprinting as a Means for Tracing the Source of E*. coli Contamination. (Co-PI, collaborated with C. Tseng) Funded by NOAA.
* *Genomic Typing of E*. coli isolates. (Co-PI, collaborated with C. Tseng) Funded by NOAA.
* *Assessment of Bacterial and Viral Contamination in Burns Ditch and Lake Water in Northwest Indiana (*PI, *collaborated with C*. Tseng) Funded by NOAA
* *Enumeration of Fecal Indicator Bifidobacterium in Sewage, Ground Water, and Lake Michigan Water*. Funded by USGS.

**Recent Internal Grants (Competitive)**

* *Screening probiotic bacteria for reducing aflatoxin in vitro*. (Co-PI, collaborated with D. Gizachew), $4,000, Purdue Northwest Exploratory Grant, Announced on Dec. 6, 2019.
* *Improving crack resistance of concrete using bacteria based self-healing agents and internal curing strategy*. (Co-PI, collaborated with C.C. Chen,), $20,000, Purdue Northwest Interdisciplinary Grant (a competitive internal grant) July 2017 – December 2018.
* *Influence of Environmental Conditions and Water Activities on Mold Growth, Aflatoxin B1, and Ochratoxin A formation on Niger Seeds*. (Co-PI, collaborated with D. Gizachew), $14,000 Purdue Northwest Catalyst Grant, July 2017 – December 2018.

**Courses Taught**

* **BIOL 10700 —** Freshman Experience in Biological Sciences
* **BIOL 22100** — Introductory Microbiology
* **BIOL 31600** — Basic Microbiology
* **BIOL 42600** — Biological Sciences Senior Capstone
* **BIOL 51601** — Food Microbiology
* **BIOL 51605 —** Environmental Microbiology
* **BIOL 53300** — Medical Microbiology
* **BIOL 48900, 49500 and 59500** — Microbiology Research
* **BIOL 69800 —** Research MS Thesis