

**Abbreviated C.V.**  
**Kirsten C. Fertuck, Ph.D.**  
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## **Education and Employment History**

### **Education**

Ph.D., Biochemistry & Molecular Biology; dual degree in Environmental Toxicology, May 2003  
Michigan State University, East Lansing, MI  
Thesis Title: *In vitro and in vivo evaluation of the receptor binding and estrogenic effects of polycyclic aromatic hydrocarbons*  
Advisor: Dr. Timothy Zacharewski

Hon.B.Sc. Toxicology & Environment (*High Distinction*), University of Toronto, Canada Apr. 1998

### **Postdoctoral Training**

Postdoctoral Fellow July 2003 - Dec. 2009  
Supervisor: Dr. Myles Brown  
Medical Oncology, Dana-Farber Cancer Institute, Boston, MA

### **Academic Appointments**

Affiliated Faculty Member Oct. 2020 - present  
Chemistry and Chemical Biology, Northeastern University, Boston, MA

Biochemistry Director July 2020 - present  
College of Science, Northeastern University, Boston, MA

Associate Teaching Professor July 2018 - present  
Biochemistry, Northeastern University, Boston, MA

Assistant Teaching Professor Jan. 2014 - June 2018  
Biochemistry, Northeastern University, Boston, MA

Adjunct Lecturer 2010 - 2014  
Boston College, Chestnut Hill, MA

Adjunct Lecturer 2012 - 2014  
Bentley University, Waltham, MA

Adjunct Lecturer Summer 2013  
Northeastern University, Boston, MA

Adjunct Lecturer Summer 2013  
Tufts University, Medford, MA

### **Research Fellowships**

Terri Brodeur Breast Cancer Foundation Postdoctoral Fellowship 2008 - 2010

Champion Investigator Award Postdoctoral Fellowship 2006 - 2008

Sass Foundation Postdoctoral Fellowship 2004 - 2006

Society of Toxicology Graduate Student Fellowship 2001 - 2002

Chemical Food Safety Graduate Fellowship 1998 - 2001

**Updated:** July 2024

Ontario Graduate Scholarship (declined) 1998 - 2001

### Other Honors and Awards

NU College of Science Innovation Award	2024
Excellence in Teaching Award, NU College of Science	2022
CellPAINT Contest Winner, Best in 'Celebrating Vaccines' category	2021
Finalist, Excellence in Teaching Award, NU College of Science	2020
American Society for Biochemistry and Molecular Biology Outstanding Chapter Award (presented to Undergraduate Chapter faculty advisor; one award per year and currently 110+ Chapters)	2020, 2016
Golden Pen Award (awarded by the NU PreHealth program in recognition of substantial contribution to the support of students applying to medical/dental/veterinary/PA and other PreHealth programs)	2016
Phoenix Award for Organizational Excellence (awarded to Biochemistry Club, including faculty advisor)	2015
Outstanding Graduate Student Award, Sigma Xi Michigan State University Chapter	2002
Graduate Student Research Grants, Sigma Xi Michigan State University Chapter	2000, 2001
Biochemistry Faculty Fellowship, Michigan State University	1998
University of Toronto Women's Association Scholarship, New College	1997
Frances L. Allen Scholarship, Faculty of Arts and Science, University of Toronto	1997
Sidney and Lucille Silver Scholarship, Faculty of Arts and Science, University of Toronto	1997
Martin L. Wills Scholarship, Heart and Stroke Foundation of Ontario	1994

### Scholarship

#### Peer-reviewed publications

1. *Acknowledged in:* Zeidan, Q., J. Loertscher, A.J. Wolfson, J.T. Tansey, E.G. Offerdahl, P.J. Kennelly, D.R. Dries, V. Del Gaizo Moore, D.M. Dean, L.M. Carastro, S.M. Villafane and L. Tyler. 2021. Development of a Certification Exam to Assess Undergraduate Students' Proficiency in Biochemistry and Molecular Biology Core Concepts. *CBE: Life Sciences Education* 20(2):e1-20. For efforts as an ASBMB Education Fellow in providing Certification Exam rubric validation and volunteer exam grading.
2. Wang, C., J.A. Mayer, A. Mazumdar, **K.C. Fertuck**, H. Kim, M. Brown and P.H. Brown. 2011. Estrogen induces c-myc gene expression via an upstream enhancer activated by the estrogen receptor and the AP-1 transcription factor. *Molecular Endocrinology* 25(9):1527-38.
3. Carroll, J.C., C.A. Meyer, J. Song, W. Li, T.R. Geistlinger, J. Eeckhoutte, A.S. Brodsky, E.K. Keeton, **K.C. Fertuck**, G.F. Hall, Q. Wang, S. Bekiranov, V. Sementchenko, E.A. Fox, P.A. Silver, T.R. Gingeras, X. S. Liu and M. Brown. 2006. Genome-wide analysis of estrogen receptor binding sites. *Nature Genetics* 38(11): 1289-97.
4. Huang, Y.W., J.B. Matthews, **K.C. Fertuck** and T.R. Zacharewski. 2005. Use of *Xenopus laevis* as a model for investigating *in vitro* and *in vivo* endocrine disruption in amphibians. *Environmental Toxicology and Chemistry* 24(8): 2002-9.
5. Boverhof, D.R., **K.C. Fertuck**, L.D. Burgoon, J.E. Eckel, C. Gennings and T.R. Zacharewski. 2004. Temporal- and dose-dependent hepatic gene expression changes in immature ovariectomized mice following exposure to ethynyl estradiol. *Carcinogenesis*. 25(7): 1277-91.

6. **Fertuck, K.C.**, J.E. Eckel, C. Gennings and T.R. Zacharewski. 2003. Identification of temporal patterns of gene expression in the uteri of immature, ovariectomized mice following exposure to ethynyl estradiol. *Physiological Genomics* 15(2): 127-41.
7. Matthews, J.B., **K.C. Fertuck**, T. Celius, Y.W. Huang, C.J. Fong and T.R. Zacharewski. 2002. Ability of structurally diverse natural products and synthetic chemicals to induce gene expression mediated by estrogen receptors from various species. *Journal of Steroid Biochemistry and Molecular Biology* 82(2): 181-94.
8. Goodin, M.G., **K.C. Fertuck**, T.R. Zacharewski and R.J. Rosengren. 2002. Estrogen receptor-mediated actions of polyphenolic catechins *in vivo* and *in vitro*. *Toxicological Sciences* 69(2): 354-61.
9. **Fertuck, K.C.**, H. Sikka, J.B. Matthews and T.R. Zacharewski. 2001. Interaction of PAH-related compounds with the alpha and beta isoforms of the estrogen receptor. *Toxicology Letters* 121(3): 167-77.
10. **Fertuck, K.C.**, J.B. Matthews and T.R. Zacharewski. 2001. Hydroxylated benzo[a]pyrene metabolites are responsible for *in vitro* estrogen receptor-mediated gene expression induced by benzo[a]pyrene, but do not elicit uterotrophic effects *in vivo*. *Toxicological Sciences* 59(2): 231-40.
11. Diamond, M.L., S.E. Gingrich, **K.C. Fertuck**, B.E. McCarry, G.A. Stern, B. Billeck, B. Grift, D. Brooker and T.D. Yager. 2000. Evidence for organic film on an impervious urban surface: characterization and potential teratogenic effects. *Environmental Science & Technology* 34(14): 2900-08.
12. Sweezy, N., S. Tchepichev, S. Gagnon, **K.C. Fertuck**, and H. O'Brodovich. 1998. Female gender hormones regulate mRNA levels and function of the rat lung epithelial Na channel. *American Journal of Physiology* 274(*Cell Physiology* 43): C379-86.