# Terry C. Hrubec

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### **Education:**

PhD in Veterinary Medical Sciences, Virginia Polytechnic Institute and State University, 1994.

DVM from VA-MD College of Veterinary Medicine, VPI & SU, 1991.

MS in Biology, The George Washington University, 1985.

BA in Fine Arts, The George Washington University, 1982.

BS in Zoology, The George Washington University, 1981.

#### **Current Publications:**

- 1. Melin VE, Shanteau P, Melin TE, Dessify B, Nguyen C, Shea CS, Hrubec TC, 2015. Quaternary ammonium disinfectants cause subfertility in mice by targeting both male and female reproductive processes. Published Online 11-12-15.
- 2. Hunt P, Hrubec TC, 2015. Letter to the Editor in response to Hostetler. Reproductive Toxicology 52: 120–121. doi:10.1016/j.reprotox.2014.11.010.
- 3. Melin VE, Potineni H, Hunt P, Griswold J, Siems B, Were SR, Hrubec TC, 2014. Exposure to common quaternary ammonium disinfectants decreases fertility in mice. Reproductive Toxicology, 50:163-170. Published Online: 8-14-14, DOI: 10.1016/j.reprotox.2014.07.071
- 4. Melin VE, Johnstone DW, Etzkorn FA, Hrubec TC, 2014. Drinking Water Treatment is Not Associated with an Observed Increase in Neural Tube Defects in Mice. Environmental Monitoring and Assessment 186 (6): 3717-3724.
- 5. Mallela MK, Hrubec TC, 2012. Reduction in valproic acid-induced neural tube defects by maternal immune stimulation: role of apoptosis. Birth Defects Research Part B: Developmental and Reproductive Toxicology. Published online: 5 JUL 2012 | DOI: 10.1002/bdrb.21018 Print version 2012, 95:296-303.
- 6. Goodwin D, Hrubec TC, Klein BG, Strobl JS, Were SR, Han Q, Lindsay DS, 2012. Investigation of age and sex related changes in behavior and neurotransmitter concentrations in mice congenitally infected with *Toxoplasma gondii*. Journal of Parasitology, published online: http://dx.doi.org/10.1645/GE-3068.1.
- 7. Hrubec TC, Prater MR, Mallela MK, Gogal RM Jr, Guo TL, Holladay SD, 2012. Diverse ability of maternal immune stimulation to reduce birth defects in mice exposed to teratogens: a review.

- Journal of Developmental Origins of Health and Disease. Published online: CJO doi:10.1017/S204017441100078X. Print 3(3):132-139.
- 8. Mallela MK, Were SD, Hrubec TC, 2010. Neural tube defects in mice exposed to tap water. Environmental Toxicology. Published online: 1 JUN 2010, DOI: 10.1002/tox.20600 Print version 2012, 26(6):633-640.
- 9. Hrubec TC, Toops KA, Holladay SD, 2009. Prevention of diabetes induced palate defects by maternal immune stimulation. The Anatomical Record Part A 292(2):271-276.
- 10. Gutierrez JC, Prater MR, Hrubec TH, Smith BJ, Freeman LE, Mallela MK, Holladay SD, 2009. Late-gestation ventricular myocardial reduction in fetuses of hyperglycemic CD-1 mice is associated with increased apoptosis. Birth Defects Research Part B: Developmental and Reproductive Toxicology. 86: 409-415.
- 11. Gutierrez JC, Prater MR, Hrubec TC, Smith BJ, Freeman LE, Holladay SD, 2009. Heart changes in 17 day-old fetuses of diabetic ICR mothers: Improvement with maternal immune stimulation. Congenital Anomalies 49:1-7.
- 12. Gutierrez JC, Hrubec TC, Prater MR, Smith BJ, Freeman LE, Holladay SD, 2007. Aortic and ventricular dilation and myocardial reduction in gestation day 17 ICR mouse fetuses of diabetic mothers. Birth Defects Research A: Clinical and Molecular Teratology 79(6):459-464.
- 13. Knowles S, Hrubec TC, Smith SA, 2006. Hematology and plasma chemistry reference intervals for cultured shortnose sturgeon (*Acipenser brevirostrum*). Veterinary Clinical Pathology 35(4):434-440.
- 14. Hrubec TC, Yan M, Ye K, Salafia CM, Holladay SD, 2006. Valproic acid induced fetal malformations are reduced by maternal immune stimulation with granulocyte macrophage colony-stimulating factor or interferon y. The Anatomical Record Part A 288A:1303-1309.
- 15. Hrubec TC, Prater MR, Toops KA, Holladay SD, 2006. Reduction in diabetes induced craniofacial defects by maternal immune stimulation. Birth Defects Research Part B: Developmental and Reproductive Toxicology 77:1-9.
- 16. Hrubec TC, Punareewattana K, Prater MR, Holladay SD, 2005. Reduction of teratogen induced birth defects in mice: Role of maternal immune stimulation. Invited Review: Current Topics in Toxicology 2:33-40.

## **Book Chapters:**

- 1. Hunt PA, Hrubec TC, Melin VE, 2016. Disinfection in the 21st Centuary: Is there harm in being clean? In: Integrative Environmental Medicine, Ed. A Cohen and F vom Saal, Oxford University Press, New York, NY.
- 2. Hrubec TC, Smith SA, 2010. Normal hematology of fishes. In: Schalm's Veterinary Hematology 6th ed., ed. Weiss, D. and J. Wardrop. Wiley Blackwell, Ames, IA.
- 3. Hrubec TC, Blaylock BL, Holladay SD, 2004. Developmental immunotoxicity of halogenated aromatic hydrocarbons and polycyclic aromatic hydrocarbons. In: Textbook of Developmental Immunotoxicology. Ed. SD Holladay, CRC Press, Boca Raton, FL.
- 4. Hrubec TC, Holladay SD, 2004. Mycotoxins and other miscellaneous developmental immunotoxicants. In: Textbook of Developmental Immunotoxicology. Ed. SD Holladay, CRC Press, Boca Raton, FL.

### Awards:

Best Poster Award in Basic Science. E. Via College of Osteopathic Medicine, Annual Research Recognition Day 2008, 2009, 2013, 2014, 2015.

Mentor for recipient of 2014 MARTA Bradford Award at Teratology Society Annual Meeting, Belleview, WA.

Mentor for Outstanding PhD Student of the Year, VA-MD College of Veterinary Medicine, 2011. Teratology Society 47<sup>th</sup> Annual meeting, 2007 – Invited panelist, Pittsburg, PA. Mentored Research Scientist Development Award (Ko1) 2002.

# **Professional and Community Activities:**

Delphi Panel on Core Syllabus on Embryology and Teratology Society of Toxicology, 2015-present The Teratology Society, 2003-present American Association of Anatomists, 2003-present American Association for the Advancement of Science, 1984-present