

# **Deborah O'Dell**

**Professor of Biology at University of Mary Washington**

Fredericksburg, VA, US

Dr. O'Dell performs research into how bees use magnetic fields to orient themselves.

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## **Description**

Can bees smell your fear? Is there a connection between cell phone towers and honey? These are just a few of the questions being explored by Deborah O'Dell, professor of biology at the University of Mary Washington.

According to Dr. O'Dell, bees can't smell your fear, but they can smell your nervous body odor.

“When afraid, a person sweats, discharging does not belong in hive chemicals,” says Dr. O'Dell. “When bees detect that, they produce an alarm pheromone that may signal others to attack.”

So what is the solution? Always wear strong, unscented deodorant around bees.

Due to her studies of magnetic orientation in bees, Dr. O'Dell also is interested in recent studies suggesting that bees living near cell phone towers may become disoriented and produce less honey.

A member of the Society for Neuroscience, Dr. O'Dell is an expert on the structure and function of the nervous system, magnetic orientation in animals and developmental neurobiology. Much of her research focuses on the function and development of nervous systems, including bees, and the role of inflammation in Alzheimer's disease. She also won a 2010 VSO research grant in partnership with UMW Associate Professor of Biology Andrew Dolby for their project, “Enzyme Immunoassay Quantification of Heat Shock Protein 60,” and its application to avian conservation biology.

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## **Industry Expertise**

Education/Learning, Laboratory Services, Program Development, Research, Training and Development

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## **Topics**

Biology, Neuroscience, Magnetic Orientation in Animals, Developmental Neurobiology, Alzheimer's Disease, Learning and Memory, Learning & Memory

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## **Affiliations**

Society for Neuroscience : Member, Virginia Academy of Science the Society for Developmental Biology, Beta Eta Chapter of Delta Kappa Gamma

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## **Education**

**State University of New York at Stony Brook**  
Ph.D. Developmental Biology

**Ursinus College**  
B.Sc. Biology

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