



Ibiyinka FUWAPE

Home Country
Nigeria

Degree
Post-Doctorate in Physics

Expertise
Physics

Research Focus
Mechanisms of Information
Encoding in Oscillatory
Sensory Cells

Host University
Ohio University, United States

Fellowship Awarded
2006

Ibiyinka Fuwape has a doctorate in physics and was the first female to obtain a first-class degree in physics from any university in her home country, Nigeria. Married with three children, she has three sisters and loves to bake and decorate cakes, sing, teach and spend time with her family.

After obtaining all her degrees from the University of Ibadan in Ibadan, Nigeria, she became a faculty member at The Federal University of Technology, Akure and served on many university committees.

Currently conducting post-doctoral research in physics at Ohio University in the United States, Ibiyinka is focusing her research on oscillations and noise in information processing in sensory nervous systems using the electro-receptors of the paddlefish. The electro-receptors of some aquatic animals, including the paddlefish, sharks and rays, possess spontaneous active noisy quasi-periodic oscillations, but the function of the spontaneous oscillations in these aquatic animals is not yet understood. However, the morphology of these electro-receptors is similar to the senses of balance and sound in humans.

Ibiyinka's goal is to understand the mechanisms of information encoding in the oscillatory sensory cells she is studying. The results of her research will provide insight into the mechanisms of encoding information in the auditory and vestibular sensory receptors of vertebrates including human beings.

Ibiyinka plans to return to teaching at The Federal University of Technology, Akure in Nigeria.