

Bucky – The Biology Professor

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Professor Terry "Bucky" Gates

Professor Terry "Bucky" Gates grew up in North Carolina. From the earliest moments of his life he says he was drawn to biology, but it was the vestigial leg structures in whales that grabbed his attention and brought him into the world of evolution. He attended North Carolina University and while there he did not exactly do research. However, he did help build exhibits in the natural history museum and prepare and excavate fossils. He continued his education at the University of Utah where he focused on prehistoric forensics. His research also included naming new duck billed dinosaurs as well as studying the evolutionary trends within that group. Of the eight years he spent in Utah about three of them were spent traveling to southern Utah and Mexico to work on dig sites. When asked what he would consider his area of expertise he answered, "hadrosauine hadrosaurid dinosaurs and taphonomy and biogeography." What does that all mean you might be asking yourself? Well, hadrosauine hadrosaurid dinosaurs are the duck-billed dinosaurs that he studied in graduate school. Taphonomy is the study of decaying organisms and how they fossilize. The purpose of this is to better understand biases in the fossil record. Biogeography is the study of biodiversity over space and time. It asks the questions which organisms were where at what time and why they were not anywhere else. These questions are then answered by researching what was occurring within that time period. Put it together and what do you get? The tools needed for any paleontologist. So, what kind of research is he doing now? He is currently beginning to work on ecosystem preservability and dinosaur biogeography. His work is trying to understand how ecosystems changed over time by studying the mechanisms and time constraints that affect this process. Until now, ecosystems have been assumed based upon the fossil record. He is also interested in understanding the patterns of biodiversity and evolution based upon the distribution of dinosaurs across space and time.

After all of this what would he like to do in the future? He has so far enjoyed teaching here at Lake Forest College and considers it to be his first career choice for the future. He says the students here are "top notch" and the faculty and staff have been very helpful and gracious. As far as research is concerned, he would like to get into "environmental change through time, distinguishing

environmental disturbance and/or pressure extinction from background extinction, faunal reactions to environmental change, and macroevolutionary trends of duck-billed dinosaurs and their ancestors." This kind of work will take him all over the world but he would like to remain in North America because of the "high quality rocks." Now, if any or all of this for some reason does not happen the backup plan(s) is/are fishing guide, brew master, and/or wine and cheese shop owner. I would have to say those are some excellent choices.

Some random information about Professor Gates is that his favorite dinosaur is the oviraptor which is Latin for *egg-seizer*. This is a raptor dinosaur that lived during the late Cretaceous Period about 80 to 70 million years ago. It has only been found in the Djadokhta Formation of Mongolia and in the northeast region of China called the Bayan Mandahu. It is characterized by the loss of its teeth, a shortened skull that looks similar to a parrot, and a large crest on the top of its head. It was first discovered by Roy Chapman Andrews and the reason for its name that it was found atop a pile of eggs of another species. Now for the ultimate question, why is Professor Gates' nickname 'Bucky'? The answer for that is much simpler then you would think. When Professor Gates was born, his father's favorite baseball player was Yankees short-stop and sometimes catcher Bucky Dent. There you have it, Professor Terry 'Bucky' Gates. If you see him around campus, make sure to say hi. Maybe ask him about his thoughts on Darwin and evolution (just a reminder it's been 150 years since Darwin published *On the Origin of Species*). I am sure he will have plenty to discuss.

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