

To: Francis Degnin  
Re: Emeritus Status for Professor John Bumpus

John Bumpus came to UNI in January of 1995. He was hired at the rank of associate professor (without tenure) in the department of chemistry and in 1999 was promoted to full professor with tenure. His appointment was somewhat unique to UNI in that he was expected to be a major contributor to the newly formed multidisciplinary Environmental Programs (Science) housed in the College of Natural Sciences (CNS). At the time, his primary responsibilities were to teach environmental chemistry to MS students seeking graduate degrees and conducting self-supporting research in the area of environmental science. He also taught an environmental chemistry class in the Chemistry department. I cannot accurately assess his contributions to the environmental programs, but I do know he received federal funding (a total of 6 federal awards and a number of state grants) and graduated 9 students who successfully completed the MS degree in Environmental Science. His interests were in photochemical degradation of environmental pollutants and fungal catalyzed bioremediation of high explosives. I'm sure he would have graduated many more students had the administration not terminated the Environmental program in 2012.

John also had students who received graduate degrees in the department of Chemistry. One notable student was Jennifer Stimpson who graduated with an MA degree in chemistry in 1997. She was the first African American student to receive a graduate degree in chemistry at UNI. When the administration ended the environmental science program, John took a more active role in the chemistry department. He was the first person in the department to develop a fully on-line course when he offered a section of the liberal arts core course, "Molecules and Life" on-line. He later developed an entirely new online course called, "Drugs, Poisons, and Venoms" (CHEM 4505). This is significant because it is a standalone on-line course based on literature. It is a very popular class and has been taught every semester for the past 10 years. It is quite popular for students getting their MA in Science education.

With the demise of the environmental programs, John needed to shift his research interests. He developed an interest in computational chemistry and became for all practical purposes a self-taught computational chemist. I believe the number of papers that he has published that area speaks for itself (7 papers in peer reviewed chemistry journals.) He also taught an experimental class in computational chemistry.

Two notable endeavors championed by John that went beyond the normal scholarship, research, and service expectations as a UNI professor were his commitment to international scientific collaborations with École Nationale Supérieure de Chimie de Rennes. He visited Rennes a number of times and was an invited lecturer. He coordinated student exchanges between both institutions for a number of years. This was quite a remarkable task considering the lack of support from UNI for international programs.

John also had a very ambitious goal of changing undergraduate chemistry laboratories. In 2004 he wrote an NSF proposal "A Midwestern Undergraduate Research Center: Bringing Research to

the Student.” This was an ambitious plan to change the way laboratory classes are taught. John convened a group of science educators (chemists and a biologist) from the Midwest to develop a new way of teaching lab. He was successful in obtaining an NSF starter grant and submitted the major proposal twice. Unfortunately, it was not funded but the reviews were pretty remarkable.

I certainly believe that John’s many contributions to UNI teaching, research and service make him worthy of emeritus status.

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Professor of Chemistry