

## Dr. Walter Wilczynski, 1952–2020

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Walter (“Walt” to his friends) Wilczynski died on June 9, 2020, at his home in Atlanta, at the age of 67 years. He was the type specimen of a neuroethologist, as well as a former editor of *Brain, Behavior and Evolution* (BBE), a program officer at National Science Foundation (NSF), and director of the Neuroscience Institute at Georgia State University. He authored 110 primary publications, co-wrote or edited 2 books, numerous book chapters, and other assorted reviews or commentaries. More important than his many academic accomplishments, however, Walt was a much loved friend to those of us fortunate enough to have known him well.

Walt did his graduate training with Professor Glenn Northcutt at the University of Michigan. For his dissertation, Walt did the first, and still definitive, studies of the anatomy and connectivity of the striatum in frogs, using the then cutting-edge technique of horseradish peroxidase (HRP) tract tracing. Together with his fellow graduate student and friend Tim Neary, Walt also did important research on ascending somatosensory thalamic projections in frog brains. His training with Northcutt gave Walt in-depth knowledge of both the anatomy and evolution of the vertebrate forebrain, which informed all of his research throughout his career.

In 1979, Walt joined the lab of Professor Robert Capranica at Cornell University as a postdoctoral fellow, and it was there that the 3 of us became friends with him. Walt joined Capranica’s lab to pursue his growing interest in sensory processing in the midbrain of frogs. He did the



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first detailed anatomical and circuit study of the frog mid-brain auditory region, the torus semicircularis (homologous to mammalian inferior colliculus). His thorough description of the torus provided the groundwork for studies to move from the traditional focus of Capranica’s lab on auditory responses in the VIIIth nerve to the more complex response properties of midbrain auditory neurons.

During Walt’s time at Cornell, two of us (H.H.Z. and E.A.B.) did projects with Walt on behavioral and neural aspects of communication in Spring Peepers (*Pseudacris crucifer*), and H.H.Z. and Walt published a paper on transcellular transfer of HRP in the frog visual system. These projects had nothing to do with either of our dissertations or Walt’s postdoctoral training, but were done solely for the pure fun of doing research with Walt. Walt

was just fun to be around, and spending hours out at night listening to Peepers in the cold Ithaca spring rain seemed worthwhile because of the late-night beers and jokes that we shared with Walt afterward. Walt combined intellectual curiosity, encyclopedic knowledge, and genuine enthusiasm for doing research; conversations in the lab often led to ideas that we all wanted to test together.

Walt, M.J.R., and H.H.Z. were all hired at the same time at the University of Texas (UT) in 1983. His 20+ years at UT were fun and productive. Right after these 3 Cornellians arrived in Austin, Capranica wrote to Walt and suggested that Walt collaborate with M.J.R. on a study of the neuroethology and evolution of acoustic communication in cricket frogs (*Acris crepitans*). Capranica had previously collaborated with the evolutionary biologist Evitar Nevo on these frogs, and he was now bequeathing that endeavor to Walt and M.J.R. That collaboration was productive and included a number of nights working in the swamps of Louisiana and East Texas. A longer and even more fruitful collaboration was formed when Walt and his students and postdocs joined forces with M.J.R. and Stanley Rand, helping to uncover the fascinating story of sexual selection and communication in Túngara frogs, making it a classic story in brain, behavior, and evolution. Even though Walt's contribution to these studies was mostly lab work, he did join numerous field expeditions in Gamboa, Panama, and made several excursions with his wife Debbi into the interior of Panama. Walt and M.J.R. wrote a book on integrative animal behavior, which was well matched to the interests of all four of us, Walt, E.A.B., H.H.Z., and M.J.R., in brain, behavior, and evolution. Walt and M.J.R. also initiated a number of other research projects that ended in failure, but, thankfully, there is not enough space here to enumerate them. Paraphrasing Nietzsche: when research failed, it only made our friendship stronger.

Walt also studied how hormones and neuromodulators influence mating behavior and auditory communication in other species of frogs, as well as some reptiles, with an eye toward understanding the generality of endocrine control of courtship and mating in vertebrates and the selective pressures that shape communication calls. His research showing auditory responses in the hypothalamus of frogs was truly path-breaking. He continued to study comparative neuroanatomy and elucidated the connections and functional interactions between various regions of the amphibian brain.

For a few years at UT, Walt and H.H.Z. taught a Functional Neuroanatomy class, mostly Walt's doing and with H.H.Z. as junior partner. It was loads of fun, and H.H.Z.

was always impressed with Walt's breadth of knowledge. Walt also briefly taught an Animal Communication class with M.J.R., which also put on display Walt's breadth of knowledge of animal biology and psychology.

In 2005, Walt, looking for new challenges, moved to Georgia State University (GSU) to serve as the Co-Director for Research for the Center for Behavioral Neuroscience. He was instrumental in establishing the Neuroscience Institute at GSU in 2008, and served as its founding director for 6 years before returning to teaching and research. Walt and his colleague Laura Carruth shared research interests, especially in the areas of animal communication and neuroendocrinology. They started holding joint lab meetings in 2010, which led to co-advising undergraduates and graduate students and eventually to combining their labs in 2015. Walt even came up with a lab name and logo, the Comparative Endocrinology and Neuroethology Lab, or CEN.

In 2016, Walt was awarded a Fulbright Fellowship to work with Dr. Mario Penna at the Programa de Fisiología y Biología of the University of Chile. This Fellowship gave him the opportunity to combine his passion for mentoring students and his love of field work, while experiencing the beautiful mountains in the vicinity of Santiago.

Walt made a huge impact beyond his own research and teaching. He was one of the early organizers of UT's Institute for Neuroscience, an umbrella organization uniting neuroscientists from disparate departments across the UT campus. He spent a year at NSF as a visiting program manager from 1996 to 1997, where he was a member of the federal cross-agency Human Brain Project and a Neuroscience cluster representative on the committee developing and implementing NSF's cross-Directorate funding initiative in Learning and Intelligent Systems. Walt was on the editorial boards of several journals but will be best remembered for his 11-year stint as Editor-in-Chief of *BBE* (1999–2010). Under his leadership, with the able editorial assistance of Dr. Blinda McClelland, *BBE* continued to be the flagship journal of comparative neurobiology.

No memorial for Walt would be complete without discussing his sense of humor. Walt had a keen sense of the absurd in life, together with a master's sense of comic timing in telling humorous anecdotes and setting up long-form jokes. Many is the time Walt, H.H.Z., and E.A.B. scared the Spring Peepers into silence when we all started laughing as jokes passed among us. In polite company, Walt could come across as quiet and low key, but those who knew him well could see the wheels turning and looked forward to his keen observations when it was

just us. Walt's humor was invaluable in getting through the inevitable dry patch that any research project faces. Walt and E.A.B. traveled to Panama in 1987 to do a field project on the neotropical "Tink" frog *Diasporus diastema*. We were both assistant professors then, and time was in short supply, but we were happy to carve out two weeks so that we could work together in the field, far from our departmental responsibilities. We carefully timed our trip to coincide with the onset of the rainy season, when the frogs would be actively calling and breeding. Perhaps as an early harbinger of global warming, however, the rains never arrived during our stay, nor did the frogs start calling, other than a few hardy males. In other company, sweating through the hot dry days and nights in Gamboa, not being able to do the field work we came so far to do, would have led to frustration and short tempers. But we filled the days with interesting conversa-

tion, many jokes, and much Cerveza Panama from the vending machine on the ground floor of our STRI apartment. It made E.A.B. appreciate Walt's many qualities even more. And thanks to the creative dynamic that was part of working with Walt, we pivoted and conducted a study of calling by the few hardy Tink frogs, exploiting the circumstances to good effect and a resulting publication. Walt had the creativity and drive to make lemonade out of this lemon!

Walt was beloved by his own graduate students and postdocs, and his great productivity was possible because of the fantastic group of people that he trained who then went on to their own professional successes. His colleagues valued him as a leader and someone in whom they could trust. And he was loyal and devoted to those fortunate enough to be counted among his friends. He will be missed by all those who came in contact with him.