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## An apprentice in a sorcerer's laboratory

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It is with great pleasure and joy that I write about John Schellman and the time that I spent in his laboratory as a postdoc. When I joined John's lab in 1989, he had just retired from his teaching responsibilities and was looking forward to the added free time for research. John had just received a new Silicon Graphics workstation for his computational work and asked that I maintain it. I was a kid with a new toy. John's first prophecy was that my postdoctoral years would be some of the fondest in my career. It was already proving to be so.

Together, John and his wife Charlotte have a long history in the field of protein science, with John's emphasis being on the thermodynamics of protein denaturation. When I arrived, John's postdocs, Giovanni Signor, Walt Baase and Wayne Bechtel were busy with numerous circular dichroism measurements to examine the intricacies of protein melting. My task, however, was not with proteins but with DNA, another of John's favorite subjects.

John, Walt Baase and a graduate student, Daniel Moore had already verified the reptation mechanism of gel electrophoresis using linear dichroism. I continued a few of these experiments, but found myself reading more and more about electrokinetic phenomena. Soon after, John and Charlotte flew to Europe to visit with friends and colleagues. Europe, as I later learned, was like a second home

for them. Between his postdoctoral work at Carlsberg Laboratories, sabbaticals, collaborations and vacations, John and Charlotte have spent over 7 years in Europe.

In the course of my research, I studied in detail the Schellman and Stigter paper on the electrophoretic charge of DNA. This paper had been marked, wrinkled and toted in my backpack so many times that I had to get another legible copy. Although the paper was published nearly 25 years ago, it still stands as one of the classical works on the electrophoretic charge of DNA. I might add that despite the years since its publication, John and Dirk Stigter have maintained a close friendship, and each year, when possible, their families get together at the annual Shakespeare Festival in Ashland, Oregon.

Hong Qian joined John's lab a few months after I arrived. Although Hong's interests were much more theoretical than mine, we spent numerous hours with John discussing the fundamental physics of electrophoresis. These were always, fun, lively and enlightening discussions. Although the discussions were sometimes above my head, John always treated everyone as equal and encouraged us to explore our ideas. John's enthusiastic, engaging and sometimes-humorous manner of discourse was always inspiring and promoted a good feeling of camaraderie.

Two years after leaving John's lab I accepted an industrial position at Nanogen, Inc. where I still continue to work. At Nanogen my work involves

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the use of electrophoresis to move DNA target molecules to specific array sites on a microchip. My apprenticeship under John could not have been better preparation for this work.

Despite John's active scientific life, he always found time to hike in the forest with family and

friends, go out for a cup of coffee with colleagues, or flip hamburgers with Pete Von Hippel at the annual molecular biology picnic. It's in appreciation of his friendship and dedication to the biophysical sciences that we dedicate this issue of *Biophysical Chemistry* to John Schellman.