



SSR Trainee Mentoring Award

(Supported by a grant from the Montréal Reproductive Centre and the SSR Trainee Mentor Fund)

This award recognizes an SSR member who as a mentor has had significant impact on Trainees within the SSR. The Trainee Mentoring Award will be presented each year at the SSR Annual Meeting to an SSR member who has consistently demonstrated a measure of support and guidance to Trainees that far exceeds the basic responsibilities required of an academic advisor. The recipient of the 2013 Trainee Mentoring Award is **Gordon D. Niswender, Ph.D.**

Dr. Gordon D. Niswender is the recipient of the 2013 Trainee Mentoring Award. Dr. Niswender was awarded his Ph.D. from the University of Illinois in 1967. He then moved to the University of Michigan for five years, first as a postdoctoral fellow and then as an assistant professor. It was here that Dr. Niswender developed radioimmunoassays for a number of hormones and species, probably the most well-known of which was R15, an LH antibody cross-reactive in almost every species used in laboratories throughout the world. Dr. Niswender moved to Colorado State University in 1972, which remained his “academic home” until he retired in 2006. He continued to develop radioimmunoassays and antibodies that he shared with over 600 researchers in more than 30 countries.

Dr. Niswender has authored or co-authored over 210 publications in refereed journals, 40 book chapters, and over 110 scientific abstracts. In the majority of these publications, one of his students served as first author. His students have commented that Dr. Niswender always provided one of the most interactive laboratories in which to train and created a highly stimulating environment during weekly laboratory meetings and journal clubs. Upon receiving the Carl G. Hartman Award in 2005, Dr. Niswender eloquently stated that the award should have been collectively received by those who did most of the real work, including 6 M.S. students, 20 Ph.D. trainees, and 32 postdoctoral fellows. It should be further noted that Dr. Niswender was a

founding member of the SSR (1967) and he advocated that the basis for the SSR should be a platform for trainees to present their data, a philosophy that still holds true today.

What makes someone such an outstanding mentor? To qualify as an outstanding mentor, one needs only to look at the principles for the assessment of the reliability of a radioimmunoassay: precision, accuracy, sensitivity, and specificity. First, there are key components, such as a standard, to make sure the assay, or in this case, the “mentoring assay,” is working. Dr. Niswender held his trainees to the highest standards, guiding them by providing a “place where cutting-edge work important in moving the field of reproduction forward was pursued.” “He would have us prepare our slides, and practice our talks over and over until they were perfect. He was also very astute at anticipating questions that might arise from the audience and helping us craft the best answer.” He demanded both precision and accuracy from his students, not only as they pursued their research, but also whenever they presented it.

Also in any assay, there is always the “unknown” as well as the “hot.” Similarly, in this mentoring assay, there was the unknown...the unknown disposition of Dr. Niswender when you had to walk into his office with your tail between your legs because you really messed something up. “His strong personality was well-known and you certainly knew when he walked into a room (whether you were looking in his direction or

not).” Similarly, an assay cannot perform without the “hot,” the radiolabeled known component. “Dr. Niswender was not always the guy you ‘liked’ or wanted to go to his office to conference with because you knew you might get your head (or some other part of your anatomy) handed to you. However, that also forced you to develop your abilities to staunchly argue your point, hold your ground, or learn to concede without folding.” Although Dr. Niswender may have come across as having a gruff exterior to students who were under his direction as trainees, his sensitivity and unyielding support for his students as they moved through the stages of their own careers is well recognized.

Dr. Niswender was an exceptional mentor, and like his most famous R15 antibody, he has demonstrated superb cross-reactivity. Dr. Niswender’s trainees are leading the nation’s scientific effort today in careers that include service as professors, department heads, or associate deans in academic institutions; as leaders in governmental agencies such as the FDA and the USDA; and as scientists and administrators in industry and in private foundations. We all reflect fondly on our time spent working under the direction of Dr. Niswender. He prepared his students for whatever might come their way, both in the laboratory and during the progression of their careers. Reflecting back to our radioimmunoassay analogy, Dr. Niswender has a great binding affinity for trainees and he did not dissociate from those he trained, even after they left his laboratory.

One of the most important aspects that Dr. Niswender instilled in his trainees was an appreciation of the importance and impact that research would have not only for the scientific community, but also for the public. He is famous for asking, “If I am John Q. Taxpayer, how is this research going to benefit me?” Not only did this question make his trainees think about conducting research with a purpose, it also served to push his students to be imaginative and innovative. “Dr. Niswender always challenged his students, expecting quality scientific research with high rigor and a great depth of understanding of the literature, not only in their specific area of research, but also within other biological systems.” Finally, the most important aspect that Dr. Niswender instilled in his trainees was the passion and love for vigorous scientific discussions and research.

Dr. Niswender is most deserving of this award. His many years dedicated to training students continue to have a major impact on the scientific field. His trainees look back fondly to their time spent in Dr. Niswender’s laboratory. He truly is exemplary in his methods of mentoring students to conduct science with precision, accuracy, sensitivity, and specificity. On behalf of all the trainees, we thank you, Dr. Niswender, for all of the time you took to make sure we were prepared when we finally left your laboratory, for the respect for performing high-quality science that you instilled in us, and for supporting us as we branched out into our own scientific careers. *(Submitted by Tracy Davis, Ph.D.)*