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EDITORIAL

Special issue in memory of Robert H. Purdy

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Robert H. Purdy 1929-2012

To honor Robert (Bob) H. Purdy, we dedicate our work in the field of neuroactive steroids to his memory….

September 23, 2012 was a sad day indeed. Stephen Paul delivered the news to me, and within a few days, many of Bob's collaborators and friends in the scientific community, some of whom had once been his competitors, shared their remembrances of him together.

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So many of our accomplishments as a field are indebted to Bob. It all started because he saw the need for a way to quantify the two primary neuroactive metabolites of progesterone and deoxycorticosterone (allopregnanolone and tetrahydrodeoxycorticosterone, respectively). Bob developed antibodies to both steroids and then published the methods to separate the steroids by HPLC and quantify the appropriate aliquots by radioimmunoassay using these antibodies. In his work with Steven Paul at the NIMH, he showed that stress elevated these neuroactive steroids in the plasma and brain, and the stress effects in brain preceded effects in plasma. This landmark paper in PNAS opened an entirely new field of research. I was lucky to be the post-doc working with Steve and Bob on this project. Needless to say, it redirected my career and I am forever grateful for all that Bob taught me in those days and over the years. Upon his death, there was an amazing outpouring of sentiment acknowledging his generosity with his vast knowledge of steroid chemistry. The greatest minds in our field expressed their appreciation to Bob for his many contributions, his singularly broad and deep knowledge of neuroactive steroids, his pioneering efforts to quantify these molecules utilizing rigorous methodological approaches that included mass spectrometry, his unending devotion to science, and his generous friendship. Bob Purdy is greatly missed.

Bob completed his undergraduate studies at Yale and received his doctorate in chemistry from Harvard. He worked for many years in the field of steroid metabolism and clarified the role of catechol estrogens in breast cancer. Bob was already in his late 50s when he turned his attention to the neuroactive metabolites of progesterone and deoxycorticosterone. After publishing his landmark work on the characterization of the antibodies and the effects of stress, he proceeded to share the antibodies with investigators around the world. He played a key role in the early development of neuroactive steroids for human disease. His sheep polyclonal allopregnanolone antibody became widely used in stress,

alcohol, depression, and epilepsy research. In the early 2000s, he affinity purified his allopregnanolone antibody and this led to its application to immunohistochemistry—opening new avenues of discovery in the field once again. Over the years, Bob kept the field going by producing reagents that were not commercially available and sharing them with multiple investigators in the field, resulting in a myriad of scientific advances that would not have been possible without his generosity. He and other groups developed gas chromatography–mass spectrometry analysis of neuroactive steroids; as deuterated internal standards were critical to quantitative accuracy, Bob stepped to the plate yet again to fulfill this important need for the field. There were so many incremental discoveries all over the world that never would have happened without him—and the sum of all this work is really much more significant that any single high-profile contribution. Bob deserves credit for his contributions to many publications that did not necessarily list him as an author but to which he contributed invaluable reagents that are not commercially available. Without Bob's diligence, creativity, and talents, these reagents would not have existed and work contributing to hundreds of manuscripts would not have been possible.

At the end of his 83 years of life, Bob was still working for all of us. He was making a new hapten conjugated to KLH for the production of monoclonal antibodies to allopregnanolone. He did not have time to finish his work. A few days before he died, Bob sent me a package. It was the hapten he prepared to generate polyclonal antibodies so many years ago. He hoped it would "hold us over" until someone made a monoclonal antibody. His enduring love for science now inspires us all.

It is my honor to present a small part of his widespread legacy in this special issue of Psychopharmacology.

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