



## Washington DC Principles for Free Access to Science

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### ***Presentation of Alice Avila-Villalobos, Ph.D.***

Good morning. I am a member of the American Physiological Society, but today I represent the younger, junior members of the scientific community, who are the future of science. I am here to emphasize the critical contribution of not-for-profit scientific publications to not only the training of young scientists, but also to their tenure and promotion and competition for research grants. The scientific societies that endorse the Washington, D.C. Principles represent a broad spectrum of academic expertise, but nevertheless share a common and essential mission. That mission is to mentor young investigators, both scientifically and professionally. Fulfilling this mission requires moral commitment, time, effort, and undeniably, money.

Publication of scientific journals by many professional scientific societies and organizations generates profits. These profits go back into these organizations. What people do not realize is that a significant portion of this money is invested in the professional and academic development of the next generation of basic and clinical scientists, through awards and fellowships to junior faculty, post-doctoral fellows and graduate and undergraduate students. These funds also support workshops on skills and issues critical to professional development – such as grant writing, networking, job placement and use and care of animals in research. Money is used to support and sponsor mentoring programs geared to increasing the number of women and under-represented minorities in science. Funds are used to support science education programs for school-age children in grades K-12 and science educators of these children. I would also like to emphasize that many of the scientific organizations represented here today began to invest time and financial resources in mentoring the next generation of scientists before federal funds were available to support such an effort.

Many young scientists – women and men, minorities and non-minorities, alike, have and hopefully, will continue to benefit from the funds generated by publications of the scholarly societies represented here today. I am one such scientist who has personally benefited from mentoring efforts financially supported by funds generated from journals published by the American Physiological Society. I have worked very hard to arrive where I am today. However, the additional mentoring and moral support of the Society has made a significant difference in my professional development and progression through the various stages of scientific training.

In my first year of graduate school, I received an American Physiological Society minority travel award to attend a seminal scientific meeting. As part of this travel program, I was assigned a mentor to help me navigate through that huge meeting. In addition, my mentor introduced me to a number of established physiologists. They were very happy that I was attending the meeting and were excited about my research. This was the beginning of a very essential component of scientific training and development - networking with other scientists. I felt genuinely welcomed and included. This instilled

not only a sense of responsibility and accountability, but also a sense that the Society was committed to my success. My participation in this one mentoring program lead to subsequent involvement in other activities in the Society. I have served on the Women in Physiology Committee and helped launch a mentoring program and a series of workshops on professional skills for women in physiology. I have participated in the society's Explorations in Biomedicine: Native Americans and Research Careers Program. I served on a committee that oversees distribution of supplemental funds to international scientists working here in the U.S. I have also served on a task force to evaluate the Society's awards programs and refine future award initiatives, particularly those directed toward junior scientists. I have published in the American Journal of Physiology and serve as a reviewer for this journal and other not-for-profit journals. Other recipients of that minority travel fellowships program are now associate and tenured full professors, chairs of physiology departments, and serve as reviewers for and publish in the American Journal of Physiology.

My final point in emphasizing the critical contribution of not-for-profit scientific publications to the development of younger investigators is this. These journals are among the most prestigious scientific journals. They serve to establish and maintain professional standards and guidelines for dissemination of scientific information to which young researchers aspire. If these journals serve no other purpose with respect to mentoring, it has been to hold the young investigator – the future of science - to the highest standard of investigation, reporting, and review process.