The purpose of the International Conference on Physiology is to present the most recent information on the physiology and pathophysiology of disease. Previous conferences have an impressive and exciting history and have been the site of crucial scientific and clinical announcements. However, the meeting has existed without the identification of a scientific “home.” The current proposal is to seek the sponsorship of the 11th International Conference on Physiology from APS. The organizers believe that APS is an ideal host for these meetings for many reasons including the integrative and interdisciplinary nature of the meetings. Physiology plays a critically important role in diseases of most organ systems including the lung, kidneys, heart, and brain. Furthermore, the Physiology Conference is multinational and would provide considerable exposure to APS outside of the US.

The discovery of Physiology twenty years ago led to a virtual explosion of information on the role of physiology that has spawned more than 20,000 papers. Driven by high quality basic science, there now is a growing body of Phase II and III clinical trials employing physiological targets. The clinical relevance of physiology has ensured that the physiology conferences are translational in nature that has led to tremendous financial support from a wide range of pharmaceutical companies both large and small.

This conference would be very similar to previous International Conferences on Physiology. The program would be a combination of oral and poster presentations based primarily on submitted abstracts. The abstract-driven program has always kept the scientific presentations at the cutting edge and fostered considerable communication. Nonetheless, a relatively small number of invited speakers would also be included (6-8) in order to provide overviews, historical information, and lend credibility to the conference. There will be roughly 70 oral presentations derived from submitted abstracts and it is expected that at least 25% of these will be from trainees, as has been tradition. The trainees would not be separated into a separate session, but would be included in the appropriate scientific context. There also will be an ancillary session in which trainees would be invited to participate in a career opportunities session in which participants from a full range of companies and universities would present their thoughts and ideas on how to succeed in a research career with a focus on translational research. Along these lines, there will be at least one additional ancillary oral session in which the pharmaceutical companies will be given an opportunity to present their latest data from clinical trials.

There have been 10 previous International Conferences on Physiology that have all drawn 200-300 registrants. The last several physiology conferences were endorsed by APS. The meeting already has considerable international recognition. Nobel laureate, Sir John Smith, is one of the founding members of the Conferences on Physiology. Currently, Professor Barak McCain, an internationally acclaimed scientist has served as a member of the advisory board for all the recent meetings since the early 1990s. It is important to note that the structure and organization of the physiology meetings is consistent with the new APS conference format guidelines and so transition to APS support should be seamless. Finally, the conference organizers have already received cash and pledges of financial support of $50-75K.