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HYPOXIA
Through the Lifecycle

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PREFACE

The International Hypoxia Symposium convenes biannually to bring together international experts from many fields to explore the state of the art in normal and pathophysiological responses to hypoxia. Representatives from five continents and 32 countries joined together in February 2003 for four days in the dramatic mountains of Banff, Alberta.

As editors of the Proceedings of the International Hypoxia Symposia, we strive to maintain a 26 six year tradition of presenting a stimulating blend of clinical and basic science papers focused on hypoxia. Topics covered in 2003 include hibernation and hypoxia, hypoxia and fetal development and new advances in high altitude pathophysiology, oxidative stress and membrane damage, hypoxic regulation of blood flow, heat shock proteins in hypoxia, and future directions in hypoxia research.

In 2003 we also had the privilege of honoring John W. Severinghaus as a friend, colleague, mentor and inspiration to many in the field. Tom Hornbein’s personal tribute to John Severinghaus is the first chapter in this volume, followed by an entertaining update of the history of the discovery of oxygen written by John Severinghaus.

A tribute by Ken Storey to our late friend and colleague, Peter Hochachka, is in Chapter 23. Peter was a longtime supporter of the International Hypoxia Symposia, and a dear personal friend; he is greatly missed!

Another role for the International Hypoxia Symposia is to serve as an international forum for a variety of working groups focused on particular problems, usually related to high altitude physiology or pathophysiology. The International Hypoxia Symposia are home to the Lake Louise Acute Mountain Sickness (AMS) Score; the Children’s AMS Score and the Guidelines for Children at High Altitude. Continuing that tradition we present a paper from the chronic mountain sickness (CMS) working group. A new CMS score is presented, and the first English translation of the classic paper on CMS and its scoring, “La desadaptacion a la vida en las grandes Alturas”, is presented along with the original article in Spanish. Another working group met at the International Hypoxia Symposia present in Chapter 25 their proposal for a standard approach to AMS epidemiology.

The abstracts from the 2003 meeting were published in High Altitude Medicine and Biology 3(4), 2002, with several late abstracts presented in Chapter 26.

We hope that this collection of papers especially prepared for this volume allows us to share with a broader audience some of the intellectual excitement that embodies the spirit of the Hypoxia meetings.

ACKNOWLEDGMENTS

The 13th International Hypoxia Symposium was a rewarding experience due to the outstanding faculty and the lively participation of our largest group of participants. At this, our third meeting as the organizers, we were especially pleased that the experience known as the Hypoxia Meetings can continue to prosper. We remain always thankful for the kind and wise guidance of Charlie Houston, the originator of the Hypoxia meetings.

Ms. Joann Bauer of the University of Colorado Continuing Medical Education office provided professional support and kept everything running smoothly so we could focus on the science. Thanks Joanne!

In 2003 we had the generous support of a number of organizations and individuals, including the U.S. Army Research and Development Command, The White Mountain Research Station and Drs. Luciano Bernardi and Robert Schoene. And thanks are also due to numerous others who freely gave of their time and energy to make the meeting such a resounding success.

Please join us by the light of the full moon in February 2005 for the 14th International Hypoxia Symposium.

Robert Roach and Peter Hackett, Chairmen
International Hypoxia Symposia (www.hypoxia.net)
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