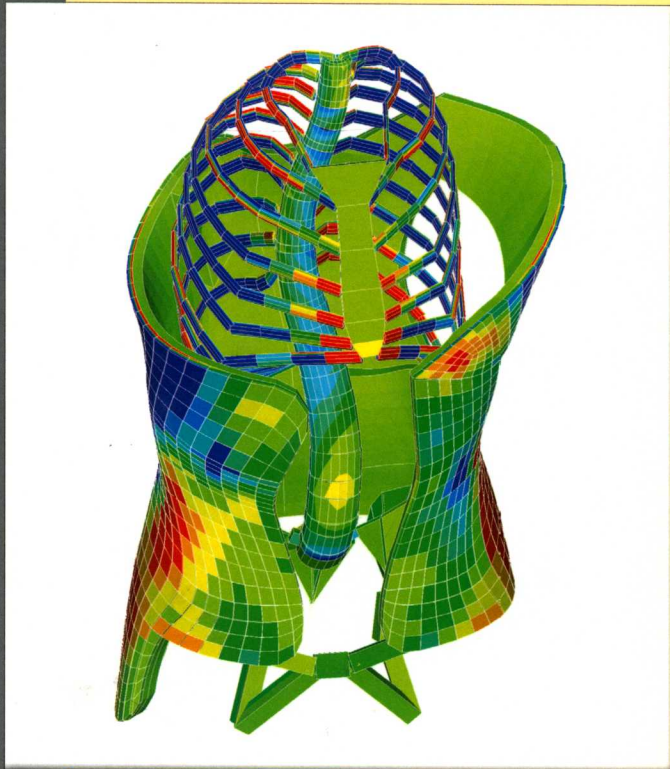


Research into Spinal Deformities 7



Editors: Carl-Eric Aubin
Ian A.F. Stokes
Hubert Labelle
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Preface

In July 2010, the International Research Society of Spinal Deformities (IRSSD) will hold its 8th biennial meeting in Montreal, Canada. The meeting is returning to one of its important venues. The 1992 meeting in Montreal marked the turning point of a series of preceding meetings that had a primary interest in morphological aspects of spine deformities and trunk asymmetry, towards three-dimensional evaluation and interpretation of scoliotic deformities and their biomechanics. Since then, the IRSSD and the biennial meetings have played an instrumental role in the advancement of scientific research on problems affecting the spine. Over the years, the interest has evolved and diversified towards improved understanding of mechanisms involved in the etiology, biology, biomechanics, metabolism, genetics, and treatment of spinal deformities. It is attended by researchers and clinicians from all over the world, providing a collegial forum for presentations, discussion and collaboration on subjects relating to spinal deformities.

A Pre-Meeting on Clinical applications of 3D technologies and research in biomechanics, biology and genetics of scoliosis also is to be held at Sainte-Justine University Hospital Center to allow the participants to see directly how research activities of our group are linked to the clinical world.

This book contains the Proceedings of the IRSSD 2010 Conference in the form of either peer-reviewed short papers or abstracts summarizing the 140 papers and posters that will be presented. It covers to all aspects of spinal deformity research, including etiology, genetics, biology, metabolism, biomechanics, imaging technologies, innovations in treatment, and treatment outcomes. These scientific proceedings provide the opportunity for readers to learn more about the latest development in this field that will be presented and discussed during the meeting. This meeting represents a multidisciplinary taskforce giving scientific and clinical experts from around the world an opportunity to meet and discuss the latest developments in the fields of scoliosis research, on the search for the underlying mechanisms that cause scoliosis as well as the clinical effectiveness of a wide range of interventions.

I would like to thank all participants, and authors for submitting their work, as well as the members of the scientific committee, chaired by Ian Stokes, that provided very valuable comments and critics that helped in adding to the impact of the work that will be presented at the meeting.

I hope this meeting will be a unique opportunity to meet, exchange, and discuss of subjects of mutual interest related to spinal deformities, and to advance the study and research into spinal deformities for the patients' benefit.

Carl-Eric Aubin
Montreal, Quebec, Canada
April 2010

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The meeting and its publication received valuable support from several companies involved in the management of spinal deformities. This support made it possible to enhance the quality of the meeting with number of activities and programs (guest speakers, round tables, Pre-meeting, etc) that would not have been otherwise possible:

Gold level:

- DePuy Spine
- Medtronic

Silver level:

- Musculoskeletal Disease Excellence Team (Sainte-Justine University Hospital Research Center)
- Research Group in Biomedical Sciences and Technologies – FRSQ (École Polytechnique de Montreal)

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- Synthes
- SpineVision
- Sainte-Justine University Hospital Research Center
- Network for Oral and Bone Health Research (RSBO-FRSQ)
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- Faculty of Dentistry, Université de Montréal

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For the organization of the meeting, very dedicated persons from the Sainte-Justine University Hospital Division of Continuing Education (Mrs. Johanne Charron, Director; Mrs. Christine Larue and Mr. Jean-François Hébert) made all local arrangements, and ensured the smooth running of the meeting with excellent skill and grace. Dr. Florina Moldovan, researcher at Sainte-Justine University Hospital Center, made valuable contribution in building and organizing the social activities, notably the banquet on the Saint-Laurent River, the Jazz cocktail and the welcome reception.

Special thanks to the graduate students Mark Driscoll and Guoruey Wong who carefully proof read all papers of this book.

The Canada Research Chair program and the Natural Sciences and Engineering Research Council of Canada supported my research activities during the time I was organizing the meeting.

Carl-Eric Aubin PhD, P.Eng.
Montreal, April 2010

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