Preface

This volume contains the papers presented at the 15th International Symposium on Hearing (ISH), which was held at the Hotel Regio, Santa Marta de Tormes, Salamanca, Spain, between 1st and 5th June 2009.

Since its inception in 1969, this Symposium has been a forum of excellence for debating the neurophysiological basis of auditory perception, with computational models as tools to test and unify physiological and perceptual theories. Every paper in this symposium includes two of the following: auditory physiology, psychophysics or modeling. The topics range from cochlear physiology to auditory attention and learning. While the symposium is always hosted by European countries, participants come from all over the world and are among the leaders in their fields. The result is an outstanding symposium, which has been described by some as a “world summit of auditory research.”

The current volume has a bottom-up structure from “simpler” physiological to more “complex” perceptual phenomena and follows the order of presentations at the meeting. Parts I to III are dedicated to information processing in the peripheral auditory system and its implications for auditory masking, spectral processing, and coding. Part IV focuses on the physiological bases of pitch and timbre perception. Part V is dedicated to binaural hearing. Parts VI and VII cover recent advances in understanding speech processing and perception and auditory scene analysis. Part VIII focuses on the neurophysiological bases of novelty detection, attention, and learning. Finally, Part IX describes novel results and ideas on hearing impairment. Some chapters have appended a written discussion by symposium participants; a form of online review that significantly enhances the quality of the content. In summary, the volume describes state-of-the-art knowledge on the most current topics of auditory science and will hopefully act as a valuable resource to stimulate further research.

It is not possible to organize a meeting of this size and importance without a considerable amount of help. We would like to express our most sincere thanks to the organizing team: Almudena Eustaquiño-Martín, Jorge Martín Méndez, Patricia Pérez González, Peter T. Johannesen, and Christian Sánchez Bellos, whose expertise and willing help were essential to the smooth running of the meeting and preparation of this volume. Many thanks also to the staff of the Fundación General de la Universidad de Salamanca for their skilful and unconditional support with the administrative aspects of the organization. We are very grateful for the generosity...
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Finally, we would like to thank all authors and participants for the high quality of their scientific contributions and for their cheerful conviviality during the meeting. The first editor wishes to thank all participants for generously and enthusiastically allowing this extraordinary symposium to take part in Spain for the first time ever.

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