Preface

In science, as in every other field of life, communication is crucial. The advancement of science depends on the sharing of knowledge and the critical exchange of complex ideas through congresses and publications. Contributions to these forums must be expressed clearly so that others can evaluate their validity and importance. An individual scientist's or team's success ultimately depends on communication skills, because funding depends on grant proposals and publications.

Speaking and writing, like analytical thinking itself, are "transversal skills". Too often educators focus exclusively on imparting knowledge rather than on developing skills. I am grateful that my teachers in secondary school recognized the importance of effective communication. No matter what specific knowledge we were supposed to assimilate, we had to demonstrate our competence in the material by expressing our own ideas. Thus, we learned to develop and organize our ideas through writing and rewriting. Likewise, my professors at university demanded clear exposition in both written and oral communication. My education provided me with the basic tools I would need to take on the challenges of any career path I would choose to follow.

As so often happens in life (or at least in *my* life), my ultimate choices were determined by circumstance and happenstance. The vicissitudes of life brought me to Catalonia, a country that has been my home for over half my life. Holding only an undergraduate in degree in psychology, speaking neither of the native tongues, and having no specific knowledge I could capitalize on, it seemed that my only option was to work as

an English teacher in one of the many unofficial "academias" that had become established to fill an important void created by shortcomings of the official educational system. My vague plans for graduate studies in my field and a career in psychology were "temporarily" shelved, and I discovered the joys of learning and living a new culture.

Teaching English as a foreign language taught me much about my mother tongue. Learning two new languages enabled me to appreciate the difficulties my students faced, especially given that I was living the languages I was learning while they were trying to fit learning my language around their busy lives. Fortunately, just when learning to teach English and attaining competence in the native tongues no longer challenged me, a new door opened. Scientists from the Escola Superior d'Agricultura at Barcelona Tech needed someone with a scientific background to translate their papers into English. These papers were well thought out, so it was purely a question of language. Working together with the authors made it possible for me to rise to this challenge, and I continue to enjoy collaborating with new generations of scientists doing exciting work in new directions at this institution today.

Then, in 1992, the *Unitat de Diagnòstic per la Imatge d'Alta Tecnologia* (UDIAT) was founded in Sabadell, and the visionary young radiologists chosen to lead the project wanted an American for English conversation practice. These friends and their colleagues at the UDIAT and Corporació Sanitària i Universitària Parc Taulí (CSUPT) have taught me so much about medicine, health-

care, and life. Conversation classes led to other types of collaboration, such as helping prepare posters and conferences as well as translating and correcting papers. I came into contact with biomedical professionals from various fields and institutions. Some of these were established researchers with extremely competent writing skills, while others were just starting out in the world of academic medicine; all had various degrees of deficits in English. Through the years, I have had the privilege of working on thousands of papers in diverse fields through translating, rewriting, editing, proofreading, and helping with submissions and resubmissions. This direct collaboration with authors who have different levels of competence in writing and language has given me a unique understanding of the difficulties Spanish writers face when writing English.

Another door opened when Dr. Ramón Ribes, the brilliant author of a series of books on English for different medical professionals, invited me to participate in medical English courses he was organizing. Around the same time, Dr. José Nicolás provided me with the opportunity to organize and conduct a module in scientific English for some of the Master's programs offered through the medical schools at the University of Barcelona and Autonomous University of Barcelona. These new challenges forced me to think hard about biomedical professionals' language needs, about what they needed to learn and

the best ways to help them learn it. Preparing for these courses, working with knowledgeable, dynamic professors (Ramón Ribes, Kai Vilanova, Fernando Navarro, Juanjo Sanz, Brian McCarthy, and Anna Alguersuari) and interacting with students have all been incredibly enriching.

After several successful courses, Dr. Ribes gave me the opportunity to coauthor books on medical English, and I was forced to put my knowledge down on paper. As Benjamin Disraeli said, "The best way to become acquainted with a subject is to write a book about it". Researching, writing, and rewriting these books (Surgical English, Springer 2009; Inglés Médico y Sanitario, LID 2010; Preparing and Delivering Scientific Presentations, Springer 2011) helped me consolidate my knowledge. I also became aware that although there are many excellent books on scientific writing, most are directed at native English speakers or students and professionals working in English-speaking countries who have near-native fluency. Moreover, very few provide readers with exercises that would enable them to put theory into practice.

The present book aims to help biomedical professionals develop skills in scientific writing. It illustrates the principles underlying good writing, but most importantly it provides you with controlled exercises to put these principles into practice. I hope that this will help you to assimilate them and incorporate them into all your writing.

John Giba Sentmenat, March 2014