

Preface

One of the great debates in science fiction these days is whether it is losing its relevance as the rate of technological advancement increases. The reality of new technologies often outpaces that which has been predicted in literature, and nowhere is this more apparent than in Medicine.

Forty years ago CAT (Computerized Axial Tomography) scanners revolutionized the way we image the body, and in the decades since there has been a rapid-fire release of one technology after the next—MRI (Magnetic Resonance Imaging), CTA (Computerized Tomography Angiography), MRA (Magnetic Resonance Angiography), PET-CT (Positron Emission Tomography—Computerized Tomography), etc.—that allows us to see inside the body at a level of detail that was considered impossible only a few short decades ago. In fact, today's imaging rivals that depicted in early Star Trek episodes that were trying to predict the technology of the twenty-third century.

Advances in robotic surgery have improved the accuracy of skilled surgeons; new medications utilizing nanotechnology are improving efficacy while diminishing side effects; electronic health records are rapidly disseminating information to all involved providers; and an ever-increasing array of new technologies has contributed to the evolution of modern Medicine.

In my field, Rehabilitation Medicine, technologies such as brain-computer interfacing (allowing someone to directly control a computer with only their thoughts), bionic prosthetic limbs, robotic therapy devices (robots that aide in physical therapy), and robotic exoskeletal braces that allow paraplegics to walk again have already crept out of the pages of science fiction and into the real world. Although most of these are not yet advanced enough for widespread clinical use, there is no doubt that they will dramatically improve the way we help people with disabilities regain their independence.

The stories in this collection look at where we might be going in the near and distant future regarding not only the continued application of these remarkable technologies, but also the political and ethical implications of how all this technology is going to affect us as individuals and as a society. And

while it is fun to look at how the technological advances in medical care may enhance our lives, the ethical dilemmas posed by these changes are perhaps even more intriguing.

I hope you'll find these stories not only entertaining, but also thought-provoking. After all, the future is not set in stone, and it is our job, all of us, to try and nurture it to grow in the right direction.

Many people have helped me to create the stories in this collection, the most important being my wife, Laura, who shares my fascination with scientific postulation and discovery, and has encouraged me to forge on with my passion to write. I was incredibly fortunate to cross paths with Stanley Schmidt, the Hugo Award winning editor of *Analog Science Fiction and Fact*, before his retirement earlier this year. I learned a great deal about crafting a story to make it thought-provoking and true to the science behind the story by attending his Worldcon panels, reading his editorials in *Analog*, learning from his comments about my stories (including a stack of those he rejected, which often taught me the most), and his meticulous editing.

There's nothing like a workshop full of friendly faces looking to rip your stories down to the core (in a good way!) with their no-holds-barred critiques—an invaluable resource. I have been blessed to be in a workshop run by Adam-Troy Castro and with input from Ben Burgess, Judi Castro, Dave Dunn, Cliff Dunbar, Chris Negelein, Giselle Peterson, Mark Halverson, and David Slavin. I can't thank them enough.

One final nod to Dr. Nick Kanas, who I had the good fortune to meet at Worldcon this year. Nick informed me about the *Springer Science and Fiction* series just as I was looking for the right fit for this book. He connected me with Dr. Christian Caron, the editor of Springer's series, and the two of them helped me organize the 'science and fiction' thoughts behind this collection. Without them, this book would not exist.

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