

To boldly go . . .

To fit the theme of this Holiday issue, I am offering a brief intergalactic tour of medicine as it will be practised in space, according to science fiction writers. The only place to start is with James White's classic Sector General series. It was launched in 1962 with *Hospital Station* and ended in 1999 — 12 books and sundry short stories later — with the posthumous publication of *Double Contact*.

With 384 levels and 10 000 staff, the spaceborne Sector General is the first and last call for the denizens of White's crowded universe. In-patients range from the delicate inhabitants of the methane ward to the 12-m, water-breathing Chalders. Staff-members are equally diverse: there's human physician Conway and nurse-turned-pathologist Murchison, a 6-legged Tralthan pathologist named Thornnastor, the insect-like Cinruskin Prilicla, who is always exquisitely polite, and a very human chief of staff and psychologist named O'Mara, who is always exquisitely rude — except to those in need of his services.

The physicians handle their diverse caseload with the help of Educator Tapes that temporarily endow them with the expertise of an accomplished physician of the requisite species. The tapes also provide the recipient with the donor's personality, which leads to a certain confusion in matters of diet and romance. The tapes and the hospital design, however, cover only the known, and the unknown presents with daunting regularity at Sector General. Its visitors have ranged from a sentient virus to a continent-sized patient in need of surgery.

Resolution of the various cases invariably involves ingenuity, strategy, engineering, good cooking and, always, communication. Xenophobia, in this Irish writer's work, is an affliction requiring treatment.

A different perspective is offered in Stephen L. Burns' *Flesh and Silver*. Its surgeons are volunteers who accept amputation of their hands to release their ability to perform psychokinetic surgery, but then find themselves alienated from patients and colleagues by the "nightmare effect" — the psychic scars left on the patient by the surgery.

Gregory Marchey is one of the surgeons: he travels, he operates and he drinks. What seems set to be a further reiteration of that oft-repeated theme of the alienating effect of progress is undercut as the story develops. The cyborg who kidnaps Marchey has far more humanity than his flesh-and-blood patient, Brother Fist, the dictator/patriarch of an isolated colony. But Brother Fist claims to have a way to prevent the nightmare effect, and so the damaged Marchey enters a dangerous psychological contest with the psychopath, the prize being the redemption of his fellow surgeons.

The hero of Lois McMaster Bujold's Vorkosigan saga (*The Warrior's Apprentice* and its sequels) may not be a physician, but he has more medical experience than he or anyone could ever want. An assassination attempt on his parents before his birth left him physically disabled in a culture that values military prowess and fears mutation. He compensates with great inventiveness, including the creation of his alter-ego, Admiral Naismith, and his mercenary space fleet. He also grows up, coming to terms with his home culture and compelling it to come to terms with him.

Bujold's novels are warm, intricate and humane. In her universe, cloning, genetic engineering and artificial wombs are commonplace, but the defining human experiences remain those of identity, morality and choice, as well as disability, aging and death. — *Alison Sinclair, CMAJ*