electrochemical modulation of the dysfunctional circuits in Parkinson's disease.

The book has many well-established authors and provides a good overview of the advances made in many fields across these three parts. The material is complex and dense. Therefore it is difficult to connect the diverse topics well together. The physiology sections starts with two overview chapters that are quite good and lay the foundation for the subsequent chapters at least on the physiology. The subsequent treatment of subjects of the individual neurotransmitters such as dopamine and glutamate are covered reasonably well. However, the chapters on computational models are somewhat superficial and require a larger section to truly tie together the sections on the physiology and computation. The authors of these chapters have themselves done a substantial amount of work but the considerations as written in the chapters are limited.

The section on the neurobiology and pathophysiology is adequate but it was difficult to find any relevance to the topic being covered by the book. Although cognitive deficits can be easily considered into the dynamics of PD, it was not clear to me how the topics of G-Protein coupling, plant toxin etc could be relevant to the dynamics of cortical-subcortical function in PD. I had the same problem in terms of the treatment chapters, especially the one on dopamine replacement. This was a superficial review of a complex issue that also had no tie-in to the title of the book. The chapters on deep brain stimulation were at least somewhat more relevant as they deal with the aspects of dynamical systems that are touched upon in the earlier chapters. Cell replacement therapies as the last chapter also seems to me to be out-of-place.

I feel that the book and the topic are clearly needed in the field. However, there appear to be several chapters in the book that do not actually address the title of the book. It is because of this that the subject in those sections seems somewhat superficial and disconnected. The book would have been better if it had been restricted to the subject of cortico-subcortical dynamics.

Therefore the topic focuses predominantly on the advances made in the neurophysiological understanding of circuit dysfunction in Parkinson's disease.


Dr. Peter Gram is a psychiatry fellow at a teaching hospital in Newbury, Connecticut. On call one night he admits Naya, a 7-year-old girl who's tried to climb over a balcony wall in her sleep. When Naya begins to draw pictures that suggest she's dreaming details about the recent brutal murder of another child, Dr. Gram is drawn into the criminal investigation.

The book is slow to get started but it’s worth persisting as short chapters telling converging storylines begin to move this novel along quickly once it does get going. While the identity of the murderer is pretty obvious early in the book, it's still fun watching the characters try to figure it out. A few plot points don’t seem to make sense. For example, Dr. Gram gets himself into trouble by foolishly visiting the murder scene for no clear reason; investigating officers enter someone's apartment without a warrant or anything that seems like just cause. Nevertheless, it’s overall a well-told story.

Non-medical readers will find the descriptions of day to day running of a hospital ward interesting. Given the book’s American setting, I was intrigued that it took several pages of the novel just for Dr. Gram to talk an insurance company into allowing him to admit Naya to hospital.

The author, Preetham Grandhi, is a child psychiatrist himself and this is his first novel. This story, with its paranormal twist on psychiatric practice, has a “Sixth Sense” flavour to it and would make an even better film than it does a novel.

If you're looking for a light read for a quiet weekend, this is a good book to pick up. It's not a novel that challenges the reader but it certainly succeeds in entertaining.

Andrew Kirk
Saskatoon, Saskatchewan, Canada