

the transcendence of great art (that Bacon's first attempts at essay writing ended life crumpled up and tossed on the fire is a fact that would undoubtedly escape the impatient young man).

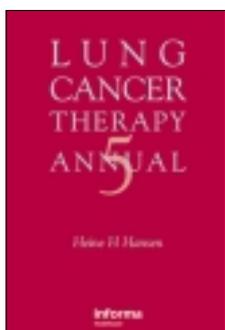
*Intuition* on Marion and Sandy: "best of colleagues, they remained best of friends, creators of a rare world unto themselves, a peaceable kingdom where the lion might lie down with the leopard (Marion was no lamb)". Here,

surely, is a passage to sum up the novel: the witty and uncomplicated prose style, the compassionately rendered characters, and the pleasing literary allusion. In literature too, there are myriad ways to fail. Ms Goodman has side-stepped all of them.

Talha Burki

t\_burki@yahoo.co.uk

## Management of lung cancer



Lung cancer therapy annual 5  
Heine H Hansen (Ed)  
Informa Healthcare, 2006  
£55.00 (US\$13.55, €81.70)  
pp 224  
ISBN 0 415 38024 3

This book offers a well-coordinated, self-contained update on developments in recent published work, and how this information affects the day-to-day management of patients with lung cancer. The text is easy to read and accessible to anyone interested in this subject, from respiratory nurse specialists to doctors in training, and knowledge of the previous annuals is not needed.

The introduction by Heine Hansen sets the scene, with emphasis on the dominant role of cigarette smoking in lung cancer. Here, he reinforces the health warnings against smoking and provides evidence that "it is never too late to stop smoking as there is always a health gain by quitting". The book then goes on to cover epidemiology, biology, early detection and screening, staging and prognostic factors, and the treatment of non-small-cell lung cancer, small-cell lung cancer, and mesothelioma. Every chapter contains key references, which help further in-depth study.

Highlights of the *Lung Cancer Therapy Annual 5* are the chapters on screening, staging, staging procedures and prognostic factors, and the treatment of non-small-cell lung cancer, which summarise well the recent work and interest in these areas. Results of completed and ongoing lung-cancer screening trials are discussed and the American Cancer Society (Atlanta, GA, USA) recommendations on informed decision making for lung cancer screening are given. The difficulty in the discrimination between benign

and malignant processes, and the use of PET are reviewed, as are prognostic factors, which are nicely subdivided into anatomical and non-anatomical factors.

The chapters on treatment emphasise the need for disease-specific specialists and discuss the increasing multimodality approach used in the treatment of lung cancer. This book also reviews the use of surgery, radiotherapy, and chemotherapy, either sequentially or concomitantly, in selected groups of patients. Additionally, new and more targeted agents are discussed. However, patients in clinical trials are not representative of the general patient population—those in North America could differ substantially from those in the UK, for example.

The main problems with this book are because of space constraints, such that some sections are slightly indigestible, and some controversial themes are not fully developed—eg, the role of adjuvant chemotherapy. However, these sections are referenced sufficiently for the interested reader.

In summary, this book is a useful and informative read on lung cancer, and can be read on its own without reference to previous annuals, updating the reader on advances in lung cancer and providing background epidemiological data on incidence and survival.

Tariq Sethi

t.sethi@ed.ac.uk

## Web

### Medical school on demand

Before Aazaz Haq jumps into the shower each morning, he connects his video iPod to his computer to download the previous day's lectures at the University of Michigan Medical School, Ann Arbor, MI, USA. Recently, the topic was lung cancer histology, and the second-year medical student memorised the differences between squamous-cell carcinomas and adenocarcinomas while making himself a smoothie and walking to class.

For Haq and his classmates, lectures on podcast—a digital audio or video file that can be downloaded

automatically onto a computer or MP3 player—are turning medical school into an on-demand and on-the-go pursuit.

About 10% of medical schools in the USA and Canada use some form of podcasting to distribute lectures, and up to a quarter will adopt the technology within the next year, predicts Morgan Passiment, director of Information Resources Outreach and Liaison at the Association of American Medical Colleges, Washington, DC, USA. The trend is spreading outside North America as well.

Podcasts are the latest efforts of medical schools to incorporate information technology—already a powerful driving force for medical advances—into the education of its future health professionals. Today, students can consult medical references on hand-held devices and go online to zoom in on histology slides, watch streaming lecture videos at twice their original speed, or interact with a virtual patient.

Podcasting technology emerged 2 years ago in the form of free, radio-style audio programmes and soon made its way into universities as so-called coursecasts. For medical schools that had been offering online videotapes of lectures for years, coursecasting was a natural, cost-free next step, comments Jennifer Stringer, curriculum applications manager for Stanford University Medical Media and Information Technologies (SUMMIT; Stanford, CA, USA).

At Harvard Medical School, Boston, MA, USA, student requests prompted the university to offer podcast versions of lectures in December, 2005. Since then, more than 500 students have subscribed, estimates Jason Alvarez, Harvard's director of Educational Technology and Software Development. Medical schools at the University of Texas at Houston (Houston, TX, USA), Duke University (Durham, NC, USA), and others have created their own coursecasts. Some of these, like the University of Michigan's video-equipped Dr iPod, are run via Apple Inc's academically minded version of its online music store: iTunes U. Professors like Justin Gallivan at Emory University, Atlanta, GA, USA, use free podcasting software to easily upload their lectures online. Medical schools often choose to restrict podcasts to their immediate communities, but professors, including Gallivan and even some universities, have made them available to the public.

Coursecasts and the like cater to the varied learning styles of medical students working to cram as many signalling pathways into their brains as possible. Although, some students might learn best by small-group discussion, says Passiment, others are better served by listening to lectures alone at 02:00 in the morning.

With Dr iPod, University of Michigan first-year student Yaseen Oweis can take lecture notes at leisure, pausing if necessary to look up an unfamiliar term. Most students use podcasts mainly for review because complicated topics—especially visually detailed ones, such as embryology—can be difficult to learn on audio or a small iPod screen for the first time.

"Especially in the preclinical part of medicine, when students are...really having to learn a new language, the ability to be able to go back and review or listen to what they've been exposed to in lecture is a tremendous tool", says Stringer.

The flexibility afforded by the format is also important for coursecast users. Jake Lazarus, a first-year student at the University of Philadelphia, PA, USA, bought an iPod for the main purpose of reviewing lectures while he lifted weights or made his daily half-hour journey to campus. Second-year student John Simon Van Arnham listens to a lecture or



Will increasing mobility of learning take students out of classrooms?

two whenever he has to spend hours slicing tissue in his Stanford University laboratory.

Although many professors welcome yet another option for mastering the material, others lament the increasing mobility of learning when it takes students out of the classroom. Donald Regula, a second-year course director at Stanford University, says that more than 50% of his class stopped attending lectures when the school introduced streaming lecture videos online about 6 years ago. Although Lazarus says exceptional teachers usually lure even the staunchest podcast fans, he and other students attest to rarely attending lectures in lieu of watching or listening to them later. Regula is "resigned to the fact that we can't stop technology", but contends that the learning experience is compromised for no-shows.

At the same time, emerging data support the idea of digital coursework supplementing, or even replacing, live teaching. When Jean-Claude Bradley, e-learning coordinator for Drexel University's College of Arts and Sciences, Philadelphia, PA, USA, compared the average examination grades of his premedical organic chemistry students who attended live lectures with the 80% who opted for the digital versions he had been producing for several years, he found them to be identical. Last year, Bradley switched entirely to digital lectures—students watch in their own time, then go to him with specific questions on the course material.

What's the next big innovation for medical students? Passiment foresees personal digital assistants, iPods, and mobile phones coming together into a single device to deliver coursework. Meanwhile, Lazarus is hoping that technology will "start beaming it directly into your brain."

*Ishani Ganguli*  
ishani.ganguli@gmail.com