

On the Net

An atlas of the brain, online

Although hype surrounding the Net's medical education and research possibilities has been with us for years, the reality is finally catching up with the hyperbole. A prime example is offered by The Whole Brain Atlas (www.med.harvard.edu/AANLIB/), a site created by Dr. Keith Johnson of Harvard University and Alex Becker of the Massachusetts Institute of Technology. It allows users to delve into the brain and

observe the diseases that attack it.

Using datasets from real patients, users can observe the pathology resulting in transcortical aphasia, see what advanced Alzheimer's disease actually does to the brain's anatomy and function, and check how normal aging affects the brain. Occasionally, data are gathered over time to see how the brain changes, either by itself or in response to pharmaceutical or surgical treatment.

The Whole Brain Atlas includes MRI, CT and nuclear medicine images of 30 clinical cases, with more than 13 000 images available. The focus is on the pathoanatomy of several leading central nervous system diseases such as stroke and Huntington's disease, but diseases such as AIDS and multiple sclerosis are also discussed.

The system offers multiple ways to view each case. There is a standard "point-and-click" Web interface that lets users move through various modalities. For those with Java-ready browsers (this includes all newer versions of Netscape and Explorer), there is an interactive system. And for those who hate the slow speed of the Web, there is a direct download feature.

In a broader but less-detailed offering, the US National Library of Medicine has created a tool called the Visible Human Project (www.npac.syr.edu/projects/vishuman/) — a set of digitized images of the human body available online. Here the datasets include digitized anatomical photographs as well as MRI and CT scans. A Java-ready browser is needed to use the images.

The aim of both projects is mainly educational, but they point to a future in which research may also be conducted using these types of cyber services. — *Michael O'Reilly, mike@oreilly.net*



BC's PharmaNet system proving convenient

Most BC physicians think the 4-year-old PharmaNet system is a useful treatment tool, according to a recent evaluation by doctors. The evaluation, conducted by the government-run program, found that 45% of respondents rated the program with scores of from 8 to 10 using a 1-to-10 scale. PharmaNet, which is available in every pharmacy and hospital in the province, provides patient drug profiles and claims processing at pharmacies and in hospital emergency departments.

The evaluation also revealed that 20% of all drug profiles obtained

through the service affected treatment decisions. According to Paul Tier, director of HealthNet BC, other benefits include the accuracy of the drug profiles (when compared with a patient's memory), the elimination of language barriers and the time saved in retrieving drug information. The system provides "complete, accurate, unbiased information in a minute or less," says Tier. "A lot of initial fears about administrative overhead have turned out to be an administrative saving."

PharmaNet was also lauded as a

successful example of telecommunication service delivery during a Vancouver seminar on telemedicine last fall. When a prescription is about to be filled, the pharmacist can access the patient's drug profile. The program will check for potential drug interactions or any history of refilling prescriptions too soon or too late, and will automatically process claims for costs that can be reimbursed. "Pharmacists are warned right there if there is anything on which they should be taking action," says Tier. — *Heather Kent, Vancouver*