

Leishmaniasis epidemic hits Afghanistan

The World Health Organization is appealing for money to tackle the world's largest single epidemic of cutaneous leishmaniasis, which is now under way in Afghanistan. Between 50% and 75% of leishmaniasis infections involve the skin. The lesions, which may number more than 200, cause serious disability and leave the patient permanently scarred. Visceral leishmaniasis (kala azar)

is the most severe form and is always fatal if untreated. There is also a mucosal form involving the nose, throat and mouth. In Kabul alone an estimated 200 000 people are believed to have the parasitic disease, which is endemic in 88 countries on 5 continents; there are as many as 2 million new cases a year. Coinfection with HIV, which is considered extremely serious, is becoming

more common. The prevention of sandfly bites is considered the key to eliminating the illness. WHO, together with the Afghan government and some international groups, is seeking US\$1.2 million to bring the outbreak under control there. Planned measures include the use of drugs and insecticide-impregnated bednets, and better health education. (www.who.int/inf). — *CMAJ*

HEART & SOUL

The Neuro has a new boss

To talk with David Colman, the new director of the Montreal Neurological Institute, is to talk optimism. This 53-year-old neuroscientist seems set to singlehandedly reverse Quebec's medical brain drain. When he starts his new job this month, he will bring with him 8 graduate students and research associates, along with more than US\$1 million a year in research grants. His recruitment is a major coup for the institute, which has just established a new brain tumour research centre.

Colman's goal is to keep the institution's 230 researchers and students rooted firmly at the hospital, but he also wants to continue directing his research and perhaps doing a little teaching on the side. "I used to teach the history of anatomy, and we'd look at old Vesalius woodcuts on the fabric of the human body," he says, referring to the doctor who changed the face of medicine in the mid-1500s by recreating his anatomical observations in exquisite prints.

Colman then launched into a story about woodcuts and human cadavers being smuggled over the Alps in the dead of night, and concluded with the wistful declaration that he would "love to do some teaching here." Unfortunately, the New York City native suspects that research and meeting agendas may leave no time for lecture notes.

His appointment will shake things up at the venerable institution Mon-

trealers call "The Neuro." The facility, home to the largest group of neuroscientists in the country, has been without a permanent director since Dr. Richard Murphy stepped down in 2000. After a 2-year search, Colman was headhunted to fill the Wilder Penfield Chair in Neuroscience, named for the famous American physician who became Montreal's first neurosurgeon in 1928 and founded The Neuro 6 years later. Although Colman is a research scientist and not a physician, he shares Penfield's vision of combining cutting-edge research with clinical care for people with neurologic disorders.

Colman, who holds a PhD in neurosciences, does research on the architecture of the synapse and on myelination. He comes to Montreal after serving as Annenberg Professor of Molecular Biology at Mount Sinai Hospital in New York.

One aspect of Canadian life that excites Colman most is the research landscape, which he lauds as "inquiry-driven." He says wondering how something works can translate into spectacular discoveries. "A great example is the work on thermophilic bacteria. In the '60s, Brock started working on these bacteria near hot springs in temperatures that would do cell damage to any of us. He discovered that these were archaic bacteria that existed in oceans and volcanoes, with different types of enzymes that allow you to take



Colman: from New York to The Neuro

a single strand of DNA and make a bucketful of DNA. Today, that's the core of the biotechnology industry."

And that's the kind of basic research Colman does. His work addresses how nerve cells communicate with one another and regenerate. "How do cells react to their environment and transduce signals within their own cytoplasm?" is the way Colman describes it.

He says having the freedom to ask basic questions such as that is one of the reasons he's coming to Canada. "If you fund a thousand inquiry-driven projects," he says, "you may find the one that changes the world." — *Susan Pinker*, Montreal