ENTOMOLOGIST RICHARD POLLACK | MEETING THE MINDS

An explorer in the world of insects

By Andrew Rimas, Globe Correspondent  | April 3, 2006

Most people would say that Richard Pollack has a lousy job, and they'd be right. As a research associate in the department of immunology and infectious diseases at Harvard University's School of Public Health, Pollack's work is also crawling with mosquitoes, ticks, and bedbugs. But especially lice. He's got an itch for the things that get under our skin.

"Bugs turn me on," he says. "As they do most little boys. It's just that some of us don't outgrow it." Although he's one of the world's foremost experts on head lice (his team has examined the hair of 10,000 children), Pollack does look boyish for his 49 years. Sitting amid a flood of academic papers and dressed in the uniform of the practical scientist -- work shirt, blue jeans, utilitarian pockets -- his enthusiasm for parasitic insects is, almost, infectious.

"Wherever I go, I can always find one of my friends," he says. "My wife knows there's no such thing as a vacation. I can appreciate the lovely scenery, but I'm the one who sees the spiders in the woodwork. On the airplane, I'm always wondering, 'What's that sitting on the scalp of the gentleman three rows ahead?' "

Pollack's not exaggerating. When he took his wife and daughter to see the Everglades, he made sure they went during mosquito season. "They sat in the car. I was outside enjoying the hum."

Pollack has insects in his blood. An Ohio native, his grandfather was a Navy doctor with an interest in mosquito-borne malaria, and Pollack followed in his footsteps by training as an entomologist at Cornell and then at the London School of Hygiene and Tropical Medicine.

"I could have worked on aphids or grasshoppers, but I have a morbid sense," he says. Hence the affinity for bloodsuckers. "Insects that find us attractive are worth a closer look."

That's why he keeps his microscope trained on head lice ("Fascinating creatures!" he calls them), although he's quick to point out that they're not a real threat compared with other pests. "Lice harm very few people. There's a ridiculous overreaction by society. More than half of children who are called 'lousy' are misdiagnosed. Most physicians will never see a head louse." Although he didn't suffer from lice when he was a boy, Pollack sometimes infests himself for research purposes. He once fashioned a "chamber" that he strapped onto his arm to allow the bugs to feed undisturbed.

"My wife looked at me funny when I did that," he says. "But no more than usual."

Pollack also studies the far more serious threats posed by mosquitoes and black flies. It was between graduate degrees that Pollack first witnessed the human suffering that these parasites can inflict. "In 1982, I'd spent the year working on black flies in southern Sudan," he says. "They caused disfiguring skin disease and river blindness. It's a terrible, terrible disease."

Pollack travels extensively in Africa and South America -- in March he flew to Ethiopia for a malaria project -- but when he's in town, he moonlights as a commissioner for the Norfolk County Mosquito Control Project. Meaning that it's his job to keep Eastern equine encephalitis and West Nile virus out of our bloodstreams.

"There's a misunderstanding that the risk of infection is fairly minimal," he says. "People die from these things every year. I'd rather be bitten 100 times by head lice than once by a mosquito."

He recounts, with a humor born of distance, the time that he awoke in a crowded tent one morning in Sudan. "One of my assistants had broken the zipper, and somebody had forgotten to make sure we had a roll of duct tape." By morning, there were 750 fully fed mosquitoes on the underside of the roof.

"A minor incident," he says dismissively. "But most people don't realize how good we have it here."

FACT SHEET

Hometown: Needham.

Family: Wife, Robin Mozell, and daughter, Sarah, 11. Also, an English setter named Haimish and two cats, Simcha and Tsatske.
Secret ambition: "Live long and prosper." And to get more funding for his lab.

Hobbies: Tinkering. He likes to take things apart to see how they work. "I'll spend an hour or longer fixing something I could replace for a few dollars."

Advice on how to avoid bed bugs: Think twice before picking up furniture discarded on the street. That nice-looking dresser may be there for a reason.

Advice on lice: Make sure you're diagnosed correctly. If you do have a case of bugs, don't be afraid of chemicals. "There's a lot of nonsense advocated by people who don't like insecticides," says Pollack, who says that pesticides, properly used, can be an effective treatment.

Advice on life: "Question your assumptions. The more comfortable you are with what you believe, the more likely you are to be wrong about part of it." ■