

Technology

Science for not-so-dummies

Café Scientifique brings complex ideas into informal settings

By Joseph Wilson

When it comes to the newest discoveries in human genetics, the easiest way of dealing with the complexity of the technology is with a neat metaphor: the book of life, God's recipe, the library of the earth, etc.

But what we really need are fewer metaphorical platitudes and more conversations at pubs about what all this newfound knowledge actually means for our health.

Mount Sinai Hospital, in partnership with the Ontario Science Centre, is hosting a series of salon-style discussions addressing these heady issues.

Instead of a setting that gets you nodding off in the midst of a lecture by someone way smarter than you, these discussions are held in bars, where drinking and arguing are encouraged.

The first of these events, entitled Mapping Your DNA, took place at the Bedford Academy in November, where three specialists kicked off the discussion: an ethicist dealing with issues of consent in genetic testing, a geneticist working on mapping the human genome and a genetic counsellor.

They were given just 10 minutes to summarize their work and take sides on the question of whether knowing your genetic predisposition for a disease is a good thing or more trouble than it's worth.

The evening really got going when people in the audience started grilling the experts about their work and what it means for the average person. Does knowledge of the human genome empower people to make important life decisions or does it paralyze us with anxiety?

Last year, two complete human genomes were posted online for the first time. One of them belonged to scientist James Watson, co-discoverer of the double-helix structure of DNA. Its publication seriously raised the profile of genomic research and prompted companies all over the world to pledge publication of more complete personalized human genomes in the near future.

Currently, you can get an analysis of the key genes in your genome that have well-established links to high-profile illnesses like Crohn's disease. California company 23andMe now offers its services in Canada and will deliver personalized fact sheets on everything from how we taste broccoli to our susceptibility to heart disease, all for as little as \$1,000.

The crowd at the Bedford was diverse, the conversation ranging from "hypomorphic single nucleotide mutations" to arguments over whether we should eat fewer french fries.

The structure of events like this ensures that you never really know where the conversation will go.

"It's not easy," admits Mount Sinai bioethicist Kerry Bowman after taking questions from the audience, "but it's so important, connecting with the public like this."

As for the less structured venue, he thinks it's terrific.

"It's a huge relief not to do Power-Point," he tells me. "I love this laid-back atmosphere."

"That's what we're looking for," says Nikki Luscombe of the Samuel Lunenfeld Research Institute at Mount Sinai, "the human side of the science."

Luscombe sees this as a huge opportunity to share with the wider public the work that's being done behind lab doors.

"We need to get better at translating our findings to the general public," she says. "We want to strip away the scientific language to get to the heart of the matter."

The next health-themed Café Scientifique, The Stem Cell Promise, happens Wednesday (February 13), 6 pm, at the Duke of York (39 Prince Arthur, 416-964-2441).

Regular Café Scientifique discussions are held at the Rivoli (332 Queen West, 416-596-1908) on the third Saturday of every month. Go to www.cafescientifique.ca or write to cafescientifique@osc.on.ca.

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