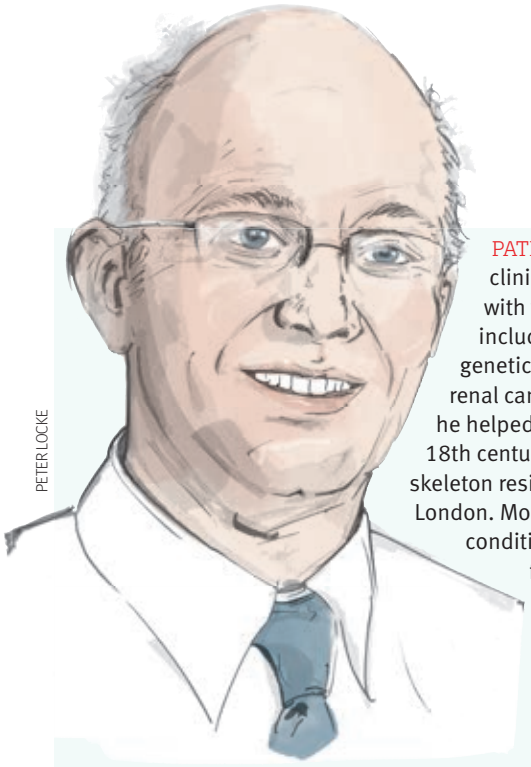
Patrick Morrison
A lumberjack manqué?



PETER LOCKE

PATRICK MORRISON, 51, is consultant clinical geneticist at Belfast City Hospital with wide clinical and research interests including Huntington's disease and the genetics of breast, ovarian, colon, and renal cancer. The oldest patient in whom he helped make a diagnosis was the famous 18th century Irish giant Charles Byrne, whose skeleton resides in the Hunterian Museum in London. Morrison helped diagnose Byrne's condition as familial pituitary adenoma from a mutation in the *AIP* gene, and the research led to a blood test for detection and early treatment of people carrying the gene. Morrison also led the Northern Ireland leg of the study that showed aspirin to be protective against colon cancer.

What book should every doctor read?
"The *British National Formulary (BNF)*—it would prevent more prescribing errors. There's even an app for those who don't like books"

What was your earliest ambition?
To be a scientist. My Sunday school teacher was a professor of polymer chemistry and encouraged me to do a medical degree, as he said that I could then experiment on humans as well as animals. It was good advice.

Who has been your biggest inspiration?
My father—his professional motto was *dictum meum pactum* (my word is my bond), so I've stuck to the same motto. If I say I'll do it, then I'll do it.

What was the worst mistake in your career?
As a trainee I gave a talk to the public on genetic disorders, using slides borrowed from a head of department. A deceased patient's picture was recognised by her brother in the audience, and he was upset. I profusely apologised at the time. Since then I've made sure I use only my own slides and with full written consent from patients.

What was your best career move?
Joining the board of NICE [the National Institute for Health and Care Excellence] as a non-executive director in 2007. It's a wonderful organisation in which all of the staff seem to have the same aim of improving the NHS.

Bevan or Lansley? Who has been the best and the worst health secretary in your lifetime?
Bevan was the best, as he set up the NHS. Frank Dobson was good. The rest seem to have pointlessly reorganised the NHS with no noticeable improvement, so joint last place goes to all of them.

Who is the person you would most like to thank and why?
My wife, for keeping me grounded in reality and for regularly forcing me to come home from work and go out and socialise.

If you were given £1m what would you spend it on?
I give over 10% of my income to charitable causes on principle, so £100 000 would go instantly to a range of patient based charities. My wife complains that I only buy myself something every 20 years (hi fi at 20, Panama hat at 40)—so I have nine years of thinking before I turn 60, or she'll spend it.

Where are or were you happiest?
On the morning that I went into work after being awarded the CBE on New Year's Eve 2014, I had a heavy clinic with several terrible diagnoses to give to pregnant mothers, so the CBE fame lasted about five minutes. Helping patients with terrible disorders in the NHS is where I'm happiest, and it gives you the best perspective on life.

What single unheralded change has made the most difference in your field in your lifetime?
The electronic clinical record: there's no need to worry about letters not in the chart, and most of our hospital specialties now use this, so it saves a lot of time and effort. DNA testing is second.

Do you support doctor assisted suicide?
No—I was trained to preserve life. Good palliative care is greatly under-rated and under used, although there is still need for improvement and better funding.

What book should every doctor read?
The *British National Formulary* (*BNF*)—it would prevent more prescribing errors. There's even an app for those who don't like books.

What poem, song, or passage of prose would you like mourners at your funeral to hear?
Digging, a poem by Seamus Heaney, seems appropriate on so many levels. I've done a lot of editing and reviewing of journal manuscripts and have written a lot of papers myself.

What is your guiltiest pleasure?
(Pleasure) x (several) + (legal) + (above board) = Happiness with no guilt.

What is your most treasured possession?
I'm not really attached to any material possessions. Even my office at work is quite "minimalist," with a chair and a desk and a hospital PC.

What, if anything, are you doing to reduce your carbon footprint?
I travel as little as possible, and more meetings could be done by videoconferencing. I have solar water panels on the roof of our house, so there's plenty of free hot water for eight months of the year. A lot of other eco-solutions are not financially viable at present, but that will change.

Summarise your personality in three words
Hard working, conscientious, reliable.

If you weren't in your present position what would you be doing instead?
Over the past five years I've become addicted to chopping down trees, so possibly a lumberjack. My wife prohibits me from having a chainsaw, so thanks to her I still have all of my limbs intact.

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THE ART OF RISK COMMUNICATION Gerd Gigerenzer

Towards a paradigm shift in cancer screening: informed citizens instead of greater participation

Germany aims to stop nudging the public on screening

Policy on screening people for cancer poses a dilemma: should we aim for higher participation rates or for better informed citizens? Both cannot be had. A focus on informing citizens risks lowering participation rates, because well informed people may realise that for most cancers it is unclear whether the benefits of screening exceed its harms. Historically, screening policies opted for increasing participation and accordingly took measures that made people overestimate the benefits and underestimate the harms.[1] But that is set to change, at least in Germany.

Increasing participation rates has been moderately successful. For example, German breast cancer screening campaigns set a goal of 70% of eligible women and reached over 50%. Similarly, the NHS Breast Screening Programme in England aimed for an 80% participation rate and reached over 70%.[2]

But campaigns for this screening test and most other cancer screening tests have caused people in rich countries to widely overestimate benefits and underestimate harms.[3] Only 2-4% of German and British women understand the benefit of breast cancer screening, while the rest overestimate it 10-fold, 100-fold, or 200-fold or do not know.[4] By comparison, in Russia, where pink ribbon campaigns do not exist and the participation rate is relatively low, 18% of women understand the benefits.

Turning the tables in screening

But Germany's National Cancer Plan, which was initiated by the government in 2008 and coordinates screening and treatment, is now turning the tables. It was announced at a workshop in February 2015 that, on the basis of a 2013 law on improving the detection of cancer,[5] "the goal of informed participatory decision making is now ranked higher than the goal of a maximum participation rate in cancer screening."[6] To change policy so clearly and publicly is unprecedented and represents a potential paradigm shift in screening. Its implementation will require fundamental changes. In my view, these include the following.

Evidence based information

All screening pamphlets and websites aimed at the public need to abandon persuasion and provide evidence based and transparent information. "Evidence based" means that both the pros and the cons of screening should be reported. "Transparent" means that the magnitude of the pros and cons is reported, instead of merely unquantified assertions, and that these numbers are reported as transparent absolute risks instead of misleading statistics such as relative risks and five year survival rates.[7] One efficient instrument would be fact boxes for all kinds of screening.[8]

Training for health professionals

All health professionals need good training in health statistics and in communicating risk to patients. Most doctors do not understand the benefits of cancer screening and fall prey to misleading statistics, studies show.[9] To change this situation requires:

- Revising university curriculums so that every medical student learns about health statistics and how to evaluate medical research articles, as well as how to communicate this evidence in a way that patients can understand. Adequate coverage of these three skills would require some 100 hours of curriculum time, including practical training,
- Ensuring that continuing medical education includes training in risk literacy and communication. Medical organisations responsible for continuing medical education should consider ending their reliance on industry funding to sponsor educational programmes.

"Misleading statistics, once the staple of patient information, have been mostly eliminated from medical brochures in Germany"

Increasing public health literacy

Not just patients with cancer and people at risk of cancer but also the general public needs good health education. The most effective way would be to start early in school and to provide enjoyable teaching activities to children and adolescents to improve their basic knowledge of health and so that they learn health associated skills such as cooking.

The right to knowledge

Germany has made some progress on the first goal, improving the information provided to patients. Misleading statistics, once the staple of patient information, have been mostly eliminated from medical brochures.[1] On the second goal, training for health professionals, a nationwide programme to train medical school students in communicating with patients was proposed at the February workshop.

I welcome this open declaration of a fundamental shift towards informed patients (and physicians). In Muir Gray's words, "People have a right to clean, clear drinking water as they have a right to clean, clear knowledge."[10]

Yet its execution will not be easy, mainly because it may be seen as a threat to financial interests in medicine and in industry. The National Cancer Plan will have to find ways to deal with these conflicts of interest. It is timely to do so. Otherwise, we risk the public losing even more trust in the healthcare system, including doctors.

Hopefully, Germany's paradigm shift will become a model for other countries where the goal is still to nudge as many citizens as possible into screening.

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