

Andrew Read - The Irish Times

Science journalism, I discovered, is almost the opposite of being a University Professor. As a journalist, people ring you back. Thousands read what you write, but only for a day then it is dead. You get to follow your nose. You work all over science. You only talk to the smartest, the best, the most enthusiastic. Management wouldn't dream of asking you to raise the money needed to do your job. Clarity, succinctness, and an absence of jargon and bullshit are valued. Decisions are made on an hourly, not annual basis. Closure is a daily event. You can go home in the evening and forget about it. You can see the result of your labours the next day. When your work is rejected, you've spent only a few hours on it, not a few months. Best of all, it's a job requirement that when you get to work, you grab a coffee and read the newspaper – yours, and the opposition's.

It had never crossed my mind that a few weeks on the *Irish Times* would teach me so much about my real job. I had also not been expecting the experience to be so stimulating. But I did expect to learn a lot about journalism, and I sure did. Mostly this was due to Dick Ahlstrom, the Science Editor of *The Irish Times*, who chucked me in at the deep end and kept me there. From working with him, and watching the UK broadsheet hacks in action at the Festival of Science, I have a new respect for professional science journalists – these guys really are extremely good. I also gained disrespect for deadlines – if they're important, you can hit them – and much more confidence that I can generate and handle media attention. My writing has also improved (you should have read it before).

Science journalism is not about being exactly correct. It's not like writing a scientific paper. It can't be: papers are boring. Fifteen co-authors? Sorry, they simply can't get a mention. The headline? The subeditors added that. The picture caption? Ditto. Minor errors? So what: the story wasn't directed at your close scientific colleagues. What keeps the journalist on the straight and narrow, aside from fear of complete cock-up, is not much more than a vague worry about reputation. In the burning heat of the deadline, and especially when scientists are being obtuse, the journo's have to battle very, very hard to get things right. We scientists should help them as much as possible.

Despite my initial worries, I found interviewing and writing quite easy. But nosing the story (the first few sentences) I found a real challenge. A story needs a great hook – which means that if a scientist wants positive publicity, s/he has to get the story very, very straight and very, very interesting. Sound bites actually have a lot going for them: they require great clarity of thought, and they are more efficient. And simplify, simplify, simply. A story can never be too easy to understand. These are all good lessons for working scientists. Our paper titles, abstracts, figure captions and openers in the Introduction and Discussion are by-and-large shocking.

Scientists are busy people with short attention spans – why don't we write for them?

My thanks to the BA and especially Nick Hillier for making it happen, the senior management in the School of Biology at Edinburgh, for their convincing impressions of support, the other Media Fellows for such good laughs and stimulating company, and especially Dick Ahlstrom at the *Irish Times*. At the BA induction day, someone said there is never enough space or time in journalism. That's true, but Dick gave me time, and made space in the paper, and I'm extremely grateful.

Appendix 1. The outputs.

Home News

Irish students to launch rocket from space centre in Florida. 12 Aug p. 6.

First Irish space rocket launched. Aug 13 p. 4.

Archer says new energy sources needed. 17 Sept p. 8

Science Today (the Thursday science feature page)

Rocket science for beginners at Kennedy Space Centre. Aug 21 p. 8

The smart irrational bird brain. Aug 21 p. 8

Our junk DNA may come in handy after all. 28 Aug p. 19

Age-old methods to fight malaria. 28 Aug p. 19

Weathering solar storms. 4 Sept p. 13

Using zero gravity to combat creep. 4 Sept p.13.

There's more to nature than the eye can see. 18 Sept p. 11

Digging deep turns up feat of medieval engineering. Sept 25 p. 12.

Plan bee: back the buzz. 9 Oct p. 15

How immunity can affect memory. 9 Oct p. 15

Funding failures mean few Fellows. 16 Oct p 17.

The BA Festival of Science

Study links noises classes to lower grades. 9 Sept p. 10

Meat trade threatens both hunters and hunted. 9 Sept p. 10.

Midge may pass on bird flu to humans, scientists fear. 10 Sept p. 9

High breast cancer levels linked to lifestyle in richer countries. 10 Sept p. 9.

This house may look normal.... 11 Sept p. 15

Blame it on our brain if you are tone deaf. 12 Sept p. 8

Scientists say EU is delaying life-saving drugs. 12 Sept p. 8

Gestures linked to language we think in. 13 Sept p. 6

Fewer elderly would fall if they exercised more often. 13 Sept p. 6

Appendix 2. What it was actually like.

What follows is a diary I kept during Week Two in Dublin. It was written over Guinness each night. Like all weeks on the science desk at the IT, this week was built around Science Today, a four-story feature page that comes out each Thursday, which Dick edits. Many of the stories on it concern Irish scientists working in Ireland or abroad. Science news for the main paper is handled on an ad hoc basis as it comes up.

Monday

Get to see last Thursday's science page with my first feature stories. The page is a thing of beauty. The pic-desk guys have made the hummingbird picture better than the original – really

bringing out the birds colours. No problems with size. Can't say I agree with all the cuts to my story: the really interesting finale about why natural selection would allow birds to be irrational has been cut. Dick says if you've got something serious to say, stick it further up the story.

Spend much of the day dealing with Edinburgh. The job search last week has fall out. The no. 2 candidate is so good we should try and get him too. Need to lobby. And there's a shortage of desk space and computers back in Edinburgh. After several calls, one of my research group miraculously comes up with a solution I couldn't see.

Dick edits my Junk DNA story and likes it (or at least goes with it). I'm still annoyed that Dick is rewriting the opening couple of paragraphs of my stories. Why can't I do opening paragraphs properly? We discuss the underlying science of the junk DNA story and decide there is much to be sorted. Dick reviews the next few weeks of science pages and decides that this week should be my malaria Irishman as well as Junk DNA. I also realise I am now committed to a biodiversity story, another on bee conservation, another on the brain and immunity.

2.30 pm. Dick asks if I can do the malaria story by 5. Sure I say, having no sodding idea. Am very impressed by the way Picdesk get the light and contrast right on a moody picture of Mr Malaria I want to use.

3 pm. Holyshit. No story. Phone Tanzania for the key interview.

5.30. Story in hand but twice as long as required. Have some great quotes though: "further research is just an excuse to elaborate some scientific careers".

Dick suddenly needs to deal with a Sellafield story. Some reprocessing plant is to be closed according to *The Guardian*. Midway through, he finds a story on solar flares I'm to write. NASA's pictures look great. I can't believe NASA has three probes investigating the sun, but apparently it does.

6.30. Malaria story the right length, and kinda OK. Marg calls from Edinburgh for the third time to discuss a manuscript we're writing – have to put her off again.

7.15. Story is great. I bet Dick (or some faceless sub) is going to cut the 'elaborating careers' quote but I've shifted it up the story to try and save it. Dick is so buried in the Sellafield story he can't edit mine (and fair enough). These guys are awesome at catching moving information. Science and Foreign collaborate on getting it done. I leave at 8.30 p.m. after dealing with two more grants I'd been asked to comment on, and finally talking to Marg. I also field e-mails on dates for forthcoming meetings (animal house committee, department management group). Is life too short?

In the pub, I read another grant. It's great. I want to be involved.

Tuesday

In at 9.00 a.m. (the newsroom is empty). Read the paper. Dick's front page on Sellafield is great. So is his inside thumbsucker [in the jarg, a background article requiring no extra research for an experienced journo].

Then I am working the phone and e-mail over the 2nd job issue. It's going well, but needs more pushing.

When Dick gets in, I point out that NASA is about to release the Columbia accident report. He has to follow up the Sellafield story, plus edit my malaria piece, so I wonder briefly about suggesting I do the shuttle story. But it requires serious experience – i.e. him. We get the malaria piece edited (the 'career elaboration' line survives for another day – will the subs cut it?) and it looks OK. In the middle of that, Dick gets a call from a member of the public who has seen the sea glowing off a North Dublin beach. I handle it – calls to marine biologists all over Ireland are returned with a vengeance – I couldn't keep track of who was who. But am impressed that several University Press Officers phoned back to find out if I am happy. Never get that as a Professor.

Late afternoon and I've got the plankton story nailed. But Newsdesk are not keen because we can't get a picture. If they don't take the story tomorrow, I'll pitch it at Dick for *Science Today* and expand it. The guy who called in turns out to be the artist who did the iconic Che Guevara poster from the 1960's. Awesome.

Organised the interviews for the solar flare and biodiversity stories. Sean, the biodiversity expert, has very controversial ideas; should be fun.

Also talked with Judi about her grant, having put her off three times. It really is a great grant: bound to fail. More e-mails on more committee meetings. You gotta wonder about working in a university. But could I deal with the military efficiency of a newspaper? Probably. At least decisions are made and we move on.

End of the day. One of the University Press Officers calls. Her plankton expert needs a sample from the North Dublin beach. Mmmm. May be Mr Che Guevara could get these guys a sample? If yes, I could get a pic of the organism plus a proper species name. Slightly worried I am too involved in this story.

Discussion with Page Layout re Thursday's science page. She wants a close-up of a mosquito to accompany the malaria story. I'm unconvinced. I've seen a million such pictures and I find the mood shot of the Irishman more interesting, but hell, they're the professionals. We'll see. I bet they go with the mossie. Ms Page Layout is just back from Italy with mossie bites on her ankles and she wants to kill them all. Fair enough.

Another thought for the day – what did journos do before the WWW? I've learnt about solar flares and phosphorescent phytoplankton in a few minutes. Also can't believe how bad many university websites are – old details, slow to load AND NO GODDAM PHONE NUMBERS. Don't they realise that e-mail is way too slow?

Hey guess what? I called the solar flare guyand he'd heard of me – the BA Media Fellow. Even knew my name. Jeez. They're reading my articles in the Goddard Space Centre in Washington (well, at least he has). Bet they've never read any of my scientific papers there. Must be a moral in that.

Wednesday

In early. Dick's Columbia piece is great. The cause of the accident is no surprise, and hence no story – so how to get a novel angle? Dick picked up on the possibility that they could have been rescued. A long shot for sure, but really interesting. A movie plot – spy planes, extra shuttle flights, oxygen running out...the mere possibility must be tough on the dead astronauts' families.

Lots to do for my research group. Another grant comes in for comment. Katrina e-mails with a hard analysis she needs help with. I am guilty in her case. We should be working together, not me swanning around in Dublin. Dick comes in and he's forced the phosphorescence story back on to the news rota. I suggest we should get a pic of the bug that has caused the sea to glow in the past. Talk to some people in Sweden re a pic – the photographer wants €100 for it. Dick clears the expenditure with Picdesk, but we agree there is a better pic on the web, and I try to track down the photographer who took it. It's a UK website but the photographer works in Holland and can't be contacted. How can he expect to make money? Despite repeated calls, the website owner doesn't get back to me. Dick edits the story – the worst re-write yet. Doesn't really screw with my sentences, but he sure rearranges them. Anyway, it goes down the wire to news desk, photo attached. We can't get hold of the photographer, but decide to worry about it afterwards. The Swede has sent his pic, but is now demanding €200! Meanwhile, the artist is back on the phone and he tells me he will try to get a sample for the Galway Press Officer. I worry that I am actually constructing the story, but hell, it might make a nice spread in the Science page.

I do the biodiversity interview. Sean is very provocative.

I do the solar flare interview. This turns out better than I expect – the guy does daily solar weather forecasts for NASA – so that astronauts don't get fried – and for military and commercial clients. He's got great pics of Coronal Mass Ejections. I learn how they differ from solar flares. I've wondered this before: how do these guys who spend their life deep in space, go home at night? 'How was your day, dear?' 'Oh, just one massive CME, only 1 million mph. It missed earth.'

The Science Page proofs arrive. Triumph! They've done a great job on the malaria story. The moody pic is used as an insert and they've zoomed in on a mossie so it's huge – and head only shot. (Only weeks later do I realise it's the wrong mossie species). The junk DNA story looks great too. I dominate the page and all the images. I kid Dick that his story on science policy is letting the page down. Am hugely gratified that my stories have not been cut. Best of all, the 'career embellishment' quote is there!

Discuss next week's images with Dick. He's keen on the bar-coded worm idea and a tree of life – we're getting Graphics on to it.

I get an e-mail about a major experiment two of my people have spent lots of time and weekends on over the summer. A key part of it has bombed. Bugger it. The bit that worked should yield something, but not the key result. I wonder if I can talk them into doing it again.

Dick is off tomorrow so we agree what I've got to do. Finish the biodiversity story. Finalise the CME story. Interview someone who e-mailed Dick in response to his Columbia piece. The guy flattered Dick by saying he'd got the point of the NASA report and then, claiming that the shuttle will fly again, says his experiments can now proceed. Perfect. We need an article on it, and can use the NASA report as a hook. But I gotta do it tomorrow – we need to finalise it Monday. I have to do some preparation for this one. The guy is in mechanical engineering. Also agree with Dick I'll check out the bee stories and see where they'll go.

Dick spends much of the afternoon with one of the regular reporters on some breaking news on stem cells. He's also been asked to produce 300 words on Mars, which tonight is very close to the earth (as these things go). The poor guy. He's already written two stories on it. But he grinds the words out.

Thursday

In really early to try and get three stories nailed and investigate another. Discover the bastards have dumped my bioluminescent plankton story. A body has been found up North, believed to be that of a 1972 IRA victim. It has been given extensive coverage. I guess it is more important than my story. Still. One up side is that they didn't use the photo we didn't have permission to use – just as well, since I'd even forgotten to pass on the photo credit details. At least the plankton story is not in the opposition papers – that really would have pissed me off.

The Science Page looks lovely. I meet a journo who says she has been reading my articles. Ahhhhhhh....

Dick's piece on Mars is impressive given that it is totally vacuous and a report of last night's Mars viewing that he wrote before the sun had gone down. His piece with Alison on stem cells is much beefier.

Jaap calls at 9.30 a.m. and we discuss experimental design for his forthcoming experiments.

Excellent and rapid e-feedback from the space weather forecaster on my draft article, and he's sorted the pics for me. Story done!

Turn to the biodiversity story. Sean has given me one long rant and it's difficult to do much more than re-organise his sentences. Should be a strong piece. Have long discussions with Graphics about how to represent the tree of life. He wants to do it as if it is a tree – can't have that because something would have to be at the top. I have the insight that we could leave all the taxon names off. This deals with Dick's worry that all the technical names will put the punters off – while still getting across that point that we (the visibles) represent sod all of life.

Brace myself and then call the materials scientist. He turns out to be a very clear speaker with a well thought through story. Boy that helps. Drops me lots of hooks and gives me the feeling that I really understand microgravity experiments with alloys in the space station and computer simulation (ha bloody ha). Don't have time to write it all but I knock it into shape enough to wait until Monday. The guy is going to try and get me a pic of the microcrystal structure in a jet turbine – the name of the game. Rolls Royce is one of the funders. He's optimistic the shuttle will soon be flying again and they'll be back on line. I hope so – sounds like great work. He's also read both my stories in today's paper. What a guy.

Phone around re bees. Can only raise the Northern Ireland bee guy. The Dublin partner is in Guernsey doing field work. The Swiss one is totally AWOL. Still, Mr NI beeman spins a good yarn and I think there's a story in it. Bee conservation – we need them for pollination but evidently the rare ones are getting rarer. At Dublin airport, read a studentship application – it's almost there. Hopefully I can pop into the my Edinburgh office tomorrow and get it done – and see a few of my research group.

So, this week on the science desk?.....my first news story dumped by the subs, but two very good stories on the science page, three more in the bag, and ideas for a couple more. It's still fun and seems to involve a lot less crap than being a university professor. The EU e-mail with six attached forms was followed by another with another six forms – evidently there were mistakes in the first six. I wonder how much all this bureaucracy sucks out of science. The people I've interviewed in the last two weeks are doing such great stuff; let's try to save them.

On the plane home, I realise I can't remember the stories I had in the paper the week before. Yesterday's paper, today's chip wrapper etc. Even in my own mind. Still, on the plane I count at least 10 people reading the *Irish Times*. That means they'll at least glance at my stories. Maybe 200-300,000 people glanced at them today? Success? Who knows. But it has been great getting my head around such interesting and diverse science. So far, though, getting a semi-coherent (and, according to the author, an accurate) story out of the paper called 'Hairpin RNAs and Retrotransposon LTRs Effect RNAi and Chromatin-Based Gene Silencing' is my best triumph.