This is the unedited version of a profile which appeared in *Australian Doctor* in 2000. The published version may have had minor changes.

The Profile: Dr Karl Kruszelnicki

CV

1981-present: 1995-present: 1988-91:	Many different positions on TV and radio Julius Sumner Miller Fellow, University of Sydney Royal Alexandra Hospital for Children, Camperdown
and	King George IV Hospital
1987:	Intern, Repatriation General Hospital, Concord
1981-86:	MBBS, University of Sydney
1977-80:	Studies in computer science and Master of biomedical engineering, University of NSW
1976-78:	Scientific Officer, Prince Henry Hospital, Sydney
1972-75:	Various jobs, including film maker, car mechanic, band manager and taxi driver
1970-71:	Tutor/Research Assistant, Institute of Higher Technical Education, Lae, Papua New Guinea.
1968-69:	Physicist, Port Kembla Steelworks
1968-69:	studied for Master of Science (uncompleted),
University of	NSW
1965-67: Wollongong	BSC in Physics and Mathematics, University of

Karl's Crusades

Doctor Karl, as he is so widely known, sweeps into the foyer, wheeling a big, black briefcase, and with a groovy young woman in tow. A colleague had promised that Dr Karl's affection for attention-grabbing shirts would make him easy to spot.

And he is - you can't miss Dr Karl Kruszelnicki, the self-confessed revhead who has worked as a physicist, taxi driver and doctor but these days is famous for spreading the news about quirky science. It's not just his shirt which is loud.

Comedian Gabby Millgate is not quite sure why she was invited to tag along today for Dr Karl's regular Thursday gig with ABC radio. They had met at one of her gigs where he had gone into some detail explaining why his business card looked embossed but wasn't really.

She thinks Dr Karl thought she might be interested in how the radio thing works. "I was actually more intrigued by the invitation...maybe it makes him feel like a rockstar," she jokes.

There's no doubt that Dr Karl likes a stage and an audience. But he is as much crusader as entertainer.

"I go around and try to fight the forces of evil," he says of his work with the ABC and University of Sydney. It's a phrase which crops up often in his conversation, in between rushing from one studio to the next and answering listeners' questions on everything from how spiders breathe to why dogs don't hyperventilate from panting.

Speaking quickly, almost breathlessly, he also exhorts listeners to send in belly button lint (more than 3,000 have already obliged) for a study investigating why it tends to be blue and whether it really is more common if you use top-loading washing machines.

The forces of evil, it transpires, are the anti-science brigade, and most especially "those who believe vaccination is bad for you and think that you can fix everything with crystal healing".

"Some of them have confronted me with what they think are a bunch of arguments which are, to put it in technical terms, not worth a pinch of shit wrapped in newspaper," he says. The latter is another phrase which recurs.

Dr Karl is an unashamed enthusiast for science, and is confident that the genetic revolution will allow people to stay young for thousands of years. "I believe some of the people living today will be in the first generation to live forever or the last generation to die," he says.

The way Dr Karl describes his work, it seems that the crusader is also part Robin Hood. His corporate jobs - speaking to companies and others prepared to pay big bucks for his views on where science is heading subsidise his other work, speaking to high school students, trying to inspire them about science in particular and education in general. Apart from being generous with his time, Dr Karl is also well known at the University of Sydney for his financial generosity, to the extent that he has helped fund students' trips to conferences.

Dick Collins, professor of physics, is director of The Science Foundation for Physics at the University, which decided to establish the Julius Sumner Miller Fellowship, with the aim of encouraging the communication of the wonders of science in the spirit of its namesake.

Dr Karl has been the Fellow since 1995, which mainly involves talking to students at the university and schools about science. "I remember to saying to the chair of the selection committee, 'I think this is going to be great but I think we're making a very high risk decision," remembers Collins, "because he was so unusual."

"Dr Karl is a crazy guy and I say that in a not insulting way...but on the other hand you go out on a limb and amazing things start to happen sometimes. In fact, he's grown the position far more than we might have imagined - he's become a giant like Julius Sumner Miller.

"He virtually supports himself through the money he raises elsewhere. Some of my colleagues think he's a bit loopy and in many ways he is. He's very hard to have a conversation with on one subject for any significant amount of time because he keeps jumping from subject to subject. He's uncontrollable in that sense.

"Fortunately, the way we have it set up here we don't have to control him; if we did I think it would be an unmitigated disaster."

In his time, Julius Sumner Miller was sometimes criticised by colleagues for trivialising science and being a populariser rather than a "real" scientist. Similar complaints are made about Dr Karl; and that he paints with such a broad brush that the detail is sometimes omitted.

Some colleagues, in both science and the media, also grump that he doesn't always acknowledge their work. "I could refer you to some people who hate his guts," says one associate, "but I don't want to do that."

But Dr Karl also has many fans, including the University's vice chancellor Gavin Brown who describes him as "a great asset to the university".

Last year, Jas Chambers, the science faculty's marketing manger, received many hundreds of letters and emails praising Dr Karl's work. "He's an inspiration to a lot of young kids," she says.

Those who have worked closely with Dr Karl - who has never been part of the ABC's science unit - are also huge fans. ABC presenter Angela Catterns says: "He's exactly what he sounds like - he's wonderfully enthusiastic, he's a very colourful character. I love that he loves what he does - he makes science and medicine more interesting than anybody else I can think of."

"He's probably one of the most splendid people I've ever had to work with," adds long-term producer and friend, Dan Driscoll.

A "national living treasure," concludes Ian Allen, who first worked with Dr Karl on Quantum in 1985 and is now executive producer of ABC Science Online.

"Dr Karl is an awesome person to work with...he's always happy and pleasant and there's lots of good things to talk about all the time," says Caroline Pegram. She is described by others as Dr Karl's assistant, but he insists that she be called his colleague. She adds: "I reckon I've got the best employer in Australia."

Meanwhile, back to the JJJ studio where a caller has rung in to reprimand Dr Karl for saying that monotremes give birth to live young. They lay eggs, and she is very disappointed that he got something wrong "that every school child is taught."

"I am so glad you rang to set me straight; I was wrong, I was wrong," says Dr Dr Karl, not at all fussed. He is used to making mistakes, doesn't pretend to know it all. He mentions several times that his IQ, at 110, is not exceptional. "Most people I know are smarter than I am," he says, "I just work hard."

Dr Karl is not known for remembering peoples' names and faces. Caroline Pegram says she walks with him down the corridors of Sydney University whispering the names of who is greeting him. Dr Karl puts it down to having an unhappy, lonely childhood, saying that it impeded the development of the part of his brain responsible for remembering faces.

What he *is* good at is remembering and telling stories. Just because he doesn't know the answer to a tricky question thrown at him on radio doesn't mean he won't be able to spin a few good stories into his non-answer.

Asked why yawns are infectious, he tells how there is a yawn centre in the brain, how someone with their arms paralysed from stroke can still yawn, that rats get erections when they yawn, and that many Olympics athletes would have yawned just before their event - before finally concluding, "but why a yawn is contagious we do not know".

You can find out a lot more about things like why biscuits taste better when dunked from Dr Karl's many books and his very popular website, where you can also learn about the birth of his youngest child, Lola (http://abc.net.au/science/k2/default.htm).

It's back in the early 1970s. Dr Karl has decided to have a change of personality - he doesn't want to be shy and serious anymore - and to "drop out" after jobs which didn't quite work out.

Defamation laws stop us from exploring why Dr Karl remains so unhappy about his time with BHP as a physicist, as a researcher in New Guinea, and a brief stint making videos for bands. Suffice to say that he tends to divide the world into good guys and bad guys and, from his perspective at least, he's ended up working with more than a few from the latter category.

But now he has left all that behind, and is enjoying the hippy lifestyle, squatting in a Department of Main Roads property in Glebe. In between studies and miscellaneous other jobs, he drives cabs. Some of his cabbie mates have been attacked and even murdered recently, and Dr Karl himself was recently savagely beaten and left unconscious by men who then raped his female passenger.

When three male passengers attack Dr Karl one night, they get more than they bargained for. Their long-haired driver thinks these are the thugs who recently killed a cabbie mate and is so enraged that he uses his car as a weapon, running into two of them.

When the third passenger escapes en route to the police station, Dr Karl loses it. "I did a really bad thing," he remembers. "I went back to kill the other two. Luckily they had run away."

After putting in an estimated 250,000 kms behind the cabbie's wheel, Dr Karl starts work as a scientific officer at Prince Henry Hospital, but soon becomes disillusioned - too many of those bad guys. After beginning studies in computer science at NSW University, he moves into biomedical engineering. He designs and builds a machine to detect electrical signals from the retina for the late Fred Hollows, of whom Dr Karl speaks with great warmth.

"Finally I came across someone who was not a crooked bastard and was worth admiring - unlike certain doctors, he did not specialise in diseases of the wealthy. He is one of the only eye doctors I know who did cataract ops for the Medicare rebate; he did my mother."

Dr Karl then decided to study medicine because "I kept running across people in hospitals who I thought I can do this job as well or better."

But NSW and Newcastle Universities knocked him back. "I failed the Newcastle University personality test for not being creative enough," he says heatedly. "They said you are not creative enough. I have written 19 books, I build machines..."

Dr Karl was 32 when he started medicine at the University of Sydney. After taking a year off to work on ABC TV's new program, Quantum, he finished the course in 1986, and then worked at the Royal Alexandra Hospital for Children and King George IV Hospital.

Colleagues from that time remember him with great fondness as someone who related well to children and their families, and who was a "fun but chaotic" workmate not known for rushing patients.

"He made the correct career choice," says one former medical colleague who is now a loyal listener. "If you think queues are bad now in health system, imagine what they would have been like if he had stayed...." Dr Karl no longer practises medicine but helps out in emergencies on planes. "I have a quarter of million dollars worth of education paid for by the taxpayer; it's the least I can do. I'm scared of being sued but nevertheless I have to do it because it is the right thing to do."

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It now is lunchtime at the ABC cafe, where staff are busy but make time to fuss over Dr Karl, who is clearly a favoured customer. He empties onto the table his travelling kit, describing each item.

It includes mouth freshener "because when you talk a lot your mouth dries out" and an emergency smoke mask which he always carries in his top pocket on planes in case of fire.

Isn't that just a touch paranoid? "No, I just travel a lot." In fact, if you spend much time listening to Dr Karl, you will learn how many flights he has had this year (at the time of our interview, last year, it was 65). In 1999, he did 80 flights involving five medical emergencies.

Even though he is described by one colleague as having "more energy than a classroom of 500 uni students" and says he doesn't need much sleep, you get a sense that even Dr Karl feels worn down by the demands of constant travel and speaking engagements, judging by the way he recites his crazy schedule.

Why push himself so hard, especially when he's doing so well in both his professional and personal life?

Dr Karl is uncharacteristically stuck for words when asked questions that incline to the personal. "What are you asking me all this soft squishy stuff for?" he says between uhms and ahs.

"Ask Mary, she'll tell you, she knows all of that sort of stuff," he finally says.

I am later told that the only other way to switch off Dr Karl is to raise the subject of football or sport. Dr Karl is famous for soliciting signatures for his autograph book which he carries most places and holds the scrawls of everyone from John Howard to three of the 12 people who have walked on the moon.

Caroline Pegram recounts that Dr Karl was once at a TV do and could tell from the conversation that the big guy with a moustache was a cricketer. "He went up and said, 'you must be Denis Lilley, can I have your autograph?'

Pegram laughs: "It was Merve Hughes."

Mary Dobbie has been Dr Karl's other half since meeting at medical school more than 15 years ago.

"He was incredibly conspicuous, I guess because he was older, really skinny and he had odd socks and short shorts," she says. "He sat up the front and asked people not to throw paper airplanes - he's so short sighted he can't see. My mother tells me she knew I was in love with him the first day I came home."

Dr Karl's recollection of medical school is that "the NSW Government had brought together the most attractive and intelligent females in NSW at that time for my enjoyment. I found the most kind and beautiful of all and I happily became monogamous."

Dr Karl and Mary have three children - "Little Karl", 12, Alice, 10 and Lola, 2. Alice is reportedly pushing for her parents to marry so she can be bridesmaid. She is also reported to roll her eyes a lot at her father like the time Mary overheard him telling their daughter that it would be good to have a baby while she was a teenager so he could see his grandchildren.

Mary, now a GP, says much of what drives Dr Karl can be traced back to his early family life: "I know a lot of migrant families where their parents' expectations and hopes get transferred...and being the only son."

Karl Sven Woytek Sas Konkovitch Matthew Kruszelnicki was born in Sweden to two refugees from European concentration camps. His mother, from Danzig, fell in love with the Polish man who was teaching her English.

When Karl was two, they decided to migrate to the US, but missed the boat because he was ill.

The next boat was heading to Australia, which is how Karl found himself growing up in Wollongong. His father, who had been a writer and broadcaster, worked as a labourer and his mother ran a shop but remained deeply affected by her wartime experiences.

Karl doesn't have particularly fond memories of his childhood or schooling. "I was a wog and they were rude to my parents," he remembers. "They were all nice little Catholic kids telling my parents to shut up and not speak that funny language."

Karl was a champion tennis player. "How did the Christian Brothers respond? I had a choice of two sports - playing football or picking up paper."

Mary thinks Karl is still driven by the stories his father told about surviving against incredible odds, and the notion that "you've got to make the most of everything, you don't know what's in store for you." His father was a member of the Polish resistance put in Russian jails and German concentration camps.

For all his scientific scepticism, Mary says Karl has a sense of destiny. When his father died, he felt he was meant to take on his father's role of being a writer, and he often talks about Alice following in the path of a great aunt who was an opera singer.

Mary describes Karl as unrelentingly optimistic, good hearted, incredibly generous and kind. He also doesn't suffer fools, can be pedantic and is not as manic at home as at work. He is also a devoted father, and 4-wheel drive enthusiast, who has taken the family across 10 of Australia's 12 deserts.

"It's just very beautiful out there in the outback," he says. "You get a quietness out there that you can't get anywhere else; it's so beautiful it makes you weep - the deep blue of the sky against the deep red of the sand."

A perfect place to borrow Dr Karl's radio signoff: Peace, Love and Mungbeans.