# **CURRICULUM VITAE Karl Sven Kruszelnicki**

# **PERSONAL INFORMATION**

Full Name: Karl Sven Woytek Sas Konkovitch Matthew Kruszelnicki

Place of Birth: Hålsingborg, Sweden

- Address: University of Sydney, Physics Department (A28), NSW 2006
- Telephone: 02-9351-2963, Fax 02-9351-7726,

# **EDUCATION**

<u>**Primary School**</u> - the Little Flower School in Wollongong, NSW, Sydney Australia.

<u>Secondary School</u> - Edmund Rice Christian Brothers College in Wollongong, NSW, Sydney Australia. Received **Commonwealth Scholarship** to University.

#### **Tertiary Education**

**Bachelor of Science in Physics and Mathematics. (B. Sc.)** - Wollongong Campus of the University of New South Wales.

Master of Science (Qualifying) in Astrophysics (M. Sc. (Qual.)) - Wollongong Campus of the University of New South Wales.

**Computer Science** - study as a miscellaneous student at the University of New South Wales.

**Master of Biomedical Engineering (M. Biomed. E.)** - University of New South Wales

**Commonwealth Government Scholarship** in 1979 and **Lions Fellowship** in 1980. Studied under Dr. Peter Gouras in Jan/Feb 1980 at the Columbia University Presbyterian Physician's and Surgeon's Hospital in New York in the field of electroretinography (detecting electrical signals from the human retina). Designed and built an electroretinograph. **Bachelor of Medicine and Bachelor of Surgery. (MB, BS**). - University of Sydney.

Awarded Grafton Elliot Smith Memorial Prize for Anatomy in 1982.

Awarded Alexander James Scholarship for Community Medicine in 1984.

Elected Member of the Australian Institute of Physics. (M.A.I.P.).

# **PROFESSIONAL EXPERIENCE**

<u>**Physicist</u>** at the Port Kembla Steelworks of Broken Hill Proprietary Limited/Australian Iron and Steel.</u>

**Tutor/Research Assistant** at the Institute of Higher Technical Education in Lae in Papua and New Guinea. Taught Physics and did research into hair and wool.

**Filmmaker** One of the first Australians to receive a grant to make films. Worked in 16mm film (colour and black and white) and video. Designed and built own film processing laboratory.

<u>**Car Mechanic</u>** Was apprentice to a master mechanic. Set up own workshop and repaired automobiles.</u>

**<u>Road Manager</u>** for various bands, eg, Slim Dusty, Bo Diddley, Bullamakanka Bush Band, Anne Kirkpatrick Band, And Band, Wasted Daze, etc.

Taxi Driver - Drove 250,000 km for Legion Taxis in Sydney.

<u>Scientific Officer</u> in Cardiology Unit at Prince Henry Hospital at Little Bay in Sydney.

#### **Medical Doctor:**

Intern at Repatriation General Hospital Concord, NSW.

**<u>Resident</u>** at Royal Alexandra Hospital for Children at Camperdown, NSW, and Neonatal Intensive Care Unit at John Spence Nursery at King George IV Hospital, Camperdown, NSW.

### <u>Academia</u>

1995+ Julius Sumner Miller Fellow, with The Science Foundation for Physics, School of Physics, University of Sydney.

2016 The University of the Sunshine Coast awarded Dr Karl an **Honorary Doctorate.** 

# Public Speaking

I speak to school students, the general public, business and academic audiences. Shows are tailored to suit the audience.

Adam Spencer and I criss-crossed Australia for National Science Week (which actually lasted about a fortnight) for many years. We went to each state of Australia, and spoke in capital cities and small regional centres.

In 2002, Adam Spencer and I performed our shows in the UK for the British Association of Science at the University of Leicester. We also did a show at the Royal Institution, where we apparently had the largest audience that they had drawn for many years.

I give an annual presentation in December at the Royal Institution in London (sometimes in September too) and speak annually for New Scientist Live, UK.

I have spoken to international audiences in India, Taiwan, Hong Kong, USA and Malaysia.

## Multi Media:

### **Television:**

<u>Television Presenter</u> in the opening series of **QUANTUM**.

**<u>Reporter</u>** for the **Midday Show with Ray Martin** then **Derryn Hinch** and **Kerrie-Anne Kennerley.** 

<u>Weather</u> and <u>Science Reporter</u> (<u>wrote, produced and</u> <u>presented</u>), for Good Morning Australia.

**Script-Writer** - **Life Be In It - The Body Show** and **Bright Sparks.** 

Script Consultant - Lift-Off 2, Sky-&-Space Show and Kiddeo

Part-time reporter weekly for Live-It-Up

Appearances on SBS Medical series **Second Opinion - Series** I & II.

Regular guest on **Sunrise** Channel 7, **Good News Week**, **Glasshouse**, **Today Extra**, and various other shows.

<u>Science Commentary</u> Dr Karl's Outrageous Acts of Science, 2017 on Discovery Channel. This 10-part Pop Science series featured me explaining the science behind some seriously mind-boggling experiments, extraordinary inventions and insane stunts found on the net.

Guest on ABC Anh Do's Brush with Fame, 2018

<u>**Host</u> ABC Stargazing Live, with by Brian Cox and Julia Zemiro. I hosted Brisbane's biggest Star Party and announced that the 'nationwide attempt to break the Guinness world record for the most people simultaneously observing an object in the night sky through a telescope'** *had been broken!***</u>** 

<u>Guest</u> on SBS Who Do You Think You Are. My episode was the most watched show in the history of the programme.

# <u>Film:</u>

<u>Narrator</u> for the feature film <u>Living Universe</u>. Narrated by me with a voice-over by astrophysicist Professor Tamara Davis, the film explores an interstellar adventure searching for life on another planet.

# **Radio:**

Wrote and presented radio program (on 2JJJ (Sydney) and Radio National ABC), called "Great Moments in Science". This show won two Australian Hi-Fi FM Awards in the Category of Education in 1982 and 1983 and was awarded an honourable mention in 1984.

Wrote and presented radio program called "Expand Your Brain", 2SM (Sydney)

Ongoing, regular guest appearances on Australia wide radio stations both commercial and government networks.

One-hour science talkback on National BBC News Talks show "Up All Night".

# **PUBLICATIONS**

#### **Books:**

1984: "Great Moments in Science", Boobook Publications Sydney, Australia, ISBN 0908121083

1985: "Even Greater Moments in Science", Boobook Publications, Sydney, Australia, ISBN 0908121164

1986:"Science Bizarre",AustralianBroadcastingCorporationEnterprises,Sydney,Australia,ISBN 0642527407

1987: "Science Bizarre II", Australian Broadcasting Corporation Enterprises, Sydney, Australia, ISBN 064253070 X

1988: "Great Australian Facts and Firsts - Science and Technology", Harcourt Brace Jovanovich, Australia, 1988,

*ISBN 0729502864* (Written in collaboration with Dr. Mary Dobbie)

1988: "Great Australian Facts and Firsts - Nature and the Land", *Harcourt Brace Jovanovich, Australia, 1988, ISBN 0* 729502872 (Written in collaboration with Dr. Mary Dobbie)

1988: "Great Australian Facts and Firsts - People and Achievements", *Harcourt Brace Jovanovich, Australia, 1988, ISBN 0729502880* (Written in collaboration with Dr. Mary Dobbie)

1991 "Latest Great Moments in Science", Australian Broadcasting Corporation Enterprises, Sydney, Australia, ISBN 0733301444

1992 "Spacescape", Harcourt Brace Jovanovich, Australia, 1992, ISBN 0729508766

1993 **"Bizarre Moments in Science"** Australian Broadcasting Corporation Enterprises, Sydney, Australia, 1993, ISBN 0733302106 1994 Cassette entitled **"Fantastic Moments in Science"** Australian Broadcasting Corporation Enterprises, Sydney, Australia

1994 "Absolutely Fabulous Moments in Science" Australian Broadcasting Corporation Enterprises, Sydney, Australia, 1994, ISBN 0733304079

1995 **"Sensational Moments in Science"** Australian Broadcasting Corporation Enterprises, Sydney, Australia, 1995, ISBN 0733304567

1996 "Pigeon Poo the Universe & Car Paint - and Other Awesome Science Moments", HarperCollins Publishers Pty Ltd, Australia, 1996, ISBN 0732257239

1997 **"Ears, Gears and Gadgets"**, *HarperCollins Publishers Pty Ltd, Australia, 1997, ISBN 0207196109* 

1997 **"Forests, Fleece & Prickly Pears"**, *HarperCollins Publishers Pty Ltd*, *Australia*, 1997, ISBN 0207196117

1997 **"Flight, Food & Thingummygigs"**, *HarperCollins Publishers Pty Ltd*, *Australia*, 1997, *ISBN* 0207196125

1997 "Flying Lasers, Robofish and Cities of Slime - and Other Brain-Bending Science Moments", HarperCollins Publishers Pty Ltd, Australia, 1997, ISBN 073225874X

1998 "Munching Maggots, Noah's Flood and TV Heart Attacks and Other Cataclysmic Science Moments", HarperCollins Publishers Pty Ltd, Australia, 1998, ISBN 0 732258588

1999 "Fidgeting Fat, Exploding Meat and Gobbling Whirly Birds and Other Delicious Science Moments", HarperCollins Publishers Pty Ltd, Australia, 1999, ISBN 0732258758

2001 "Q&A With Dr. K - Why It Is So. Headless Chickens, Bathroom Queues and Belly Button Blues", HarperCollins Publishers Pty Ltd, Australia, 2001, ISBN 0732258553

2002 **"Dr Karl's Collection of Great Australian Facts & Firsts"**, *HarperCollins Publishers Pty Ltd*, *Australia*, 2002, *ISBN 0207198608*  2002 **"Dr Karl's Great Moments In Science" (Video),** *ABC Video, Nov. 2002 release.* An animated series, featuring live Dr. Karl segments.

2003 "Bumbreath, Botox and Bubbles – and other Fully Sick Science Moments", HarperCollins Publishers Pty Ltd, Australia, 2003, ISBN 0732267153

2004 'Great Mythconceptions – Cellulite, Camel Humps and Chocolate Zits', HarperCollins Publishers Pty Ltd, Australia,2004, ISBN 0732280621

2005 **"Dis Information and Other Wikkid Myths",** *HarperCollins Publishers Pty Ltd, Australia, 2005, ISBN* 07322806205

2006 "It Ain't Necessarily So, Bro", HarperCollins Publishers Pty Ltd, Australia, 2006, ISBN 0732280613

2007 "Please Explain", HarperCollins Publishers Pty Ltd, Australia, 2007, ISBN 0733285357

2008 'Science Is Golden', HarperCollins Publishers Pty Ltd, Australia, 2008 ISBN 0732285364

2009 'Nevermind The BULLocks...Here's the Science', HarperCollins Publishers Pty Ltd, Australia, 2009 ISBN 0732285371

2010 **"Dinosaurs Aren't Dead"** *Pan Macmillan Pty Limited, Australia 2010 ISBN 0330425797* 

2011 **"Curiouser & Curiouser** Pan Macmillan Pty Limited, Australia 2010 ISBN 1742611709

2012 **"Brain Food"** Pan Macmillan Pty Limited, Australia 2011 ISBN 1742610399

2013 **"Fifty Shades of Grey Matter",** Pan MacmillanAustralia Pty Ltd, 2013, ISBN 1742611389

2013 **"Dr Karl's Big Book of Science Stuff and Nonsense"** *Pan Macmillan Australia Pty Ltd*, *ISBN 1742613680* 

2013 "Game of Knowns", Pan Macmillan Pty Limited, Australia 2013 ISBN 1742613345 2014 "House of Karls" Pan Macmillan Australia Pty Ltd, 2014, ISBN 1743519516

**"Dr Karl's Even Bigger Book of Science Stuff and Nonsence"** *Pan Macmillan Australia Pty Ltd*, 2014, 1743532232

**"Dr Karl's Short Back and Science"** *Pan Macmillan Australia Pty Ltd*, 2015, *ISBN 1743533345* 

2015 "Dr Karl's Bigggest Book of Science Stuff (and Nonsense" Pan Macmillan Australia Pty Ltd, 2015, ISBN 

**"The Doctor"** *Pan Macmillan Australia Pty Ltd*, 2016, *ISBN 1743547427* 

**"Dr Karl's Big Book of Amazing Animals"** *Pan Macmillan Australia Pty Ltd*, 2016, *ISBN 1743547434* 

**"Dr Karl's Little Book of Dinos"** Pan Macmillan Australia Pty Ltd, 2017, ISBN 1925481242

2017 **"Dr Karl's Little Book of Space"** Pan Macmillan Australia Pty Ltd, 2017, ISBN 1925481235

2017 **"Karl, The Universe and Everything"** *Pan Macmillan Australia Pty Ltd*, 2017, *ISBN 1925481327* 

2018 "Vital Science" Pan Macmillan Australia Pty Ltd, 2018, ISBN 1760781224

2019 **"Dr Karl's Random Road Trip Through Science"** *HarperCollins Publishers Pty Ltd*, 2019, *ISBN* 0733340321. My first book with pop-up holograms/Augmented Reality! To access the content download the free **Dr Karl App:** <u>https://drkarl.com/dr-karl-mobile-app-instructions/</u>

2020 **"Dr Karl's Surfing Safari Through Science"** *HarperCollins Publishers Pty Ltd*, 2020, *ISBN* 0733340338. My second book with pop-up holograms/ Augmented Reality! To access the content download the free Dr Karl App: <u>https://drkarl.com/dr-karl-mobile-appinstructions/</u>

2021 **"Dr Karl's Little Book of Climate Change** Science" HarperCollins Publishers Pty Ltd, 2021, ISBN 0733341298

## <u>Non-Books</u>

"Electroretinography - An Assessment of Techniques", by Karl S. Kruszelnicki, Jackie Joy and E.M. Nicholls, *Australasian Physics and Engineering Sciences in Medicine*, 1981, Vol. 4, No. 4

I have been writing in many non-book publications since 1987, when I began my very first column in a daily newspaper. I have been a regular columnist for newspapers (**Daily Mirror** and **Sydney Morning Herald**) and for magazines (**Overlander** and **Australian Doctor**).

I have written monthly columns for **National Geographic Kids (Australia and New Zealand)** and still write regular columns for **Australian Geographic.** 

### <u>Videos</u>

**1998-2007** Royal Australian Navy Training Videos, varying from 15 – 65 minutes long (only on DVD)

**"Dr Karl's Great Moments In Science" (Video VHS Cassette),** *ABC Video, Nov. 2002 release.* An animated series, featuring live Dr. Karl segments.

**"Sleek Geeks Comedy Science" (Video DVD),** *ABC Video, Nov. 2002 release.* A 6-part half-hour series, with fellow Sleek Geek Adam Spencer.

Voice overs on numerous video recordings including Free Range Production animations of **Great Moments in Science** stories.

## <u>Internet</u>

1998 on...

I moved into using the Internet to Popularise Science in 1998. My own homepage is <u>https://drkarl.com/</u> and my ABC Homepage is <u>www.abc.net.au/science/k2</u>.

In 2000, the ABC site won the Australian Financial Review Internet Awards, Winner of Best Science and Technology Website.

There are five separate podcasts available – the hour-long **ABC Triple J** Question-and-Answer show, the six-minute long **Great Moments in Science** on the ABC, and the hour-long **Radio 5 Live** Question-and-Answer show on BBC Radio 5 live. The ABC podcasts are usually in the Top 20 Podcasts available in Australia.

I had a regular **Sleek Geek** podcast with Adam Spencer which can be accessed via the drkarl.com homepage.

During the ABC Triple J radio show, the homepage is activated so that listeners from around the world can post their answers to the questions that are asked.

I have my newest podcast **Shirtloads of Science** also accessed via the drkarl.com homepage.

# **AWARDS and RECOGNITION**

1979 Commonwealth Government Scholarship

1980 Lions Fellowship

1982 Australian Hi-Fi FM Awards in the Category of Education

1982 Grafton Elliot Smith Memorial Prize for Anatomy

1983 Australian Hi-Fi FM Awards in the Category of Education

1984 Alexander James Scholarship for Community Medicine

1984 Australian Hi-Fi FM Awards in the Category of Education - honourable mention

## 1994 Michael Daley Awards for Science, Technology and Engineering Journalism

Best Entry (print or broadcast) relating to the topic "Remote Sensing", the field of the 1995 Australia Prize.

Best Radio Entry (news, feature or documentary) for "Tsunamis" and "Science Talkback" (Joint award, shared with Elizabeth Finkel of Ockham's Razor.

1996 Distinguished Foreign Guest in the USA International Visitor Program. (Previous recipients included Anwar Sadat, Indira Ghandi and Margaret Thatcher)

## 2000 Australian Financial Review Internet Awards, Winner of Best Science and Technology Website.

2000 Apple Masters Award - (Macintosh Computers)

Ig Nobel Award for research into why belly button fluff is blue, and why we get it. This was presented at a ceremony held at Harvard University in Boston.

2002 Centenary Australia Medal.

2003 Australian Father of the Year

2003 Voted in the **Top 100 Australian Intellectuals** in a poll organized by the Sydney Morning Herald newspaper.

2003-2007 Chosen as the face of the NSW State Government road safety campaign for microsleeps. (One in every five road deaths is caused by the driver falling asleep at the wheel. This five-year Radio, TV, Print and Billboard campaign aimed to alert drivers to the poorly recognized early warning signs of fatigue, eg, inability to get comfortable, and making fewer but larger movements of the steering wheel.

2005 In Annual Reader's Digest "100 Most Trusted People in Australia" was voted No. 7

2006 Appointed Member of the Order of Australia (AM), on the Australia Day Honours List. - For service to the community through promoting greater understanding and knowledge of the application of science to daily living as an author and science commentator on radio and television.

2006 In Annual Reader's Digest "100 Most Trusted People in Australia" was voted No. 11

2007 Australian Skeptic of the Year

2007 In Annual Reader's Digest "100 Most Trusted People in Australia" was voted No. 14

Invited to do a **Speaking Tour of India** (Mumbai, Delhi, Hyderabad and Bangalore) to high school students, university students and university faculty members.

2012 Named as a National Living Treasure by the National Trust of Australia (NSW).

2012 Main-belt asteroid 18412 Kruszelnicki was named in Dr Karl's honour.

2016 The University of the Sunshine Coast awarded Dr Karl an **Honorary Doctorate** for excellence in science communication during his 30-year career providing expert commentary across Australian media.

2017 The University of Sydney's Fisher Library invited me to donate some of my work for Rare Books and Special Collections, as 'a unique and interesting collection, of value to students and researchers at the University and the wider academic community'. 2018 Invited to do a **Speaking Tour of Malaysia** (Kuala Lumpur, Kuching) to high school students, university students and university faculty members.

2019 The United Nations awarded me the UNESCO Kalinga Prize for the Popularisation of Science at the World Science Forum in Budapest, Hungary. I am the first Australian to win the prize. Other winners include Margaret Mead, David Attenborough, Arthur C. Clarke, Bertrand Russell and David Suzuki.

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