

Charmed by snakes

Summarize yourself in the form of a title of a paper in Nature.

Working on a mystery and going wherever it leads.

What was your first experiment as a child?

I had snakes as a kid — a king snake, a yellow snake, green snakes, several kinds of garter snake, and a tiny species called DeKay's snake. I experimented a lot with their choice of food items. The beautiful patterns of some of these species had a lot to do with my future aesthetic interests in biology.

Who has been the most important mentor in your career?

Matt Scott (now at Stanford) gave me a huge, golden opportunity in the early days of molecular developmental genetics and an unusual degree of freedom.

Whose graduate student would you most like to have been (historical impossibility notwithstanding)?

Someone from the 'Morgan school': Calvin Bridges or Alfred Sturtevant. Or Theodosius Dobzhansky.

What single scientific paper changed your career path?

Ed Lewis's review on the Bithorax complex (*Nature* 276, 565–570; 1978).

What book has been most influential in your scientific career?

A tie between *Ontogeny and Phylogeny* by Stephen Jay Gould and *Embryos, Genes, and Evolution* by Rudolph Raff and Thomas Kaufman.

What literary character would you employ as a postdoc?

Candide. One always needs optimism.

What's your favourite conference destination, and why?

England. More relaxed than the United States, great historical settings, and better beer.

What was the worst/most memorable comment you ever received from a referee?

Several of our best-known papers were initially greeted with apathy or faint praise, or were not even reviewed upon submission. I won't say which ones in order to protect the innocent (and future submissions).

You have the audience in your hands, but some smart-alec asks you the killer question you have no idea how to answer. What's your response?

Tell them it's a great question and that I have no idea how to answer it. That usually leads

to more discussion and I get a better idea of the serious questions that other people have related to my discipline.

What book is currently on your bedside table?

In the Heart of the Sea: The Tragedy of the Whaleship Essex by Nathaniel Philbrick. Think lab science is a challenge? Try three months in a rowing boat in the open ocean with nothing to eat but the guy next to you.

What music heads the playlist in your car or lab?

Tom Petty and the Heartbreakers.

Assuming the dead can be raised and/or time travel exists, who from the world outside science would you most like to have dinner with?

Churchill, Roosevelt and Eisenhower in early 1944. I've read a fair amount by or about these figures and the history of the time. The weight and tension of that year, and all the issues of the next 50 years, would be a riveting discussion.

Where and when would you most like to have lived or worked?

Late nineteenth century in the American West, hunting dinosaurs.

You are on a plane behind two students obviously going to the same conference, who start to talk about your work. What do you do?

Take a nap.

What do you most dislike about having research published?

Reviewer roulette. Success is often more a matter of the luck of the draw of reviewers than of the diligence of authors. Referees and editors are crunched for time, so a piece of work that took years can be dismissed in minutes.

What would you have become, if not a scientist?

A (very) minor-league baseball player.

What music would you have played at your funeral?

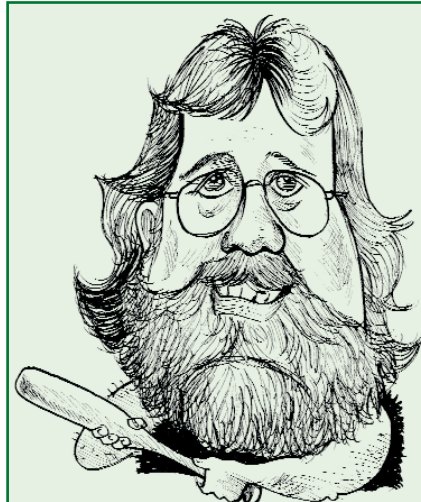
The Dixie Dregs — the best instrumental rock band, period.

The job of captain on the Starship Enterprise in Star Trek has become vacant. Nominate any real person, living or dead, for the post.

Robin Williams.

Is there a 'tyranny of reductionism' in how scientists are trained today?

Certainly it is a dominant viewpoint. Although I worry about the lack of natural history and organismal perspectives, the reductionist approach in biology has been spectacularly successful in addressing many complex mysteries for which it is appropriate.



Sean Carroll

Sean Carroll is an investigator at the Howard Hughes Medical Institute and professor of molecular biology and genetics at the University of Wisconsin-Madison. He studies animal development and evolution and occasionally co-produces rock videos depicting his lab's work.

Under what conditions do you have your greatest and most inspired ideas?

Sleeping, or near sleep.

What's the one thing about science that you wish the public understood better?

The depth and breadth of evidence supporting scientific ideas: compared with, say, the absence of evidence in areas like astrology, UFOs and ghosts.

Which field in science (apart from your own) deserves more funding, and why?

Palaeontology. A lot of bang for the buck and great interdisciplinary training for future teachers and scholars.

What's the most interesting thing in your fridge?

Moët and Chandon Private Reserve, a souvenir of Epernay. Liquid gold.

Why is physics so hard?

After Newton's basics, I find that I have little intuitive feel for the rest.

What's just around the corner?

The rewriting of population genetics in terms of functional biology.

Which actor would best portray you in a film?

Jack Nicholson, directed by the Coen brothers.

You've just been told (in confidence) that the world will end tomorrow. What do you do next?

Party like ... there's no tomorrow.

What would be the title of your autobiography?

'Escape from Toledo'. ■