

Serendipity

By Philip A. Baer, MDCM, FRCPC, FACP

“The more I draw and write, the more I realize that accidents are a necessary part of any creative act, much more so than logic or wisdom. Sometimes a mistake is the only way of arriving at an original concept, and the history of successful inventions is full of mishaps, serendipity and unintended results.”

– Shaun Tan, Australian artist and writer

Try to get out for a daily walk through the trees for exercise and mental well-being. This so-called “forest bathing” (*shinrin-yoku*) is actually prescribed to patients by their physicians in Japan. Mine is usually carried out in a cemetery, not a real forest. Occasionally, I meet someone I know on these walks, and we chat. I find these random meetings generate positive feelings and make me feel that I chose the specific timing of my walk well.

That feeling is one of serendipity, which has been in the news frequently of late. The 2023 Nobel Prize in Medicine was awarded to Drs. Katalin Kariko and Drew Weissman for their work on mRNA leading to the COVID vaccine. Apparently, their collaboration took off after a chance meeting at a photocopier in 1998.¹ That might not happen in the age of digital rather than printed documents, and then where would our world be today?

Along the same lines, a slow elevator at UCLA in 1988 is said to have facilitated a meeting between a urologist and a physiologist, leading to the discovery of the role of nitric oxide in erectile dysfunction (ED) and to the serendipitous repurposing of sildenafil from an anti-anginal to an ED therapy, and a Nobel Prize in 1998.²

As I was thinking about this, I noted recent articles on serendipity in *The Globe and Mail*³ and *The Medical Post*⁴ as well. There are even conferences on the topic. The concept is based on a Persian fairytale, “The Three Princes of Serendip,” in which the princes travel the world and make discoveries by “happy accident.” The term was coined in 1754 by Horace Walpole, the son of the first Prime Minister of Great Britain. Serendip is the land now known as Sri Lanka.

The annals of scientific discovery are replete with examples of serendipity, in which unexpected and positive findings are observed by chance or accidentally. However, as Louis Pasteur said, “In the field of observations, fortune favours the prepared mind.” Much of the battle lies in recognizing the meaning of the accidental findings and proceeding from there. Among familiar discoveries, serendipity is noted in the development of the Gram stain and the McKenzie method of physiotherapy for low back pain, and the discovery of *Helicobacter pylori*, X-rays, radioactivity, warfarin, tricyclic antidepressants, and of course penicillin. Your office may also make use of microwave ovens and Post-It notes, also discovered and developed in this fashion.^{2,5} Many of these feats eventually garnered a Nobel prize.

The other venue where serendipity lives is at our annual conferences, at least in their live versions. The American College of Rheumatology (ACR) brought back in-person posters for

2023, as the virtual poster hall of the pandemic era was not fit for purpose. We all have wandered those massive halls at ACR and at the European Alliance of Associations for Rheumatology (EULAR), sometimes with a planned route and list of posters to review, but often in haphazard fashion instead, randomly meeting colleagues and stumbling upon research we might never have consciously sought out. That randomness was part of the beauty of the experience, and it occurred not only in the poster hall but at the other conference venues: plenary and breakout sessions, workshops, food courts and industry exhibit halls. No matter how slick the virtual platform, online posters, exhibit booths, and networking lounges did not facilitate serendipity.

As we return to in-person conferences, I commend to you the advice of a plastic surgeon discussing strategies for attending medical conferences and maximizing serendipity: “Plan your day, but don’t stick too closely to the plan” and “Don’t go to (too) many talks, talk to people instead.”⁶

At the Ontario Rheumatology Association (ORA) 2023 Annual Scientific Meeting, our first fully live event since 2019, I had an opportunity that showcased the possibilities. At lunch, my wife and I sat down at a random table, where we met a rheumatology fellow who was training in the U.S. but wanted to return to Canada to practice in the Niagara area. He didn’t know anyone at the meeting, but we spotted a colleague from that area across the room and were able to make the connection. If that leads to one more desperately needed rheumatologist in Niagara, it will be an example of serendipity in action.

Philip A. Baer, MDCM, FRCPC, FACP

Editor-in-chief, CRAJ

Scarborough, Ontario

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