\THE DEEP*MIND ^OF RICHARD SUTTON}

If computing science superstars were like rock stars,
Richard Sutton would be all four of The Beatles.
The icon shares what he has learned about AI, and
himself, over his groundbreaking career

By Scot Morison, '80 BSc(Spec)

> When Richard Sutton stood in front of his first class at the U of A in 2003, he told the students he might not be around to finish the course. But he would try.

Sutton's cancer had returned. He had endured four major surgeries, chemotherapy and immunotherapy after aggressive melanoma spread to major organs, including his brain, years earlier. The cancer was in remission when he arrived in Canada to start his new position, but now the tumours were back.

"My odds were never very good, but we just kept fighting," Sutton says of his years of treatment.

Doctors at the Cross Cancer Institute in Edmonton treated Sutton with temozolomide, a powerful oral chemotherapy drug. His tumours were last seen in 2004, and he stopped all treatment in 2005. "Twelve years clear — it looks like I survived," he said in an interview last fall.

Sutton is considered a founding father of reinforcement learning — a key methodology in artificial intelligence research. Twenty years ago, he co-wrote *Reinforcement Learning: An Introduction*, which is still considered the definitive book on the subject.

Despite his already significant renown in the field of artificial intelligence, at the time Sutton's health issues made it a bit of a gamble to bring him to the university, says Jonathan Schaeffer, U of A dean of science.

"And it was a brilliant one."

Sutton is now one of the top dozen or two computing science superstars in the world, says Schaeffer. "If we had a Nobel Prize in computing science, his is the kind of name that people behind the scenes would be whispering about."

Sutton's field, reinforcement learning, is the computation

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