

Raymond McCauley

Digital Biology, Scientist, Engineer, and Entrepreneur

Please contact a GDA agent for information.

Topics

- Artificial Intelligence
- Big Data
- Biotechnology
- Education
- Entrepreneur
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- Thought Leader



About Raymond McCauley

Raymond McCauley is a scientist, engineer, and entrepreneur working at the forefront of biotechnology. Raymond explores how applying technology to life “biology, genetics, medicine, agriculture” is affecting every one of us. He is known for using storytelling and down-to-earth examples to show how quickly these changes are happening, right now.

Raymond is Chair of Biology at Singularity University, Co-founder and Chief Architect for BioCurious, the hackerspace for biotech—a not-for-profit where professional scientists, DIY bio hobbyists, and entrepreneurs come together to design the next big thing to come out of a Silicon Valley garage. As part of the team that developed next-generation DNA sequencing at Illumina, he worked in bioinformatics, cancer sequencing, and personal genomics. His work and story have been featured in Wired, Forbes, Time, and Nature.

Raymond’s postgraduate work includes studies at Texas A&M University, Stanford, and UC Berkeley in electrical engineering, computer science, biophysics, biochemistry, bioinformatics, and nanotechnology. Past employers include Genomera, Illumina, Ingenuity Systems, TANSTAAFL Media, QIAGEN, Viatel, NASA, and other federal agencies. Raymond develops and advises a variety of companies and organizations, including Genomera (crowd-sourced clinical tria

Select Keynotes

- **Biotechnology**

We review advances in genomics, genetic engineering, cellular agriculture, systems biology, and personalized medicine. Tools once restricted to biotechnology professionals are democratizing, becoming more like personal computers and smartphones, and appearing everywhere. What does this mean for our jobs, our families, our lives, and ourselves? And what’s coming next?

- **Digital Biology: Hacking DNA for Fun & Profit**

We review advances in genomics, genetic engineering, cellular agriculture, systems biology, and personalized medicine. Tools once restricted to biotechnology professionals are democratizing, becoming more like personal computers and smartphones, and appearing everywhere. What does this mean for our jobs, our food, our families, our lives, and ourselves? And what’s coming next?

- **Plants & Biotechnology**

Plants are the foundation of life: they give us food, fuel, fiber, and feed, and they are incredible platforms for biotechnology. You can produce vaccines, antibodies, nutrients, and specialty chemicals using sophisticated plant metabolisms. So why don’t we hear more about the plants that will save the world? In this session, you’ll find out why, and you’ll get hands-on experience with the plant cloning, by using stem cells to grow a whole new plantlet! That you can take home! (Or not! – we’ll also talk about legal restrictions.) Includes appearances by Revolution Bio and Agrilarity.

- **The Fast Forward Future of Food**

Few things are more intimate than a family meal, or the sustenance we take into our bodies. But technology is having huge effects on every single thing about our food, from the application of new sensors, robots, and AI in agriculture, to using gene editing and tissue engineering to affect the very nature of our livestock and crops. Can the perfect personalized diet now be planned with nutrigenomics, grown in a vertical greenhouse, then delivered to your automated kitchen using new tech and business models? Maybe. Find out when we discuss the fast forward future of food.

Select Articles

- [Raymond McCauley](#)

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