

The Backstory

A cold, light drizzle was beginning to fall as I stepped off the MBTA Greenline car at the Longwood stop in Boston and walked past the East Campus of the renowned Beth Israel Deaconess Hospital. A foreboding sign of things to come. I was on my way to the Harvard T. H. Chan School of Public Health to teach another weekly class on “Food Science, Technology, and Sustainability” on October 25, 2019. This was a very popular course required of all graduate students in the Department of Nutrition and was a joy to teach. When I arrived Scott Richardson, the course teaching assistant, was setting up the slides and checking attendance. This year was the largest class since I started teaching it part-time in 2003.

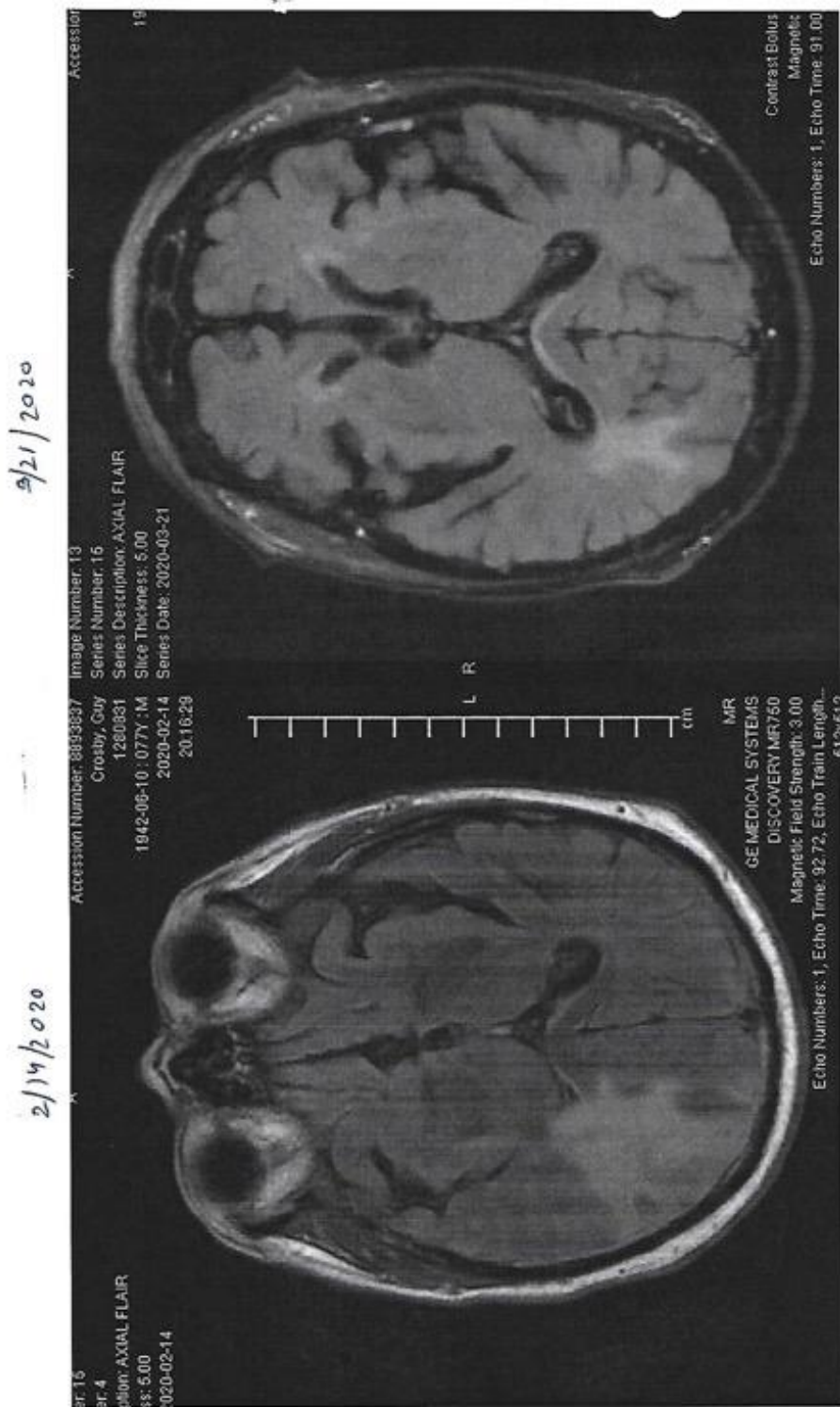
Everything went well with the completion of the course in late-December. My new book **“Cook, Taste, Learn – How The Evolution of Science Transformed the Art of Cooking”** had just been published by Columbia University Press earlier in the month, and I was beginning to receive requests to promote the book starting in the beginning of January

2020. Then on January 31st I was reading the newspaper and was startled to realize I couldn't understand what I was reading. I asked my wife Christine if it made any sense to her, which it did. Then within a few days I started to have problems knowing where I was driving and drove into a ditch. Next I couldn't remember what day it was and became confused by the days on the calendar and had problems adding simple numbers. It was clearly time to see my doctor, who was able to schedule a brain MRI (Magnetic Resonance Imaging) at a local branch of the Beth Israel Deaconess Hospital on the evening of February 12th. The results of the MRI were interpreted by a local neurologist and reported to my wife and me on February 13th. As he displayed the image on his computer screen he said with some emotion: do you see this large white area in your brain? I think it could be cancer! I want you to go to the emergency room at the Beth Israel Hospital in Boston **IMMEDIATELY!!** I am going to call them right now and tell them you are on your way.

Total shock does not adequately convey how we both felt. The drive in was surreal. After a few excruciating hours we were seen by a number of outstanding doctors who ran a battery of uncomfortable tests over several days, including blood tests, a spinal tap, removing a bone marrow sample,

and performing a kidney biopsy. The conclusion was that I had a very rare combination of multiple myeloma (an incurable cancer of the white blood cells), an inflammation of the brain called cerebral amyloid angiopathy (CAA), and that my kidneys were only functioning at about 20% capacity due to the toxic proteins formed by the myeloma cells. According to the doctors, there is no connection between the amyloid angiopathy and the myeloma cancer. The amazing thing is that the symptoms of these unrelated illnesses came on so suddenly at the same time. During the previous fall while finishing my new book and teaching my course at Harvard I never experienced any unusual symptoms. Everything seemed so normal. And within a month everything had changed. Now, as I write this a year and a half later I have made very good progress at bringing my illnesses under control. I owe much of this progress to the use of several powerful steroids, dexamethasone, prednisone, and methylprednisolone. But most of all I owe most of my progress to my incredible wife of nearly 55 years, Christine. The bottom photo below shows an early MRI taken on February 14, 2020, and the top MRI taken one week later. Notice the large white area at the bottom left of my brain in the photo below, and the much

smaller white area one week later after treatment with steroids.



This wasn't my first exposure to steroids. I became fascinated with them in high school many decades ago and then went on to conduct research on steroid chemistry in college, followed by graduate school to study the steroid cholesterol, and ultimately during two years of postdoctoral study in the chemistry department at Stanford University. Much of the research on steroids for medical use was conducted during this period. For example, the amazing anti-inflammatory agent dexamethasone was first synthesized in 1957 and approved by the U. S. FDA for medical use in 1961. It is still one of the most important steroids prescribed for many medical applications, including cancers like mine, as well as arthritis, intestinal and immune system disorders, eye problems, and many more. One of the doctors treating me at the hospital described dexamethasone as "a steroid on fire". At the doses they were giving me he wasn't kidding. I still take it biweekly today at much lower doses.

Now my passion for learning about steroids has come full circle and I have learned to appreciate first-hand the miracle of these wonderful, complex pharmaceutical agents. From my love of working with the chemistry of steroids and cholesterol I went on to become fascinated with food science,

cooking and nutrition, and have published three books on these subjects, including two with America's Test Kitchen, in 2012 and 2016.