Hello family,

I wanted to share a few notes from the recent event at Corning honoring our great-grandfather Gordon Fulcher. These notes are not official or comprehensive… I'm just trying to frame it up for everyone who was not able to attend. I'm assuming that many of you, like me, did not know much about this incredible piece of our family history. I highly recommend you read the attached Fulcher biography written by Dr. John Mauro, Research Manager of Glass, Science, and Technology at Corning (3rd in command under the Chief Technology Officer). If you missed Uncle Jack's speech, I have also attached it for your reference.

Notes from Corning Event Honoring Gordon Fulcher

The event was held at an auditorium at the Corning research campus in Corning, NY. to present two material science professors who focus on glass research an award named in our great-grandfather's honor that will allow them to take off one semester from teaching to focus entirely on glass research. Dr. John Mauro started out by giving an overview of Gordon Fulcher's accomplishments and professional history. Uncle Jack then gave a very well received and genuinely beautiful talk about his dad's personal life and his very special relationship with him. Lastly, the two recipients of the inaugural award each gave a presentation on their research and their outlook on the future of glass technology.

After lunch in a nearby boardroom with a group from the Corning Research Division, Betty, Peter, Corin, and I were given a tour of the research facility by Dr. Mauro and several others.

Corin took video of some of the tour and also interviewed key participants. She hopes to share it as soon as she finds time to edit.

Notes on Corning and Gordon Fulcher History:

Corning is the world leader in glass technology. They pioneered and currently produce about 80% of all glass used in the world's cell phones. They pioneered glass fiber optical line, an essential component that led to the information technology revolution (all high speed communication lines are fiber optics). They also pioneered glass cooking wear. Corning has 35,000 employees worldwide and has a market capitalization of $35 billion. Let's just say that Corning is to glass technology what Disney World is to theme parks…

From Maruo's birography: "Gordon Fulcher's seminal 1925 publication, in which he proposed his three-parameter model of viscosity, is one of the most significant and influential papers ever published in the field of glass science. Fulcher developed this equation during the early part of his 14-year career at Corning Glass Works (1920–1934)."

To this day, when glass scientist talk to each other about their glass experiments or research, they often say "let me see your "Fulchers". In other words, to this day, our great-grandpa's name is commonly used as a noun for one of the most fundamental aspect of glass research.

Gordon Fulcher created the modern system of abstracting. Basically, every scientific paper published in the world since Fulcher's time follows the guideline that he created (each paper has a brief paragraph at the beginning summarizing the research and findings). From Mauro: "In May, 1924, Fulcher traveled to Brussels, Belgium, as a representative of the National Research Council to attend a meeting of the Committee on Intellectual Cooperation of the League of Nations. The committee included such notable scientists as H. A. Lorentz, M. Curie, and P. Langevin. The committee voted unanimously to recommend that all articles published by scientific journals should be preceded by abstracts, following the rules adopted by Physical Review under Fulcher's leadership."

All of this new focus on Gordon Fulcher's accomplishments would probably not have happened if the aforementioned Dr. John Mauro had not taken it upon himself to write the attached biography in late 2014. I don't know the details, but Uncle Jack and Lois happened upon the article on the internet and then reached out to Mauro by email at which point they were informed about this Corning-sponsored sabbatical program that they had just created and had already decided to name in Gordon Fulcher's honor because he was such a great example. I think it is safe to say that we owe a great deal to Dr. John Mauro for his contribution to keeping this part our family history from disappearing. If you'd like to email him, here is his contact: mauroj@corning.com

Below is Dr. Mauro's Conclusion to his Fulcher's biography:

Even several decades after his death on October 21, 1971, the legacy of Gordon Scott Fulcher lives on. His paper on the viscosity of glass-forming liquids is one of the most influential papers ever published in the field of glass science. The empirical equation that he proposed has led to great debates surrounding the dynamics of supercooled liquids at low temperatures, the existence of an ideal glass transition, and the connection between the thermodynamics and kinetics of supercooled liquids and glasses. Fulcher's pioneering work on electrocast ceramics and electrical melting of glass is still the basis for much of our glass and ceramic engineering technology today. More broadly, the system of modern abstracting proposed by Fulcher is now so ubiquitous that we may take for granted the fact that someone had to invent it. The many years of thought that Fulcher put into developing his system of abstracting at the Physical Review and other journals served as a precursor for the electronic database systems that are used today.

Fulcher's interest extended well beyond the hard sciences, as evidenced by his publications in the fields of economics and psychology. Fulcher's undergraduate alma mater, Northwestern University, has even honored Fulcher with a chaired professorship in his name: the Gordon Fulcher Professor in Decision-Making at the Weinberg College of Arts and Sciences. Fulcher was a pioneering thought leader in both technical and non-technical fields who successfully transformed his innovative thinking into action that has changed the world. We should be proud to claim Fulcher as our very own Renaissance man of glass science.

Fulcher's publications comprise 21 in physics (including his one publication on the viscosity of glass-forming liquids), 5 papers on scientific abstracting, 2 papers on electrocast refractories, 7 publications on economics, and 3 papers on other miscellaneous topics. Fulcher holds 14 U.S. patents and has published two books. He was a Fellow of the American Physical Society, the American Ceramic Society, and the American Association for the Advancement of Science.