



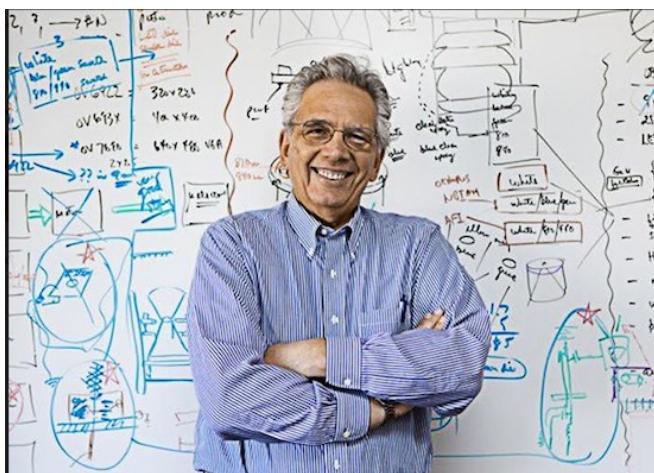
Brooklyn Daily Eagle

Follow us: [f](#) [t](#) [t](#) [y](#) [r](#)

BREAKING NEWS Yanks shut out for 3rd straight game in 3-0 loss to Jays **Sep. 24, 2016 - 7:53 PM ET**

BROOKLYN TODAY New York City Council Members Outraged Over Sandy Costs

Brooklyn native, co-inventor of DSL, distinguished engineer Richard Gitlin teaches at University of South Florida in Tampa



Richard Gitlin. Photo courtesy of Richard Gitlin

in Brooklyn, Gitlin would watch NBC's "Mr. Wizard" and create scientific experiments in the only laboratory he had — his mind.

Academically ahead of his class, Gitlin graduated from James Madison High School at 15 and entered City College of New York the next year as an Electrical Engineering major. After earning an MS and his Doctorate from Columbia University, Gitlin worked as an engineer at Bell Labs for 32 years, where he co-founded DSL and eventually became an SVP for communication science research, managing a research team of more than 600 engineers. DSL was the revolutionary technology that changed the data communications industry by allowing for a dramatic increase in the amount of data-per-second transmitted via copper telephone wire, so that data could be more cost effectively uploaded and downloaded in a home or business.

Today, at 73, Gitlin currently teaches engineering at the University of South Florida in Tampa. In 2005 he was elected into the prestigious National Academy of Engineers (other living members include Bill Gates and the Google founders).

He has also been designated a Florida World Class 21st-Century Scholar and periodically serves as an expert witness in high-profile patent litigation cases that have included technology giants such as Apple and Samsung.

Unwilling to "retire" just yet, he continues to work with University of South Florida surgical teams to take non-invasive surgical techniques to another level, wherein miniature cameras and sensors inside the body (like in the famous movie "Fantastic Voyage") are remotely anchored that would provide surgeons, who are already very skilled, with a new dimension of visibility from which to make decisions and even further refine performance.

And speaking of fantastic, Gitlin is also the creative force behind a novel device that could enable high-quality continuous ECG-level cardiac monitoring that would alert a patient or their doctor of a changing condition.

Gitlin currently has more than 57 patents, and when not working, he likes to play tennis, work out and "eat breakfast early in the morning and take long walks near downtown Tampa" with Barbara, his wife of 50 years.

In a recent interview with the Brooklyn Daily Eagle, Gitlin talked about his successful engineering career and his formative years growing up in Brooklyn.

ALL BROOKLYN, ALL THE TIME

[Print Edition](#)

September 24, 2016 | Few clouds, 66 °F

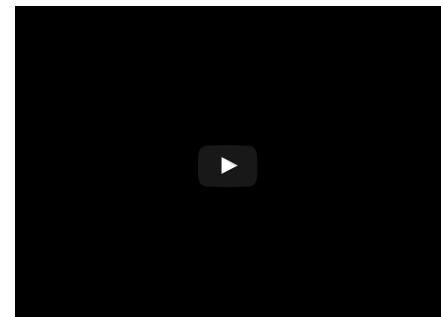
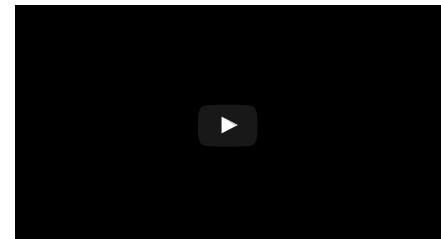
Brooklynites In Florida

By Palmer Hasty

Special to the Brooklyn Daily Eagle

Visionary engineer Richard Gitlin was born in 1943 at Unity Hospital (previously on St. John's Place until it closed down in 1978) in Brooklyn. Gitlin's family lived at 648 Bradford St. in East New York in a small, classic, two-story brick building with arched doorways. When he was 2 years old, the family moved to 4211 Seagate Ave. near the western tip of Coney Island. When he was 9, his family moved again to 2455 Haring St. in Sheepshead Bay, where he would live until he entered graduate school at Columbia University.

As the oldest child in a family of four living in a one-bedroom apartment



H & A UPHOLSTERY

OFFICE:
146 Montague St., 2nd Fl.
Brooklyn, NY 11201

WORKROOM:
185 Van Brunt St.
Brooklyn, NY 11231

718-855-9664 800-341-8776
E-Mail: haupholstery@cs.com

BDE TWITTER FEED

Tweets by [@BklynEagle](#)

 Brooklyn Daily Eagle
[@BklynEagle](#)

Mazel Tov! #NYC voter forms translated into Yiddish. Board of Elections expands language accommodation
[brooklyneagle.com/articles/2016/...](#) @HikindDov



BE: What were some early signs that you had special gifts when it came to math and science that led you into engineering?

RG: I don't know if you would call this a gift or not, but I remember one of my math teachers at James Madison High was getting his doctorate in education at Columbia, so he took all of us on the math team to the university. It was the first time I had ever been there. We learned to do some programming on an IBM computer. I was very interested in computing and wanted to see what would happen when you wrote a mathematical program that divided a quantity by zero with the result being infinity. So I wrote a program that kept going and going. Eventually the denominator did in fact reach zero, so it basically froze the machine, and my teacher said, "Alright, who's the wise guy who did this?" I told him I was just doing an experiment to see how the machine would react.

My father must have had a clue, because he was always taking me to places that would excite the curiosity of a kid. We explored Manhattan together all the time. We would just pick a street and take the subway and go explore an area until we ran out of time or money, and we usually ran out of money first.

When I was about 9 or 10, we used to go to the Lionel Train exhibit in Times Square where TKTS is located today. There was one at the Brooklyn Children's Museum as well. I was fascinated with how they could be running all these independent trains, and you could never make them crash...I thought a lot about that. I used to trace down the design and realized there was a methodology to it in terms of timing, independence and spatial independence.



Richard and Barbara Gitlin relax at an outdoor cafe in Tampa last year. Photo courtesy of Richard Gitlin

BE: You said that you had an uncle who was a surgeon who influenced your youth in Brooklyn?

RG: Yes. He had an office on Eastern Parkway. I remember, I was about 14 and I used to spend hours looking through those medical books with the transparent, multi-level overlays of all the body parts. One day he took me to a medical surgery theatre to watch an appendectomy he was doing. It was not the non-invasive kind of surgery they can do today, and when I saw all the blood, I fainted on the deck. After I woke up, I remember telling my uncle I should probably be an engineer instead of a doctor.

BE: Sounds like you have a great fondness for your Brooklyn childhood?

RG: That's true. It was so different back then. It was safe. I was about 8 years old and I had my little red wagon. I would go across the street where they played softball and take orders for sodas. I'd get the sodas from the candy store and bring them back in the wagon. They never tipped me but gave me the empty bottles that I returned for 2 cents apiece ... I suddenly I had a dollar. A frankfurter back then was only 15 cents, so I could buy a frankfurter and take it to the movies. I also made some money delivering the Daily News to the units in the apartment complex where we lived.

BE: You said you liked the Dodgers?

RG: I loved baseball and the Dodgers, especially Jackie Robinson. I'll tell you a funny Jewish story. One time, when Dodger first baseman Gil Hodges was in a slump, I told my mother I was going to St. Mark's Church with a group of friends, and she got all theatrical and said, "What on earth are you going to a Catholic Church for?" I told her we were going to mass to pray for Gil Hodges so he could get out of his batting slump.

Amazingly, the next day, Gil Hodges got three hits! A more sobering story was when I felt confused and mortified to learn that my idol, Jackie Robinson, because of segregation back then, wasn't allowed to live on Bedford Avenue where so many of the white players lived in those beautiful houses.

And something else I thought was funny — my Jewish aunts and uncles were flabbergasted that of all the people in the world, I mean, they thought my hero should be Einstein, but it was Jackie Robinson.



6m

 Brooklyn Daily Eagle
@BklynEagle

ICYMI: Ten things you should eat in
[#BayRidge brooklyneagle.com/articles/2016/...](#)
#Brooklyn



2h

 Brooklyn Daily Eagle
@BklynEagle

#Brooklyn pol @SenatorHamilton, 'traumatized' by fatal #Brownsville shooting, vows anti-violence push in Albany [brooklyneagle.com/articles/2016/...](#)



4h

 Brooklyn Daily Eagle
@BklynEagle

#BrooklynHeights church holds 'Sacred Conversations on Race'
[brooklyneagle.com/articles/2016/...](#)



5h

Embed

[View on Twitter](#)

Most Popular

[Most Viewed](#) [Most Commented](#) [Most Shared](#)

Past: [1 day](#) [1 week](#) [1 month](#) [1 year](#)

BE: A student graduating at such a young age because of academics would draw the attention of some great colleges, would they not?

RG: I did well academically and I had strong SAT scores. I was admitted to Columbia University with a tuition scholarship (but not room and board) but decided to go to City College that had a highly rated engineering program. I would take the Surf Avenue bus to the E and then take the train to Times Square and change to the IRT all the way uptown to City College. I remember the subway seats were arranged perpendicular instead of parallel to the subway walls, which gave me a lot of room to spread out my notebooks and study. It made the long commute from Sheepshead Bay to City College both pass quickly and it gave me ample time to get my homework done. I calculated that I logged about 150,000 miles on the subway while in college.

BE: So it's true that you could have gone to any Graduate School in the country?

RG: I certainly had a lot of choices. After I decided to go to grad school, I scored very high on my graduate school exams – the best exam scores I ever had. Universities were calling from all over the country...Stanford, MIT, Illinois, Pennsylvania. My mother wanted to know why all those people were calling me from faraway places. I received an NDEA (National Defense Education Act Fellowship)...that's a five-year fellowship with great benefits. I could go to any place that accepted me.

I remember deciding that I wanted to go to Stanford and was looking forward to going there, but in December of that year, I met a girl from Sheepshead Bay and suddenly didn't want to be so far away from Brooklyn. She became my wife, so it was also a life decision to attend Columbia. I might add that it was the best decision I ever made. We're celebrating our 50th anniversary next year.

BE: How did you land in Florida from New Jersey?

RG: After I was elected into the National Academy of Engineers, I got all these offers to be a Provost or a Dean, but I declined, since I had been an exec at Bell Labs and know how hard it is to manage PhDs...even when you had influence over their careers. I could only imagine the "herding cats" challenge of being responsible for academics. At that point in my life, I wanted it to be simple, and Barbara and I wanted to be in a warm climate. The University of South Florida had an Endowed Chair available and they made me a very compelling offer... I've been here eight years, and I'm having a great time doing research that will benefit humanity, teaching and training future researchers and indulging my entrepreneurial side.

BE: Since taking the job at the University of South Florida as a distinguished university professor in the Electrical Engineering Department, you've been working with physicians on MARVEL. What is that, and what does the acronym mean?

RG: It's a mouthful, but it means Miniature and Anchored Remote Videoscope for Expedited Laparoscopy. At least the acronym is a real word. We are trying to take minimal invasive surgery (MIS) to another level. Instead of a plurality of devices, the surgeon will have a single device with a light source, multiple cameras, and a wireless transmitter. That frees up a port for another surgical tool so the surgeon can work with both hands instead of one. I also believe this will help prevent dangerous accidental incisions that can sometimes happen during surgery. Ultimately, we will have MARVEL surgical devices that are wirelessly controlled by the surgeon and aided by the cameras we have today.

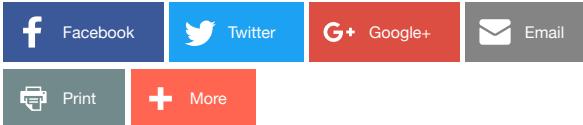
BE: So you're happy at the University of South Florida?

RG: Yes. As I told the Gulf Coast Business Review a few years back, I found the atmosphere here to be very stimulating and I've been energized. I can't wait to get to the office in the morning and to the lab or the hospital in the afternoon.

BE: At 73, retiring is out of the question then?

RG: Absolutely out of the question. If I retired, what would I do? It actually terrifies me. I still have skills. I'm a professor, I have a startup company in Tampa based on my research, and I do some expert witness work in patent litigation. When it gets cold, we're in Florida, and when it gets too hot in Florida, we're at the Jersey shore and a club we belong to on the Atlantic Ocean. We are blessed to have such a wonderful life. Every day I get up at 5:30 and have breakfast with my wife. When I get back from work, we go out to dinner and take long walks or we'll just meet friends for dinner. I just can't imagine retiring and not using my expertise in the areas that are in my ken.

September 22, 2016 - 10:20am



Related Articles



Jehovah's Witnesses sell 124 Columbia Heights to Florida Panthers owner Vincent Viola

GOOOAL, Watchtower! The Jehovah's Witnesses have sold a Brooklyn Heights residential building situated on the Promenade, 124 Columbia

1. Dyker Heights parents praise FDA approval of muscular dystrophy drug

2. New ranking finds 8 Brooklyn schools on list of 40 best public high schools in NYC

3. Brooklyn College receives \$500K to promote coastal resilience through environmental literacy

4. About Us

5. Final participatory budgeting brainstorming meetings coming up as deadline draws closer



Get Live TV on the Go.

