

JOHNS HOPKINS UNIVERSITY
ORAL HISTORY COLLECTION
MS.0404

“SB”

Interviewed by Jennifer Kinniff

February 26, 2018

Johns Hopkins University
Oral History Collection

Interviewee: "SB"

Interviewer: Jennifer Kinniff (JK)

Date: February 26, 2018

JK: Today is February 26th, 2018. I'm here in MSE Library with "SB," who is participating in our first generation college students oral history project. Thanks for being here with me.

SB: Yeah. Thank you.

JK: Okay. Let's start. Could you tell me about where you were born and a little bit about your family?

SB: All right. So that's a complicated question. It makes conversations kind of awkward. I was born in Ecuador and raised in Newark, Delaware, USA. Whenever I tell people that I'm from Ecuador, they immediately assume I'm some international student and I've been living in Ecuador forever. I've realized that I am profoundly abnormal compared to other people, and that's what makes me unique. Yeah. That's the long answer.

JK: And is your family from Ecuador?

SB: Yeah. My mother's side is, and my father's side is from here.

JK: Okay. And what is the highest education that your parents have?

SB: Okay. My dad was a high school dropout and got his GED. He has a "degree" from somewhere in Ecuador, which may or may not be authentic. And my mom, definitely not college. Maybe an associate's degree but again, it's Ecuador, so I don't know if that's authentic or not. That's a thing. Sometimes, people have degrees or institutions offer degrees that are just totally bogus. Yeah. So in a nutshell, I am of a low socioeconomic status, which pertains to the topic of the project here.

JK: And what do your parents do?

SB: My mom used to be a model. Now, she is or was a cashier at Marshall's, a fashion and random stuff for the house kind of store. Now, she makes flower arrangements somewhere in the Christiana Mall over in Delaware. My dad, he did a couple of odd jobs. When he went over to Ecuador, he taught computer stuff. Like he taught students Basic, Visual Basic. Basically programming languages of the 1980s.

After that, he came back because economic opportunities were insufficient over in Ecuador. He became a call center agent or whatever for Chase Bank, I think. Chase Bank was acquired by Capital One. Apparently, he was so good at his job that they promoted him to some kind of middle manager and that's what he does now.

JK: Okay.

SB: All with a degree that may or may not be real.

JK: [Laughs] So your parents, did they meet in Ecuador? Is that right?

SB: They did. That's actually a fun story to tell people. My granddad has a masters in English but he likes to travel and he likes Ecuador. Not sure how that connection happened, but he goes there every now and then. He writes poems and stories about Ecuador. Yeah. So being the crazy guy he is, he invited my dad over and said, "Let's go on an adventure and just see what happens," and my dad was like, "Okay." They go to Ecuador and my dad, he's this handsome gringo and meets this model on the bus or something and they start hitting it up.

And one thing leads to another. They get married. They have me and here I am.

JK: All right. And when did you move to the States?

SB: I moved to the States when I was 7.

JK: Okay. Cool. Do you remember a lot about Ecuador?

SB: I do.

JK: You do?

SB: Oh, right. The thing I wanted to do at the beginning of the interview. I am [name redacted].

JK: Okay [laughs].

SB: Yes, hello future. I hope that Philadelphia still has good cheesesteaks. I hope the winters actually have snow in them. I remember as a little kid, it used to snow during winter and now, we don't have winter at all basically. What else? Oh, yeah. The Eagles won the Super Bowl finally. That was a huge thing. Like, man. All the bars just exploded. Anyway, yeah.

[0:05:00]

SB: If I can derail this interview for a moment, I studied a lot of history at the Delaware Military Academy. I'm primarily an engineer and science-y person but I like the humanities. I like the liberal arts. I read all the time. History books, books from the Renaissance, all that good stuff. As a kid, I always imagined explaining modern life to King Louis the 14th or one of the King Henrys, or just people from the past. Seems like I'm doing the reverse here. I'm speaking to the future.

JK: About the present. Yeah [laughs].

SB: About the present. What else? Yeah. I hope neural prosthetics are more advanced in the future because that's the field I'm getting into. As a kid, I was fascinated by physics and science and technology. I was sitting in front of the TV once – the TV is a screen that people stare at for a long time, a lot of commercials – and there was this science documentary about the future of medicine and tech and there was this space rocket going to space and launching satellites. That was cool.

Telescopes looking into the sun, mapping out dark spots and all that. Advances in biology, new medicines and stuff, that was really interesting. And then they got to prosthetics. The host of the show's like, "Oh, look. We have this new hook for an arm for this amputee," and that was immensely disappointing and that's when I realized that I was going to go into the field of neural engineering, advance the field of neural prosthetics so that we don't have to give people freaking hooks for arms anymore.

Actual ... as close to a human limb as possible. So that's me.

JK: So you've had that plan in your head for a long time?

SB: Oh, yeah. Yeah. I'm a total freak because the majority of people here are like, "I don't know what I'm doing with my life. I'll just go with the flow," and I was never that person. I knew what I wanted to do since middle school. I knew I wanted to come here. The modular prosthetic limb, which was what really inspired me to go into the field was made here at Johns Hopkins, at the Applied Physics Lab. I read the *Technical Digest* when I was in middle school and high school. I come here and it's great and the program finished and the funding was cut. So there goes that.

JK: What program? What do you mean?

SB: The Revolutionary – English. The Revolutionizing Prosthetics program that developed the Modular Prosthetic Limb. Yeah, by the time I grew up and was smart enough to get in here and old enough, the program finished. So I couldn't really work on it.

JK: They are still doing things with prosthetic limbs though. Right? I've seen things in recent years of them helping veterans, right? Working on some advanced stuff but it's a different program, I guess.

SB: Yeah.

JK: Or not so much of a program as just a project.

SB: Yeah. There's this guy called Matheny. I forgot what his full name was but he was one of the first test subjects of the Modular Prosthetic Limb. I had an internship at APL for a computational neuroscience program by Dr. Gray Roncal. He is awesome. I was able to shake his hand and I can admit that he has a very strong, firm handshake courtesy of the robotic arm he has.

But yeah, I do see myself helping out veterans. I tell people this story a lot. Before I realized I was smart, I wanted to be a hospital corpsman in the Navy. Basically a combat medic for marines and sailors. But apparently, I'm smart and I figured I would be able to have a greater impact if I'm the engineer developing the technology rather than being out there applying it. Because I will admit there is that element missing in being an engineer about actually helping people. There's more of that distance between me and the patients.

[0:10:00]

But as a combat medic, I would help a couple of people deeply but as an engineer, as a research engineer, I could help all of humanity. So that's the route I took.

JK: No. Makes sense. Is there something in particular that drew you to prosthetics or you just saw it and were fascinated by it?

SB: Yeah. I was fascinated by it. I was torn between being a doctor and an engineer. This whole neural prosthetics, biomedical engineering thing helps me be both, basically. I'm ... yeah, I'm fixing people, but I'm more *repairing* people and I think that's really cool. And the state of technology now, we can't really give people their arms back or legs or part of them. And there's this whole phenomenon called the phantom limb and these amputees feel like there's something missing. I can get into the technical details but, hey. And that is one of the most human aspects of medicine and prosthetics. It's the fact that we're dealing with parts of people and just the fact that they used to have something and now it's gone. It has a very profound effect on people mentally.

And again, I think neural prosthetics and neural engineering is one of the warmest, most human fields of engineering and that's what really drew me into it.

JK: Cool. I'm going to back you up a little.

SB: Yeah. I was going to say – I wanted to get my personal stuff out there and then we'll go back.

JK: I love it. I can tell that's where your brain is right now. That's really cool. So you've kind of explained how you fell in love with this field. What was high school like for you? You said you went to a military academy?

SB: Yes. So I'll go from the beginning. School was a long winding journey. I think I went to preschool in Ecuador. Kindergarten at the University of Delaware, they had some kind of children's program. Went back to Ecuador. Did grades one through two. Came to the US when I was 7. My memory's fuzzy but anyway, I know, I guarantee that I was here in the US for third grade through now. I went to Downes Elementary in Newark. That was –

They were good people but I didn't belong there. I went to – can I curse, please?

JK: Sure.

SB: Oh, my God. Yes. Okay.

JK: [Laughs].

SB: I went to Shue-Medill Middle School in Delaware, which is the gateway to hell. It is pure shit. Let me tell you about Shue. It's where all of the people who are going to be the future gangbangers of the country go to. We have a cop there. She's blonde. Just keeping order there. It's basically a prison for middle schoolers.

That was not a good environment for me. I knew I was better than that. I transferred in eighth – I got out of the feeder pattern and into a new one in eighth grade and I went to Skyline Middle School for eighth grade and that was quite a transition.

The neighborhood surrounding Shue is just totally ghetto and the neighborhood surrounding Skyline was a nice, fluffy, white, totally insulated, happy neighborhood. Oh, my God. That was an experience because I went from worrying about being jumped or shanked or beat up to being this unicorn like, "Oh, wow. He's so different."

Oh, my God. That was my first experience with class. Okay. Shue was one of my first experiences with race because I was clearly a Mexican to these people and... racial violence. Anyway, yeah. I was a strange one in Skyline but I met the daughter of the cop back at Shue. She was pretty hot but I ... no. I didn't go there. For high school, I went to Conrad Schools of Science.

[0:15:00]

They recently opened up. I thought it was going to be a good fit for me and it kind of was. They focused on medicine and biotech, which clearly, was what I wanted to get into. Back in Skyline, I took a standardized test from the state of Delaware. My scores were through the roof. Mine was four digits. The average was three digits. That's all I remember.

Recommended biomedical engineering – again, that's how I ended up here. Anyway, Conrad Schools of Science, supposedly a good school for smart, gifted people and it totally wasn't because again, the feeder pattern, I tend to live in shitty neighborhoods. People like to beat the shit out of each other and pull knives and that's what Conrad was. The administration there had good intentions. They hired a guy from Harvard to teach biotechnology but he had

to deal with people basically giving each other blowjobs under the table and absolutely not caring about school.

That was absolutely heartbreaking because I absolutely believed in the faculty of the school but the people, the students, were so horrible that it just didn't work. I knew I wanted to get out of there so I applied for the Charter School of Wilmington, which is this elite school I didn't get in, Cab Calloway, which is a music school just for fun, I guess, and the last option was Delaware Military Academy. I didn't get a response until the week before the sophomore year began, the Commandant Wintermantel. I might get this stuff wrong. It's been a while. He personally called me in. He saw my application. He saw I got straight As freshman year and apparently, I was intelligent.

So I walk in, I'm in civilian clothing, to this big, blue building and I walk past the receptionist and I go into his office. There are some 20 or 40 millimeter shells lying around for decoration, which was a nice touch. Some of the little Smokey Bear hats Marines tend to wear and it was a really quick interview.

He has my grades in his hand. He says, "I see you got straight As. Let's make this quick. You're in. This is your official welcome," and I'm like, "Okay." I attend abbreviated basic training. A bunch of pushups, a bunch of side straddle hops, basically jumping jacks, and I am in and I spend the remaining high school career at DMA. Started as [Cadet] Seaman Recruit as is usual. Graduated as Cadet Lieutenant, which was pretty nice. I would have settled for [Cadet] Ensign, but okay.

I was the Regimental Academic Team Commander. That was pretty good. I was also the trash man. I volunteered because I saw these guys – Master Chief Call. He's a really cool guy but he had to deal with cadets that didn't want to contribute to the academy. At lunch, he would have to drag people over and make them do trash duty and that hurt. I volunteered every lunch session and I helped the academy like, that's what I do. I like these guys. I want to ...

So I stood out from most people in that sense. One last thing.

JK: Yeah. Go ahead.

SB: So I applied to a bunch of colleges, I applied to the University of Delaware with absolutely no intention of going there because it's in Delaware. I got into the honors program. I didn't care. I applied

to Drexel, Carnegie Mellon, Duke, Columbia, Harvard, Yale, here, MIT early decision. I ended up going here because of the financial aid package. Harvard waitlisted me and denied me. Yale flat out denied me. I didn't like them either.

Yeah, so Hopkins it is and again, this was kind of one of my first choices because of the modular prosthetic limb. I tell the news to the academy and they just blow up because all of their cadets either go to the University of Delaware, University of Wilmington or one of the service or service-related academies and I was the one who went to a prestigious university on a full ride.

[0:20:00]

And that was, like, earth shattering because again, I come from a – I basically come from a swamp and that doesn't tend to happen to people there. So here I am. I know there's a plan but like I said, I like history and I'm being part of it now. Go ahead.

JK: Exactly. No. I'm glad you are. I'm curious about what your parents' or your family's thoughts were about education. Were they pushing you to go to college?

SB: My parents basically told me not to get a girl pregnant and be happy. That was it. That was it. Oh, and to stay home and take care of them when they get old which ... well, the fact that they were assholes basically sunk that idea. Again, that's one of the reasons why I wanted to leave Delaware. My parents were total assholes. But anyway, next question.

JK: Sure. So tell me what it was like when you first got here.

SB: Oh, when I first got here. It was cool but mostly distressing. I was still Ecuadorian culturally. Culture shock was just a brick wall that I had to go through.

JK: Oh, are you talking about when you first got to the States?

SB: When I first got to the States.

JK: Oh, sorry. That's actually – go ahead. Tell me about that.

SB: Okay. Okay. So the school, it was Downes Elementary. They don't usually deal with people like me. They usually deal with people who lived in the swamp. It's not really a swamp but yeah, kind of. Nothing happens in Delaware. Downes takes in Delawareans, not

Ecuadorians and they had no idea what to do with me. It sucked. Just it was a bad time.

JK: Did you have English then?

SB: I did. Oh, right. In Ecuador, I attended Academia Cotopaxi and Colegio Americano, which were for Ecuadorian Americans like me. And again, my dad is American so I knew English right out of the gate. I consider Spanish to be my primary language but English is my most developed language. So communication was not the problem. It was mostly cultural and just ... it was just too much too fast.

JK: I see. What was the cultural transition like then when you came to Hopkins? Because you were coming again – I don't know how many students at Hopkins come from a military academy or things like that.

SB: Right. So like I said, I thought I was going to be a hospital corpsman probably in recon, in there with the Marines. Okay, so here's the thing; I have to bring this up. I feel like the military leans to the right and is a little bit more conservative. I was – I lean to the left and I'm liberal and progressive ... the academy did not care because I was that good. For the math league team, I basically pulled the team out of nothingness and they needed me. I was the academic guy. I put them on the map.

Politics, that didn't matter. Physical fitness, I failed – didn't matter. I was – they needed – yeah. Culturally, here ... it really didn't play a role at all. I chose the military. The military didn't choose me, in a way. I was always punctual. I like order. I like rules. I like neatness. I like punctuality. Culturally, I brought myself, which happened to be like the military values, but ... I get what you want to ask. Like, "Did the military training influence my experience here?" And the answer is no because I already had the values. And that's pretty much it.

JK: Yeah. Okay. What about, I guess, culture shock in terms of being a part of the student body here. Did you feel like you were meeting other people from your background, or not so much?

[0:25:00]

SB: Okay. This is the good stuff.

- JK: Your background's very unique so I don't mean exactly your background but –
- SB: It is. It's true. And for a long time, I've been pigeonholed. At Shue, I was the Mexican. At Skyline, I was the Mexican thug like, "Oh, he's so gangster." Oh, God. Because again, I'm not that white. Conrad, DMA, I was pigeonholed as the nerd. Here, people try to pigeonhole me but I'm just so unique that it never works and it just annoys me.
- I get pigeonholed as the international student, which I'm not. I get pigeonholed as a loner, which I mostly am. What else? I get pigeonholed as a party pooper, which I definitely am. But man, it ... you have to give me specific aspects of the culture here for me to – because this is too general.
- JK: Let's see. Well, let's talk about it in terms of being a first generation student and maybe your socioeconomic status.
- SB: Okay. Okay. Right. Socioeconomic status. I am totally different from most people of my "group." I don't care all that much about money. All I want is food, water, internet, electricity, and my own little corner somewhere. I've bumped into a few of other first generation students mostly because I don't go to any of the meetings. I just don't identify with those guys and I talk to them and they're all like, "Oh, I'm here to make my family proud because this is such a huge accomplishment and it'll bring honor and good stuff." And it's, "Oh, it's Hopkins. It's this super prestigious place." I never cared about any of that.
- And there is an ocean between me and the other first generation students. I came in here to change the world, not to make money. I feel like the other first generation students are here because mommy and daddy told them to study well at school and get a good job and not have their life, which is totally understandable. That is the stereotypical story of first generation students. I have, for all the people that I have met, that is the case.
- And I might have gone down that route but I'm just too much of an idealist to be like that. Again, I wanted to change the world. I wanted to help rebuild people's lives. I don't ... just money and prestige is just crap I don't care about. And that's what creates this rift between me and other people. It's they're here because of the prestige, because of the connections, whatever the hell that means, of the money-making potential. They want to climb the ladder because they've – because let's face it, we both started out in a

pretty shitty place and of course, we both wanted to get out.

But I wanted to ascend and contribute to society and humanity and I feel like other first generation students are a little – they’re narrower. They just want to avoid the misery and the pain that came from being of a low socioeconomic status and that’s it. I would be there with them trying to get out of the hole but after we’re out of the hole, we are completely different. So that’s it.

JK: We talked a little bit about this before we turned the tape on but how did you decide – you knew you wanted to do prosthetics. Was it an easy decision what program to go into here at Hopkins?

SB: Okay. Here’s the thing. And again, I’m a unique snowflake. I understand that college is supposed to be the place where you have all of this freedom to choose classes or whatever. I think that’s more of a liberal arts kind of mentality.

[0:30:00]

My parents don’t have a whole lot of college experience so I just had all of these preconceived notions like, “Oh, universities are more engineering than they are liberal arts which is the other way around,” and ugh. So I applied to biomedical engineering because I wanted to be more in the neural prosthetics rather than the traditional engineering field. I applied to the BME program here which people talk all the time about because it used to be the number one program in the nation, maybe the world.

And like, “Oh, it’s so prestigious.” Again, crap I don’t care about. The whole prestige thing was more of an obstacle for me and annoyance rather than a bonus. So I applied for BME here at Hopkins because again, the MPL, Modular Prosthetic Limb was built here or in the system that belongs here. And BME is about that. It is about the intersection between medicine and technology and that’s what neural prosthetics is. That’s what neural engineering is and that was my path.

If that didn’t exist, I would have picked electrical engineering and mixed in some biology and medicine in it because again, neural engineering is all about decoding the electrical signals of neurons. You got to know the biology to know what you’re doing. You need to know the electrical stuff to really know what you’re doing. Deciding was easy.

JK: And since you've been here, who have been the professors or what have been the courses that have been most fulfilling for you?

SB: Okay. The short answer is none of them. Absolutely none of them and I ... it felt bad the first day I stepped in here because again, I have no college experience or any of that. My impression of Hopkins was that of neural engineering. I was dead wrong. Hopkins specializes in computational medicine, which is neat and wonderful but it is not what I want to do.

In terms of most influential class, it was the first one. Modeling and Design, that's the first class that BME majors take in the department and it shows us the lab that we have in Clark Hall. It shows us some of the professors. And that's when I got some of the first warning signs. We had to go through some of the – the professors of the department gave these presentations and it was just computational biology, one after another.

“We have a computer model of the heart. We have a computer model of the liver. A computer model of the muscles,” and it was just computer model after model after model. And I'm just waiting for the hardware, the power systems, the neural stuff and there was none of that. After spending about four years here and after corroborating with other students and professors, it's true. Hopkins specializes in computational medicine.

I've been looking tirelessly for all the neural engineering stuff here at Hopkins and ... yeah. The Modular Prosthetic Limb, the hardware stuff was outsourced in a way to people from other universities.

JK: Oh, okay.

SB: So what happened was when I had my internship at APL, I was able to talk to some of the people there. And they were all computer scientists. Right? Again, the warning signs. All of the hardware people came from other places like Pittsburgh, Illinois ... what are the other places? I have a list but basically, not here.

So the result of that is I will not be doing graduate school here because Hopkins is pulling me towards that direction of computational biology. I've been resisting since day one. I am going somewhere else. And oh, my God. I am not going to the most prestigious – again, the people in the program will not shut up about it. “It's the most prestigious program in the nation or the

world” and I’m just holding my fists in the air like, “I don't care. I want to do this.” Being an idealist is hard.

[0:35:00]

So.

JK: Where do you think you want to go for grad school or –

SB: Okay. I was originally thinking the Illinois Institute of Technology. There is a professor there called Dr. Troyk. He does wireless data and power transmission and some biocompatible material stuff, which is the stuff I want to do. I’ve been into electronics for a long time. Third grade science fair project was a coil of wire that was supposedly supposed to suspend a metallic nail in air by pushing – right? Electromagnetic stuff was what I was into.

So this is absolutely the stuff that I want to do. I’m taking a neural implants class right now. I was doing homework earlier today but the professor is Dr. Fridman and he mentioned that some professors tend to be assholes. And just based on my experiences here at Hopkins, I agree. Professors can be assholes. And just working with corrosive people, it is just bad for mental health. It’s not something I want to do. So program fit and personal fit is very important to me, especially given my experiences.

And when selecting a graduate program, yes, the material and the subject and the specialty is important but it’s also the people.

JK: Definitely.

SB: Because I’m going to be into – I’m going to go into a PhD program for about seven years and if it’s seven years with a faculty advisor who is a corrosive human being, that will be seven years of hell and it will – I want to avoid that.

JK: Yeah. That’s wise to know going in.

SB: Right. So University of Pittsburgh, apparently University of Minnesota. University of Illinois isn’t doing anything so not going there. I have a list.

JK: Okay. Cool.

SB: Somewhere.

JK: Have you been active in any activities or clubs here at Hopkins or mostly just focused on studies?

SB: Okay. So I avoid social groups. I'm not part of that. I wanted to be part of Engineers Without Borders. Okay. So this is where the socioeconomic stuff gets in. 2014, I'm this Ecuadorian American. I show up to the first meeting and they're doing a water pump project in Ecuador and I'm like, "Man. I'm an Ecuadorian. I know the place. I know the language. I know the culture. Sign me up." And they're like, "You need a thousand dollars for the plane ticket," and I'm like, "I don't have money. Are you kidding me?" I have a full ride to Hopkins and I still can't afford the place. Right?

So I didn't end up going. The people who were more well endowed, shall we say, did. That is when I realized, "Fuck, money."

JK: You can get a full ride and still –

SB: I can't afford it. I barely afford rent. I barely afford food. Sophomore year, I had to work minimum wage at the library, fantastic place, just to pay for food. I worked 10 or 14 hours a week with \$7 each. I was living on a budget of \$7 a day for food. Right? And people think I'm crazy but I did it. I lost a lot of weight and I was healthy. Right?

I wasn't eating donuts or whatever. Yeah. That, I don't think that is a common experience here.

JK: Yeah. Do you find that takes mental energy for you that you wish you – do you know what I mean?

SB: No.

JK: That other people don't have to do?

SB: Because my entire life, I've been fighting for survival. It doesn't take mental energy because it's my state of being. Right? Because if it does take up mental energy, then you just don't survive. Meanwhile, everyone else is like, "Oh, I went to the Bahamas and I got so drunk and I –" totally alien stuff. They have time and money to burn and just waste and I'm here just trying to not starve, pay rent.

[0:40:00]

So again, I tend to avoid these social groups because I'm not one of them.

JK: Yeah. So what have you been doing on your summers and your long breaks?

SB: Okay. So the summer between my – actually the summer between high school and freshman year, I went here and I saw the place for a week and I went on a cruise for first generation people or something. And I had amazing macaroni and cheese there. I loved it. I went to the Inner Harbor over in Baltimore.

JK: I know what you're talking about. Yeah.

SB: And I slept here for three days and I went through pre-orientation which I liked to call disorientation because they just throw a bunch of events at you non-stop and I basically did not go to many of them because I just needed to chill. Yeah.

JK: Makes sense.

SB: Freshman, sophomore year, I wanted to do research at a lab in the lab for computational sensing and robotics. Under the professor Iordachita in the BIGSS lab. That didn't go so well mostly because I was having some heart problems. I went into academic probation from Dean's List because apparently my heart isn't functioning well. I went to the emergency room. They said, "We don't find anything. You're fine." I said, "No, I'm not."

Yeah. That was a crappy summer. I just hung out with my roommate. We played this game called Factorio. Just if you guys in the future, if you've heard of this, then I played it. Sophomore to junior year, oh, boy, I got an internship at APL for the MICrONS computational neuroscience project and it was great. I've been applying for internships at APL since day one. Rejected every single time. I don't know why. It was a – again, under Gray Roncal. We call him Will.

He wanted to provide research experience for people who didn't have research experience before, for disadvantaged students and everything, which apparently was me. So it was pretty easy to get in even though my GPA is just shit. It used to be good but again, my heart started acting bad. Yeah. So yeah. Internship at APL. They paid me money which, all of it went to rent, because again, I don't really have disposable income. The summer between senior and graduation, that hasn't happened yet.

JK: Right. To be determined. And so you were just talking about having health problems. Did you have a support system while you were in college? Who was your support system?

SB: I was my support system and it's always been that way. When I was surrounded by gangbangers in middle school to just assholes anywhere to my parents, I was my support system. It was me versus the world. I think people who try to better themselves in that kind of condition would agree with me.

JK: Okay.

SB: What is a support system actually? What do you mean? Like friends or?

JK: Could be. Yeah, friends.

SB: So basically, not being alone. Okay. Well, I am alone.

JK: Yeah. Okay.

SB: [Laughs].

JK: Everybody has their – yeah. You are your own support system. Yeah, or I don't know. I'm trying to think what – there are certain university-provided support systems.

SB: Oh, that. I didn't go to that. No.

JK: Okay. And how have you felt about life in Baltimore while you've been here?

SB: Okay. Baltimore has been particularly eye opening. Well, actually it opens my eyes wider to race and socioeconomic status. Again, first experiences. Racial crap over at Shue-Medill. I come here and it was just a little disturbing because the majority of Baltimore is black. The majority of Baltimore is blighted and then there's this pocket of affluent Hopkins in just the middle of pure hell and decay and just –

[0:45:00]

Oh, man. Where would I begin? Right. Most citizens of Baltimore are black. There are these not quite segregated areas where not-black people live. All the security – all the security guards are

black without fail. All the janitors are black. All the food service workers are black except for the French chef who makes the menu.

The people working in the offices are white. The ... oh, man. The professors tend to be white or Asian. The rich people who donate money are all white. The dean is Jewish white. All right? What else?

What I'm trying to say is it's kind of creepy and unsettling how there are these lines along race. I have not seen a single black professor ever. Ever.

JK: There are some but I guess you – not a lot but you've never –

SB: Right. But I personally have not seen one.

JK: You personally have never had one. Yeah.

SB: Oh, man.

JK: Do you feel like there's not a place for you in that kind of segregated system?

SB: Well, I've never had a place. In Ecuador, I was the gringo. In America, I was that Mexican gangbanger, I was that really smart Chinese student, I was, I don't know, the creepy guy in the corner. I don't belong anywhere. I really don't and I understand that there's this history of segregation in America and slavery. I feel like that doesn't really apply to me because I am so diluted. It's crazy. I'm half Ecuadorian, half American but on my Ecuadorian side, I'm a mix Incan and mix Spaniard. I don't know what proportion.

On my American side, I am Middle Eastern. I'm Irish. I'm German, Prussian specifically, maybe a little bit of Polish. I am so diluted, I'm not really anything anymore. This whole race thing, I feel, doesn't apply to me at all and ... no, seriously. When people try to guess what ethnicity I am, they have no clue. They just look at all of the external factors. Again, I'm really smart. I'm clearly Chinese.

Oh, I come from not here and I speak Spanish. I am clearly Mexican. Stuff like that. No, I don't belong anywhere, not even Ecuador.

JK: Have you met anyone else here who you think is kind of in the same boat, feels a complex identity like that?

SB: Nope. Because people here are either normal people or strong, independent allies of some cause or something like MOCHA, the – I don't know. Something colored something something.

JK: Men of color, yeah.

SB: Men of color. There's a Latino group.

JK: So you're saying you feel like people have sort of allied themselves with –

SB: Right. It's like people draw these lines and they're playing a game that I don't play. My race is human. That's it. No, really human. Because I'm almost everything that I'm nothing.

JK: Yeah. So based on your experience here, would you recommend to other first generation students that they come to Hopkins if they were given a full ride here? Maybe not your program necessarily if they wanted to do exactly what you were doing right, it sounds like, but in terms of Hopkins as a general experience?

SB: Yes. Because there is a lot of support for people.

[0:50:00]

Like Hopkins is actually extremely friendly to first generation students. I know in the BME department with Dr. Eileen Hasse, my faculty advisor she's really supportive. Yes, come here, especially on a full ride because it's a full ride. Who wants to pay the 64 grand a year?

JK: Yeah. How did you feel like they were supportive, your advisor and Hopkins generally?

SB: So this is how it happened. My entire life before Hopkins, I thought I was advantaged because I worked hard. I was motivated. I had ambition in the sense of helping humanity. Not in like I'm going to make an app and make a billion dollars or some crap. It was supportive because people are willing to talk about socioeconomic issues.

About a month ago, I talked to my advisor, Dr. Hasse. She mentioned that most people here come with advantages, money,

connections, all that stuff that I don't have and it's true. It took me being admitted and going to Hopkins to realize I was disadvantaged because my entire life, I was surrounded by people in my condition who just became totally nihilistic and had no desire or motivation to improve themselves, that things were going to be just the way they were. And I absolutely fought that and it actually hurts because I sympathize with the people I left behind in Delaware.

But what separates me from them was the fact that I wanted and was willing to leave and I did. And for whatever reason, they just stay there. That is actually tragic and horrifying to me and that will never go away. Because I wanted to help them but it's their choice.

JK: Yeah. And do you have advice for other first generation students who do make it Hopkins about how to be successful here? Or how to be happy here?

SB: How to be happy here, I don't know because ... because again, I am weird but also happiness is ... everyone has their own needs and wants. Mine are just chilling out in my room and then I'm happy. Hopkins will provide you too many opportunities. You must pick and choose and not sign up for everything. 2014, the president of the SGA, the student government association, exploded because he signed up for too much stuff.

Okay. Yeah. Back in Delaware, there are no opportunities. I was part of the math circle, which was a group of professors and high school students studying math under Dr. Rakesh of the University of Delaware. I showed up to every single meeting and I feel like I kept that alive until it eventually died because people were not showing up. I was part of math league. Again, I was a big math guy. I was the only guy who really organized and kept the thing alive because again, opportunities just do not exist where I come from.

That is the total opposite here at Hopkins. There are too many opportunities. People are stretched for time here. I signed up for everything because of my old programming. Like, "Oh, my God, these programs are going to die if I don't sign --" which is totally not the case but it was back then, back there. Right.

So first piece of advice, know yourself, figure out what makes you happy. Second piece of advice, don't sign up for everything. Right. I've always had this sense of direction so I knew what to sign up for. If you don't have a sense of direction, just try out stuff but just

take care of yourself. Third piece of advice, realize that most people here are not like you. They tend to come from New York City and have a metric shitload of money.

[0:55:00]

No. I'm dead serious. A metric shitload because their daddy was some banker or investment banker or owned some corporation and they go on red carpet stuff with celebrities and they go vacationing down South. Stuff like this, the stuff that people joke about about rich people is real here. So get ready for that. And just be resilient and realize that you do have disadvantages. You had to fight your way out of the hole here and there are people who were not born in the hole and who have absolutely no idea what your reality is. And you don't have an idea of what their reality is. So everyone has to deal with it in their own way.

I cannot dictate advice on how to do that. I just can't.

JK: Yeah. Fair enough. Is there anything else that you want to say about Hopkins that I haven't asked you about?

SB: Hopkins, I've noticed that Hopkins is very left wing, which I like but some of it is a little too left wing. I consider myself liberal progressive and all that stuff but some things are just really weird. I understand that gay marriage and queer and all that LGBTQ – I don't know how many letters they're going to tack on now – is important but as a ... what am I? A cis, white-ish, straight male, it's too complicated. I'm sorry.

I'm just a normal guy. Right? And now, I have to – and in some of these student organizations, I have to give my preferred pronoun, like his, her, they, what, blurbzorp or whatever, preferred gender. I didn't even know people had preferred – I thought people just had genders. There's all of this language and all of these ideas about gender politics or whatever. That exists here. If that's your thing, good for you. If you don't understand it, welcome to the club that exists.

Apparently there are steam tunnels here that people like to sneak into. I haven't been there but I'd like to. What else? The Fresh Food Café, people rave about it in the first few days and then get sick of it quickly afterwards. Hopkins is bigger than you think. What else? What else? What else? What else?

The statue, the one that illuminates all of the M level of the library

is wonderful. I appreciate the geometric complexity of it or simplicity rather. I like geometry. That's what I studied, math-wise, in high school and middle school. The thing about that statue is it spread light in every direction and the designers of that study space there were very intelligent and put the desks in such a way that nobody was staring directly at the statue because you would be blinded by it. Except the front desk, which is where I worked.

JK: [Laughs].

SB: So get this. I had to help people as my part time job and I had to stare directly in front and towards that statue such that no matter how I turned my head or where I was, there would be a beam of shining warm sunlight straight into my eyes and that sucked.

JK: This is the most I've ever heard anyone talk about that statue.

[1:00:00]

I'm fascinated.

SB: That statue is wonderful, except if you're looking at it. It illuminates everything. It's basically the sun. Just don't stare at the sun.

JK: My colleague calls it the potato chip.

SB: The potato chip?

JK: Yeah.

[Laughter]

SB: What else about Hopkins? Malone Hall, the computer science department looks like an Apple store, everything else looks like a medieval castle. Bloomberg, the physics building, is very cold. It's made entirely out of cement and stuff and it's really far away. There is a building that nobody or very few people know. It's like the geology building. It's like on the very, very western side of campus.

JK: Olin Hall?

SB: Yeah. I think that's what it is. If you want to get away from people and go into nature, go there. It's far away from people but not too far away. They've got pretty rocks there. What else? My full name

is – well, my full American name is [redacted]. My full Ecuadorian name is [redacted]. In Ecuador, we have two last names, a paternal and a maternal one and in America, it's just the paternal last name and you don't have any more, which sucks. I prefer the Ecuadorian system.

Nobody – and this whole feminist movement that we have here, nobody has picked up their torches and pitchforks over that yet. They should. What else? Just I feel like I am here because I am inherently a rebel. I don't get along with many people. I'm not part of the mainstream. I am the world's biggest party pooper and that is what helped me achieve what I have done because I refuse to accept the status quo of where I came from which was don't go to jail, don't get a girl pregnant, and get a job.

Right? I was an idealist and I am and will always be an idealist to some degree. I know that helping humanity on a large scale is satisfying and is what I was meant to do. And the people that surrounded me were like, "You're lame," and I didn't care. It's just hard being me but I ... but that's why science is so cool.

You're doing work for the benefit of everyone in the future.

JK: You have such a clarity of vision. I have no doubt that if I were to check in on you in ten years, that you would be doing exactly what you plan on –

SB: Yeah, yeah, yeah. Oh, yeah, yeah, yeah. Oh, no, no, no. Absolutely. People always joke that ten years ago or ten years from now, I would have said the exact same thing. I am so weird. I knew what I wanted to do since I was a kid and I have this plan for my entire life that I've developed since I was a kid and I'm surrounded by these people who don't what the hell they're doing. They have no plan.

They're just – oh, I'll just go with whatever and I'm like, "Dude. Why?" and they're like, "That ...". Are there people like me? No, I'm serious. People, the future, people of the past if there were time travelers, how common is it for people to know what they want to do for the rest of their lives and plan out their lives when they're still a kid? I have not met anyone who's like me. So I think that what helped me get here is not just the fact that I'm a rebel but also the fact that I have a freaking plan.

Oh, it's hard. Okay. One thing I've noticed culturally,

socioeconomic-wise, is people are in constant pain down there. And people bond over it. Right?

[1:05:00]

Because their parents are abusive, their grandma has cancer, they have no money, they've got to work a part-time job where they die and then people complain about it and people develop meaningful relationships. Here, it's who fucked what girl, who got so drunk that they puked out their entire intestines, who got so messed up. It's so superfluous and so meaningless and so vapid that the relationships built here are just totally superficial. They're like drinking buddies.

Whereas over there, it's like fighting for survival, dealing with gangsters, basically. Just ... oh, man. It has more meaning or rather it has meaning and I feel like the relationships here aren't. Because here, because we're these prestigious go-getter type A personalities, we've got to compete with each other or network and make connections for future economic benefit or something. Meanwhile, over there, people huddle together for warmth so they don't freeze to death.

Right? That doesn't happen. Well, over grades but that's not the same thing. People aren't going to fall into the void and deteriorate if they get a D or a C. Right?

JK: Yeah. Well, I think that – that's one of the – it seems like a disadvantage but I think for first generation students, it can be an advantage that you've got this sort of depth of experience that you can bring to things.

SB: Right. And the secret is to not be destroyed on your journey here because that is a possibility. You could do something really stupid and end up in jail. You could become extremely depressed and become an alcoholic. You can just go insane and become incredibly violent. You can lose all hope and become a nihilist. You can physically die. You can piss off the wrong person and he pulls a gun on you and kills you.

You can run away and try to escape and never been seen again. There's just so much that can go wrong. Right? And I think the reason why people don't try to better their situation is because they don't know what's out there. Hopkins. It's hard. It's scary but some people like me are so hurt, so sick of it that they will do anything to get out. I personally would have killed myself if I did

not get out because I was going to get out one way or another.

Right? And then you come here and it's just like, "Oh, grades, fashion, or ..." It's just really meaningless things. And I talk to my friend a lot about these sort of things and he agrees with me how once you make it, which is not having to worry about survival all that much, now you've ascended to the level of those who never had to deal with it. And what happens is you can't really talk about it and make connections off of these experiences because you've kind of left all of those people behind back in the hole and now you're with people who never really had to bleed for anything.

JK: Yeah.

SB: Yeah.

JK: Okay. That's a powerful thing to end on.

SB: Thanks.

[Laughter]

JK: Thanks for being here and talking with me.

SB: Yeah, no problem.

JK: I really appreciate it.