Smith College Alumnae Oral History Project

Smith College Archives
Northampton, MA

Lauren Barth-Cohen, Class of 2005

Interviewed by
Hana Sarfan, Class of 2016

May 16, 2015

Abstract

In this interview, Lauren Barth-Cohen discusses her Smith experience, academic challenges and triumphs. She recalls her positive experience as a physics major and credits notable professors in the science department. Barth-Cohen details her post Smith career trajectory in the male dominated physics field and how her difficulties steered her toward teaching and engineering.

Restrictions

No online access.

Format

Interview recorded using Canon Vixia HF.

Videographer

Video recorded by Kate Geis.

Transcript

Transcribed by Terri Pease, Audio Transcription Center.

Bibliography and Footnote Citation Forms

Video Recording

Bibliography: Barth-Cohen, Lauren. Interview by Hana Sarfan. Video recording, May 16, 2015. Smith College Alumnae Oral History Project, Smith College Archives. **Footnote:** Lauren Barth-Cohen, interview by Hana Sarfan, transcript of video recording, May 16, 2015, Smith College Alumnae Oral History Project, Smith College Archives.

Transcript

Bibliography: Barth-Cohen, Lauren. Interview by Hana Sarfan. Transcript of video recording, May 16, 2015. Smith College Alumnae Oral History Project, Smith College Archives. **Footnote:** Lauren Barth-Cohen, interview by Hana Sarfan, transcript of video recording, May 16, 2015, Smith College Alumnae Oral History Project, Smith College Archives, p. 3.

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Sophia Smith Collection
Smith College
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Transcript of interview conducted May 16, 2015 with:

LAUREN BARTH-COHEN

By: HANA SARFAN

SARFAN: So let's start with what made you chose to attend Smith.

BARTH-COHEN: Well, when I was a teenager I wanted to study physics or math or astronomy or something like that. And I wasn't very good at psychics in high school and so my mom thought that going to a small school with a small physics department where they would be supportive and offer me lots of help would be a good move because my mom was worried that if I went to a large school with a very big, competitive physics department, that I'd just get lost in the shuffle and that wouldn't be good. That was my mom's view of encouraging me to stick with physics even though I liked it, but I wasn't very good at it — which is kind of a weird thing — anyways I came here partly because I was like, Oh, it feels warm and fuzzy. And when I visited Smith when I was in high school, it reminded me of summer camp and I always enjoyed summer camp and so it felt like a happy place, kind of.

SARFAN: What was your reaction when you first arrived? Did it meet your expectations?

BARTH-COHEN: I think so. I just remember having lots of fun; being kind of overwhelmed.

SARFAN: Did it start to feel more comfortable as time went on?

BARTH-COHEN: Yeah, I think I was always very happy here.

SARFAN: That's good. Did you have close friends in your house?

BARTH-COHEN: You know I didn't. I had a couple of acquaintances, but not close friends. I was on the swim team and I had a couple of close friends from swimming and I had a couple of close friends who were also physics majors and I had close friends from art classes and other things, but not so much in my house. And actually I started in Gillette and after my junior year I left because I just didn't feel like a strong connection, kind of.

SARFAN: You left Smith?

BARTH-COHEN: Sorry, I left Gillette. I lived in Gillette for three years and then I was like, I'm done with this. I didn't feel connected. So I lived in the apartments — what's it called — I lived in the Freedman's for a semester — and I hated my roommates and then went to Tenney for my last semester.

SARFAN: How was Tenney?

BARTH-COHEN: Crazy, but fun. Overwhelming and crazy.

SARFAN: What kinds of things did you like to do for fun when you were a student?

BARTH-COHEN: I was really serious. I was doing physics and honestly I spent most of my weekend sitting over in McConnell doing homework with my physics buddies. I swam for two years and so that was really fun. I used to run with my swimming friends — I don't even know which direction — but south or west of campus.

SARFAN: OK. So you did swimming. You didn't do any other organization?

BARTH-COHEN: Yeah, I was in student government my junior and senior years. I'm not going to quite remember the names correctly. My senior year I was on the SGA cabinet — I think that's what it was called — I was head of I think it's called the Curriculum Committee. I also had this nomination to this committee — this university-wide committee called "Missions and Priorities" — I think it was called — I was like the student rep on this committee that had the president and faculty on it where we made decisions about funding and stuff. But that was just like a tiny bit of time; not that big of a commitment.

SARFAN: Were there any professors that you felt especially connected to?

BARTH-COHEN: Yeah. In the Psychics Department, there's a professor who's still here — Gary Felder — his first year as faculty corresponded with my second or third year as a psychics major and he was young and hip and I felt like I was close to him. We used to talk about psychics and I liked his class a lot — he taught thermal psychics and I felt like he — I just felt like I connected with him.

SARFAN: Can you remember any political controversies while you were on campus?

BARTH-COHEN: On campus controversies or national?

SARFAN: Yeah.

BARTH-COHEN: When I was here there was a whole "hoo ha" — it was right after I left — about dining rooms and changing dining rooms and stuff and what they were serving when and-

SARFAN: Like consolidating?

BARTH-COHEN: Yeah, that was happening.

SARFAN: What about you guys had some celebrations, changes, celebrations in sisterhood?

BARTH-COHEN: Gosh, I don't remember. I mean, I remember the event, but I don't remember if there were controversies about that. There might have been and I just might not have been paying attention.

SARFAN: I think according to the things I was looking at, researching in the archives about these years, it seems like there were more transgender students, during your time, did you notice that and was there a positive-?

BARTH-COHEN: There was definitely a lot of people who identified as trans, or gender queer, or genderfuck or all sorts of things. I have no sense if there's more or less students who identify that now. But in my graduating class there was a bunch of people and a bunch of people who were just exploring — exploring things and figuring things out — who didn't necessarily commit to one kind of box. And I thought that was always part of the landscape.

SARFAN: Do you think that was particular to going to a women's college?

BARTH-COHEN: That's an interesting question. On some level I feel it was probably noticeable at a women's college for many reasons. Partly because — I always think of the population of people who transition — often has originally roots in the queer community and in the gay and lesbian community — and so I imagine — assume that people are interested in Smith for part of that community — and then they transition to another community. So it always seemed like — not that surprising — it never struck me as a big deal.

SARFAN: Were there other aspects of going to a women's college that felt different or unique than kind of a typical college experience?

BARTH-COHEN: Well, it's hard to know, right, because this is the only college experience I had, right? When I talk to colleagues and friends who went to large, public, co-ed schools or small, co-ed schools, I feel like we definitely had some different experiences — when you talk of the gender side of things. I also say that I've lots of friends over the years who have gone to small

liberal arts colleges and I feel like our experiences kind of resonate with each other in many ways. Small classes, close friendships.

SARFAN: Do you feel like there were any particular expectations of you as a Smithy?

BARTH-COHEN: I didn't feel like other people had expectations of me so much. I feel like there's this general sense of — not just Smithies — but women who go to these kinds of liberal arts colleges — these kinds of seven sisters schools — you're strong women; you can do things in the world and get ahead and be in control and be powerful. I feel like those general expectations, but I never felt strongly about how they did or didn't apply to me. I've always felt like I'm me and I do what's right for me.

SARFAN: That's good. Can you think of a challenge that something that was difficult at Smith that you overcame or experienced?

BARTH-COHEN: I definitely had moments where I wasn't quite — where I was maybe less happy — moments when I wasn't quite as happy as usual or situations that I didn't love — but not so much challenges that I personally had. I'm generally a pretty happy person.

SARFAN: Good. How about any opportunities that you felt you had at Smith?

BARTH-COHEN: I felt like academically I was really supported, I had really good classes and really good professors and I felt like they really supported — they really supported — the learning that happened in the classroom and the learning of the science that happened outside of the classroom, too. I felt really good about my intellectual experience here in the classes I took.

SARFAN: Did you go abroad?

BARTH-COHEN: I didn't.

SARFAN: And how do you think your education has served you since graduating or do you think there is anything you wish was different?

BARTH-COHEN: Sure. So, long answer. So, when I was studying psychics here I had a job where I helped the first year psychics students here with homework basically, like a TA — I don't remember what it's called — something like that. From that experience I got interested in how people learn psychics. It was really noticeable to me as a senior that I was explaining this psychics concept that on some level seemed really easy to me, but were clearly not easy to everyone else and I got curious as to why is that. Why is this thing hard? So that was around the same time that I also decided I didn't want to get a PhD in psychics. I had applied to psychics

PhD programs and gotten in and gone to visit and been like, Oh my gosh. This is not a place that I'll be happy. It was just too intense, too people trying to one-up themselves (inaudible) it just wasn't a place I thought I'd do well. So when you're not sure what to do I was spending a lot of time on line Googling stuff. I wound up coming across a graduate program in science education at Berkley and I wound up emailing with the professors there and anyway I wound up going and I felt like — when I told my professors at Smith that I'm not going to go on in psychics, I'm going to do science education — I felt like they didn't judge me and they were supportive. They didn't know anything about what I was going to do but there were still like, Oh, OK. It still felt like they were supportive. I don't think I would've figured out that path if it hadn't been for them being really awesome. So in retrospect I kind of wish I had taken some education classes or explored that interest before I got to my senior year because it happened kind of late, but I don't think I would've done that if I hadn't had good psychics professors and had them be supportive.

SARFAN: You talk about — so it's interesting you start out telling us about your mom wanted you to be in a safe place so that you could learn — and then you came here and you have this great experience. So you got into psychics and were teaching other people psychics and can you tell us what you've been doing with your life since then? And it's been a very interesting — the school has made a big commitment to engineering, so if you could talk about your own path, what you're doing now, all of those things.

BARTH-COHEN: Absolutely. I went to this program at Berkeley to get a PhD in science education. As part of that I had to take some psychics classes. So I had this experience of walking into psychics classes for first year doctoral students at Berkeley which is one of the top psychics programs in the country and it was like 85% men and I'd say 90% of those students had gotten their undergrad degrees at an MIT or a Stanford, or Harvard or one of those schools and I was kind of like, Oh shit. It was really scary and the professors were not nice and they said derogatory things and I was not a happy camper. And I made friends with a couple of other people who had gone to liberal arts colleges and were women and anyways. What wound up happening is I failed the prelim — for a doctorate in psychics you have to take these preliminary exams and I was trying to get a master in psychics before I got my PhD in science education and I failed the prelim three times, which was pretty spectacular. I love psychics, but I also had that tough experience. I was able to go to my graduate school advisor and be like, Listen, this isn't working. We need to change something here. And so I stopped taking those psychics classes because it was making me miserable and I went over to mechanical engineering which is also a big, scary department with like 90% men. But it turned out they could teach and there's these weird things where engineers respect physicists because

they think they're more theoretical — anyway — so I went over there and it turned out they could teach, and I liked them, so it kind of worked out for me. And part of the reason it worked out, in retrospect, is I had enough training in psychics and math to be able to do the engineering. Without a problem I could do those classes. But the requirements for getting an undergrad in psychics at Smith are just less rigorous than MIT, right? There's no way around it. They just require more classes, these other schools. So my peers in psychics just had more classes than I had had, than Smith had ever offered. So that's partly why I struggled, but once I went over into mechanical engineering, I was happy as a clam, and did those classes and that was just a requirement for my doctorate. And then I got my PhD in science education and I worked with a man who specialized in psychics education and so I wrote a dissertation on students learning about complex systems — those are like systems where the macro level and the micro level have a (inaudible) relationship and so you can think about diffusion that way, and evolution, and all these big important ideas in science that we think are important for kids to learn but are also really difficult topics to learn about — and so I wrote a dissertation on students learning of those kinds of topics. And I got my PhD in 2012 and then I did a post-doc at the University of Maine in Orono, and while I was at Maine I worked with teachers, so I was never a teacher, right? I come to science education from the science, not from the teaching side, which is like, not great always in education, right? They want people who are teachers and I was never a teacher. So while I was at the University of Maine I worked on a project that was working with teachers where they were doing professional development to help teachers learn how to teach better and learn the science better in Northern Maine. It was working with physical science teachers at the middle school and high school level. Maine is really rural, so teachers are often really isolated and don't have peers to talk to — so this was a really large NSF grant that was working to help teachers learn the content better so they could better teach. So, I did that for a year and then about a year ago I moved down to the University of Miami in Florida where I'm on the faculty of the School of Education and Human Development and I'm in the Department of Teaching and Learning and I'm one of two science education people there — we've got a really small group. And I'm in the process of getting my research up and running, and so I'm still working on getting my dissertation stuff published on (inaudible) complex systems. I have projects from my post-doc looking at teachers learning in the physical sciences and I have a new project on robotics education, which I'm really excited about. We're teaching fifth graders in Broward County robotics because the idea is that computer science is an area where there are a lot of high-paying jobs and you want to get students — you want to give everyone access to those kinds of jobs. But to do that you need to often major in computer science and it turns out that when people are like 18 just wake up and decide they want to major in computer science — to

choose that as a major you have to be interested in computer science already. An interest in that kind of field is often instigated when people are young. If you grew up in a wealthy family you probably have a computer in your home and your parents are like, Yeah, go fiddle with it, take it apart, do whatever, right? But for kids who don't have that exposure you want to find a way to cultivate interest when they are young so I have this project where we are working with 5th graders to cultivate their interest when they are in elementary school — with hopes that — later on. So, that's what I'm doing now.

SARFAN: That's amazing. So with all of this knowledge you've gained doing this, how do you think women need to be taught sciences and young — little girls.

BARTH-COHEN: So, I think about single sex education now differently than I did probably when I was 18. From the academic side, I actually am not explicitly looking at gender differences. I think there's a lot of research where they look at gender differences because it's a really easy thing — you run a study and have people check a box — you can easily run the statistics. But I find most of the research that looks at gender differences like not that satisfying because they can find differences. But no one has any good theory on what causes those differences or what we should do differently. They come up with those theories and they're always kind of like — what's the word — stereotyping one gender, saying, "Oh, girls do this, boys do this" and that's not satisfying because it's not that simple, right? It's not fair to just lump people into one bucket and assume that because people are a certain way that therefore they should be taught science a certain way. That makes me uncomfortable. So from an academic side I don't look at gender differences because it doesn't settle well with me. That being said, looking back on it I feel like my experience here was really important because it offered me the ability to grow intellectually and to build confidence and have friendships and learn in a safe environment that I think I would not have gotten elsewhere. So I think that's what it offers; I think that's the important thing. The idea that when you're learning something hard you have to take risks. You have to risk the fact that you may not do well, maybe you'll fail, maybe it will be hard, maybe it won't work out, and maybe you'll get things wrong. I think you need a safe environments to try that, to do that. To study something hard, there's a chance you might not succeed. So I think that's what women's colleges can offer; I think that's what small colleges can offer. I think that's what Smith offered me was a chance to learn something hard and difficult where it was OK to fail and there were people who were trying to support me, both friends and professors, as best they could. So it felt safe and as a result it built my confidence that I could go on later and if I did fail later — which I did in psychics — it wasn't the end of the world it was like, That's OK. I tried it; I gave it my best.

SARFAN: Do you have thoughts about the direction that Smith is going in terms of really trying to strengthen the sciences and engineering?

BARTH-COHEN: Yeah. Of course I think that's important. On a national level, we don't have enough science majors. We don't have enough — I can tell you we don't have enough psychics teachers in the country — there are basically no psychics teachers practically being produced and that's like a huge problem, right? And so I think strengthening the sciences is really important, absolutely.

SARFAN: I guess my last couple of questions are well, first of all, if you think there are major changes that you see in Smith coming back after being gone a few years?

BARTH-COHEN: There's not many things — I see little things in like the buildings and stuff — but there's nothing major that had me shocked.

SARFAN: And then, if there's any advice that you'd want to give to current students.

BARTH-COHEN: Oh, sure. I think it's really important to intellectually take risks. To try things, even if you don't know if it's going to work out; even if you're not sure, but you try things and then you do your best and you see what happens, but you can't — I'm a little bit of a control freak and I like to know what's going to happen and try to plan, but especially when you're young and you don't have a lot of responsibilities, I think it's really important to just try things, and do your best and experiment.

SARFAN: Thank you so much.

END OF INTERVIEW

Transcribed by Terri Pease, June 14, 2015