

# FACULTY DEVELOPMENT & DIVERSITY FIRST GENERATION HEALTH FACULTY INTERVIEWS



**UC DAVIS**  
**HEALTH**

#FIRSTGEN  
COLLEGE  
GRAD

January 22,  
2019

Summary Report

A Project of Faculty Development and Diversity

Prepared by Rebeca E. Giacinto, PhD & Julie Rainwater, PhD  
Schools of Health Evaluation Unit  
University of California, Davis Health

# Faculty Development & Diversity FIRST GENERATION HEALTH Faculty Interviews

## EXECUTIVE SUMMARY

As part of the UC Davis Health Faculty Development and Diversity program, 18 interviews were conducted among faculty from the Schools of Health who self-identified as first-generation college graduates (“First Gen Health”). First Gen Health faculty told the story of their path to academic health and described significant factors and challenges in their success in becoming a faculty member. Qualitative analyses of de-identified interview transcripts were conducted to ascertain common experiences and themes. Findings from the first-generation project suggest common factors found across all interviews that influenced or continue to promote success among first generation faculty in attaining their career goals in academic health. In addition, several factors were also identified as challenges to achieve success (as defined by participants) throughout distinct stages of their career towards becoming faculty members.

Findings from the UC Davis Schools of Health First Generation Faculty interviews suggest common factors that may influence or promote success among first generation faculty in attaining their career goals in academic health. These factors are categorized conceptually at the individual, social/community and infrastructure levels to best identify areas of potential impact and increase the use and application of these findings in academic settings such as UC Davis (see Figure 1).

Figure 1. Factors that Influence Success among First Generation Faculty

	PROTECTIVE/SUPPORT	STRESSORS/CHALLENGES
INDIVIDUAL	Motivation to improve lives of family/ community; Unique perspective and inspiration as First Gen Health and/or URM background; Resilience; Self-determination; Initiative.	Cultural and linguistic barriers; Limited knowledge to successfully navigate academic environments; Internalized bias; Imposter Syndrome.
SOCIAL/ COMMUNITY	Family and community support and expectations; Mentorship; Collaborative relationships.	Work/Life Imbalance; Perceived Discrimination/Marginalization; Isolation; Gender and Ethnic Bias; Limited social capital.
INFRASTRUCTURE	Networking opportunities, Opportunities for interdisciplinary involvement; Opportunities for URM and First Gen Health to mentor, collaborate and/or serve on committees.	Limited funding; Student loan debt; Limited eligibility for grants for experienced faculty; Limited infrastructure to address social and work/life balance Issues.

**Individual:** Characteristics related to the individual that influence behaviors to pursue and seek opportunities to attain career goals

**Social/Community:** Formal and informal social networks and support systems that can influence individual behaviors and related opportunities and initiative to pursue professional goals.

**Infrastructure:** Relationships among organizations, institutions, and policies that may affect career “success” in academic health, including system level factors that directly or indirectly encourage or discourage support for First Gen Health faculty on campus.

Primary findings from this qualitative research are briefly summarized under the following major headings: a) Inspiration and Success; b) Challenges to Achieving Career Goals and; c) Recommendations for other First-Generation Students and New Faculty. Findings may provide insights into opportunities to address common challenges and increase factors that foster success among first generation students and new academic faculty at different stages of their career trajectory.

### **Inspiration and Success**

- First Gen Health faculty consistently describe themselves as being determined and resilient, which were considered key to achieving personal goals.
- Inspiration to pursue higher education was often attributed to family support and high expectations as well as a sense of responsibility to give back to family, community and students like themselves.
- In choosing academic health as a career goal, First Gen Health faculty noted that experiencing hardship during childhood was a motivating factor. Experience caring for others, lack of access to care or the loss of a loved one as a result of a preventable health condition, were most commonly reported descriptions of how experience hardship played a role in pursuing further education in health.
- First Gen Health faculty stated that mentors and other faculty members, generally during graduate school, were the most significant support that helped them become an academic health faculty member. In fact, almost all participants were able to identify at least one faculty member who was pivotal in shaping or helping them attain their career goals.
- First Gen Health faculty frequently mentioned collaborative relationships, colleagues and support networks as significant factors to building and fostering their professional growth.
- First Gen Health faculty described success or fulfillment seeing others succeed or having the satisfaction of witnessing others, in most cases students or early career faculty members, accomplish their personal and professional goals. In addition, participants underscored that making a difference or impact in the community, such as advancing research to reduce health disparities or improving health outcomes, were also considered important to feeling successful or accomplished.

### **Challenges to Achieving Career Goals**

Several factors were also identified as challenges towards achieving success throughout distinct stages of their career towards becoming faculty members.

- Feelings of isolation, marginalization, and not fitting in with the academic culture or community were often mentioned as significant challenges.
- First Gen Health female faculty noted the compounded effect of cultural and gender norms within their own cultural groups, which may add another layer of complexity for diverse First Gen Health URM faculty.
- Expectations placed on First Gen Health faculty from underrepresented groups, including women, were considered both an opportunity and a burden. First Gen Health URM faculty reported increased opportunities to participate and collaborate in multiple interdisciplinary groups and settings but also described the challenges of negotiating the added time burden experienced from participating in these activities. The need to maintain effective boundaries and time management was noted, particularly for new faculty or early career researchers.

### **Recommendations for First-Generation Students and New Faculty**

When asked how they would advise other first-generation faculty and students, interviewees stressed the need to actively seek advice, support, and collaborations.

- Participants underscored the importance for both new faculty and students to seek out individuals and support networks to help them succeed in their academic career trajectory; exposure to diverse mentorship was also considered key to succeed in academic medicine.
- Collaboration was also reported to be key in career advancement, particularly in co-authorship of publications and grant submission opportunities which are critical for early career faculty.
- Acknowledging that one is going to feel torn between family obligations and academic opportunities was noted as important. Students and early career faculty were recommended to actively recognize the long-term benefits of their education and training for their families as well as themselves in the future.
- Building resilience and maintaining motivation was considered pivotal when faced with perceived failure or disappointment to continue to persevere, particularly within the academic environment.
- Developing time management skills and negotiating expectations for time commitments (imposed by self and/or others) was also noted by participants. Setting boundaries, prioritizing activities and having good time management skills were viewed as necessary throughout all training and career aspects.
- Maintaining a healthy work/life balance and practicing self-care was regarded as imperative to success and fulfillment, and to reduce the potential for burnout among students and faculty.

## Recruitment and Data Collection

Recruitment activities for the First-Generation Health Project took place between August 2017 and January 2018. Initial recruitment was carried out through an email announcement sent by the UC Davis Associate Vice Chancellor for Academic Personnel inviting all Health Sciences faculty members (N=948) to participate in the First-Generation campus initiative. A follow up recruitment email was sent by the UC Davis Associate Dean for Faculty Development and Diversity. This email invitation described the goal of the initiative to identify and collect stories from first-generation academic health faculty members to inspire current and future academic health faculty and improve the experience of first generation faculty at UC Davis Health. A total of 21 potential participants responded to the email invitations. Of these, 18 self-identified as First Gen Health and indicated that they wished to participate in an interview for the project. First Gen Health faculty in this initiative and project are defined as individuals whose parents do not possess a college degree.

In total, 18 qualitative interviews were conducted among faculty members in academic health. Interviews ranged from 30-60 min. and averaged 45 minutes in duration. Interviews took place in locations that were convenient for participants to meet and that were conducive to the interview process (i.e. a conference room, participants office, etc.). Interviews were carried out by two primary interviewers and one assisting interviewer; in most cases both primary interviewers were present to conduct the interview and engaged in post hoc reflections after the interview concluded. All data was recorded using a digital audio recording device during the interview. The audio recordings were transcribed verbatim by Landmark Transcription and stored on a UC Davis approved secured database. Access to the de-identified transcriptions of all interviews was granted to the School of Health Evaluation Unit to carry out analysis using qualitative research methods and summarize primary themes around participant experiences.

## Interview Questions

Participants were asked a total of eight questions during the interview, which consisted of:

- 1) When you think about being the first in your family to go into academic health, what comes to mind?
- 2) Who or what inspired you to pursue academic health?
- 3) Please tell us about the most important support or opportunity that helped you to become an academic health faculty member?
- 4) What have been some of the challenges that you have had to overcome to get to where you are today professionally?
- 5) Please describe some of the factors that have helped you to foster success in your career.
- 6) What accomplishment are you most proud of as a UC Davis faculty member?
- 7) What advice would you give a first-generation health sciences student? A first-generation new faculty member?
- 8) What does success or fulfillment mean to you as a faculty member?

These eight interview questions were summarized and grouped based on similar types of questions and answers provided by participants. Summary of findings focus primarily on data relevant to the project as defined by program leaders and that contributed the most towards informing the aim of the initiative to improve the experience of first generation faculty and students at UC Davis Health. Guided by the eight interview questions, data in this report are summarized under the following headings: a) Inspiration to Pursue Higher Education; b) Primary Support Figures or Mechanisms to Pursue Higher Education; c) Contribution Factors to Successfully Achieve Career Goals; d) Challenges to Achieving Career Goals and; e) Recommendations for other First-Generation Students and Faculty.

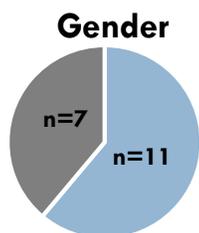
## Data Analysis

De-identified transcripts were analyzed using inductive content analysis to identify and categorize meaningful and detailed information about participant's experience as First Gen Health and faculty during the interviews (1-2). The significance of individual experiences or themes relate to frequency of appearance and patterns identified within and across different questions for each interview (Table 1). The coding framework integrated salient themes and patterns generated from interviews and emergent themes were verified during discussion. Inter-rater reliability of at least 80% was reached among two experienced coders in qualitative methods to identify potential interpretive shifts in the meanings of codes that informed individual coding frames. Code discrepancies were discussed among coders to achieve mutual consensus of code meaning. A final report summarized themes and subthemes relating to participants perspectives, experiences and recommendations for new First Gen Health faculty at UC Davis Schools of Health. Checks of coding schema against text served as a constant comparison to ensure rigor in analysis and interpretation of study results (2). Data was analyzed using Dedoose, Excel, and SPSS software programs.

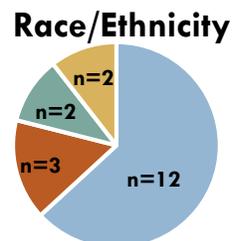
## Results

### Participants Characteristics

Approximately two-third of participants in the first-generation project were female and most identified self-identified their race as White, followed by Hispanic/Latino.



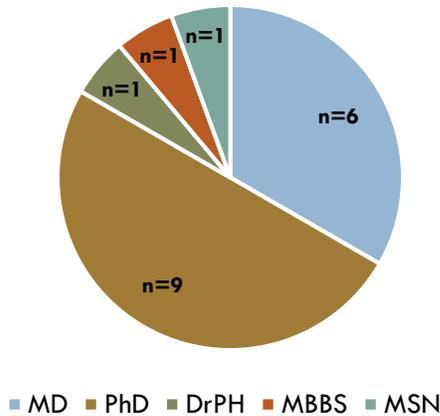
■ Female ■ Male



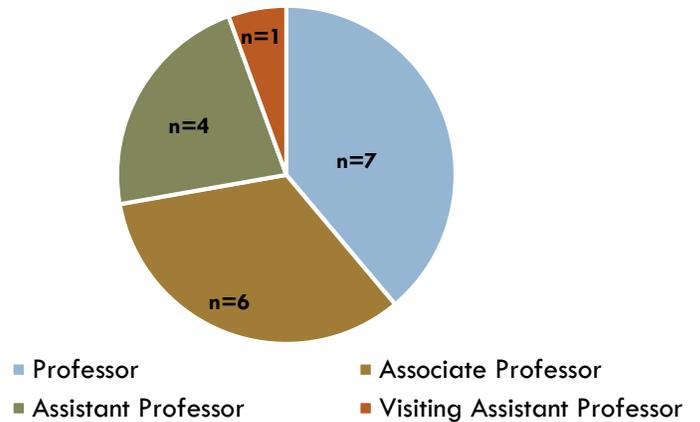
■ White ■ Hispanic/Latino ■ Black/African American ■ Asian

Most participants reported having received a PhD or MD degree and were Associate Professors or tenured Professors at UC Davis.

**Highest Degree Received**



**Academic Rank**



## Summary of Findings

### A. Inspiration to Pursue Higher Education – The Role of Family

Participants were first asked “when you think about being the first in your family to go into academic health, what comes to mind?”. Primary themes reported regarding participants’ inspiration to pursue higher education included: 1) Family Support and Expectations; 2) Responsibility to give back to Family, Community and Students; and 3) Self-determination/Initiative to pursue career path and achieve goals. These themes are described below with representative quotes selected from participants.

#### 1. Family Support and Expectations

Most participants referenced family as a primary influence or source of support in pursuing further education overall. Parents were described as support figures who encouraged participants during their upbringing and provided opportunities to further their education. Participants often described these opportunities provided to them as the result of “sacrifice” made by parents who did not have the same choices themselves but wanted to provide them with a better or different life. In many cases, narratives of immigrating to the US and negotiating new settings and acculturation processes were also discussed and were intertwined with their experience, both as first-generation faculty and first-generation immigrants. As one participant explained:

*I guess the first thing that comes to my mind is feeling grateful to my parents... they worked extremely hard...to try to make sure that the family had enough money, but also to instill a sense that education was really important. I think if they hadn't worked extremely, extremely hard, that I wouldn't be doing this.*

In addition to encouragement from family to pursue further education, some participants also reported family expectations to attend college as the primary factor in pursuing their career path.

*I was brought up that, “You’re going to college, so you can support yourself and your kids,” ... that was ingrained, because my mother hadn’t had that opportunity, I think. I was going to college, period.*

*I’m what my parents always wanted me to be and, maybe, a little bit also what they might have liked to be if they had the opportunity to go to college.*

## 2. Responsibility to Family, Community and Students

In addition to family support and expectations, feeling a strong sense of responsibility to give back to family and the community were frequently mentioned by participants as key source of inspiration to pursue higher education and/or academic health. They often described the chance to pursue further education as a “privilege” and feeling a strong sense of duty or obligation to succeed to give back to family and their community who did not have these opportunities. For some participants, this responsibility was sometimes viewed as taking on the role as the leader or liaison for the family or community, particularly for navigating or accessing health services and/or making a difference in the community, generally related to improving health outcomes.

*I feel a lot of responsibility to my family and they look to me as the healthcare provider even though I’m not a medical doctor or even a nurse. They see me as the health authority and that comes with a lot of responsibility...*

## 3. Self-determination/Initiative

Participants also attributed their own self-determination and initiative as key to successfully pursuing higher education in academic health. Interest and passion for their field of practice as well as dedication and hard work to achieve career goals were often described, along with childhood experiences that shaped their career pathway into academic health.

*For me, thinking about how to make things better, it was very important... the field of or the discipline of epidemiology just intrigued me in terms of health and just trying to solve puzzles, but in a different way.... I thought that would really motivate me and just being able to make a difference and a change.*

*What comes to mind is a willingness to pursue the unknown on a career path... my parents completed high school and went to work, and so, even to this day, I’m still the only member of my family to complete college.*

Experiencing hardship during childhood was also reported by some as a motivating factor to pursue further education, specifically in the area of health. The experience of caring for other and/or limited access to health care or the loss of a loved one as a result of a preventable health condition, were most commonly reported descriptions of how family played a role in pursuing further education in academic health.

*My immediate brother died at the age of seven, and I saw him die of malaria in front of me. So many other things around the village...really, healthcare to me became almost a cult... that I have to grow and make a difference. From early on, I thought, it's my duty, I almost took it upon myself to say when I grow up, I want to make a difference.*

*My mother-in-law's experience [end of life/hospice care] ... It was being there day in and day out [caring for MIL]. You see this amazing work...*

Some participants described this responsibility to extend to students, particularly to connect or reach out to first-generation and underrepresented minority (URM) students. Other participants described the need to represent or become an identifiable role model to students and early career faculty in an academic setting. In addition, one participant described the need to correct misconceptions and assumptions made about faculty in academic health.

*I continued to teach and mentor [so that] more people would see faces like mine when they're learning and being taught.*

*I think when I see medical students they just [think] that you come from a family of health professionals, and your family has these assets, and everything was really easy, and you were the smartest in your class.... I feel like that's the default assumption...I feel like I have to actively let people know that that's not the case. I think that's particularly true for medical students.*

## **B. Inspiration, Support and Opportunities towards becoming an academic health faculty member**

Participants were asked who or what was the inspiration to pursue academic health. Primary themes identified for this question included: a) role models and mentors and; b) personal interest/self-motivation and self determination to pursue career interest.

### **1. Role Models and Mentors**

In answering this second interview question, many participants referenced previous statements regarding the support and encouragement received from family members including parents, partners, or childhood experiences as their inspiration to pursue academic health.

*I think that without parental encouragement and value in college, I wouldn't have gotten started on that [academic health] trajectory.*

*Social supports, family social supports all along [the way]. That starts with my family. My parents really strongly believed in education.... I also would've never finished a PhD without my husband.*

Participants also mentioned specific role models during childhood (i.e. a doctor, paramedic, nurse) that provided exposure or an introduction to different a career choice in academic health.

*I had a lot of health challenges when I was growing up [and spent a lot of time] engaging with a family doctor...I think I just always wanted to be a nurse. I really loved what they did, the care they provided. I must've been exposed to some really good nurses, because I never wavered in that. .... I want to say by the time I was ten years old I knew I was going to be a nurse. Nobody was going to change that in me. I just stuck with it.*

*I knew I was interested in health sciences. I knew I was interested in medicine, but nobody was like, "Hey, go to college." I wasn't on that path. At Santa Rosa [High School], I was in a health sciences class, and a paramedic came in to speak with us about what he did. I was like, I can do that on my own. I can go to Santa Rosa Junior College. I can get an EMT. I can become a paramedic. I can do this.*

In other cases, participants identified multiple role models throughout their academic training as crucial to shaping their career path in academic health.

*I just met some fantastic people early on...I've had some really good mentors to see that I also had the capacity for being a leader, which is how I ended up doing what I'm doing on the main campus.*

*The word "empowerment" or "self-determination" were not words that we used. We just thought, "We're here. We have to do more." This one professor told me, he said, "Well, have you thought about going into academia?"*

*A woman faculty member ...she was the first person to say to me "It's what you bring to the table that matters". The only doctor I knew was my pediatrician... I thought that that's what all doctors were old men behind a big table.... It made me think...*

Participants were also asked to identify the most important support or opportunity that helped them become an academic health faculty member. Overall, most participants stated that mentors and faculty members, generally during graduate school, were the most significant support that helped them become an academic health faculty member. In fact, almost all participants were able to identify at least one faculty member who was pivotal in shaping or helping them attain their career goals.

*I had two mentors in particular who were helpful both professionally and personally and really reached out to a small college, so we knew the people who were teaching us. They were extremely helpful in just general information, but also being supportive and providing guidance and being inspirational*

*I think it was really the faculty members who cared enough to counsel me. They were open to me coming to talk to them and saying, "Have you looked into this? There's a great opportunity in this area." Even suggesting graduate school to go to. I think it's the faculty members. I don't think I could have done it without them.*

In addition to academic mentors, some participants stated that colleagues and peers were also very valuable in supporting and encouraging the advancement of their career path to becoming a faculty member.

*As a female first generation faculty member, having peers and faculty just a little bit ahead of me... I'm constantly inspired by those who have made great accomplishments, but I'm motivated by those who are just moving right ahead of me. It feels so tangible to be able to do that next thing.*

## 2. Personal Interest/Motivation/Self-determination

Along with mentorship, many participants also described their own personal interest and passion for their work or subject area as a significant factor in pursuing a faculty member position in academic health. This self-motivation was described as key to seeking opportunities to gain more knowledge and expertise and further their work in these areas of interest. Participants often referenced previous answers to interview questions to describe how this motivation and drive were inspired and fueled by childhood experiences (i.e. experiencing or overcoming hardship) and a responsibility to help others or give back to their community.

*I just really love doing the research and finding the answer to some question that's going help people. I get very excited and passionate about questions that can improve health. That's why I went into academics.*

*My trajectory has turned different from majority of other people who grew up like me, because I've had the opportunity to see a different opportunity or a different perspective. I think that's what we need. That's what everybody needs.*

## C. Challenges experienced in the trajectory towards become an academic health faculty member

Participants were asked to describe some of the challenges that they overcame to get to where they are today professionally. The most commonly reported challenges that participants experienced in becoming or holding an academic health faculty position included: a) perceived marginalization and negotiation of gender, cultural and social norms; b) overcoming imposter syndrome, c) financial hardship and; d) achieving or maintaining an optimal work/life-family balance.

## Negotiating gender, cultural and social norms in academic health

### 1. Gender Barriers in Academic Health Community (normative beliefs about gender)

Female faculty members who were the minority in their career path (as compared to males) in academic or medical health tended to describe more challenges in overcoming or negotiating normative beliefs about gender roles to succeed professionally. Normative beliefs about gender were described as both self-imposed and as perpetuated in the academic community or culture. In some cases, overcoming these barriers entailed adapting and changing self-perceptions and behaviors (i.e. becoming more assertive) to succeed in competitive or male dominant environments. Participants also discussed the compounded effect of cultural norms and expectations of women within their own cultural groups, which added another layer of complexity for diverse URM faculty.

*I think gender puts a big role as a challenge for me, personally. I think that my culture is really to sit quietly, and persevere, and not rock the boat. It's very difficult for me to pull up to a table, and sit up straight, and have a voice at the table... Not because I don't have an opinion, but it's finding the way to share that opinion is really, really hard... I think in this job, it's really important to do. This is the kind of job, I think, that people—if you're quiet, people assume that you don't know or you don't care.*

*Certainly again, as a woman and an underrepresented minority, sometimes it seems like you have to reach a greater level in order to achieve the next step, or to be as well-respected once you get to the next step with your seat at the table.*

*As I came here, and when I started at Davis, I've been here since 2002. I noticed that when the people are around the table there are very few women who are sitting around the table. There was a time where I felt like I was invited to the table because I was a woman. That felt important, but it also bothered me to feel like, "Gosh. Why did we have to think about that? Why isn't that just part of who we are?" It made me feel like what I could do in some small way is just to at least lay the foundation, right, for the throngs of other women that come.*

### 2. Cultural, Social and Language Barriers in Academic Health Community

Participants from underrepresented groups frequently described having negotiate ethnic/cultural differences in their professional career. Feelings of isolation, marginalization, and not fitting in with the academic culture or community were often mentioned as significant challenges.

*...it's not easy being a member of an underrepresented group climbing, especially when I was working in the Midwest and even on the East Coast, being alone...I want to say that that has been a very big challenge over the lifetime of my career. I have certainly felt that from time to time...from supervisors, from superiors, people I had to report to.*

*I'd been taught English for almost all my life, but really when you come here [U.S.] it's when you realize, "Oh, you don't speak English".*

*Offentimes I'm asked, "Well, you're Mexican American or a US citizen. You've grown here your entire life. You should be highly acculturated." I said, "Well, no. I lived in different worlds ...in Mexico, you behave a different very different way. There's times where I forget to switch that off. I'm conscious of it, but you always have to be very polite and you try to say no, but in a very nice way. For me, saying no to faculty I felt a fear of disappointing or [that] you're not doing what you need to.*

### 3. Imposter Syndrome

Overcoming or struggling with "imposter syndrome" was also frequently mentioned by participants throughout the interviews. Participants described experiencing imposter syndrome throughout their career trajectory and some reported continuing to struggle with it in their current professional positions. For many, imposter syndrome was exacerbated by feelings of isolation or of not belonging/fitting in.

*Imposter syndrome...that's been the biggest challenge, constantly fighting that feeling of not good enough...it's always your own tape that's the hardest.*

*I think it just can't be underestimated the power of imposter syndrome and if you don't get a handle on it, it can really erode success and well-being, for sure. I hope that U.C. Davis Health is promoting the message that we value diverse experiences, cognitive diversity and that students and faculty who come from those diverse backgrounds that there's a place for us here. It's kind of a daily—it's a daily task to have to remind yourself of that, but it's really important.*

*I think sometimes, as a first-generation person, you have this [imposter syndrome] more so than other [non first generation] students, you have this sort of shadow that can hang over you. Maybe I snuck in, and I didn't really deserve to be here. My file got stuck to the bottom of somebody else's file that got in. I just somehow piggy-backed. Someone's going find out one day, and get rid of me, because I'm not as good at this, or I'm not as good at that.*

### 4. Financial barriers

Financial stress experienced during college or graduate training was another common theme identified by participants in reporting challenges encountered during their career trajectory. Implications of having limited financial resources included having to pause or delay academic training, working multiple jobs to afford college, as well as feeling socially excluded or isolated if unable to afford activities with peers and other students who were more financially stable.

*The few family members I had were more like, "Well why are you bothering to go to college?" A place like Stanford has a lot of kids who don't understand why you don't have your own car and why you don't have money to go do things on the weekends". It's trying to fit into that...*

*I think financial challenge is the biggest. For students today, it's much worse... I feel like I worked a lot all through college. I was a waitress. I worked until 2:00 in the morning and then [I went] to study. Even with the loans, it wasn't enough for me not to have to work full-time.*

Another challenge participants mentioned was student loan debt, which continued to affect them in present day.

*The challenge of doing anything that we do is the ongoing opportunity cost of not doing other things. I'm 36. I have spent the majority of my life studying. I have \$300,000.00 worth of debt, and my life just started. I'd say that's a challenge.*

*You know, there have been some financial barriers...My internship was unpaid. My post doc was poorly paid and those could have been real stops for me...I have a lot of student loan debt, a lot. So, I just make it work, I guess...*

Some faculty also described limited funding as ongoing challenge in current positions as early career investigators or faculty, though these were primarily described in the context of funding current or proposed academic research grants or programs.

*I have some funding mechanisms, but once you get past a point, the early investigator, you're not eligible anymore, but I have been able to take advantage of all those same resources over time, but it took me a while to identify what those were, and why they were important...I do think that having that knowledge early on is very beneficial, really helping you have that perspective of what's important and how to balance all the responsibilities that you're going to have.*

*My funding is not—the topic or the focus of my work is not—it doesn't lend itself to the low hanging fruit for funding...*

## 5. Work and Family Life Balance

Balancing work and family life was also reported to be challenging among participants. Balancing competing priorities, avoiding burnout and sacrifice were most commonly mentioned. In particular, participants described sacrifice in the context of their decisions made around family planning, either deciding against having offspring in order to be able to achieve career goals or coming to terms with limitations in career ambitions as a parent.

*I've been working a lot to try and value the kind of leader that I am and the way that I operate.... I'm a single parent and you just have to shut it [pressure or expectations] off. There's just no other choice, but it's so healthy ...to shut it off.*

*I'm fortunate that I have no—as many faculty do, I have no shortage of a strong work ethic, sometimes to a fault. I think that can carry you through that rough patch early on, but it cannot sustain you over a career. Humans are not made to do that, and also balance and have personal relationships and solid health and things. Hard work can only carry you so far...*

*Depending on your support system [it] may or may not be a challenge for you, but going at this alone, in a way, you don't get to have kids. You can, but it's extraordinarily difficult. I can't understate how difficult that is to do. It's the number of sacrifices that you make in order to do this, to do what you dream of and love.*

#### **D. Factors that foster Career Success**

Participants were asked to describe some of the factors that have helped them to foster success in their career. The primary themes for factors that fostered success that emerged from all interviews included: a) mentorship (overall); b) diverse mentorship; c) collaboration/networking; d) self-determination/motivation; e) resilience or overcoming adversity and; f) unique perspectives and opportunities as First Gen Health faculty.

##### **1. Mentorship (overall)**

Mentorship in general was mentioned by most participants as one of the most important factors to success and continued growth in their academic positions.

*Sometimes there are structural barriers and no matter how much you dream, your dreams may not go too far because of structural barriers. I think that's where the power of mentoring, the power of climate, institutional climate, comes in. Mentoring is primary.*

*Good mentorship are people who could look out for my career in ways that I didn't have the perspective to be able to do, who could create experiences and provide introductions that would help me create a network and get involved in research and get involved in professional presentations and in publications and really giving me the skills to be successful in an academic career, as well as the support—and encouragement and collegiality, which I think it's that when a mentor now becomes a colleague and still retains that mentor role... were it not for people giving me a boost up, I wouldn't have been successful.*

##### **2. Diverse mentorship**

In addition to mentorship in general, receiving diverse mentorship was also underscored as important to meet the distinct and dynamic needs of participants as well as to receive unique interdisciplinary perspectives.

*Mentors are important; someone to speak to and someone—and for me, it's different mentors, not one and not always female and not always Latina... I also think it's very important to get things done. I'm not loud, so it's good to have women that encourage that...for me, going into academia was coming to a new country... It's a new language.*

*I try to find mentors wherever I go. I have chosen consistently to do what I wanted to do versus—what I was most passionate about, versus following the easiest path or following the path that might be the most lucrative. I ask for help. I say when I don't know something.*

### 3. Collaboration/Networking

Participants frequently mentioned collaborative relationships, colleagues, and support networks as pivotal factors to building and fostering their professional success.

*I'm very much a team-oriented person. I think that there's no way I could do what I do without a really good team. I think, to me, that means that in—at all levels, to me, it feels like my—I depend on other people, and they depend on me.*

*The opportunities that I've had here are fairly much related to the relationships that I've developed with all of my colleagues... If it weren't for that then there would really be no movement for me. There would be no place for me to grow into. It's my colleagues here, the people, that it is an academic health center. There's no shortage of opportunities just in general and if anything, there are way more opportunities than one could ever take advantage of. So, that has been a big factor working in a large health system, a large academic health system.*

### 4. Self-determination/Motivation

Participants also mentioned self-determination and motivation as key factors needed to achieve success in their careers. This was described in the context of having self-discipline, initiative, keeping a goal in mind and taking advantage of opportunities to achieve career goals. These factors were discussed as important during the development of participants' careers as well as in their current professional positions.

*For me, it's definitely my determination. I had to overcome a few limitations that I see in myself. I'm very reluctant to ask for help, and that needed to change, cuz I realized if you don't ask for help, you are not going to succeed. I'm introverted, and so for me I need to find connections with people that are not too superficial. For me, making connection with people is difficult. It's been difficult since the—I mean it's been easier in Italy because the cultural background is the same.*

*Because I was so motivated—I am definitely a self-starter, so that helped a lot. Then when I moved, that was definitely a challenge, because you move and you leave everything behind, so I had—at the time, I was in a relationship, and it didn't seem to be likely to continue.*

## 5. Resilience/Overcoming Adversity

Other attributes such as resilience to overcome adversity to continue to pursue career goals were also mentioned by participants. Resilience was also described as a positive attribute throughout their childhood and formative academic training to overcome and persist to find and maintain a pathway to achieve career goals.

*I don't really take no for an answer—well, it's not really that I don't take no for an answer, but I'm a problem solver. If I see a problem, I want fix it....I think that I tend to downplay challenges as they come up in my life, because I've been very fortunate to have been raised with the mindset that there is really nothing that you can't do.*

*My personal discipline made me at that time attractive to the mentors. Because people cannot mentor you if they don't feel you have the discipline to listen. Sometimes you may set this goal and then something good and something goes like this. You can't sit back. You just keep going, keep going.*

## 6. Unique perspectives and opportunities as first-generation faculty

Other factors that contributed towards achieving success among participants included having a unique perspective or experience as First Gen Health and/or URM faculty. Participants discussed the increased demand for faculty from underrepresented groups, including women, to provide their perspective or view. This provided increased opportunities to participate and collaborate in multiple groups and settings. Participants also emphasized that their experience as First Gen Health provided them with a unique view and ability to stay “attuned” or aware of issues, as well as being able to better relate to students and patients.

*I think the experience that I had as a child and seeing life from a probably not entirely warm and fuzzy context made me a little more attuned to things of a lot of people don't ever experience or may know about at a cerebral level, but there's what I think my classmates in college at medical school. How many of them have ever actually lived in a car?*

*I think that [being from an URM] that makes you a really great doctor, and a great resource for your patients. Not that you can't have that if you come from a pedigree of doctors, but if you're kind of closer to it, remembering what that was like, I think really makes it. Same thing in academic faculty.*

Though participants described having many opportunities to participate and collaborate as first generation and/or as an underrepresented minority in academic health, many participants also discussed the parallel impact of the time burden experience from participating in these activities.

*There's this theory which I've read about for particularly underrepresented minorities in academia, sort of like the tax that you pay, right? Because people are paying attention to diversity and inclusion now. When there's not a lot of you at the table, you get asked to be on a lot of committees [and] you get asked to do a lot... “We need women's perspective. We need some underrepresented minority perspective”.*

## E. Advice for first-generation health sciences student and new faculty members

Participants were asked what advice they would give to other first-generation faculty and students. Many participants described similar factors mentioned earlier during their interview that had fostered their own personal success (such as mentorship, self-determination/resilience, taking advantage of new opportunities) in their professional careers. In addition, participants also provided advice for URM students and female faculty members, such as not feeling guilty for moving away from family to go to school or seeking career advancement, taking risks and getting out ones' own comfort zone as well as establishing a good work/life balance. The primary themes for advice for others were to a) actively seeking mentorship and collaborative support; b) maximize opportunities and exposure; c) build self-confidence/self-determination; d) maintain resilience and motivation; e) ensure time management/prioritizing career development; and f) maintain a healthy work life/balance and self-care. These and other primary themes are described below with selected quotes provided by participants.

### 1. Actively Seeking Mentorship and Collaborative Support

Participants underscored the importance for both new faculty and students to seek out individuals and support networks to help them succeed in their academic career trajectory. Participants also highlighted the need to seek multiple and diverse mentors. They also underscored the importance of asking questions or for advice from mentors if they were unclear or needed guidance in navigating the academic setting and community. Collaboration was also reported to be key in career advancement, particularly in co-authorship of publications and grant submission opportunities considered to be important for early career faculty.

*Seek advice and seek support and develop a network that can help you. I don't think education happens with individuals; I think it's a team sport...advice you can trust and both inside your academic unit but also outside ...seek support or help or collegueship with others, and the payback of doing those things—it's an investment of time, but the return on that investment is well worth it.*

*Find a good mentoring team. You need to mentors, and not just one person because one person isn't going be able to fill all the roles. You need someone in your academic area, whatever you're interested in, but also people to help you network, people to help you to decide what career is right for you. You really need a team approach to mentoring and collaboration.*

*Mentoring is key and just actually now to prepare themselves before they enter academia for positions. Now, the world is changing. There's a huge expectation for assistant professors to have numerous publications and grants.*

### 2. Maximizing Opportunities and Exposure

Participants emphasized the need for students to take advantage of opportunities and fully dedicate their time to experiences “out of their comfort zone” to provide new exposure. Some participants reported that their students often felt torn between family obligations and academic opportunities, but that students needed to

recognize the long-term benefits of their education and training for their families as well as themselves in the future.

*To go for it, to maximize the opportunities that they have and build a network. Broadly or expose themselves broadly to opportunities and what's available. I find somewhat distressing is that people chose a place and then stay there for their whole life...you need to move on. Just because it's good for you and it's good for your experience and your point of view. You quickly learn when you go to other places that there's more than one way to do things, and there's more than one way to think about problems.*

*Value the opportunity that is given, and just make the most of it.*

*I get a lot of students coming in that are torn between going home and staying and studying in school, so I talk them into staying at school and I tell them to go to school far, far away from family.*

### 3. Self-Confidence, Self-Determination, and Motivation

Self-determination and building self-confidence was reported by participants as important for both students and new faculty to help to stay focused on goals and to continue to succeed in their career path. These traits were also viewed to help combat feelings of isolation or imposter syndrome that many considered common to experience of becoming academic faculty members.

*My first advice would be that you can do it and that, persevere and ask for help...take a seat at the table, because I think that if you haven't grown up in that environment, in that milieu, then it is easy to...have ongoing imposter syndrome It might not even be conscious, just a little thing in the background. I would say that their voice was as important to be heard as everyone else's. It offers, maybe in some cases, some diversity or perspective that isn't already present. I think the final advice might be to take the seat at a table.*

*Don't isolate yourself and constantly be in dialogue with your inner voice around imposter syndrome. Don't let it be the dominant voice, but you have to really critically look at that tape and question it.*

*It would be the same thing for either the student or the faculty member. It's number one, believe in yourself and follow your dreams.*

### 4. Resilience

Resilience was also mentioned as key to pursuing an academic career, both as new faculty and as a student. These traits were also viewed as helpful when dealing with failure or disappointment and the ability to try again or preserve, particularly within the academic environment.

*I think you need resilience for any aspect of it, because nobody goes from triumph to triumph that I'm aware of, except the narcissists who never admit to any failures...develop the resilience to overcome the inevitable disappointment you will feel when you don't succeed 100 percent in everything that you do...It's probably one of the best ways of trying to avoid burnout, which is now the epidemic that is throughout maybe all professions but definitely the medical one, and which even seems to start in medical school.*

*You just have to have faith in yourself and talk to somebody else. You can do it. You just have to stay focused. Everybody has one or two negative experiences... embrace it for what it is... especially for the underrepresented students, I always tell them, "You're taking a seat that about 100 students would kill to be in, so don't squander it." It will get better.*

### 5. Time Management/Prioritizing Career Development

Time management and negotiating expectations for time commitments (imposed by self and/or others) was also noted by participants. Setting boundaries, prioritizing activities and having good time management skills were viewed as necessary throughout all training and career aspects. In particular, "service time" dedicated to activities such as chairing committees and/or providing input as a First Gen Health and/or URM representative/staff during different events were considered to have the potential to take away time from advancing personal goals. Time management for these types of activities and seeking help from mentors to ensure protected time to meet personal career goals was also emphasized.

*To be very focused... Usually, especially from your underrepresented population, you get pulled in a lot of directions... identify the resources that you're going need...then be selective about the service.... we all have to do service, but there are some committees that you shouldn't be doing early on... be selective about the kind of committees, and your department chair should help you navigate so that you're successful.*

### 6. Work Life/Balance and Self-Care

Maintaining a healthy work/life balance and practicing self-care was regarded as imperative to success and fulfillment, in addition to avoiding burnout among students and faculty. Most participants mentioned family when discussing work/life balance and the importance to "not feel guilty" and fully devote time to focus on academic training or accomplishing career goals.

*...To not feel guilty, because a lot of time, I guess, people also feel guilty, because they're not, maybe, perpetuating whatever business family, or family business—or whatever is going on in the family. Just make the family proud a different way.  
Making the time to be a good student certainly will contribute to their family cuz I know that that was always in the back of my mind: not making time for family but being devoted 100 percent to school is being devoted to your family. It will make a difference, so learning how to balance that.*

*Self-care. Very important, I think, because we are under so much stress and so many challenges. Being mindful of what the resources out there, and work on whatever psychological barriers you may have about seeking help. There's stigma and shame and other things in—that we internalize. Work on that because it would be—I've seen it happen that some of us wait too long to ask for help...*

## F. Accomplishments, Success and Fulfillment as a Faculty Member

Participants were asked to describe what success or fulfillment means as a faculty member. Primary themes for this last interview question were: a) making a difference or impact; b) building collaborative relationships and; c) helping and seeing others succeed.

### 1. Making a Difference or Impact

Many participants described success as making a difference or having an impact on students, research, communities, and/or academic program or institution. This was described by some as the long-lasting effect of their contribution to research science, imparting knowledge to new generations to move research forward or being a founder to a new program in the academic or community setting that has continued to grow.

*Seeing my work make a difference. Having the results make other scientists and researchers think about health in a different way, so asking more questions rather than less. For communities, having them use some of that work and yes, thinking about the positive and the negatives of a culture or a community...For me, that's successful, to see people living better and longer—not disease-free or injury free—but just better and viewing themselves as a person or a human being in a positive way.*

*Seeing patients with students or residents is really the highlight of my day... teaching my students in my clinic, and they say wonderful things to me, and they tear up with some of the patient that we see together. They realize how amazing—awesome—the job that we have in front of us and helping people who are suffering.*

### 2. Building Collaborative Relationships

Participants also described how collaborative relationships were key to attaining success and related accomplishments and fulfillment.

*I think it's the collaborative relationships that I have with so many different departments and divisions and people... there's lot of variety, which certainly keeps it interesting and keeps you engaged and always learning and problem solving.*

*Being part of something much bigger than me. I love that. I love being part of something bigger than me, that we are together, collaborating to educate the next generation. As we look at the impact of our students and the work that they're doing in that ripple effect. I think the impact of my research will be a success.*

### 3. Helping and Seeing Others Succeed

Lastly, many participants described success or fulfillment as seeing others, especially students or early career faculty members, accomplish their personal and professional goals.

*Success is seeing other people succeed. That's why I'm here. Success is seeing other people get to where they want to go. I had people help me get to where I wanted to go, and I still check in with them every once in a while. That brings them tremendous amount of satisfaction*

*I think it's not just personal success, but it's also helping others to be successful. I like to provide opportunities for others and see them grow...I prefer to be able to provide opportunities for others. When I can see a junior person, help them to succeed, that's extremely rewarding.*

## Conclusions

Findings from the UC Davis Schools of Health First Generation Faculty Interviews may provide insights into opportunities to address common challenges and increase factors that foster success among first generation students and new academic faculty at different stages of their career trajectory. In addition, several factors were also found to be challenges to achieve success (as defined by participants) throughout distinct stages of their career towards becoming faculty members. These factors are categorized conceptually at the individual, social/community and infrastructure/system levels to best identify areas of potential impact and increase the use and application of these findings in academic settings such as UC Davis (see Figure 1 of full report).

Areas of potential application of these findings in academic settings such as UC Davis are being developed and may foster success among first generation students and new academic faculty in their professional careers. Promoting these opportunities identified as support factors may also attenuate potential stressors and challenges frequently experienced by First Gen Health faculty in academic health.

## **Project Team**

**Hendry Ton, MD, MS, Project Leader**

**Khoban Kochai, MPH, Project Manager**

**Rebeca E. Giacinto, PhD, Lead Evaluator**

**Julie Rainwater, PhD, Senior Evaluator**

**Roberta Campbell, Interviewer and Project Coordinator**

**Mark Robinson, MSW, Interviewer**

**Anne E. White, PhD, Coder**

## **Other Contributors/Acknowledgments:**

**Gene Crumley**

**Cheryl Busman**

**Rebecca Moncada**

**Annie Caruso**

## Appendix

Table 1. Pattern Analysis: First Generation Project (N=18)

Total (N=18)	Total (f)	Themes
		<b>1. When you think about being the first in your family to go into academic health, what comes to mind?</b>
N=10		1.1. Family Support and Expectations
	n=4	a. Parental encouragement and support to pursue further education (overall)
	n=4	b. Parental expectations/obligation to pursue further education
	n=2	c. Childhood experience/hardship as an influence to pursue further education
N=9		1.2. Responsibility to Family, Community and Students
	n=5	a. Responsibility/motivation to “give back” to community or make a change/difference
	n=1	b. Responsibility to family/becoming the “authority” figure
	n=3	c. Responsibility to become a role model to other first-generation students
N=6		1.3. Self-determination/Initiative
	n=2	a. Initiative/willingness to pursue an unknown career path/future (distinct from family/background)/ visceral experience
	n=4	b. Initiative/interest/resilience to pursue interest/career choice
		1.4 Misc. Themes
	n=2	a. Happenstance/Luck
		<b>2. Who or what inspired you to pursue academic health?</b>
N=17		2. Childhood Role Model(s) and Mentors (overall)
N=8		2.1 Childhood Role Models
	n=3	a. Exposure to role model or different career option
	n=2	b. Family encouragement
	n=3	c. Background/Experience during childhood or adolescence
N=9		2.2 Mentors in Graduate/Medical School
	n=5	a. Specific Faculty/Professors/Mentors in Graduate/Medical School
	n=4	b. Multiple Mentors/Mentors along career path
N=8	n=8	2.2 Personal interest/Self-motivation to pursue career interest
		2.3 Misc. Themes
	n=1	a. Influence of peers and colleagues
		<b>3 Please tell us about the most important support or opportunity that helped you to become an academic health faculty member?</b>
N=17		3.1. Mentors/Faculty
	n=8	a. Mentorship from specific individuals
	n=9	b. Mentorship from multiple individuals along career path
N=6	n=6	3.2. Personal Interest/Motivation/Self-determination
		3.3 Misc. Themes
	n=4	a. Family Encouragement and Support
	n=2	b. Support from Funding/Fellowship/Training and Networking Opportunities
		<b>4.What have been some of the challenges that you have had to overcome to get to where you are today professionally?</b>
		4.0 Negotiation of gender, cultural and social norms in academic health
N=4	n=4	4.1. Marginalization/Discrimination (normative beliefs)
N=7	n=7	4.2 Cultural/Social Barriers in navigating “foreign” academic settings
N=4	n=4	4.3 Overcoming “Imposter Syndrome” and Social Isolation
N=8	n=8	4.4 Financial Stress
	n=4	a. Financial stress to afford college/formative training
	n=2	b. Ongoing financial debt – student loans
	n=2	c. Funding limitations – for grants/academic programs and research (current)
N=6		4.5 Work/life balance
	n=6	a. Family obligations/family planning choices
		<b>5. Please describe some of the factors that have helped you to foster success in your career.</b>
N=15		5.1 Mentorship
	n=12	a. Mentorship (in general)

	n=3	b. Diverse mentorship
N=6	n=6	5.2 Collaboration/Networking
N=13	n=13	5.3 Self-determination/Resilience/Motivation
N=4	n=4	5.4 Unique perspective as a first-generation student or faculty member
		5.5 Other/Misc. Themes
	n=2	a. Time Management Skills
	n=2	b. Setting Specific Goals
	n=2	c. Support from family
	n=1	d. Luck/Happenstance
		<b>6. What accomplishment are you most proud of as a UC Davis faculty member?</b>
N=6	n=6	6.1. Impact made on Mentees/Students
N=4	n=4	6.3 Being part of or strengthening UC Davis system/department/mission
N=5	n=5	6.5 Collaboration/Building Collaborative Relationships
N=3	n=3	6.6 Developing or contributing to a specific program or research outcome in academic health
		6.4 Misc. Theme
	n=1	a. Accomplishments outside of UC Davis
		<b>7. What advice would you give a first-generation health sciences students and new faculty?</b>
N=14	n=14	7.1. Seek mentorship and Collaborative Support
N=9	n=9	7.2. Take Advantage of Opportunities/Increase Exposure
N=11	n=11	7.3. Self-determination, Resilience and Motivation
	n=6	a. Self-Confidence/Self-determination/overcoming ongoing "imposter syndrome"
	n=5	b. Resilience and Motivation
N=4	n=4	7.4. Time Management/Prioritizing Career
N=4	n=4	7.5 Work/Life Balance and Self-Care
		<b>8. What does success or fulfillment mean to you as a faculty member?</b>
N=12	n=12	8.1. Making a Difference or Impact (multiple levels)
N=5	n=5	8.2. Helping others to Succeed
N=6	n=6	8.3. Building Collaborative Relationships

## References

1. Maguire M. Methods to support human-centered design. International journal of human-computer studies. 2001 Oct 31;55(4):587-634.
2. Kitzinger J. Qualitative research. Introducing focus groups. BMJ: British medical journal. 1995 Jul 29;311(7000):299.; Kamberelis G, Dimitriadis G. Focus groups. Routledge; 2013.