A *big* thank you

to our supporters...

Our Advisors

Roderick T. Wong, MD, MBA

David Asch, MD, MBA

Shivan Mehta, MD, MBA, MSHP

Nalaka Gooneratne, MD, MSc

Lisa S. Katz, MPA

Our Partners

Perelman School of Medicine

Penn Medicine Center for Healthcare Innovation

Penn Medicine Office of Development and
Alumni Relations

University of Pennsylvania School of Engineering and
Applied Sciences

DreamIt Health

Dorm Room Fund

2016-17

penn**health**^x

Annual Report

from the President

Dear Faculty, Colleagues, and Friends:

It is with utmost honor and pleasure that I write to you about the progress that Penn HealthX has made over the past year. The program continues on its path as the most prominent student-led organization within the Perelman School of Medicine, supplementing the education of every medical student, with the goal of preparing students for the ever-changing future of healthcare.

In the spirit of innovation, Penn HealthX strives to develop new programs and platforms for students to learn about the diverse paths that their medical degree may take the. With this in mind, HealthX organized its first ever conference, "MD as a Passport", highlighting the myriad career paths our alumni have taken since graduation, from CEO of a major hospital system to CFO of a cutting-edge biotechnology company. In addition to these educational events, we aim to provide experiences that give students the ability to develop these skills early in their careers. Therefore, in collaboration with the Castleman's Disease Collaborative Network (CDCN), we developed the Biomedical Leadership Fellowship, a unique "year-out" opportunity that allowed one third-year student the chance to work at the CDCN and develop key management and leadership skills for their future career as well as advance the mission of a crucial non-profit organization founded by a Perelman School of Medicine alumnus.

Looking ahead...
Goals for the 2017-2018 Year

- **Create** first-ever Podcast series covering topics at the intersection of healthcare management, entrepreneurship, and technology to promote on-campus learning and discussion.

- **Develop** a longitudinal workshop series to educate students on fundamental topics in business such as finance, accounting, and management with the goal of preparing the future physician leaders.

- **Promote** HealthX brand on a national level through continued collaboration with similar-minded organizations, such as Sling Health.

- **Build** a national network of engaged HealthX, students, faculty, alumni, and industry leaders dedicated to driving healthcare innovation at intersections with management, entrepreneurship, and technology.

Finally, this year's letter would be incomplete without a crucial note of thanks to Roderick T. Wong, MD, MBA, who three years ago saw the potential of our "experiment" in medical education. His support has allowed us to prove our hypothesis correct and propelled the Perelman School of Medicine to the forefront of education in healthcare management, entrepreneurship, and technology. I speak on behalf of everyone who has participated in Penn HealthX when I say your mentorship, friendship, and continued support have been integral to our organization as well as the development of all students at the Perelman School of Medicine.

Best Regards,

J.C. Lopez
President of Penn HealthX
MD, MBA Candidate '18

Incoming HealthX Leadership
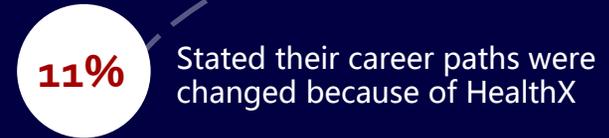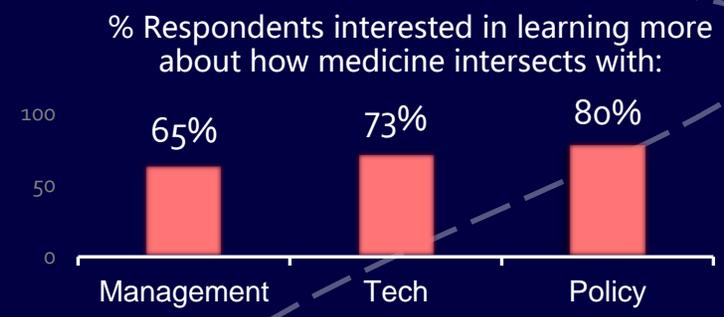
Neil N. Patel
President
MD, MTR Candidate '19

Andrew Becker
Chief-of-Staff
MD, MPH Candidate '19

HealthX by the Numbers

We surveyed 351 PSOM students
This is what they had to say…

79% Attended at least one HealthX event

22% Were influenced to choose Perelman due to HealthX

% Respondents interested in learning more about how medicine intersects with:

65%	73%	80%
Management	Tech	Policy

(bar chart axis: 100, 50, 0)

11% Stated their career paths were changed because of HealthX

8 Seminars given by guest speakers with 50+ regularly attended members

6 H-MET Certificates Awarded in Class of 2017

Penn Healthx proudly provided funding for . . .

3 Start-ups, **3** Summer Internships, **&** **3** HealthX Lab Teams

HealthX Conference: "MD as a Passport"

On October 1, 2016, our inaugural conference drew nearly 75 in attendance from Perelman SOM, Wharton, Penn Engineering as well as medical schools in the Philadelphia area. Topics focused on how physicians can leverage their MD to jump-start extra-clinical ventures and careers.

The event also entailed a series of workshops explaining the fundamentals of negotiation, design and venture capital. These workshops, including talks by HealthX's own **Nadir Bilici** as well as benefactor and PSOM alum, **Roderick Wong, MD, MBA**, emerged as the highlight of the conference for many attendees. In particular, Dr. Wong's crash course in healthcare venture capital received universal praise and now serves as the benchmark for upcoming HeatlhX courses.

Keynote addresses by **Robert Laskowski, MD, MBA** and **Lorence Kim, MD, MBA** bookended the day's events which included "Passport Stories": testimonies from physicians detailing their journeys to innovative endeavors outside of clinical practice.

2017 HealthX Start-up Grants

1. **Sanguis:** Sanguis is a hand-held and inexpensive blood cell counting device that patients can use at home for frequent monitoring. Check out http://sanguislab.com for more information.

2. **Ostiio:** Ostiio is developing a novel, fully internalized distractor for use in the craniofacial skeleton. With its magnetic activation mechanism, Ostiio's distractor can be expanded wirelessly and with precision, across a patient's skin.

3. **AutoRad, LLC:** AutoRad is seeking to disrupt the teleradiology market by creating software that triages non-contrast head CT scans based on level of urgency. They will use a machine learning approach to train their program to produce accurate, timely results.

J.C. Lopez

President
Candidate MD/MBA, 2018

Ryan O'Keefe

VP of Curriculum
Candidate MD, 2020

Logan Brock

VP of Curriculum
Candidate MD, 2020

Jun Jeon

VP of HealthX Labs
Candidate MD, 2020

Robert Lou

VP of Internships &
Venture Fund
Candidate MD, 2020

Clayton Parker

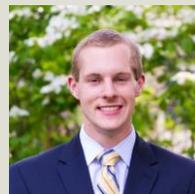VP of Conference
Candidate MD, 2020

Anik Saha

VP of Alumni Relations &
Networking
Candidate MD, 2020

Neil N. Patel

President Elect
Candidate MD/MTR, 2019

Andrew Becker

Chief-of-Staff Elect
Candidate MD/MPH, 2019

Meet the Board

2017 HealthX Summer Internships

1. **Christina Bax: Peek Vision, Health Informatics Team**
   Two mHealth apps, Peek Vision and hearScreen, respectively provide screening tests for visual and hearing deficits. Christina will participate in piloting delivery of these new tests at elementary schools in Good Hope, a small village about one hour outside Gaborone, Botswana. She will work with an interdisciplinary team of ophthalmologists and audiologists.

2. **Alejandro Cazzulino: HealthPoint Capital/ InnovaHealth Partners**
   Healthpoint Capital is a firm based out of New York City and is a leader in musculoskeletal device investment. Recently, the fund has had a new offshoot called InnovaHealth Partners. Alejandro will investigate potential new investments into companies with promising devices in their pipeline.

3. **Nancy Liu: UCSF, Quality & Improvement Research**
   At the Quality and Value Improvement Research in the Division of Hospital Medicine at UCSF, Nancy will be assisting in management and operations for initiatives working to improve the quality and accuracy of documentation and coding of medical records by the Hospitalist Department. This work will involve collecting data through interviews, surveys, and focus groups with multiple stakeholders across the UCSF system.

2017 Awardees

> "
>
> HealthX gives burgeoning entrepreneurs that extra push required when developing an early-stage technology. The financial support they provided allowed us to develop the prototype we needed to prove our concept further, especially at a time when funds were difficult to come by for a student-entrepreneur.
>
> "
>
> -Ari Wes, Candidate, MD/MTR 2018
> Founder, Ostiio

Penn HealthX Labs

HealthX Labs is our home-grown incubator program that brings together medical, business, and engineering students to tackle challenges in various aspects of healthcare delivery. HealthX Labs is also a partner of the **Sling Health National Network (formerly IDEA Labs)**, which aims to bring student incubators together, increasing collaboration.

All three of our finalist teams below participated in the Sling Health national pitch competition. IOgo and Yeva were selected as finalists and gave a podium pitch to a crowd of 500+. SpectrumScores received the Audience Choice Award.

Yeva, a web-based application, creates a community providing experience-based mentorship for caregivers.

 IOgo is developing the FlowMeter device, which automatically counts fluids going into and out of a patient in real-time.

SpectrumScores, a web-based application, helps LGBTQ+ patients find care that they need and deserve.

2016-2017 Lecture Series

As the cornerstone of our Healthcare Management, Entrepreneurship, and Technology (H-MET) curriculum, the HealthX Lecture Series continues to provide a unique opportunity for Penn Med students to learn from visionary individuals making big changes in the real world.

To increase collaboration across different student-run groups at Penn Med, we co-sponsored four of the events. Five of the events were lunch talks, while the remaining three were more intimate fire-side chats and networking events.

(* denotes University of Pennsylvania alumnus)

2/13/17: *David Fajgenbaum, MD, MBA, MSc (M'12, WG'15)
Co-founder and Executive Director of CDC
Personalized Personalized Medicine and The CDCN

2/24/17: Michael Draugelis, MS; Michael Becker; Corey Chivers, PhD; Asaf Hanish, MPH; Thaibinh Luong, PhD
Panel on Data Science in Healthcare
Co-sponsored with Penn Data Science Group

3/30/17: Debbie Kelly, MD
Head of Pharmacovigilance at Spark Therapeutics
Keep Your Eyes Open: An Unexpected Career Path (Transitioning to Industry)

3/15/17: *Pitou Devgon, MD, MBA (RES'08, WG'10); Eileen Farnon, MD; *Sharat Kusuma, MD, MBA (RES'07); *Mitesh Patel, MBA, MS (WG'09, GR'14)
Panel on Alternative Careers in Medicine Panel
Co-sponsored with William Pepper Medical Society

4/19/17: Brent Saunders, JD, MBA
CEO of Allergan
Career Path Interview Dean Gail Morrison

5/25/17: *Anand Shah, MD, MPH (M'07, RES'10)
Intrapreneur-in-residence, FDA
Information Exchange and Data Transformation (INFORMED) at the FDA

4/26/17: Scott Harrington, PhD
Chair of Healthcare Management Department, Wharton
Healthcare Reform – The ACA vs. AHCA

6/8/17: *Stephanie Teeple (GR'24, M'24)
MD/PhD Candidate
Student Capstone on Qualitative Methods in Healthcare Research