

Chief Innovation Officer of UPMC and Executive Vice President of UPMC Enterprises, Dr. Rasu Shrestha is at the industry's front lines of innovation, commercialization, and implementation. A radiologist by training, Dr. Shrestha's role has transformed, and he is now charged with "building bridges," as he explains, "between what we've known healthcare to be in the past, and what we know healthcare needs to be as we look into the future."

The Center's Associate Director, Julia Holber, had the opportunity to talk with Dr. Shrestha about his background, his vision for the future of UPMC Enterprises, and his 18,000 Twitter followers.



Julia: You are the Chief Innovation Officer for UPMC. Can you tell us about this role and what a typical day or week look like for you?

Rasu: My role is less about me and more about the team that I work with. I say this not because I'm trying to be humble, but because my role is really about bridge building. It's about connecting dots across disparate entities that might exist within our system here, within the Pittsburgh region, within the broader innovation community, and across healthcare. It's also about building bridges between what we've known healthcare to be in the past and what we know healthcare needs to be as we look into the future. My role on a day-to-day basis involves strategizing with my team in specific areas of focus about how we might be able to work with the right clinicians, entrepreneurs, investors, start-up folks, and other partners to move healthcare forward.

Julia: Tell us a bit about your background/training and your journey to Pittsburgh.

Rasu: I'm a radiologist by background and had some prior training in informatics. Way back when, during my informatics fellowship, some of the work I did was involved with a startup. You could say "the bug bit me there." I got into informatics in a more focused way around that time and did some work in LA for a number of years. While I was working point I got an MBA and gained a lot of great experience trying to tackle some of the problems involving imaging and informatics. Then, Pittsburgh came calling a little over ten years ago. I had never been to Pittsburgh, and after I hung up the phone a couple of times, I felt the urge to at least look at what the opportunity would look like. The more I explored Pittsburgh and what's unique about UPMC, primarily the payer-provider "ying and yang" and the appetite UPMC has to rethink the paradigm, I got sucked into that mindset. I've been here ten years now, and my journey has evolved from where I was charged initially with imaging, then I was the VP for Medical Information Technology, and now I lead the innovation strategy across the health system. It's been quite a ride, but it's been a fun one. It's been very purposeful in trying to have impact at scale, trying to make sure that we're able to ask the hard questions collectively as a team and as an industry, and then find solutions to those questions.

Julia: We're glad you didn't hang up the phone in the end! Are there any major events or mentors who led you to this role?

Rasu: I have had a lot of influences and influencers along the way. I will mention a mentor, Dr. Jim Halls, who is like a father figure for me. He's been the chair of radiology at USC for 25 years. He built the department from the ground up and is definitely a leader I look up to. He is 86 years old now, and he inspires me to prioritize what's important in life and to think more broadly, as opposed to more narrowly across one department.

Julia: As you know, health care technology is always changing and obsolescence is the rule, not the exception. How do you stay on top of new trends and developments?

Rasu: Here at UPMC and UPMC Enterprises, we're challenging the status quo. We're saying, look, if it's not working, if it's not doing what needs to be done, if it's not producing the outcomes that we need, we have to move away

from these strategies. We're in many ways leading the charge. We as a team are creating and instigating the change. How I try and stay on top of new ideas is by, first, asking those hard questions. I rely on my colleagues across the living lab that is UPMC. By living lab, I refer to the rest of UPMC: the health services group, UPMC Health Plan, and UPMC international. I look at UPMC as a servant-leadership model, so I learn from them and work hand-in-hand to understand where those pain points are, and with that lens focus on emerging technologies and capabilities. What we try to bring to the table is a level of academic and scientific rigor and a discipline to marry up those unmet clinical and operational needs with these emerging technologies and capabilities.

Julia: Where would you like to see UPMC Enterprises in five years?

UPMC Enterprises Rasu: We're fairly ambitious at UPMC Enterprises because our goal is to reimagine the future of healthcare. Most people know UPMC today as a provider organization or as a health plan. But, very few people know of UPMC as a company that's birthing startups and investing in companies and technologies. We're creating some of the most interesting companies in the

space of healthcare IT. I hope in the next five years, UPMC Enterprises will be seen more as a software company than as a healthcare company. I hope we will continue to meet the front on behalf of the rest of UPMC, and perhaps even the industry, in creating these new companies that we would not just be utilizing at UPMC but commercializing at scale and impacting change across the industry.

Julia: Speaking of start-ups, can you tell us about a new behavioral health-related company or venture UPMC Enterprises is working on that you are most excited about for 2018?

Rasu: Absolutely! If you look at some of the history of UPMC, UPMC started out of Western Psych Institute. That was our first hospital, and today we're close to 40 hospitals across the board. So, behavioral health is a strong suit for us here, and it's an area where we see a lot of promise moving forward. We are working with a startup



out in the Bay Area called <u>Lantern</u> (follow them on twitter at <u>@golantern</u>!). Lantern is an amazing company, and this startup brought to the table, first and foremost, great talent and passion. Together with Lantern, we're looking at the intersection of consumerization and the space of behavioral and mental health. Today, if you look at the space of behavioral health, there are a few big challenges. First there's a lot of stigma around mental health. We perhaps need to address and cure the stigma before we address and cure the disease. The other big challenge is around access to resources and care. What we're doing with Lantern is co-creating a set of solutions, working with our behavioral health experts here at UPMC and Pitt, and implementing those solutions here across UPMC. Together, we are trying to bring cognitive behavioral therapy protocols through mobile devices and tablets to provide more of a customized care plan, improve techniques of one-on-one coaching, and start seeing real results that are impacting the lives of patients and consumers.

Julia: What is your advice to clinicians and researchers who want to work with UPMC Enterprises? How would they start to go about this?

Rasu: Part of my charge here at UPMC Enterprises is the front end of the strategic intake pipeline process, to build those bridges with many a kind across the board. I'd encourage clinicians and researchers to reach out to me directly or to us through our <u>website</u>. I try to stay very accessible, whether it's by social media or by email or otherwise. We have a fairly well-defined process by which we engage with whoever reaches out to us. The other channel I'll state here is the Pittsburgh Health Data Alliance, which we put into place a few years back. If you go to the <u>Pittsburgh Health Data Alliance website</u>, there are specific ways in which researchers and scientists are engaged. We look at cohorts of proposals on a regular basis, and we provide funding and some level of a force field around these proposals, so we can guide them along and mature them to a point where we can contemplate birthing a company, products, and technologies from a commercialization prospective.

Julia: Well, I hope people take advantage of this accessibility! You mentioned your social media presence briefly. You have over 18,000 Twitter followers, thousands more than UPMC. What suggestions do you have for UPMC and for people just starting out on Twitter?



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Physician, informatician, pragmatic futurist. Chief #Innovation Officer, UPMC. In pursuit of value-based intelligent healthcare. #HITsm #hcldr #UPMCinnovates Rasu: Well, first, they can directly contact me as I am freely accessible on Twitter. I don't know if I should say this out loud, but I've opened up my DM channel, and people can direct message me at any time. It's amazing the number of valuable interactions I've had, deals that we've done, and people that we've hired using social media. My advice that I have for people who are just starting out on Twitter: it doesn't hurt to be a lurker. By all means, open a twitter account, and lurk! By lurking you're shadowing and learning the etiquettes of twitter. I call them "Twittiquettes." Twitter can be a double-edged sword, it can suck the life out of you and be very distracting. At the same time, if you're able to tame how you manage your social media feed and your presence, then it can be extremely rewarding and beneficial. My second piece of advice is: be authentic. I think authenticity goes a long way on social media. Be yourself, be authentic. My third point is: add value. In your engagements, once you're done lurking and getting comfortable, start to add value. Add links, appropriate hashtags, and a picture to attract a broader audience

and provide more information than you can capture in the 140 or 280 characters that twitter allows. The last thing you should be doing on twitter is self-promoting. Engage and go deep. Add value in terms of content and insight, and be purposeful in terms of doing so.

Julia: I also know from your Twitter you attend a lot of conferences, and you also host UPMC Enterprises conferences. Are there any events UPMC Enterprises is hosting or sponsoring this year that you encourage our readers to attend? Beyond UPMC Enterprises, are there any conferences you look forward to attending that you would suggest to readers?

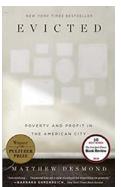
Rasu: Part of the reason I attend a lot of conferences is that we want to be front and center to a lot of the activities and discussions that are going on- not just to attract the right entrepreneurs and partners but because we want to attract and maintain great talent. It's important for us to be involved in a very planned manner.



UPMC Enterprises' most recent conference, which was very successful, was hosted by the Center for Connected Medicine and was called the <u>Top of Mind 2018</u>. We hosted that conference in December, with the mindset of going into 2018, and we had some remarkable thought-leaders from across the country participate. The idea was to talk about substance and what's top of mind for our industry across the board. We hope to continue on with similar types of engagement. Continue to follow us on twitter (<u>@UPMCEnterprises</u>) to keep updated with other events and conferences we'll be participating in. There's a big conference happening in Vegas in the next couple weeks, the <u>HIMSS Conference</u>, so we'll have a significant presence there. I'm also the Chair of the HIMSS Innovation Committee, which I'm really excited about.

Julia: What books are you currently reading on these flights to Las Vegas? Any suggestions?

Rasu: I recently completed and highly recommend *The Third Wave* by Stephen Case. He talks about what it takes to start-up, speed-up, and scale-up a company. Steve Case is the cofounder of American Online, AOL. You know, "You've Got Mail!" Now I'm reading an



entirely different book that was actually recommended by Bill Gates in a tweet he sent out. It's called *Evicted*. It's a stronger book than most that I've read, and it talks about poverty and profit in the American city. It's astonishing, the way that it paints out the specifics of the imbalances in our society. I'm still working my way through this fairly long book, but I am gaining a new sense of appreciation in terms of the reality out there. We're trying to rethink paradigms and healthcare, and we need to

WAVE
STEVE CASE
ata warehouses, but

AN ENTREPRENEUR

consider not just data that exists within our electronic health records and data warehouses, but really look at social determinants of healthcare and where our patients eat, work, live, and play. Really interesting book, I highly recommend it.

Julia: I am adding them to my list! Thank you! Do you have any final words or pieces of advice?

Rasu: I will add one of the things that I love to push forward when I think about innovation. It's not just the "what" and the "how," because we have those defined and we've come to a good finesse around those, but also the "why." For us to have these ambitions at UPMC Enterprises, it's really important for us to develop our approach on the basis of empathy. We need to involve clinicians, patients, and users in the very design of our solutions and strategies. At the end of the day, it's about making an impact in what has traditionally been the very definition of healthcare, which has been "sick care." We're trying to challenge that status quo and say, hey, as a payer-provider system that has keen business acumen and an appetite for innovation and entrepreneurship, how do we reinvent the future of healthcare? You can't do that without involving humans. Lead first with empathy, and involve users in the design and strategies of solutions.

