

Shah Lab Update meeting notes

I. Topics covered during the meeting

- 1) IDEAS (Insight. Dialogue. Engagement. Action. Scale.) discussion series overview: Rhonda Haan, GEPP
- 2) Shah Lab Update-2021 Seed grant Cycle, Lessons learned, Impact Framework: Pallavi Gupta, Shah Lab
- 3) Shah Lab Seed Grantee Success 'ongoing' Story: Young Kim, School of Biomedical Engineering
- 4) Shah Lab Social Impact Firestarter: Bill Arnold, Foundry
- 5) Challenges of Working in the Field – AMPATH & SEWA Story : Sonak Pastakia, Pharmacy
- 6) Kenya Activity Update: Diana Harbison, GEPP

II. Action Item:

Please respond to the Shah Lab Social Impact survey: <https://purduefoundry.com/shahlab>

III. Detailed Notes

1) **Insight. Dialogue. Engagement. Action. Scale.**

- The IDEAS discussion series is a collection of conversations that we are putting together. It was initially focused on reaching out to field partners and learning about the challenges they were facing with COVID. We have expanded that to include faculty and their research. Learning more about their work and sharing that information with you.
- How the IDEAS series works: You let us know if you are interested in having a conversation, we will set up the conversation with someone of your choosing, and then we edit and post it on our website, and share it with our partners and donors. We hope sharing this information leads to new avenues for collaboration, scale and funding. It may also be used to share with students to inform them about the project, along with it being a record of your work; a 20-minute video that you can share with new partners, students, donors and other collaborators. You may have many published papers on your work, but this doesn't attract much attention from the non-academic world. IDEAS video could be a way to spread the word.
- We have had one conversation with the organization SEWA which is already on our website. We are in final stages of editing a conversation between Jackie Linnes and WHP and are in the planning stages with Stacey from PPRI and CRS. We are looking for more participants. All we need is your agreement to participate and we'll make this manageable for you.
- **IDEAS Website:** <https://engineering.purdue.edu/GEP/ShahLab/IDEAS>

2) Shah Lab Update – 2021 Seed grant Cycle, lessons learnt, Impact Framework:

- Support translation of R&D into solutions for social good. This is a work in progress and will evolve and change. We hope to use local partner knowledge and connections for codeveloping relevant solutions, and their local network for replication and scale. Our impact framework highlights three main pillars (see power point).
- We continue to gather information about existing, ongoing 2019-present projects. We are also trying to look backwards at pre-2019 funded projects and gather more information.
- We want to focus on translating existing research and finding new/other donors who can help scale these ideas. How do we replicate and scale the ideas we have? The challenges are how do we ensure our partners have capacity to use our IP to execute it because we cannot be everywhere in the field. Pallavi is working with PRF and SPS to find an alternative mechanism to create humanitarian IP guidelines so that our partners have easy access to what Purdue faculty create, also so that potential partners can use that IP to implement and scale the solutions.
- The second bottleneck that Shah Lab is trying to help alleviate is providing support for Seed grantees who want to spin their innovation into a startup with social impact motivations. For this we are partnering with the Purdue Foundry to provide a '*Shah Lab Social Impact Firestarter*' program. Bill Arnold from the Purdue Foundry will share more information on this.
- Lastly, proposals GEPP/Shah Lab are coordinating and facilitating. (see power point slide for details).
- We have begun 2021 Seed grant cycle and are in problem collection phase. This year We are also trying to collect problem statements from entities working in the US to support Reciprocal Innovation model. We will send the information to faculty, ask you to mark the ones that are relevant to your research. Those problem statements will become the selected ones that we seek proposals for (the information will be posted to [Shah website](#)). We will then proceed with the same steps we used last year (see power point).
- The last slide is on the lessons learned that came out of our individual conversations with grant recipients (detailed in power point).

3) Shah Lab Seed Grantee Success 'ongoing' Story

- mHealth spectroscopy: using data science to minimize hardware complexity. Use cell phones to extract inner eyelid pictures and data to support diagnosis. (see power point)
- Continuing to work with the GEPP/Shah Lab has been very helpful to my research efforts as they have helped me coordinate efforts for new large complicated funding opportunities and expand the efforts I have ongoing. They have also been very helpful in identifying new partnership for my work, currently in India.
- Journey of his work: slide 3

4) Shah Lab Social Impact Firestarter

- Firestarter is a great platform but it needs to meet the needs of social startups not just startups that attract venture capital platform.
- Ensure that startups understand how to incorporate ethical practices in their operations.
- We get a lot of things coming into the foundry that have a social motivation behind them. We have tried to mold them into our programming and it doesn't work nor can we change what we have in place to meet them so launching a Shah Lab social impact component is very appealing to the Foundry.
- Our goal is to help Shah Lab grantees become operational/expand to meet demand/scale
- Firestarter content will be modified, to fit the need of a social impact startup.
- Seed grant recipients will form the core candidates for the Firestarter as they are the people who understand existing customer (seed grant partner and recipient), understanding of the problem that exists, so we already know certain important attributes. Your idea is already geared to a market need. So, we will try to figure out how to expand without sacrificing existing operations and matching motivations between partners, faculty, customers and identify a pathway forward. Many faculties have grad students for short periods of time or funding ends. So how do we keep that going and how do we message/communicate the work you are doing for maximum impact.
- Participants, seed grant awardees past and present but we will not stop there. We want to address the needs of anyone who fits into this category – at Shah Lab, at Purdue, Indiana and beyond.
- Firestarter is 27 hours of content that include 9-10 hours in a cohort where you talk about your customers and who your customers might be. Since you already have a good idea of who your customer is (need to separate, partner, customer and end user) we think we need to adjust the time you commit to the program
- We have a page on our website that has a questionnaire form seeking interested participation. From that I would like to talk to you to understand what the best delivery mechanism would be. What content duration, communication, over what period of time?
- www.purduefoundry.com/shahlab

5) Challenges of Working in the Field – AMPATH & SEWA Story

- Differences between Grant Proposals and Reality: NIH and other major health-related funding centers are starting to give more grants to projects that are using Implementation Science. This is a method and strategy of getting tools and processes off the shelf and into the hands of people who need them.
- We need to be wary of the different issues that can throw a proposal off the timeline. Sonak pointed to examples of these issues and how it affected his programs while working in Kenya; Coronavirus, political unrest, doctor's strike, and natural disasters. Sometimes programs have to be set aside to work on current issues and Sonak has asked that Shah Labs be aware of this and continue their funding efforts despite issues that we can't plan for.
- Working with AMPATH to make a more wholistic model for meeting needs. Programs need to have activities based on the community. Instead of focusing on one area of health, focus on many areas that will have a greater impact and reach. (see the slide)
- SEWA is struggling under COVID. They have had to implement new strategies to reaching out to the community.
- <https://indianactsi.org/researchers/services-tools/global-health/global-health-innovation-exchange-reciprocal-innovation/>

6) Kenya Engagement Activity

- Non-binding MOU between Moi Dean School of Engineering and the CoE at Purdue, through GEPP office. This will focus on short and long-term faculty exchange, undergraduate and graduate student exchange, collaborative research and discovery, learning, and teaching and engagement, and other mutually agreed upon educational or research programs.
- We are taking a year to develop this MOU to cement our relationship and to make sure that Moi has the ability to support our work there.
- GEPP is focused on maintaining communication with faculty and students working in Kenya, communication with AMPATH Team Leader, maintain our house for faculty to rent in Kenya, and seek partnerships and funding to support CoE work.
- AMPATH will be expanding to Ghana they are actively recruiting and hiring.

IV. Attendee List

- Abhijit Karve, PRF
- Alec Lanter, CoE
- Anne Dare, External
- Arnold Chen, MRGN
- Bill Arnolds, Foundry
- Bryan Pijanowski, CoA
- David Warsinger, CoE
- Dharmendra Saraswat, ABE
- DHR Sarma, PRF
- Diana Harbison, CoE
- Dwaine Jengelley, CLA
- Gary Burniske, CGFS
- Guillermo Paniagua, CoE
- Heidi Arola, Global Partnerships
- Heidi Parker, CoE
- Jake Hunter, CoE
- Jennifer DeBoer, CoE
- Jerry Shively, CoA
- John Lumkes, ABE
- Jun Chen, CoE
- Kristen Bellisario, CoA
- Lakshya Bhatnagar, CoE
- Luanne Bermel, WGHI
- Mangala Subramaniam, CLA
- Martin Okos, ABE
- Matthew Vining, CoE
- Natasha Duncan, CLA
- Pallavi Gupta, CoE
- Ramaswamy Subramanian, Bindley Center
- Rhonda Haan, CoE
- Seokcheon Lee, CoE
- Sonak Pastakia, Pharmacy
- Stacey Connaughton, PPRI
- Tami Sells, CoE
- Young Kim, CoE
- Tamara L. Kinzer-Ursem, CoE