

Mini-MBA Fellows, Summer 2020



HMPA mini-MBA 2020 Fellows



Dr Chukwuemeka Okoro, PhD
Harvard Medical School
Massachusetts General Hospital



Dr Jiska van der Reest, PhD
Harvard Medical School
Brigham and Women's Hospital



Dr Saumya Gupta, PhD
Harvard Medical School
Broad Institute of MIT
Dana-Farber Cancer Institute



HARVARD
GSAS Business Club

The **Mini-MBA Program** offered by **Harvard GSAS Business Club** is a five-week accelerated business course designed for non-business students and is relevant to those who are interested in working in the management realm.

HMPA provided financial support to three outstanding postdoctoral fellows from Harvard Medical School and the affiliated hospitals/research institutions for the purpose of joining the 12th Mini-MBA in the summer of 2020.

This course introduces the material that MBA students encounter in their first year of business school. Instruction is led by professors from Harvard Business School (HBS) in the traditional HBS case method. Students are therefore able to master the core concepts of business while also engaging with complex business problems and real-world scenarios under the guidance of the world's top business thinkers.

Please read below the experiences of the three successful candidates selected by HGSAS and HMPA to be offered this special award by HMPA!



HMPA: Where did you do your PhD?

Emeka: University of Illinois at Urbana-Champaign

HMPA: In few words, what was your thesis about?

Emeka: My PhD thesis focused on the development of novel imaging tools, combining the polarization property of light with the nonlinear effect of light-sample interaction, for assessment of collagen-rich tissues. This approach is important because it opened huge possibilities for label-free, non-invasive quantitative assessment of cancers of collagen-based tissues (such as breast), leading to more accurate diagnosis and prognosis. Quite importantly, my eyes were opened to the world of using technology to solve challenges; which helped inform my long-term goals.

HMPA: Could you explain in few words your postdoctoral project?

Emeka: I am leading the technical development of multimodal endoscopic imaging system combining the longitudinal imaging capability of OCT (optical coherence tomography) with the conventional cross-sectional visualization of white-light in a miniaturized tethered pill-sized capsule, for analysis of the gastro-intestinal tract. This project, anchored in Dr. Tearney's Lab at MGH, has the aims of reducing cost of such endoscopic procedures, while generating more useful imaging datasets to tackle conditions such as Barrett's Esophagus, celiac disease and peptic ulcers. The exciting part of the project is seeing the whole translational pipeline: from inception and ideation, to design and development, all the way to implementation and clinical trials; and of course, adding to scientific knowledge through the process.

HMPA: What was your experience during the 2020 mini MBA?

Emeka: I'm almost certain this mini-MBA was designed specifically for me. It afforded me the opportunity to listen to top-notch MBA professors and learn from them in a compressed timeline. We discussed many interesting business cases, involving companies such as Uber and Amazon, and spanning from as far back as 1972 to as recently as 2018. I was able to get a crash course in topics like marketing, operations and entrepreneurial management: useful tools for some of my plans involving translation and commercialization of innovative digital health tools. It was unique doing this over Zoom this year, but it turned out quite well, especially with having smaller discussion groups in breakout rooms.

HMPA: How did program impact your journey at HMS?

Emeka: The mini-MBA program not only enlightened my eyes to some of the features of business administration, it equipped me with valuable tools for tackling future subjects; whether ethics in business/science, organizational behavior, or even thinking about macro-economics. This has added to the variety of skills I am gaining in my journey through Harvard Medical School, and I am grateful for the opportunity the program provided. While not a full MBA program, it fit nicely with my need to blitz through business management fundamentals in tandem with my current projects.

HMPA: What are your aspirations?

Emeka: My long-term goals involve providing solutions to medical/healthcare challenges, particularly if it reduces cost to improve access in developing communities. This may be through scientific advancements and/or entrepreneurship. To this end, I am delighted by my postdoctoral work and partly exploring future roles/partnerships that would foster this kind of technological progress (whether in academia or industry). Additionally, I have been working on a novel health-delivery project over the last six months, using an approach that will hopefully transform current standards, especially in emerging markets. The unique model is currently being optimized (helped in no small part by the mini-MBA course), and I recently got a physician collaborator as we attempt a push into startup phase.

HMPA: Final thoughts?

Emeka: I highly recommend the mini-MBA program as an experience worth having, no matter one's plans.



HMPA: Where did you do your PhD?

Jiska: I completed my PhD at the Cancer Research UK Beatson Institute at the University of Glasgow, UK.

HMPA: In few words, what was your thesis about?

Jiska: My thesis focused on the reciprocal regulation of redox homeostasis and metabolism in cancer cells. I developed a novel technology to measure the oxidation state of protein cysteine residues, which is a key protein modification that can trigger cellular signaling cascades, alter enzyme activities, and modify metabolic pathways.

HMPA: Could you explain in few words your postdoctoral project?

Jiska: In my postdoc, I am still researching cancer redox metabolism, but in the context of liver metastatic cancer. Most cancer deaths occur due to metastatic spread of tumors, and we unfortunately have very few treatments to prevent or treat metastases. I am developing a mass spectrometry imaging platform to spatially visualize the metabolic behavior of metastatic cells and how they interact with healthy cells. This platform is an important advance, as most existing technologies used to study metabolism are not spatially resolved and therefore cannot distinguish between individual cells. I envision this platform will be a powerful tool that can be applied to many other scientific questions involving cellular metabolism.

HMPA: What was your experience during the 2020 mini MBA? How did program impact your journey at HMS? What are your aspirations?

Jiska: The last time I had classes related to economics was probably in undergrad, so I expected theory-heavy classes that might be quite out of my depth as a scientist. I was pleasantly surprised by the Harvard Business School Case Method, which relies heavily on class discussions and reasoning to tease apart the problem and its causes, and reiterate together on a course of action that satisfies all stakeholders. Our class was very diverse, which made for great discussions where different views and experiences were represented. As a STEM major, it feels uncomfortable that there is never one answer or course of action to solve a case (and there was so much reading!). But real-life issues rarely have a single solution, which resonates with my entrepreneurial experience as cofounder of the social enterprise HepaHealth - we connect communities to care to help eradicate Hepatitis B in the Philippines. Working with many different stakeholders in a complex healthcare environment, in the face of strained resources, we have to get creative and continuously adapt to changing circumstances. I wanted to deepen my knowledge of business, management, and finance to become a better entrepreneur through the mini-MBA, and was delighted that HMPA selected me as a 2020 Fellow. The Harvard community has been so supportive during my time here, and I have found lots of professional development opportunities to strengthen my skills and ambition to translate scientific advances into solutions that improve society.

HMPA: Final thoughts?

Jiska: I would encourage other postdocs interested in exploring beyond the narrow academic path to join Harvard's many programs that grow your potential and energize you by connecting with the inspirational young professionals in our community.



HMPA: Where did you do your PhD?

Saumya: I did an Integrated PhD from Tata Institute of Fundamental research in Mumbai, India.

HMPA: In few words, what was your thesis about?

Saumya: I have always been interested in studying variation, be it at the level of population(s), individuals or single cells. The broad focus of my thesis was studying how genetic variation between microbial population(s) makes them respond differently to the same stress. For this, I used the tools from systems genetics, genomics and molecular biology to study gene expression variation in these populations.

HMPA: Could you explain in few words your postdoctoral project?

Saumya: My research broadly focuses on studying why an individual is more at-risk to a disease while its immediate relative is not. What makes them different? For this, I make mini organs (called organoids) from stem cells in the lab from closely related individuals, and study gene regulation at a genome-wide level. I am specifically addressing these questions to obtain a mechanistic understanding for variability observed in Crohn's disease and colorectal cancer.

HMPA: What was your experience during the 2020 mini MBA?

Saumya: This was my first experience of HBS case study method and it was truly spectacular! I loved the engaging traditional case-based method of learning about business fundamentals. I learned about multiple business situations that I think would be invaluable going forward.

HMPA: How did program impact your journey at HMS?

Saumya: This accelerated business fundamentals program has introduced me to like-minded peers who want to work at the intersection of life sciences, technology, and business. It has also expanded my scope of thinking. It not only made me acutely aware of the scope of my scientific research, but also of a path that I can take to realize such dreams.

HMPA: What are your aspirations?

Saumya: Going forward I would want to have an impact in the world of personalized medicine as an academic entrepreneur. I want to tap into my innate entrepreneurial spirit and have an outsized impact on healthcare innovation and commercialization.

HMPA: Final thoughts?

Saumya: I am very excited to see the Harvard Medical School Postdoctoral Association team up with the Harvard GSAS Business Club and facilitate the transition of postdocs towards entrepreneurship. I hope to see this blossom and be a sustained initiative.

Highlight | Coffee with a CEO: How to start a startup | October 18

Thank you everyone for joining this event! We had about 15 people in total attend this session and Dr. Andrea Gwosdow, Founder, Gwosdow Associates Science Consultants had a very engaging discussion with the group answering all of the questions.

Harvard Medical POSTDOC Association

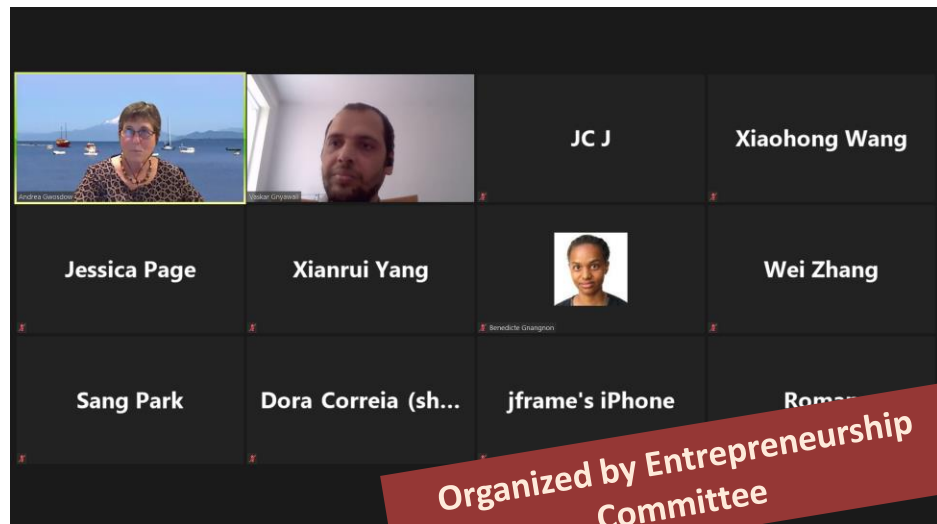
COFFEE WITH A CEO

JOIN US
to talk with a successful entrepreneur about business and creating your own company!

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Eventbrite: hmpa_ceo.eventbrite.com

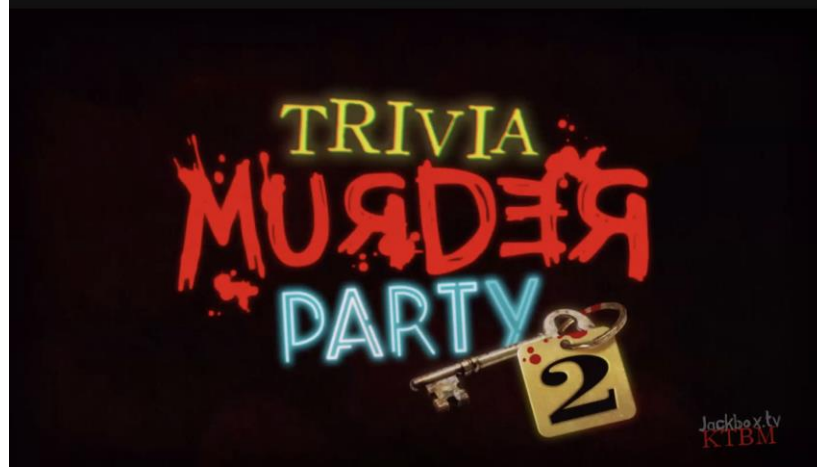
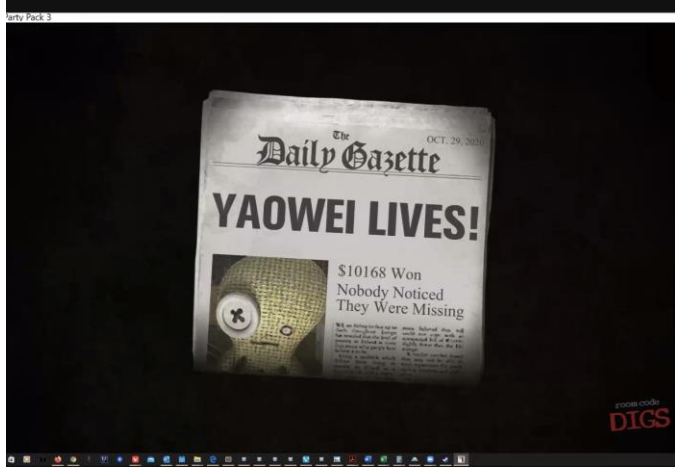
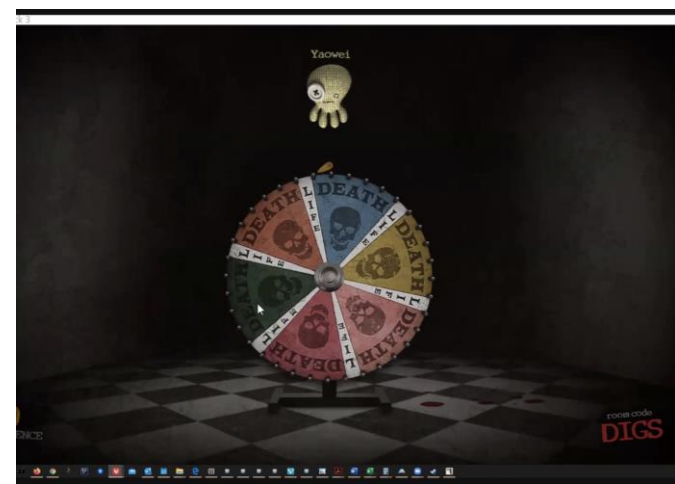
Zoom Seminar
Time: Thursday, October 8th
5:30pm – 6:30pm

Dr. Andrea Gwosdow, PhD
Gwosdow Associates Science Consultants



Organized by Entrepreneurship Committee

Highlight | Game Nights | October 1 & 29



Thank you all for joining our social virtual events! Both game nights were fun and a nice opportunity to meet each other while relaxing from a stressful week!

In addition, we would like to thank everyone who participated in the 'social nights' survey and suggested lots of creative ideas as well as time and platform preferences. Our committee will review all of the options and incorporate them to the future events!

Organized by Social Committee

Highlight | HMPA Survey: Having your voice heard

The HMPA community has been significantly impacted by the tremendous changes brought by 2020. To varying extents, the on-going COVID-19 pandemic, visa/ international travel restrictions, and social justice movement have affected our physical and mental health, as well as the flow of our work lives. In unprecedented times like these, we need the collective mind of our community to best advocate for the health and well-being of postdocs. Therefore, the HMPA Advocacy Committee invited all postdocs to make their voices heard by participating in a 15 minute anonymous survey covering topics like the COVID-19 pandemic, Black Lives Matter, and general work environment. We counted more than 300 participations and the full report is expected to be released by early 2021. A few early highlights are listed below:

- Postdocs generally feel safe under their institution's COVID-19 protocols.
- It was recommended that PI's undergo mentorship/management training to improve workplace quality of life.
- In some instances, postdocs are not being paid the NIH minimum salary.
- Postdocs would like a clear resource for reporting workplace misconduct

Organized by Advocacy Committee

Highlight | HMPA Tea Time: Together Empowering All

The HMPA Advocacy Committee introduces TEA Time: once a month our committee will host an open Zoom session where you can directly connect with us. Whether you want to request an HMPA service, share concerns about work, learn how to navigate Boston, or meet new people, we will be there for you.



Grab your drink and join us the first Friday of each month!

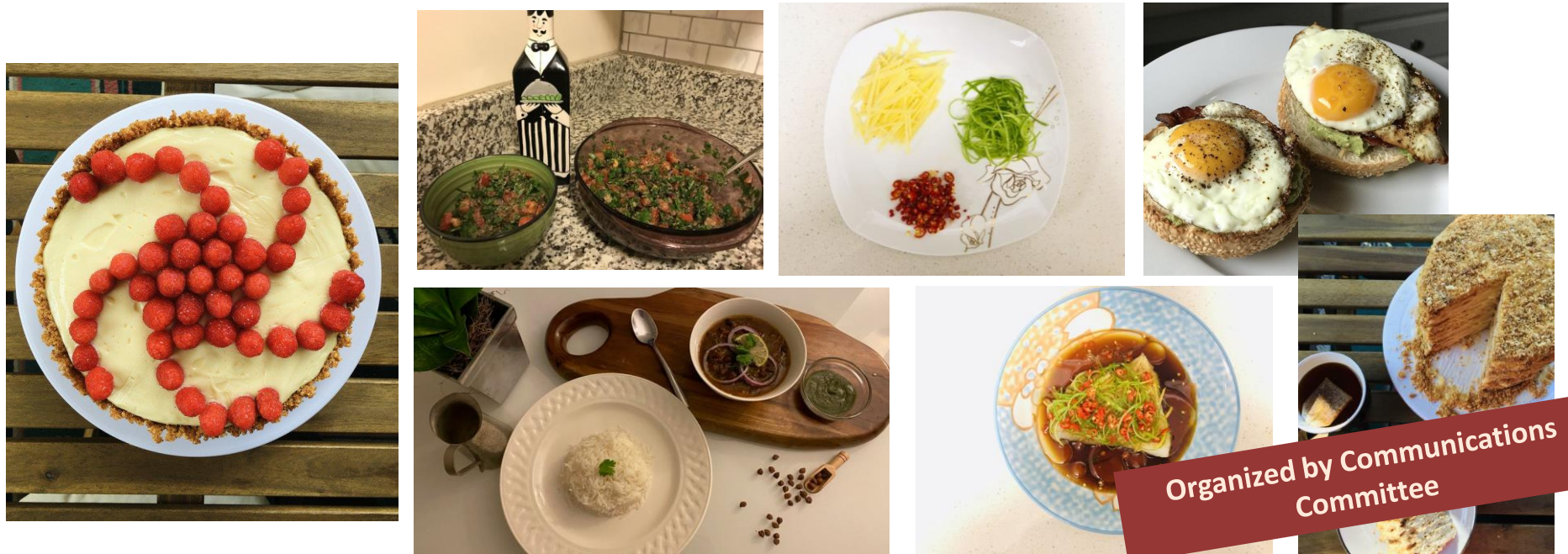
Upcoming sessions
Friday, November 6th 6-7 pm, [zoom link](#)
Friday, December 4th 9-10 am, [zoom link](#)



Organized by Advocacy Committee

Highlight | "Postdoc Recipes": A cookbook by the HMPA

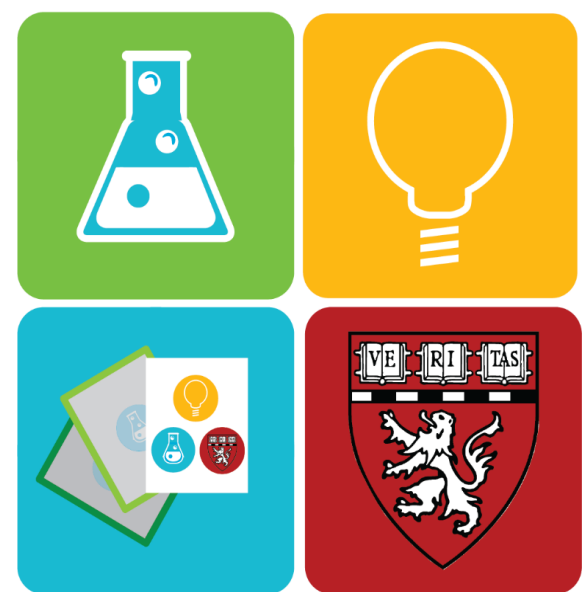
Thank you to everyone who submitted their favorite recipe they love to cook! The Communications Committee is now in the process of preparing the HMPA cookbook, "Postdoc Recipes". Below are a few of your shares; please stay tuned because some delicious recipes are on the way!



Organized by Communications Committee

Highlight | Professional Development Digest, Networking Virtually

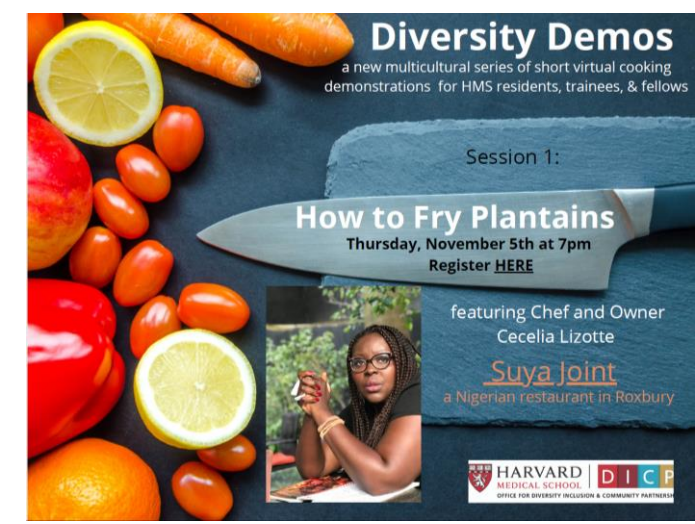
As we adjust our working lives to remote and virtual environments, we must adapt how we cultivate our future careers as well. While advancing your research, consider how you can continue to [build your collaborative and professional networks](#). Networking helps us create relationships that provide resources, support, insights, and more. Although this may feel unnatural at times, you can adopt strategies to help improve ([and even embrace](#)) your skills at building these relationships. Even without in-person seminars and conferences, you can still [make new connections and cultivate existing ones virtually](#). Virtual conferences can still be great opportunities to re-establish or make new connections. Within your lab group and research teams, communicate with your mentors on how they can support you, setup virtual coffee and lunch meetings with your academic peers, and [engage any mentees of your own too](#). Be sure to check out upcoming HMPA events as social and professional networking opportunities!



HMPA Professional Development Committee

Future Events |

- November 4 | **Global antibiotic production, marketing, regulation, and access**, Blavatnik Institute GHSM [link](#)
- November 4 | **Career Transitions & Building Skills & Experiences during COVID** [link](#)
- November 5 | **Diversity Demos** , HMS DICP [link](#)



- November 5 | **Postdoc Resilience: Managing Work & Job Search Stress** [link](#)
- November 5 | **NeuroBoston Fall 2020 Symposium**, Boston Area Neuroscience Group [link](#)
- November 5 | **Author Chat - Reinvesting in Your Rhetoric with Jill Slye**, WEST [link](#)
- November 6 | **COVID-19: Reflections and Updates**, Blavatnik Institute GHSM [link](#)
- November 6 | **Tea Time: Together Empowering All**, HMPA [link](#)



Harvard Medical School POSTDOC Association

How to Start A Startup series Funding for your idea

CURIOS ABOUT
How and where to look for funding your idea?

SIGN-UP NOW
to discover the funding opportunities to your great and creative commercially viable idea with **Dr. Erica Bechtold**.

Eventbrite: hmpa_funding.eventbrite.com

Virtual Seminar
Time: Thursday, November 12th
5:30pm – 6:30pm

Dr. Erica Bechtold
Director of Technology Commercialization
Wyss Institute
Business Development team, OTD, HU

- November 12 | **Coffee with a CEO: How and where to look for funding your idea?**, HMPA [link](#)