



Hello, Friends of New Harvest!

It's been quite the month. We've had the excitement of seeing some really great proposals near the end of the review/revision cycle - while also having to [close a project](#). Here's the scoop on this past April:

Organization

- **Developing our communications strategy.** Erin and I spent two days mid-month re-evaluating our Communications Strategy. It was extremely helpful to re-prioritize our platforms and remind ourselves what content was most important to communicate. The result? A focus on sharing the progress of our research projects, while emphasizing the need for academia and industry to co-exist to make cellular agriculture a more resilient field. You'll be seeing us dedicating more effort to Medium and Instagram and less to Facebook.

Fundraising

- **Fundraising status.** New Harvest has received **\$178,039.78** in donations between Jan 1 and April 30 of 2017. By comparison, during the same period in 2016, New Harvest had received \$133,346.67.
- **Income from speaking engagements.** New Harvest has earned **\$15,000** so far this year as Program Service Fees for speaking engagements. Any fees received by New Harvest staff for speaking engagements go to New Harvest the organization by default.
- **New donors.** We've seen 46 new donors make their first contribution to New Harvest in 2017. Eight new donors in April alone!

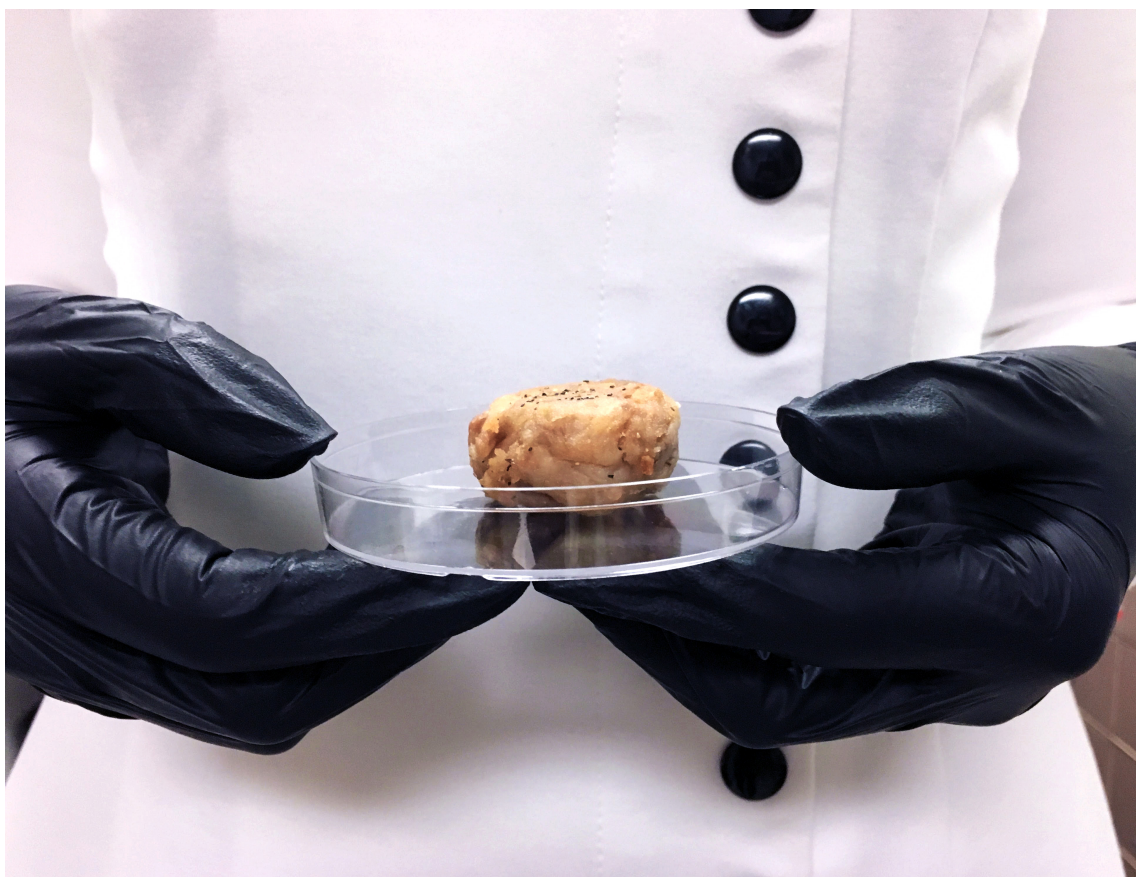
- **More monthly contributors.** There were 3 new recurring donors this month! We started the year at 50 recurring donors and now we're up to 64. Our goal is to have 100 donors [making a monthly contribution](#) by the end of 2017.

Research

- **We discontinued our first research project.** On May 1, 2017 New Harvest discontinued the research conducted by Abi Glencross at King's College London focused on 3D vascularized tissue for the production of cultured meat. It was the first New Harvest-funded Fellowship Project, and it began in November 2015.

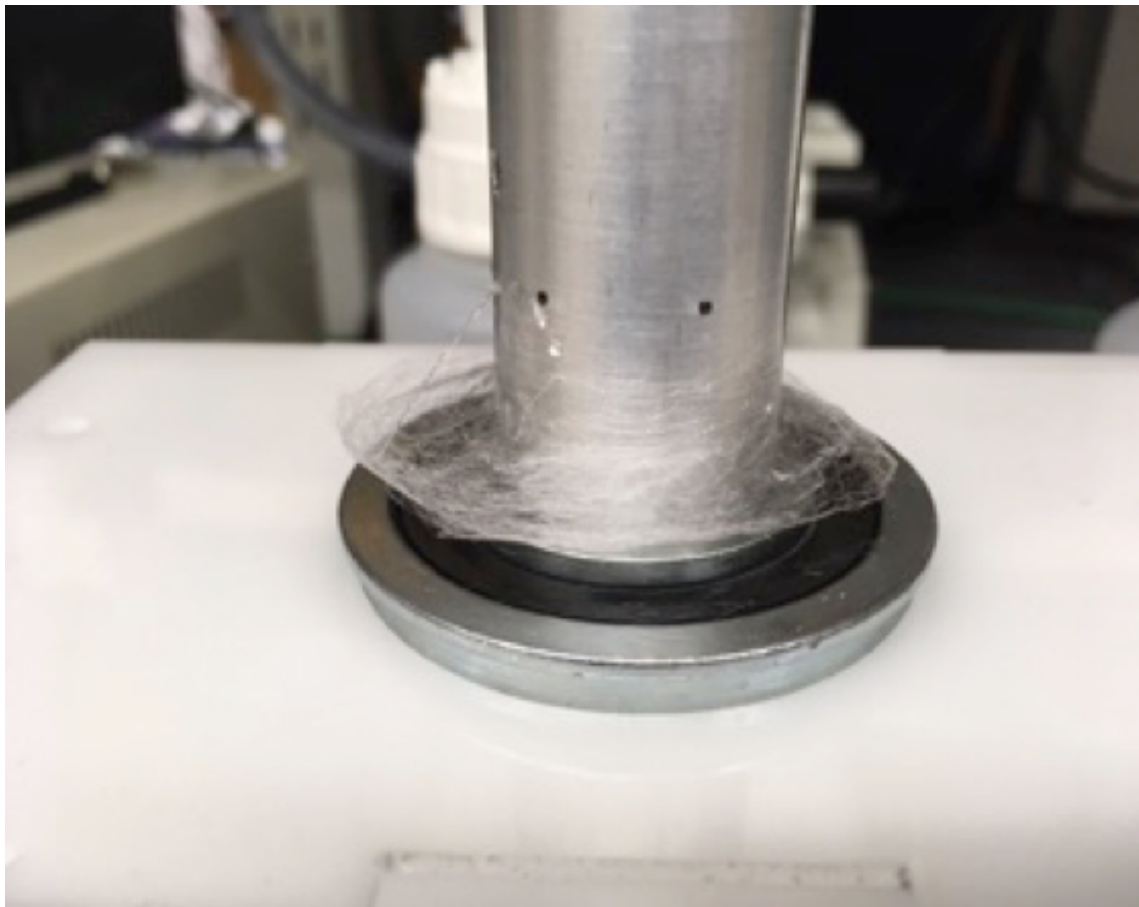
A variety of situational factors made this project no longer an effective use of donor dollars. Some of the reasons for discontinuing this work include 1) an ambitious project that was not meeting the proposed timeline 2) challenges of the Research Fellow addressing a more “unconventional” approach to tissue engineering, 3) inadequate research support in this new field from the existing scientific community. New Harvest has made several improvements to the Fellowship program based on following the progress of this project. [We wrote up a Medium post to share the background and our learnings from the experience.](#) We'd love to hear your feedback!

- **The fellows have gone crazy for plant scaffolds.** Since sending Jess Krieger and Abi Glencross to the Pelling Lab in Ottawa, all the fellows have been excited to start side projects looking at plants as scaffolds for cultured meat production. Everything from potato to artichoke to jackfruit! Marie, below, seeded turkey muscle cells onto an ethanol-washed piece of jackfruit which has conferred a very meat like structure. Intriguing! We'll be focusing exclusively on plant scaffolds at the Pelling Lab with a new project this fall. Half of the funds have been committed by the Scott and Cyan Banister Freedom Fund and the other half is just about set - should have some very positive news next update!

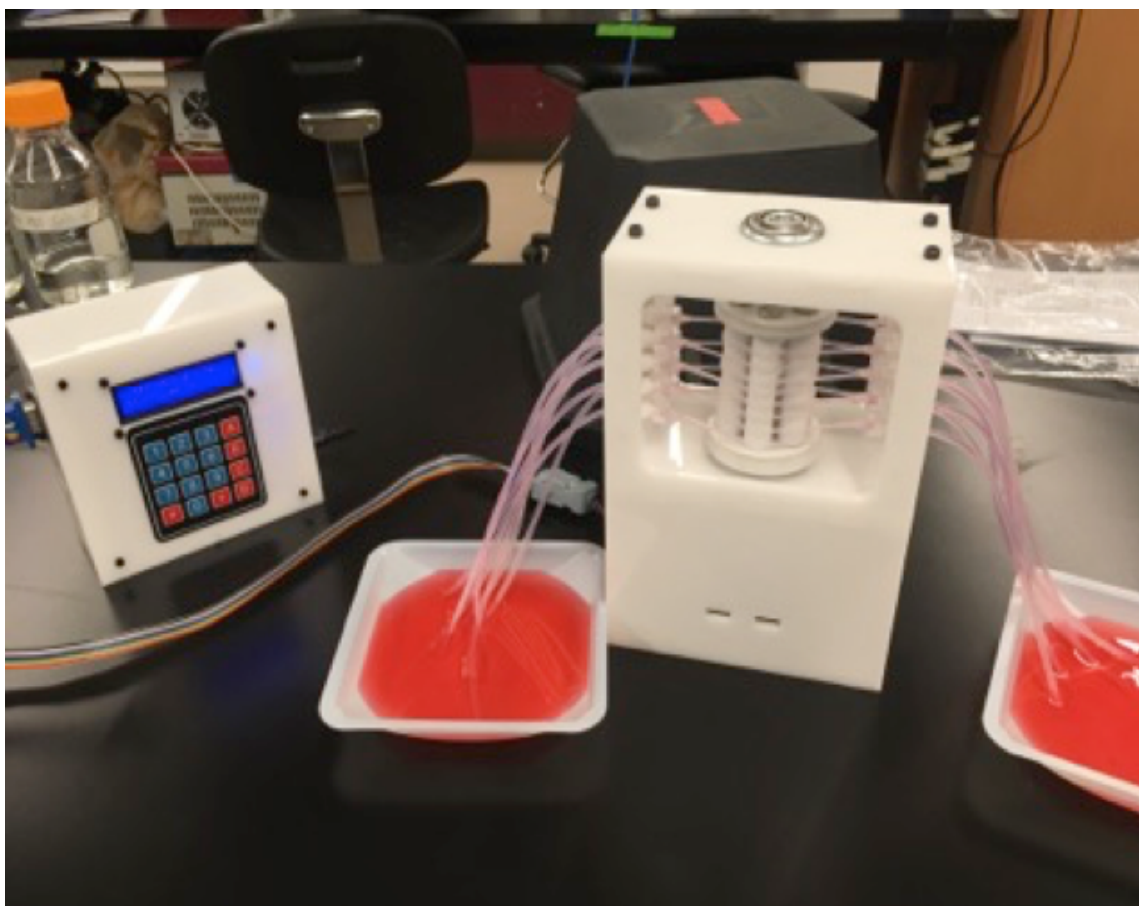


Turkey cells seeded on jackfruit - and prepared as a nugget!

- **Third disbursement of funds to North Carolina State University.** [Our project on avian tissue culture](#) is going swimmingly, and we just sent \$29,700 to cover the next 6 months of research. These funds were committed by the Shuttleworth Foundation, who has agreed to cover the last instalment in October 2017 if the project continues to stay on track. If all works out, this project will be complete in May 2018.
- **New proposal in revision.** Two months ago we received a proposal *Vascular Tissue Engineering and Bioreactor Design* from Kent State University. We've spoken to the student and the supervisor, and it has undergone two independent reviews. The proposal is currently in revision to narrow down some of the objectives that have been laid out. We were excited about the sacrificial sugar scaffold that was proposed, and impressed by the bioreactor that was built by this cell biology student in cooperation with a team of engineers. **This project will cost \$105,000 over three years.** Let us know if you're interested in supporting it!



Sacrificial sugar scaffold aka cotton candy...



Student-developed peristaltic pump for for a cultured meat bioreactor

- **New proposal in review.** Last month we received a proposal from the UK focused on the stoichiometry of cultured meat production titled *Cultured Meat Bioprocessing Design*. From the proposal:

Following the proof of concept that meat can be cultured in a lab by Prof Mark Post in 2013, the next step is to design an efficient process that can be scaled-up to an industrial size process with the goal of making cultured meat a financially viable large-scale production process. To accomplish this, engineering fundamentals of feed requirements and waste products need to be quantified for the various bioreactor options available. This can then be translated into the design of a bioreactor that is efficient in terms of capital and operating costs. The focus will be on designing a bioreactor that can be scaled up for the industrial cultivation of meat cells for use in the production of processed meat products.

I've already spoken with the student and the supervisor (longtime collaborator Dr. Marianne Ellis), and we've begun to share the proposal outwards for independent review. This is crucial research that will inform life cycle assessments for cultured meat production. **This research will cost £75,200 total (approximately \$94,000 USD) for 4 years.** This project is relatively inexpensive because of unique funding support that the candidate has already received through their university. If you are interested in supporting this project, or have any questions about it, please get in touch!

- **New proposal received.** We've just received a proposal from Andrew Stout, a student accepted to do a PhD at Tufts University, and former Maastricht University student under Dr. Mark Post's supervision. We're excited about this project, *Controlled, switchable differentiation of skeletal muscle in vitro through cell line and matrix engineering* because of the importance of ensuring that multiplying cells will be destined towards becoming muscle cells in culture. We're also keen to try having two Research Fellows in one lab (Natalie Rubio is already a fellow in the Kaplan Lab). This proposal is currently under review.

Communications

- **The conference.** We have come as far as we possibly can on a contract with the venue - we're just waiting for the signature from the other party. Don't worry, donors will receive the first mail out on conference dates!

- **Team New Harvest was profiled in the *Bay St. Bull's* guide to 30 influential Canadians under 30.** Check out the story [here!](#)
- **Erin and I attended ProFood Tech**, a large food processing conference in Chicago from April 5 - 6, where I moderated a panel discussion which included Ryan from Perfect Day. It was a great opportunity to connect with people working in large scale food production, including dairy and meat processing - we'd definitely like to do more of this kind of networking in the future.
- **Erin recorded a podcast** interview with Matteo de Vos of For Food's Sake, available [here](#).
- **Erin spoke on a Future of Food panel hosted by Babylon Farm** on April 19 alongside Algama and Exo Protein in NYC.
- **Cellular agriculture as a "Reducetarian Solution"?** Erin was invited to speak at a book talk for Brian Kateman's [The Reducetarian Solution](#), with Peggy Neu and Victoria Moran on April 20.
- **I gave a talk at "Modern Meat: The Science and Culture of Meat Substitutes,"** in a panel with Kent Kirshenbaum, Alan Levinovitz, and Ben Wurgaft at NYU on April 21. Awesome discussion and an engaged audience. Hope to share video of this soon!
- **We made an appearance on live TV** on April 25, for [Cheddar](#). Stay tuned on our newsletter for the link!
- **I'll be participating in a panel discussion** at the [Rethinking Animals Summit](#), May 6-7 in NYC.
- **Erin will be in The Netherlands May 26-27**, on a panel with the Thought for Food summit in Amsterdam.

And that's about it for this month! Many thanks to *all of our donors* for joining us on the journey towards developing animal products without animals. How incredibly exciting it is to be on the edge of this pioneering science with you!

Have a wonderful weekend,



Executive Director, New Harvest