



Hello, New Harvest Donors!

What a month! The team is busy with preparations for our July conference and we spent a good chunk of time in Boston this month for our Research Fellows Retreat.

Here are the latest updates from the team as we enter into March:

3/1/2018 YTD SNAPSHOT

- + Raised **\$110,985.41***
 - + **13** new donors
 - + Spent **\$54,590** in research grants
 - + **1** speaking engagement
 - + **20** media engagements
-

*Income & pledges in 2018

Conference



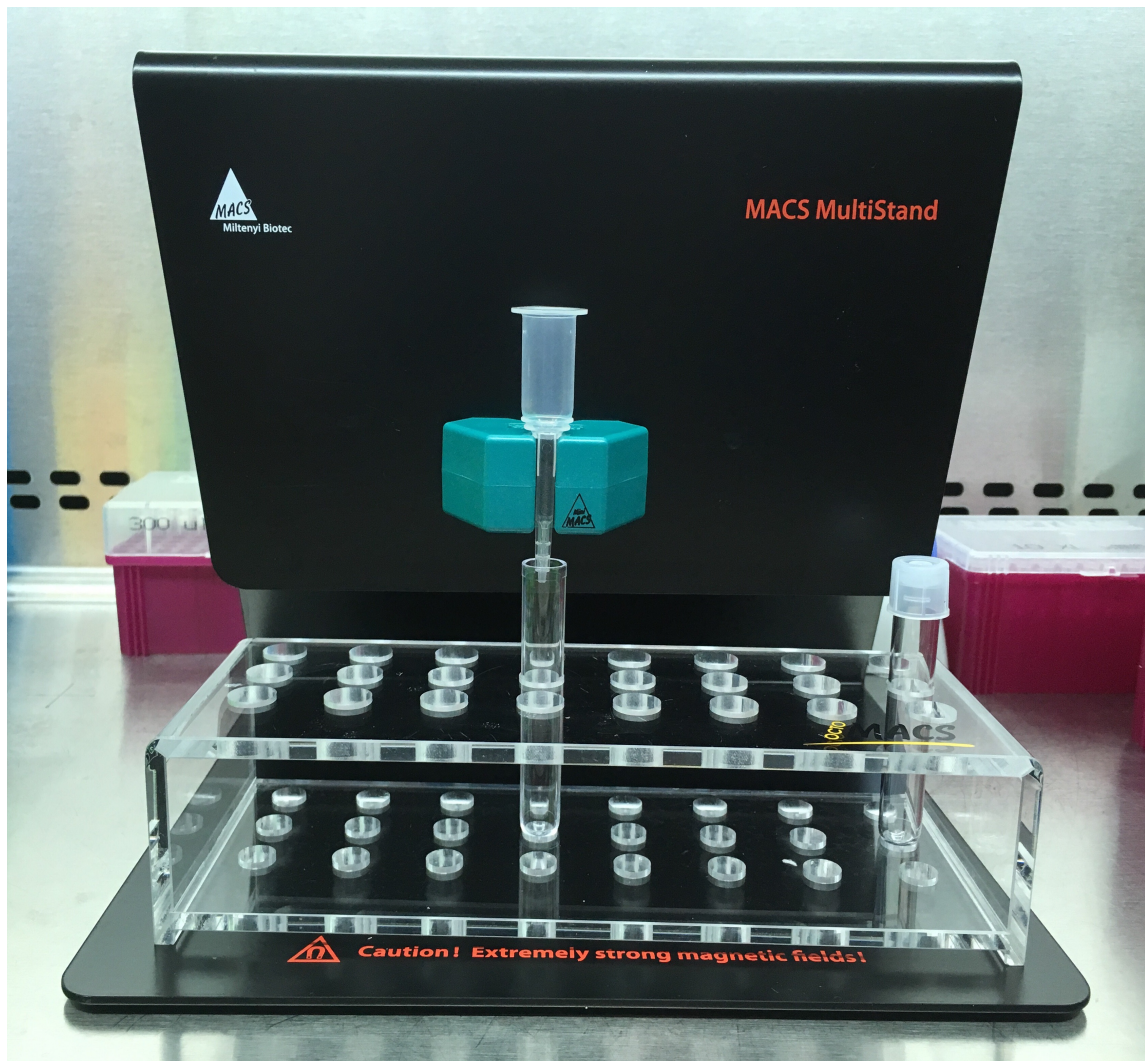
- **Mark your calendars! The New Harvest 2018 Conference will be held July 20 & 21, at the MIT Media Lab.** Join us in Cambridge, Massachusetts, for the third annual cellular agriculture conference. [We've updated our conference website with some more details.](#) More to come soon!
- Would you like to **share your research, work, and/or prototypes at the 2018 New Harvest Conference?** [Apply here.](#)
- **Want to volunteer** at the upcoming conference? [Apply here.](#)
- As we aim to keep our ticket prices as accessible as possible, our conferences are made possible through the financial support of sponsors. If you or an entity you know are interested in **sponsoring our conference**, please [get in touch](#).

Fundraising

- **Fundraising status.** New Harvest has received **\$110,985.41** in donations and pledges in 2018 to date. This does not include ticket sales, sale of merchandise, or income from speaking engagements.

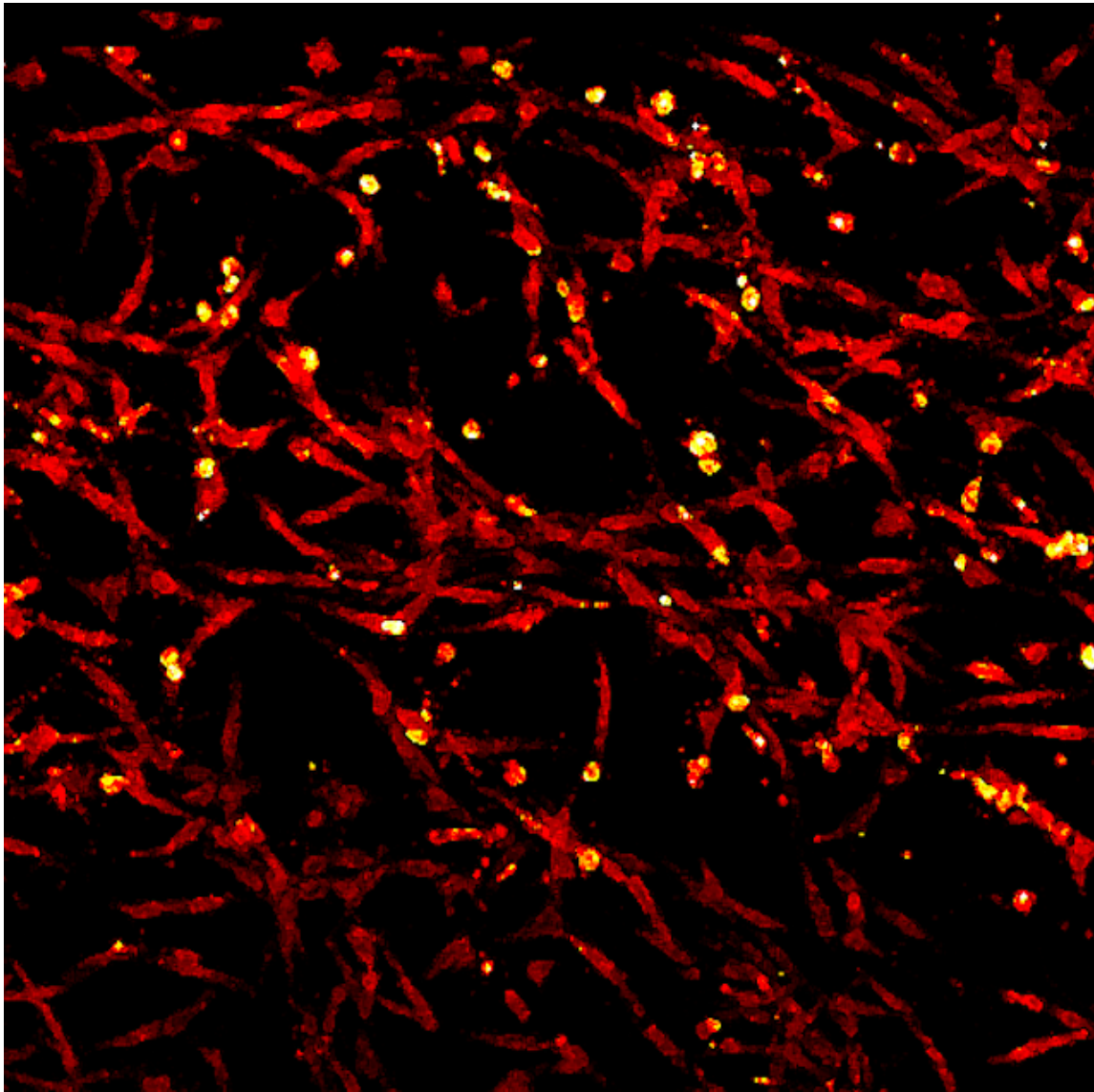
Research

- **Magnetic attraction!** New Harvest fellow Jess Krieger is using magnetic beads attached to antibodies (a technique called magnetic-activated cell sorting, or MACs) to purify her isolated porcine muscle cells! Cells that have muscle markers will stick to the beads, and the non-muscle cells will flow through, leaving an enriched population of muscle cells.



New Harvest Fellow Jess Krieger's MACs in action! Porcine muscle cells stick to the magnetic beads, and the cells that are not muscle flow through.

- **Jess took some pictures** of these cells on the multi-photon microscope to test how well they make myotubes, an indication that the muscle cells are enriched.



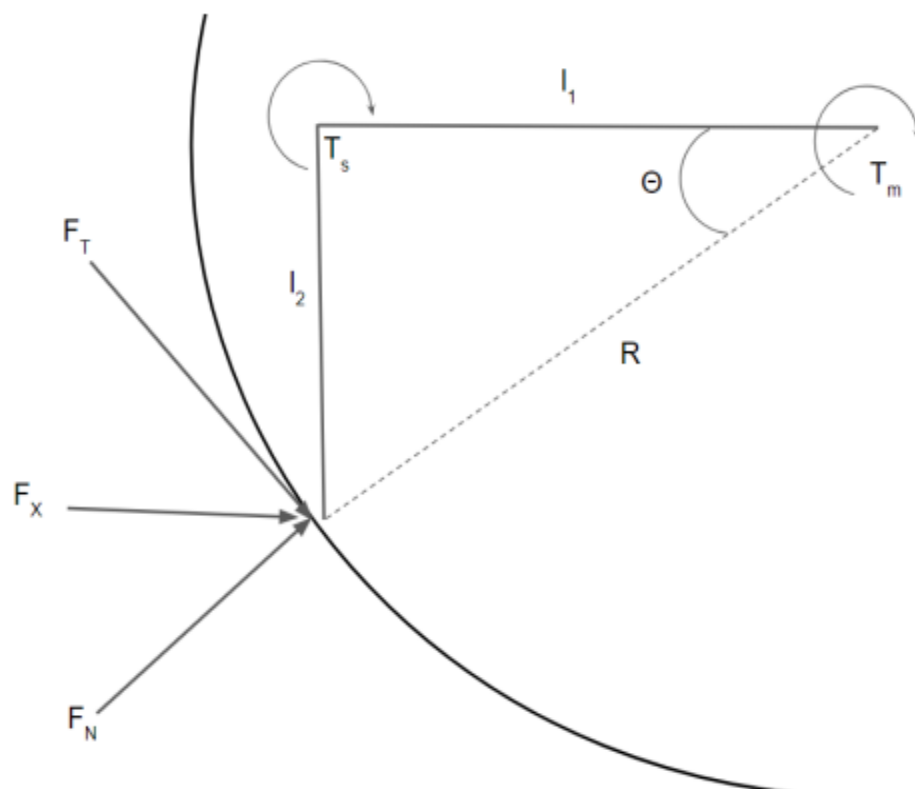
Jess Krieger's beautiful myotubes grown on a fibrin hydrogel. Looks like there are a lot of muscle cells here!

- **Our Seed Grant Bioreactor team**, advised by Jess Krieger, recently submitted its Phase 1 final report. Here are some of the components they've made!

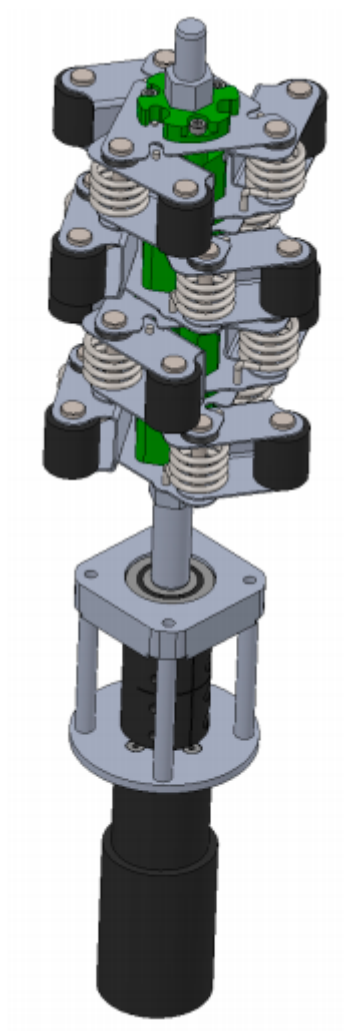


The manufactured outer shell over the inner core houses the bioreactor trays.

- **The Bioreactor team** also shared some of their diagrams and calculations. They spent a lots of time and effort to design a pump head that would meet the demands of near-constant operation. Along the way, they made a number of force diagrams (a type of diagram showing the various forces acting on an object, and the magnitude and direction of the forces) and renderings.

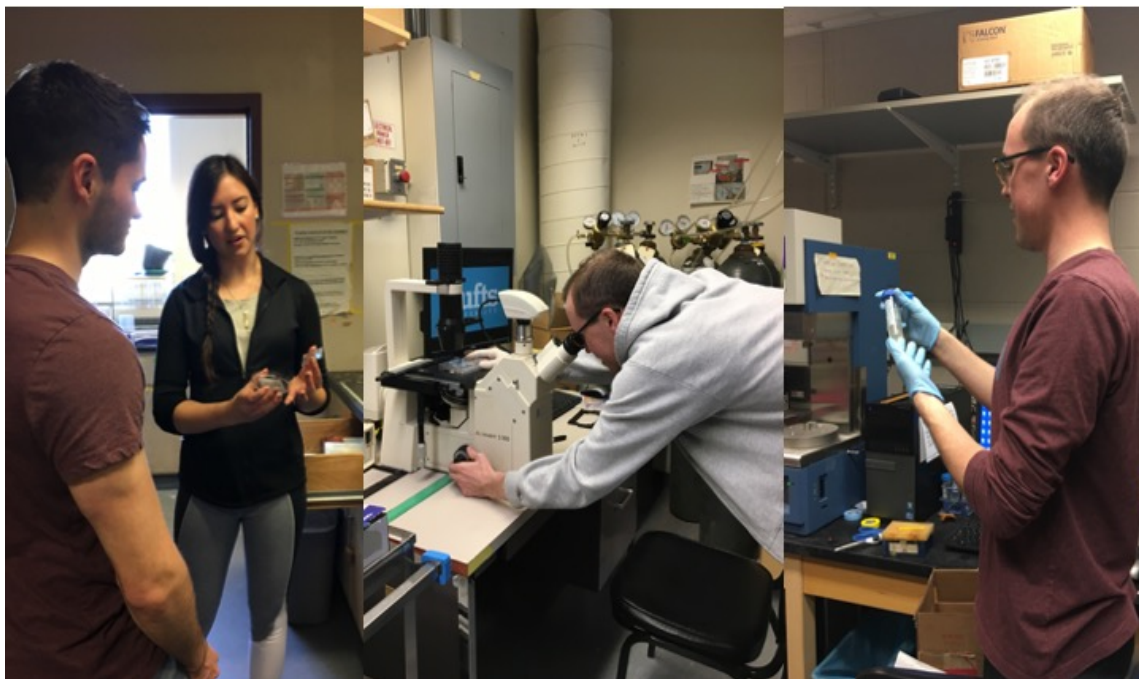


Force diagram for the theoretical model of the spring arm.



A rendering of a pumphead with four modules attached.

- **The New Harvest team just wrapped a successful retreat** in Boston! New Harvest fellows Jess Krieger, Scott Allan, Santiago Campuzano, Marie Gibbons, Natalie Rubio, and Andrew Stout met up with the New Harvest staff for lab demos, teaching, and team-building.



New Harvest Fellows Scott, Natalie, and Andrew (twice!) visiting the Kaplan lab at Tufts University. Natalie and Andrew taught the fellows a few techniques pioneered by their research team.



Caleb Harper showed the Fellows his facilities at the MIT Media Lab OpenAg Project. The New Harvest team got to take a look at some of the plant bioreactors (the team is pictured in front of a shipping container that is being converted into a "food server" in the middle photo) and snap a few photos of some test cotton plants (at left).

- [**Did you know? While Eli Whitney patented the cotton gin in 1794,**](#) he was one of the first to question the utility of patents, writing, "An invention can be so valuable as to be worthless to the inventor." More about Eli Whitney and the cotton gin [here!](#)

Communications

- Earlier this month, I spoke at **The Atlantic's** event [Harvest: Transforming the Food We Eat](#) (alongside Alton Brown!). Video of the program is available [here](#).

Community

- **A shoutout to our friends at Perfect Day Foods**, who have raised an additional \$24.7M in Series A funding! You can check out their press release on some of their exciting recent developments [here](#).
- As mentioned above, we're kicking into conference mode - again! Please apply using the linked forms if you'd like to get involved as an [exhibitor](#) or [volunteer](#).

We've had a very busy month! We're excited to share updates on the conference as they roll out in the coming weeks. Hope to see you there!

Thanks for advancing this important work with us.

Until next month,

Isha, Erin, & Kate

The New Harvest Team