



Happy Spring, New Harvest Donors!

This month I've been thinking about Carl Sagan's quote:

"If you want to make an apple pie from scratch, you must first create the universe."

It reminds me of New Harvest's work. If we want to make cultured meat, we must first create the research, train the talent, and convene the community - essentially, create the universe from which cultured meat will arise.

With that, here's what happened in the cultured meat universe this past month (plus a [bonus sound track](#) for this month's update):

4/1/2018 YTD SNAPSHOT

+ Raised **\$129,609.88***
+ **19** new donors
+ Spent **\$84,090** in research grants
+ **1** speaking engagement
+ **20** media engagements

*Income & pledges in 2018

Conference



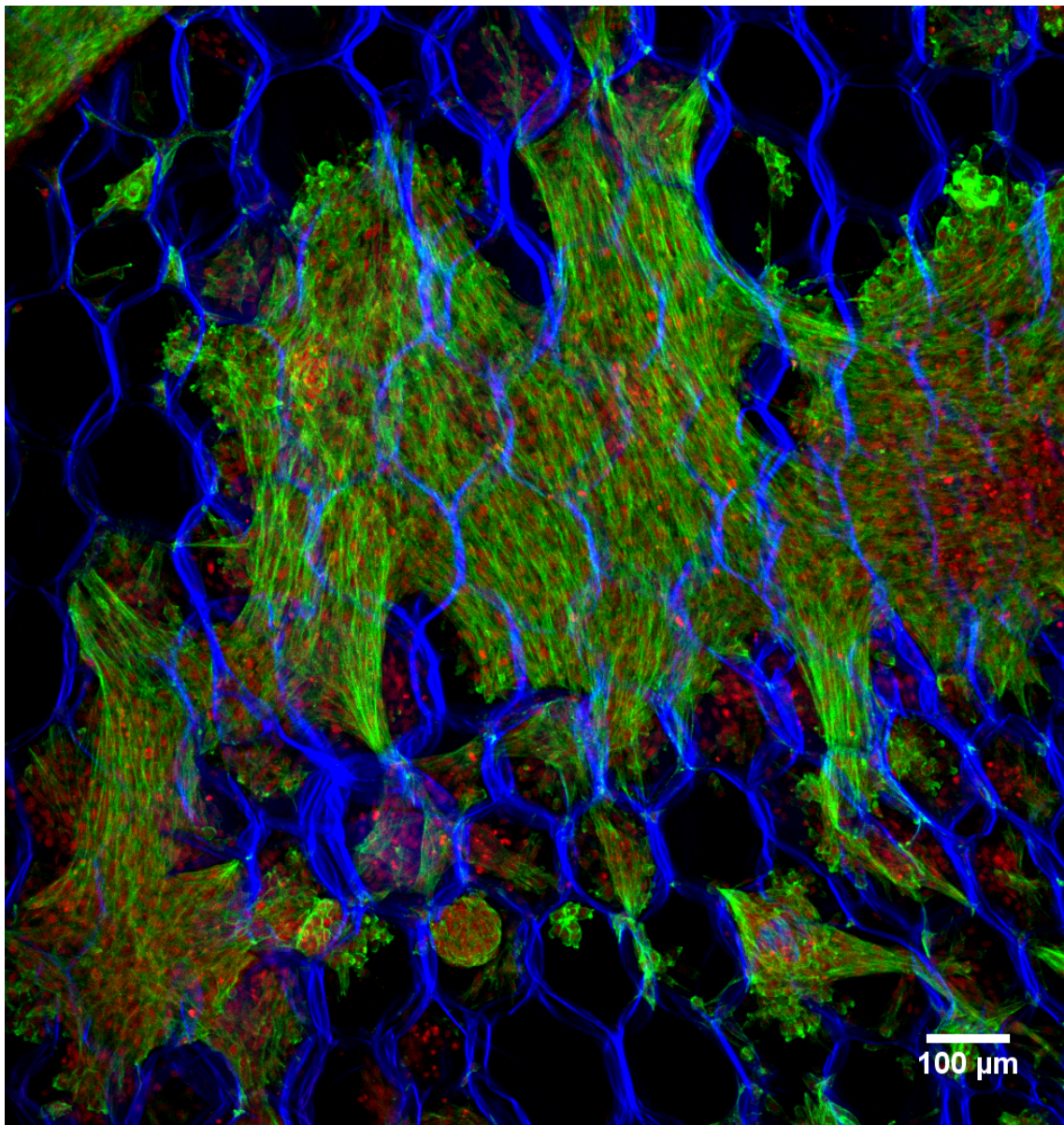
- **We have announced the first round of speakers for the [New Harvest 2018 conference](#)!** Our amazing lineup this year includes Chief Business Development Officer of the premium ingredients company John R. White Co. and renowned former President of the American Meat Science Association, **William Benjy Mikel**; **Niyati Gupta**, founder and CEO of the newly launched cultured meat startup Fork & Goode; Principal Investigator and Director of the MIT OpenAg Initiative, **Caleb Harper**; Director of Strategic Initiatives and Lead for Nutrition Innovation at Path, **Katharine Kreis**; Director of Business Development for Brooklyn SolarWorks, **Chris Neidl**; and New Harvest Research Fellows **Jess Krieger** and **Andrew Stout**. Additional speakers will be announced soon!
- **New Harvest 2018 Conference ticket sales are off to a great start!** International attendees, academics, and investors are among those taking advantage of our early bird rate. We are offering a \$100 off discount (regular rate \$600) on tickets until May 1. To register, please click [here](#).
- **Cellular agriculture entrepreneurs and researchers are invited to display their materials** (poster presentations, prototypes, and more) at the 2018 New Harvest Conference. [Apply here](#).
- **Want to volunteer** at the upcoming conference? [Apply here](#).
- 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

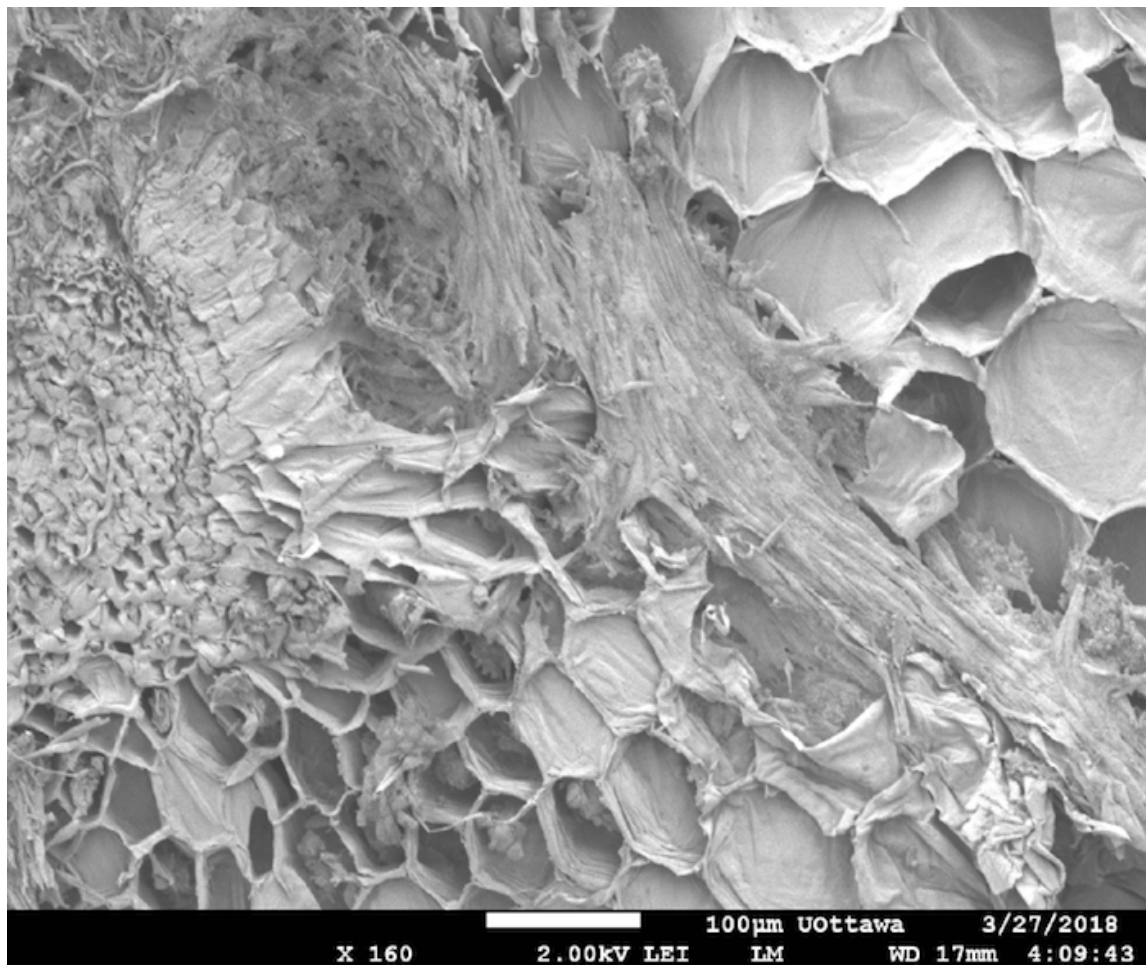
- **Fundraising status.** New Harvest has received **\$129,609.88** in donations and pledges in 2018 to date. This does not include ticket sales, sale of merchandise, or income from speaking engagements.

Research

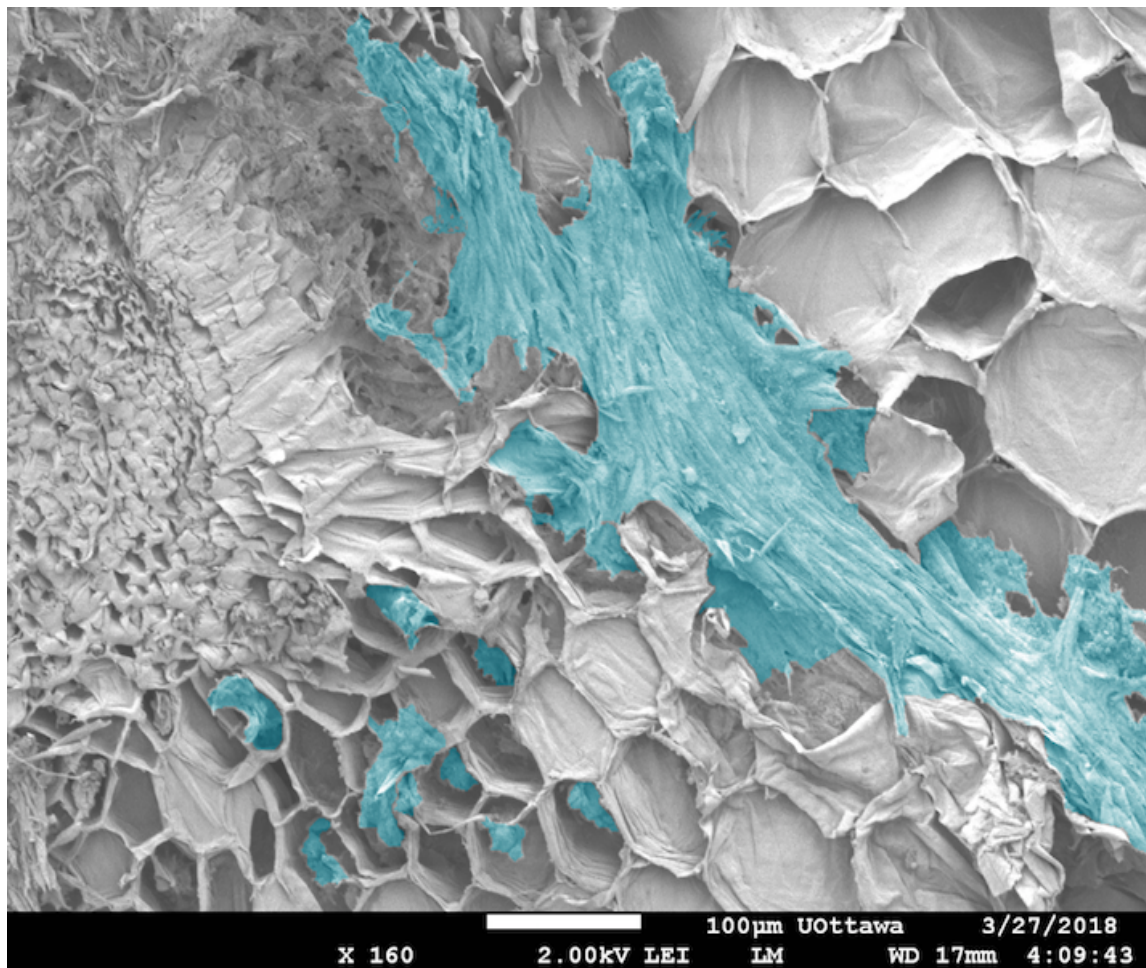
- Over the past few months, **New Harvest Fellow Santiago Campuzano** has been perfecting his fluorescent staining and scanning electron microscopy technique. Here are a few of his early images, of murine C2C12 (mouse) cells on a celery scaffold:



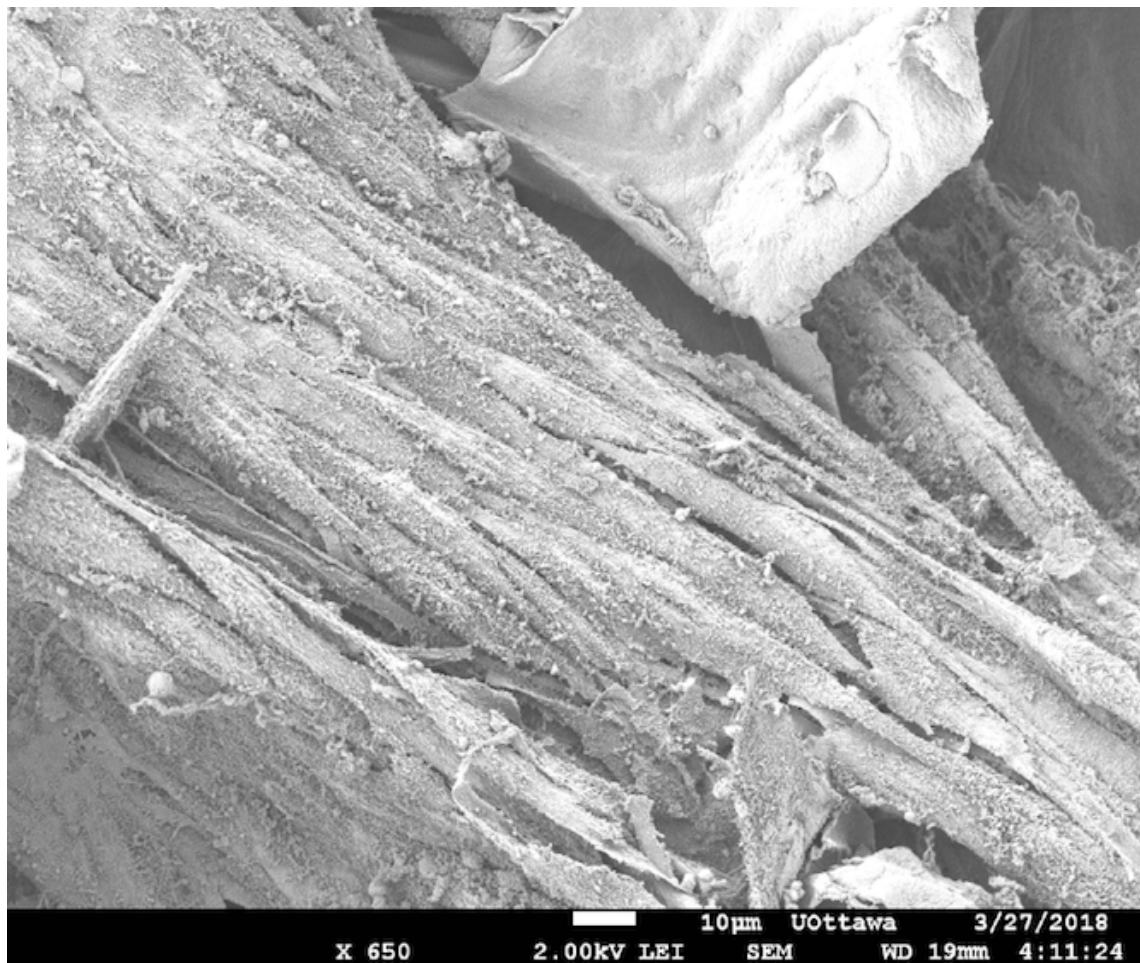
Santiago's fluorescent staining here shows red cell nuclei, green cytoskeleton, and blue cellulose.



Another look at Santiago's C2C12 mouse myoblast cells on celery scaffold.



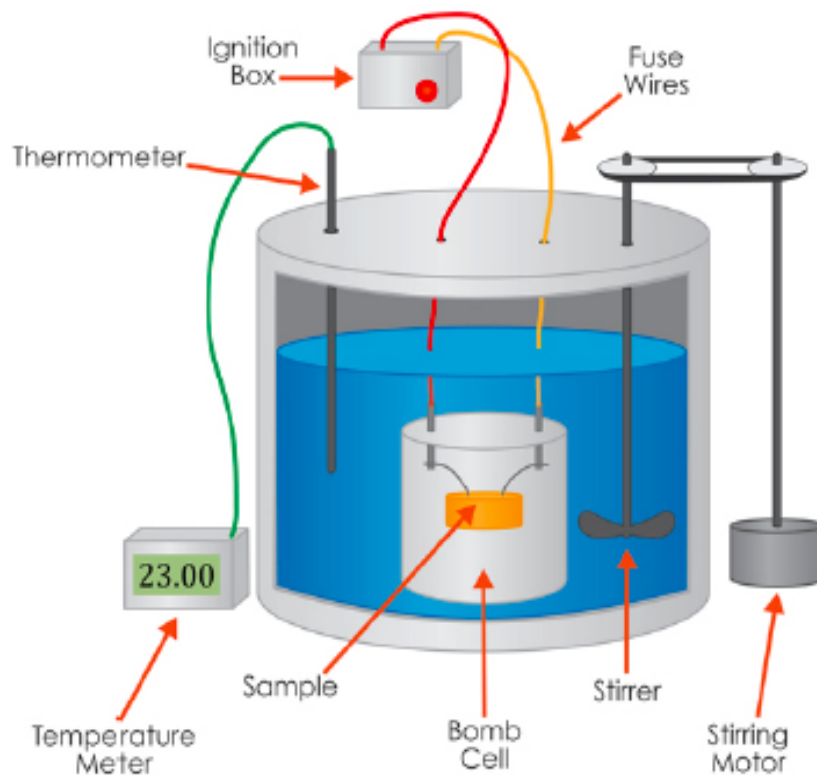
This is the same image as above, but with the C2C12 mouse myoblast cells colored blue.



Santiago's C2C12 mouse myoblast cells on celery at higher resolution.

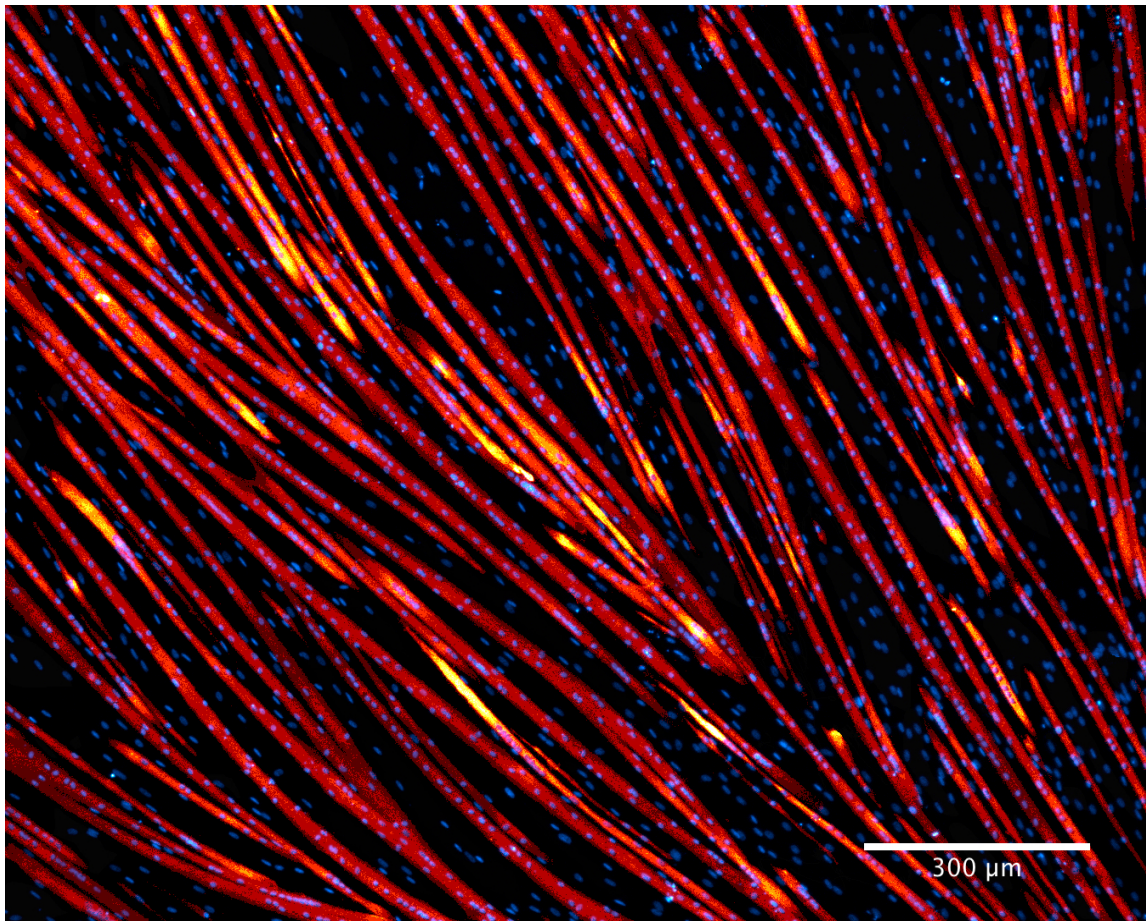
- **New Harvest Fellow Natalie Rubio** is preparing to determine the caloric content of some of her cell populations - to do so, she is using bomb calorimetry, a method in which material is combusted and the heat that is released is carefully measured.

Bomb Calorimeter



A diagram of a bomb calorimeter.

- **Did you know? – The first calorimeter** was used by [Antoine Lavoisier](#) and [Pierre-Simon Laplace](#), in the winter of 1782 to measure the heat given off by various chemical changes. You can read more about the calorimeter [here](#).
- **Correction from last month – A case of misidentified myoblasts** - an image shared in last month's donor update was a picture of Jess Krieger's C2C12 myoblasts, and not a picture of her porcine myoblasts as stated. A microscopic photo of her (actual) porcine myoblasts is included below:



Jess's porcine myoblast population in all its glory!

Communications



- **Erin spoke at the first East Asian cellular agriculture conference in Tokyo last month.** It was a great opportunity for New Harvest to gain exposure with Japanese academics and innovators.



- A bit of a blast from the past: **Back in 2015, I gave an interview for a documentary film called *The End of Meat*.** The film has since been released in Germany, Austria, and Switzerland, and will be coming to the US & Canada in August this year. The trailer is available to view [here](#).
- **Our Annual Report and Reader for 2017 is in progress!** The report will be ready for debut at our conference this July.

Thank you so much for being part of, and creating the cellular agriculture universe with us.

We could not be doing this work without your support!

Until next month,

Isha, Erin, & Kate

The New Harvest Team