



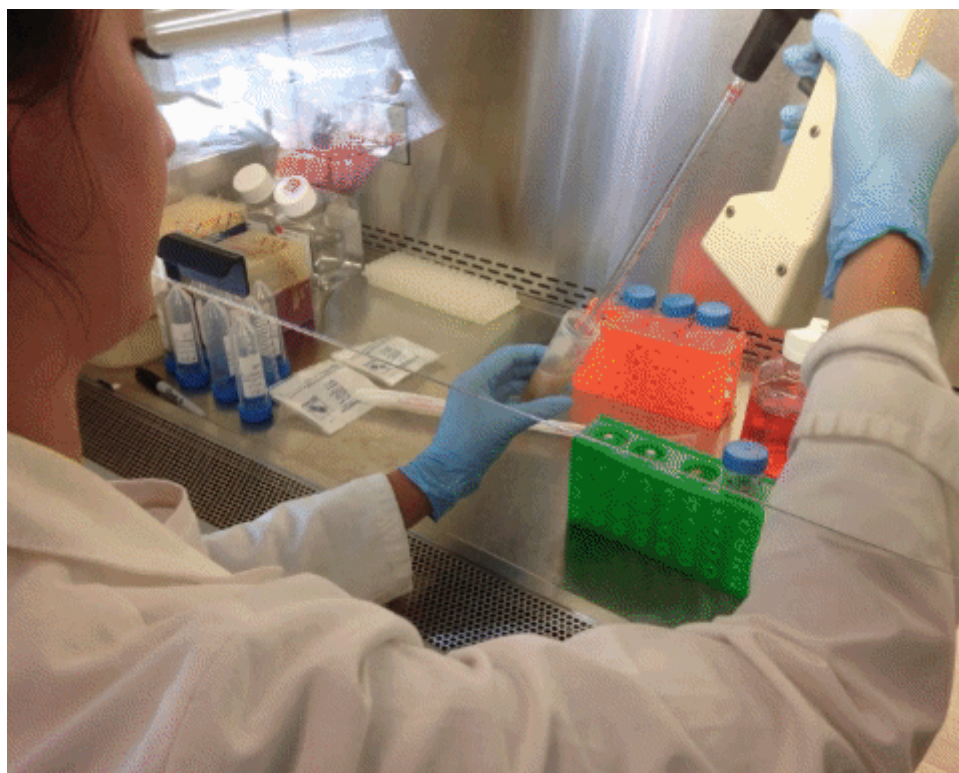
ANNOUNCEMENTS

The latest news from New Harvest:

A large black rectangular graphic with white text. The text reads: "Save the Date", "NEW HARVEST 2019", "July 19 + 20", and "MIT Media Lab". A dashed white line outlines the graphic, and a small version of the New Harvest logo is positioned to the left of the graphic.

Save the Date
NEW HARVEST 2019
July 19 + 20
MIT Media Lab

- Mark your calendars! New Harvest will be hosting the 4th annual New Harvest conference July 19 & 20, 2019 at the MIT Media Lab. Ticket sales will be opening in the new year - keep an eye on this newsletter to reserve yours first. Not sure what the New Harvest conference is about? [This teaser video from 2018 should give you a sense of what you'd be getting into!](#)



- New Harvest is excited to announce that **Avina Stiftung will match all donations made to New Harvest up to \$100,000**. With *no government funding* to support cellular agriculture, New Harvest relies on donor support to fund *all* basic and primary research to grow the field.

Join us in creating the future of food and [double your donation today](#).

NEW HARVEST FEATURES

Cell-Based Fish: A Novel Approach to Seafood Production and an Opportunity for Cellular Agriculture

Natalie Rubio , Isha Datar , David Stachura , Kate Krueger *

Version 1 : Received: 12 November 2018 / Approved: 14 November 2018 / Online: 14 November 2018 (08:50:01 CET)

How to cite: Rubio, N.; Datar, I.; Stachura, D.; Krueger, K. Cell-Based Fish: A Novel Approach to Seafood Production and an Opportunity for Cellular Agriculture. *Preprints* **2018**, 2018110326 (doi: 10.20944/preprints201811.0326.v1).

- **Our review on [cell-based fish](#) is now online!** Written along with New Harvest Research Fellow Natalie Rubio and Dr. David Stachura, we take a look at the current state of producing seafood via cellular agriculture and obstacles ahead that need to be addressed. From cell-culturing bivalve cell lines to scaffolding, we cover it all. You can get a *free* copy of our review on PrePrints [here](#).

- **New Harvest is now [listed](#) as a signatory for the OpenMTA** (Material-transfer agreement). OpenMTA is a legal framework that improves the current system for sharing biotech research. This is central to New Harvest's thesis, as "making research tools broadly available for use without restriction can accelerate the pace of research". You can learn more about the OpenMTA [here](#).

FROM AROUND THE WEB

Our favourite content from the world of cellular agriculture:

- **The USDA and FDA [announced a regulatory pathway](#) forward for cell-based meats.** Following the USDA and FDA's Joint Public Meeting in October, the two agencies released a [statement](#) about how they will work together to regulate the field. This [Food Navigator piece](#) by Elaine Watson provides a great overview about the regulatory update and what it may mean for the field moving forward.
 - **Vince Sewalt**, Senior Director at DuPont Biosciences, shares his thoughts and provides an [overview of how regulation will look](#) like for cell-based meats. Vince has previously spoken about cell ag regulation at [New Harvest conferences](#).
 - **Share your voice on the future of food!** The deadline to submit [public comments](#) following the USDA and FDA's Joint Public Meeting has been extended to **December 26th**.
 - **Executive Director Isha Datar** gave her public comments for New Harvest during the Joint Meeting. You can catch her thoughts on [food safety](#) and her [formal comments](#) on the New Harvest [YouTube channel!](#)
- **Olivia Fox Cabane** from the [Alternative Protein Show](#) wrote a [blog post](#) about **Radicle's** report on the cellular agriculture investment landscape. Underwritten by New Harvest, you can read and purchase a copy [here](#). The Alternative Protein Show takes place in San Francisco, California, from January 15th-17th, 2019.
- "We didn't know how to culture bluefin tuna cells because basically *nobody* knows how to culture bluefin tuna cells." In an [article for the Washington Post](#), Tim Carman speaks to **Finless Foods co-founders Mike Selden and Brian Wyrwas** about how they are making cell-based bluefin tuna meat. Selden and Wyrwas share their challenges on being the first to work with bluefin tuna and learning how to culture them.

- **New Harvest Research Fellow Natalie Rubio** features in [Edible Boston](#) as one of the women leading the *future of food*! Natalie talks about her research at Tufts University in cellular agriculture and how her work focuses on developing a sustainable scaffolding for growing cell-based meats.

In the world of **startups**:

- **Perfect Day Foods** co-founders Ryan Pandya and Perumal Gandhi were named in [Forbes 30-under-30 list](#) of Social Entrepreneurs! This list recognizes incredible and innovative founders and startups, and it's great that Perfect Day's co-founders were recognized for their achievement. By designing yeast to produce the same dairy proteins found in milk from a cow, Perfect Day can make the same milk. Without needing the cow. Make sure to check out [Ryan's video interview too!](#)
- **Perfect Day Foods** also announced a [new partnership with ADM](#), one of the world's largest agricultural processors and food ingredient companies. According to Perfect Day, ADM's expertise in scaling fermentation production made them the *perfect* partner to help Perfect Day get their first product to market. Perfect day uses cellular agriculture to produce animal-free **dairy** proteins, and their first product will be an [animal-free whey protein](#) *as early as next year!*

EMPLOYMENT OPPORTUNITIES IN CELLULAR AGRICULTURE

- **Interested in Cultured Meat Research?** The University of Helsinki is seeking a [3-year grant funded researcher](#) interested in pursuing their PhD. Led by Dr. Hannah Tuomisto, the research project revolves around estimating the environmental impacts of cultured meat via life cycle assessments. The deadline to apply for the program is **December 15th**.
 - In 2008, New Harvest funded the [first study investigating](#) the environmental impact of cultured meat production compared to conventional livestock agriculture by Hannah Tuomisto. *Ten years later*, we're excited to see the topic further discussed and researched.
- **Geltor** is looking to [expand its team](#) (San Leandro, CA).
- **Modern Meadow** is actively looking to fill a [number of positions](#) (Nutley, NJ).
- **Perfect Day Foods** is looking for a [Senior Process Engineer](#) (Berkeley, CA).

- **New Age Meats** is looking to hire a [Stem Cell Biologist](#) (San Francisco, CA).
- **Memphis Meats** currently has [several openings](#) (Berkeley, CA).
- **JUST** has [several openings in cellular agriculture](#) (San Francisco, CA).
- **Is your cell ag company looking to grow?** [Get in touch](#) to have your job posting shared on the New Harvest newsletter.

This mailout was written by New Harvest community member Ahmed Khan from [CellAgri](#), a news and insights platform exploring the future of food with cellular agriculture. Check out CellAgri on [Twitter](#) and [Instagram](#)!

[New Harvest](#) is powered by people like you.

Donate Now!

New Harvest is a nonprofit 501(c)(3) organization.

EIN/tax ID number: 20-1425438

All donations are fully tax deductible.