



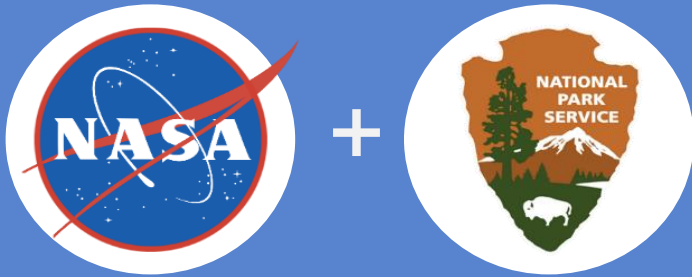
A food company for optimists

Brian Furey – Senior Director of Regulatory and Government Affairs

www.Naturesfynd.com

Our origins trace back to Yellowstone National Park

Starting with NASA-funded research on extreme
life in Yellowstone's geothermal features

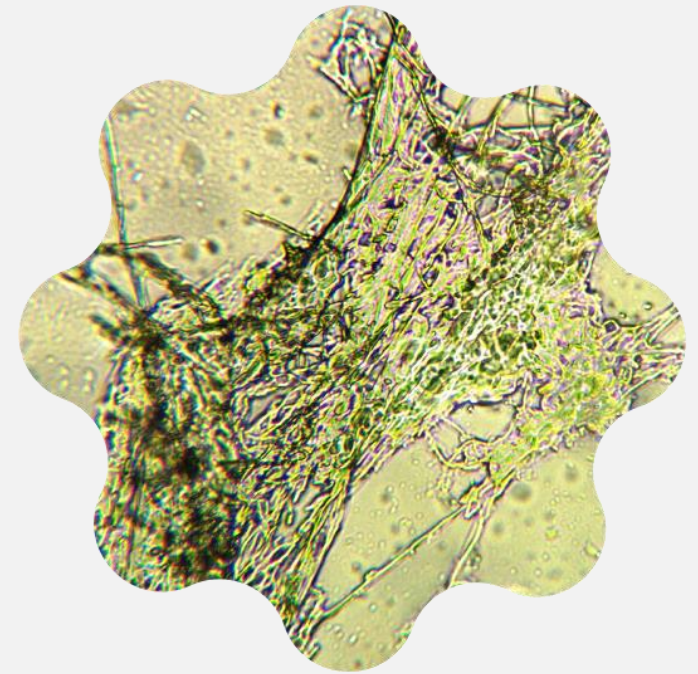


Where we discovered a small, yet mighty **organism with remarkable capabilities**

In the acidic volcanic springs of Yellowstone, we found a microorganism with extraordinary attributes capable of revolutionizing food – *Fusarium strain flavolapis*

- 50% protein with all essential amino acids, a complete protein
- Texture provides functionality in wide variety of applications
- Robust biology: quick & efficient

F. str. flavolapis



Microscopy image

We've since **achieved a breakthrough**
to produce proteins at scale,
growing Fy from *F. str. flavolapis*



Fynd delivers on nutrition, taste & texture, and sustainability

Naturally occurring organism without genetic modification

50% protein with all essential amino acids at high levels

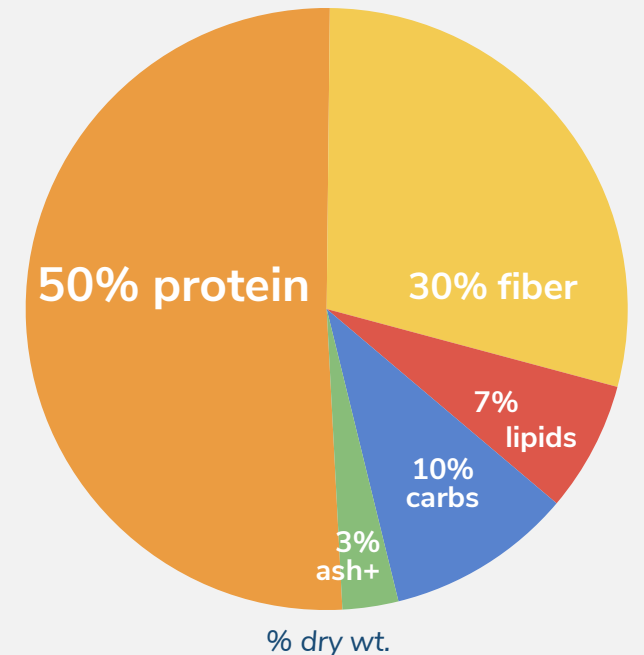
High levels of fiber, also provides calcium & iron

Natural savoriness richly accentuates additional flavors

Sustainability 99% less land, 99% less water, and 94% less GHG

Compared to traditionally raised beef at scale

Nutritional Composition



Fy Protein is high-quality protein, as indicated by an average Protein Digestibility-Corrected Amino Acid Score (PDCAAS) similar to beef

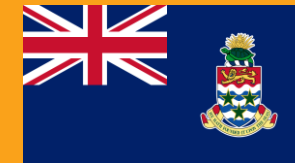
PROTEIN SOURCE	PDCAAS SCORE
Casein	1.00
When protein isolate	1.00
Whey protein concentrate	1.00
Soy protein isolate	1.00
Egg	1.00
Beef	0.92
Fy protein (in vivo)	0.91
Pea protein concentrate	0.89
Pea	0.67
Cooked kidney beans	0.65
Cooked rice	0.62
Cooked peas	0.60
Roasted peanuts	0.51
Whole wheat	0.45

Most importantly, Fy is safe to eat and we've secured Novel Food regulatory approvals across the globe



US GRAS:

- Self-GRAS Dec 2019
- FDA No Questions Letter: March 2021



Fy has also been approved by regulatory bodies across the world:

- Canada
- Singapore
- Japan
- Hong Kong
- United Arab Emirates
- Cayman Islands

Composition & Toxicological Tests Confirm the Safety of Fy Protein¹


No safety concerns identified (Digestible protein, non-mutagenic, low allergenicity, and well tolerated up to 15% in animal studies)

Testing		Study Details and Results
Composition	Various	<ul style="list-style-type: none"> <u>Nutrition</u>: Proximate analysis, micronutrient, amino acid, PDCAAS <u>Safety</u>: Mycotoxins, microbiological, heavy metals
Allergenicity	Codex	<ul style="list-style-type: none"> <u>Fy does not represent major risk of allergy</u>: No new allergenic proteins or cross-reactivity identified Literature review, <i>in vitro</i> digestion, and bioinformatics
Antimicrobial activity	EFSA FEEDAP ²	<ul style="list-style-type: none"> <u>No evidence of antimicrobial activity</u>: Fy Protein and culture supernatants tested Tested against <i>E. coli</i>, <i>P. aeruginosa</i>, <i>S. aureus</i>, <i>E. faecalis</i>, <i>B. subtilis</i>
Mutagenicity & Genotoxicity	Bacterial Reverse Mutation Test (Ames) (OECD 471)	<ul style="list-style-type: none"> <u>No evidence of bacterial mutagenicity</u>: Concentrations up to 5000ug/plate Bacterial Strains TA 1535, TA1537, TA98, TA100, <i>E. coli</i> WP2 in both absence and presence of S9
	In-vitro Mammalian Cell Micronucleus Test (OECD 487)	<ul style="list-style-type: none"> <u>Non-mutagenic</u>: Concentrations up to 50 ug/ml. Short term (4h) and long-term exposure (44h) Fy Protein did not induce structural and/or numerical chromosomal damage in human lymphocytes and is considered non-mutagenic
Subchronic Toxicity	Repeated Dose 90 Day Oral Toxicity (OECD 408)	<ul style="list-style-type: none"> <u>No adverse effects</u>: Fy protein consumed at dietary concentrations up to 15% of the diet NOAEL determined to be the highest dose tested at 15% or 9,375 mg/kg-bw/day

Assessing Allergenicity of Novel Proteins (Codex Alimentarius)¹

Literature

- Known allergenicity to similar species
- Identify potential for cross-reactivity
- *In vitro*, *in vivo*, clinical, IgE

 No major risk of allergy found in Fy


In vitro Digestibility

- Evaluate protein stability in gastric and intestinal fluids
- Food allergens typically resist proteolytic digestion

 Fy is readily digestible

Bioinformatics

- Compare genome to known allergens in allergen databases
- AllergenOnline.org by FARRP²
- >35% identity over 80 Amino Acids

 Fy is absent of matches to major allergens₃

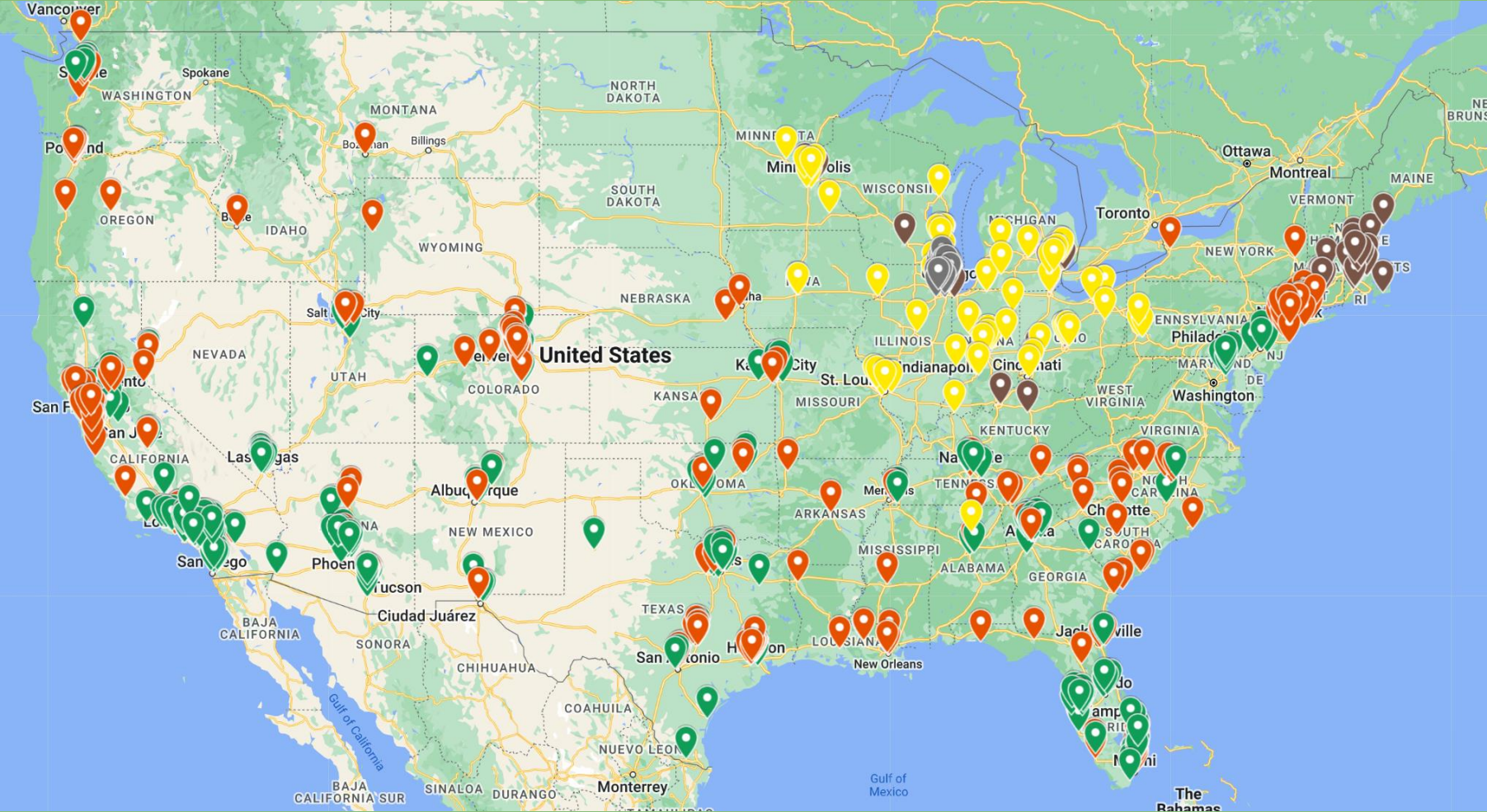
1. WHO/FAO - [Foods Derived from Modern Biotechnology](#)
2. [Allergenonline.org](#) – Food Allergy Research and resource Program (FARRP) University of Nebraska-Lincoln
3. Abdelmoteleb et. al, [Evaluating potential risks of food allergy of novel food sources based on comparison of proteins predicted from genomes and compared to www.AllergenOnline.org](#)



Our first commercial products are dairy-free cream cheese & meatless breakfast patties...and now YOGURT!



...and they're available at grocery stores across the country!



Fy is grown in Space!

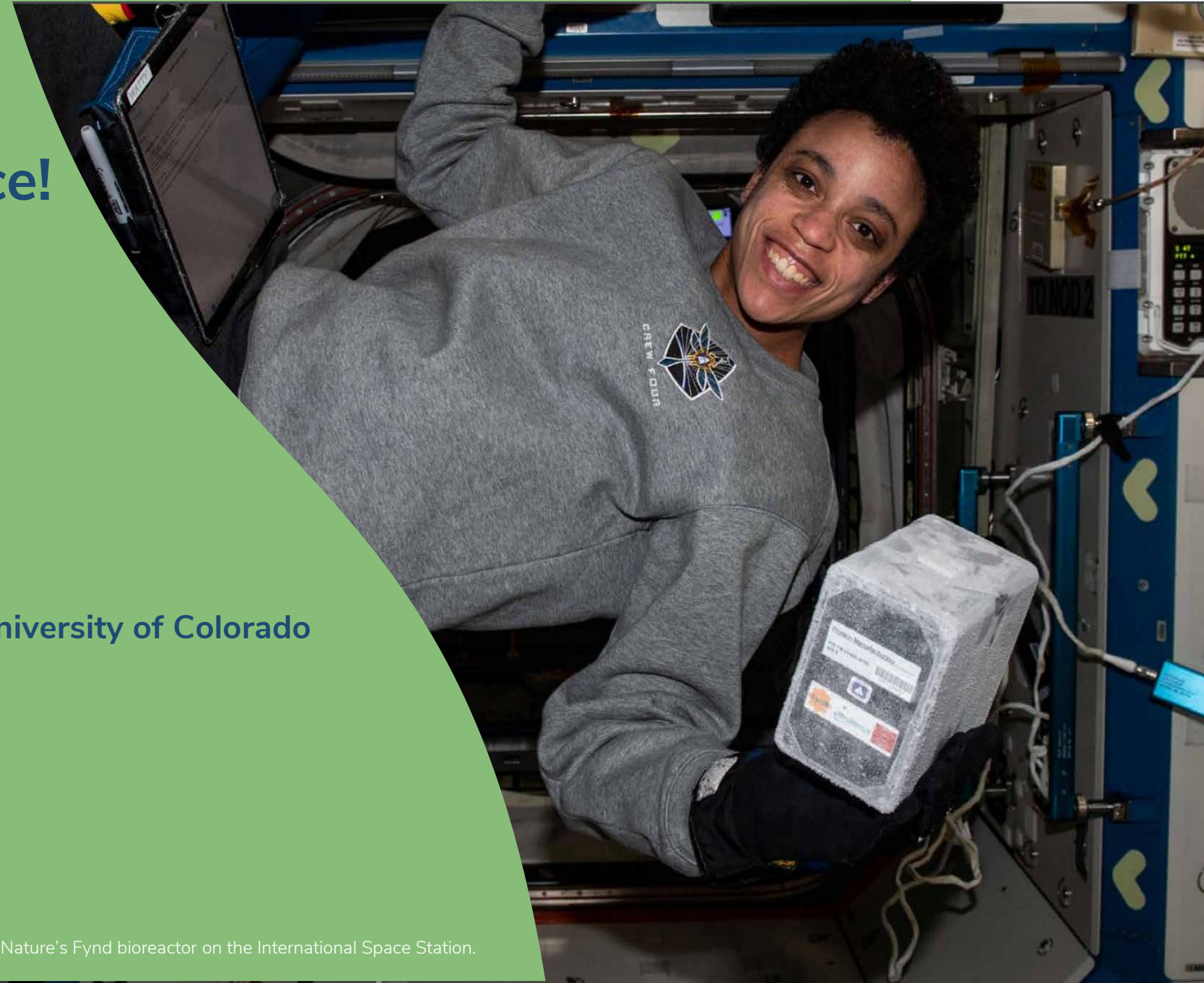
Summer '22

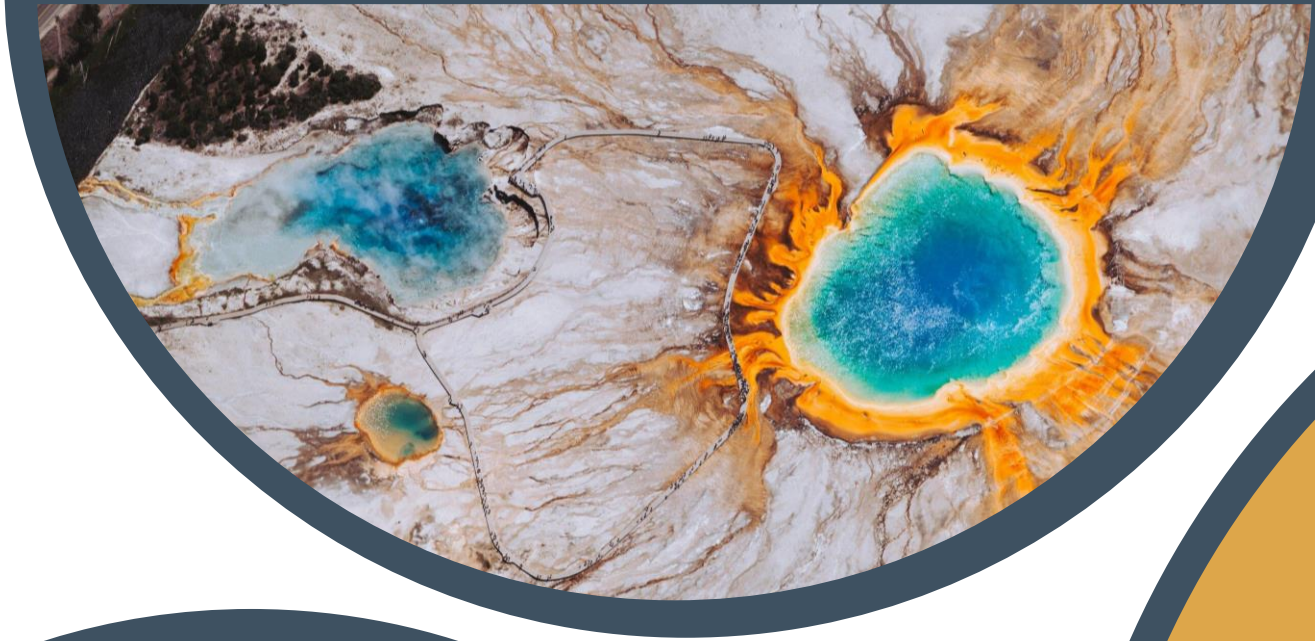
Partnership with:

NASA

Montana State University

Bioserve Space Technologies – University of Colorado





NATURE'S
Fynd

We are Fynders

We create amazing foods that nourish people and nurture the planet

Brian Furey – Senior Director of Regulatory and Government Affairs

bfurey@naresfynd.com