



## **SUN BEAR BIOFUTURE – PRODUCING AN ALTERNATIVE TO PALM OIL WITH ALL OF THE NATURAL BENEFITS, MINUS THE ENVIRONMENTAL IMPACT.**

**Oxfordshire -based business, Sun Bear Biofuture, is a biotech start-up whose ambition is to reimagine farming with precision fermentation to develop healthier and sustainable everyday ingredients for the food, cosmetics, medical and fuel industries They are starting with developing a palm oil alternative from gene optimised yeast.**

We caught up with Ben Williams, Sun Bear Biofuture's co-founder, to hear all about their business journey so far. "We started about a year ago. Myself and the two other co-founders met through a climate and biodiversity focused accelerator. We're passionate about food - how does our food system work, and how can we produce our essentials in a more sustainable way. We started to research what technologies were out there and which of those had the largest scope and ability for change.

Our focus turned to palm oil. Palm oil is everywhere, it can be found in 50% of packaged supermarket products. But it comes at a huge price to our planet. Plantations are created at the expense of tropical rainforests, destroying the most biodiverse forests, habitats of species, like the Sun Bear, and result in vast carbon emissions. We wanted to create an alternative. Sun Bear Biofuture was born."

### **CREATING AN ALTERNATIVE TO PALM OIL WITH PRECISION FERMENTATION**

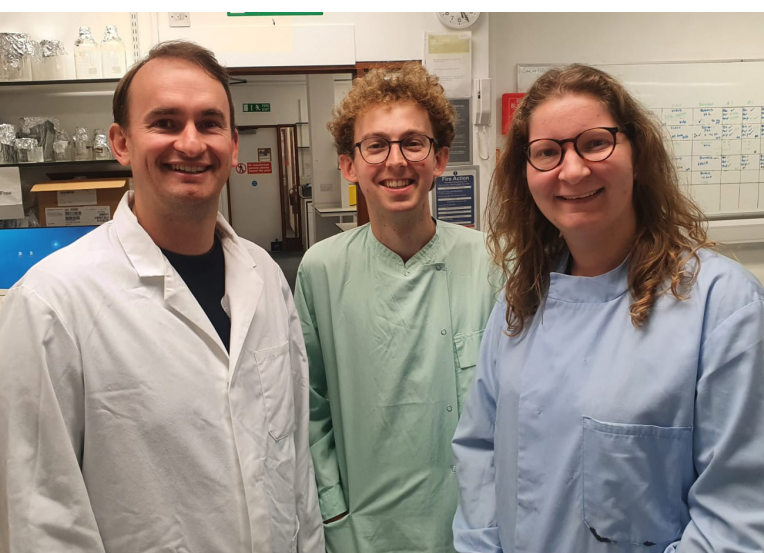
Ben tells us how their process works. "A really exciting way of producing an alternative to palm oil is through precision fermentation. It has a lot of potential for disrupting the huge, distributed supply chains we have today. There's also less competition within the fats and oils sector, compared to say dairy alternatives.

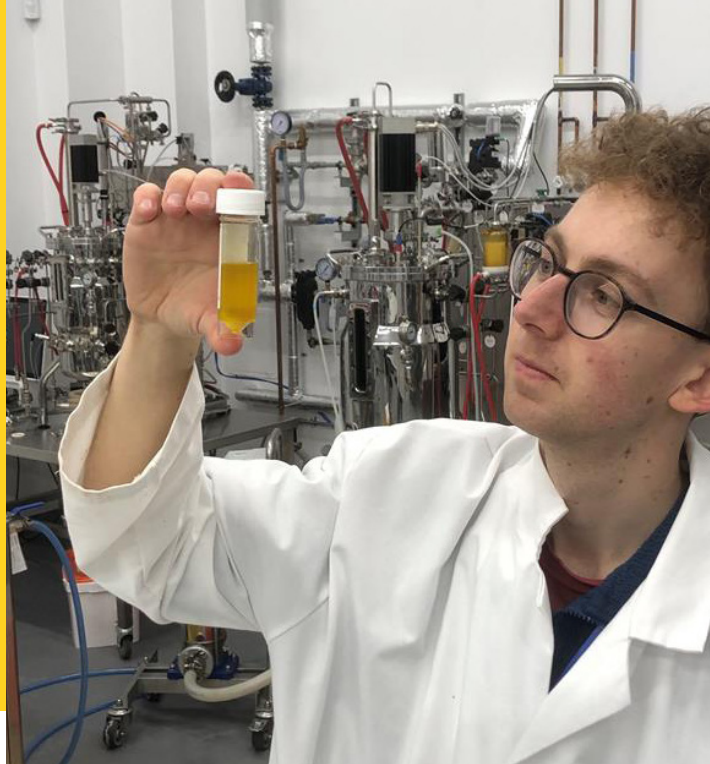
Our lab work involves developing a process that's very similar to brewing. To make beer, have a strain of yeast which you feed sugar to and out pops alcohol. Well our process is very similar. We have a strain of yeast, but rather than it producing lots of booze, it stores lots of fats very similar to palm oil. We are designing a process to maximise and produce as much fat as possible, optimising the strain and the fermentation parameters."

### **OXLEP BUSINESS JOIN THE FIGHT**

Supporting innovative businesses with a social purpose in and around Oxfordshire is what OxLEP Business do. They saw great potential in Sun Bear. Ben explains how their relationship with OxLEP has been key in moving their business forward.

"Our lab space is at the Oxford Brookes Campus, in the BioInnovation hub, and it was through the team here that we heard about OxLEP Business and the support they offer - grants and community connections etc. We got in contact with them and asked what's the best way for us to work with them. They were great straight off the bat. We explained that as a start-up funding was a huge thing for us. They informed us about the Go-Create grants that were available as part of the Innovation Support for Business Programme (ISfB).





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Lab work is expensive, so we needed funding to help support our strategy and R&D. The OxLEP team made the process really simple. Grants can be complicated, but the webinar was great and the OxLEP team helped us create a strong application. We were awarded the money and used it on purchasing lab equipment and consumables; things that were crucial for us to be able to carry out our work. The funding meant we could move forward much faster.”

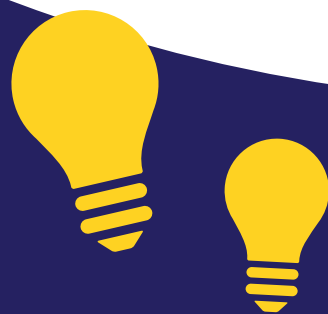
Alongside the grant funding, Sun Bear also received one-to-one support from the OxLEP team where they gained further support and guidance. Ben shares their experience, “Our founders are all from very different backgrounds. We have our own unique skills. But there are gaps of knowledge individually that we can improve on. The great thing about OxLEP’s mentoring is that you can fill those gaps. We gained advice on things like building a team, how to project manage and apply the skills we have in the team to various tasks. It was really helpful for us all.

The other thing we got involved in was OxLEP’s Leadership Networking Cohort. This allowed us to connect with other companies at a similar stage. It was great to bounce ideas off others and talk about the similar challenges you face. It opened up connections locally for us which was really valuable.”

#### CONTINUING TO WORK TOWARDS A KINDER FUTURE

Ben closes by telling us about the next phase for Sun Bear. “What we’ve done in the last year is amazing. We’ve tested the process from end-to-end on both a 1 litre scale and a 50 litre scale, generating our first samples, which was incredibly satisfying. What we are working towards now is generating bigger samples that we can start doing food safety testing, allergen testing and composition testing on. That’s the big focus for now. We’ve gone from 3 of us in the team to 7 of us full time so we’re expanding and moving forward at pace which is where we wanted to be. The future’s looking good.”

FOR MORE INFORMATION ON SUN BEAR BIOFUTURE PLEASE VISIT: [SUNBEARBIOFUTURE.COM](http://SUNBEARBIOFUTURE.COM)



Find out more about the support available from OxLEP Business:

W: [oxlepbusiness.co.uk](http://oxlepbusiness.co.uk) T: 01865 897181

E: [business@oxfordshirelep.com](mailto:business@oxfordshirelep.com)