THE SMALL COMPANIES
CHANGING THE WORLD:
Meet the Science and
Business of Sustainability

30 September 2021
14:00 - 15:00 CEST
Online Event
EUROPEAN BIOTECH WEEK 2021

27 SEPTEMBER – 3 OCTOBER

Claire SKENTELBERY
Director-General
EuropaBio
✓ Webinar will be recorded and slides available
✓ Q&A for direct questions to panellists
✓ Chat for comments to share with all delegates

Do you like the webinar?
Don’t hesitate to share it with others!

@BiotechWeekEU  @europa.bio  @biotechweek  @EuropaBio – the European Association for Bioindustries
EUROPEAN BIOTECH WEEK 2021

27 SEPTEMBER – 3 OCTOBER

Cyrille PAUTHENIER
CEO
Abolis
Your Molecule: Biobased & Sustainable
Small companies changing the world — WebEx — EuropaBio

Cyrille Pauthenier — CEO & Co-Founder

30th September 2021
Atoms should be renewable, bio-based, biodegradable

To achieve this goal, we can mimic Nature

Therefore we need to

- Deliver new products with similar properties
- Invent new properties
- Build new processes for current products
OUR MISSION: DELIVERS INNOVATION TO MAJOR COMPANIES USING BIOTECHNOLOGIES TO

Build a sustainable, cost effective & secured supply chain
Decrease their environmental impact
Develop safe-by-design molecules to replace toxic products

39 people, +5 by end 2021
55 % PhDs
Founded in 2014
850+ m² at Genopole
7 robots
15+ molecules developed or in development
How we work
METHODOLOGY TO DEVELOP A NEW PROCESS

Bio-Synthesis Screening

Bio-Synthesis Plan

Prototype Bio-Process

Scalable Bio-Process

Production
ALL THE EXPERTISE IN ONE PLACE

Robotics
- Robotics DNA platform
- Experiment workflow

Genetics
- High efficiency DNA tools
- Synthetic regulation elements
- Strain collection with tools

Softwares
- Aggregated databases
- Pathway exploration software
- Enzymes search tool
- Protein structural analysis
- 1,5 teraflop in house

Analytics
- Cutting edge Mass Spectrometry
- Metabolomics

Fermentation
- 1L → 2L → 20L fermentors
- 48 cuves fermentation robot
- Custom hardware

Intellectual Property
- Continuous freedom to operate
- Efficient patent writing
- Patent Strategic plan

Management
A WIDE RANGE OF MOLECULE IS ACCESSIBLE
Production of Target Molecule for PHARMACEUTICAL Applications
S. cerevisiae - 25 genes inserted - 3 genes KO
47 step pathway from sugar to product
18 months of work => 3 patents

Results
Sample of purified hesperidin from 20L fermentor
Synthetic Biology for Bio-synthesis

- is becoming an industrial success
- is part of the solution for a greener 21st century
- covers ingredients, plastics, healthcare and more
- is now implemented at scale

*Digital* was the revolution of the last three decades

*Biology* is the technology for the next 30 years
EUROPEAN BIOTECH WEEK 2021

27 SEPTEMBER – 3 OCTOBER

Taichi OCHI
Senior Business Developer
EV Biotech

#EuropeanBiotechWeek2021
The biggest innovations of the 21st century will be at the intersection of biology and technology. A new era is beginning.”

— Steve Jobs
The future of production is cellular

Microorganisms have the potential to effectively, naturally and sustainably create chemical compounds usually derived from destructive agricultural and petrochemical processes.
INTRODUCING
EV Biotech
Via a holistic modeling approach, we unite AI and biology seamlessly across all aspects of microbial strain development.

- Minimal R&D risk
- Optimal results
- High value molecules
EV’s platform improves with scale

EV platform increases and strengthens its data assets and value with every new project. The system learns faster with each input - improving our offering and competitive advantage.

The Time is Now

Proprietary gene sequences
Constant development
Scaling efficiency
Join us at intersection of biology and technology to create a better future together.
EUROPEAN BIOTECH WEEK 2021

27 SEPTEMBER – 3 OCTOBER

Juan MEDINA
Co-Founder and CEO
Kaffe Bueno
EUROPEAN BIOTECH WEEK 2021

27 SEPTEMBER – 3 OCTOBER

#EuropeanBiotechWeek2021

PANEL DISCUSSION
followed by
Q&A
EUROPEAN BIOTECH WEEK 2021

27 SEPTEMBER – 3 OCTOBER

THANK YOU!

@BiotechWeekEU  @europa.bio  @biotechweek  @EuropaBio – the European Association for Bioindustries