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ALL BIOMARKERS HAVE A FINGERPRINT

Cloud-based intelligent platform to accelerate drug discovery
Efficient. Flexible. Patient-centric.



EIT Health is supported by the EIT,
a body of the European Union



Mayfield

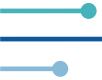




14 years

400 failed trials

0 treatments

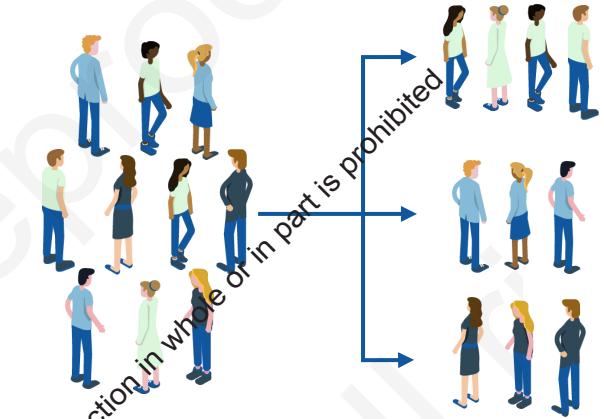


Alzheimer's: A heterogeneous disease



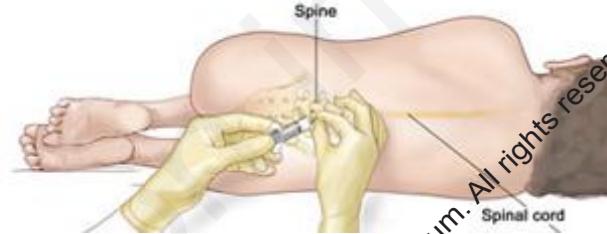
Poor biological
knowledge
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Failure of
one-drug-fits-all





Alzheimer's: Clinical trials have big challenges



Invasive



Difficult to access

\$0.7B cancer

\$5.5B

Alzheimer's trials
really expensive

90% of patients leave clinical trials

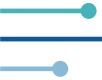
How many promising drugs will be abandoned or their evaluation seriously delayed?"

- President, Global Alzheimer's Platform Foundation

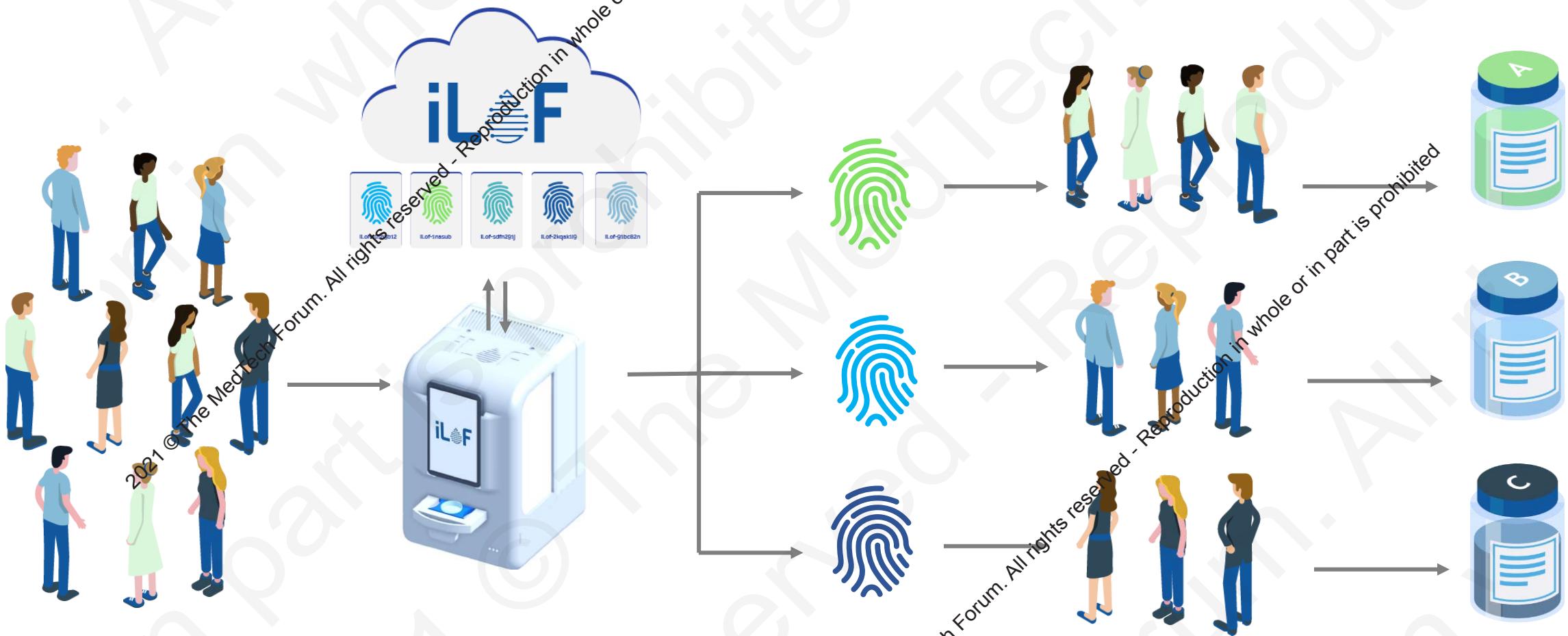
NATION & WORLD >

Posted June 5 | Updated June 5

Pfizer had clues its blockbuster drug could prevent Alzheimer's. Why didn't it tell the world?



Enabling development of personalized treatments



40%

Cheaper

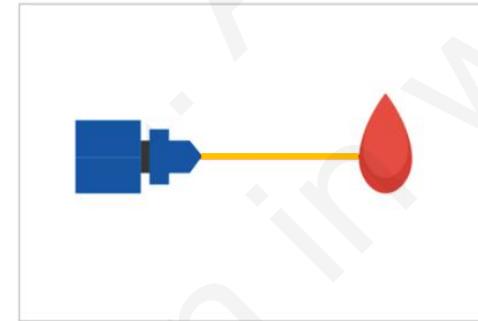
70%

Faster



Convenient
Non-invasive

iLoF Platform: Building a cloud-based library of personalised biomarkers and biological profiles



Photonics Sample Analysis



Optical Fingerprint Generation



Fingerprint Matching



Patient screening

Patient diagnosis

Patient monitoring

Personalised treatment



Non-invasive
Microliters of blood



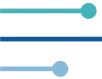
Adaptable
Multiple biomarkers



Fast
2 seconds



Low cost
Using Light and AI



One platform, multiple applications

2 patents >10 publications

1. Biomarker Detection

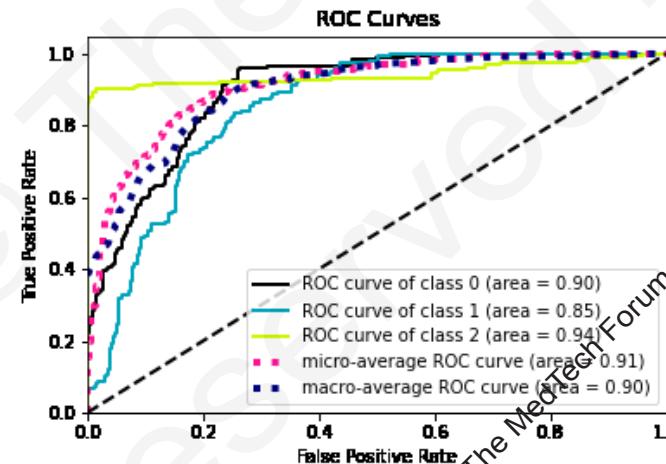
- ✓ Peptide detection
- ✓ Multi-class identification
- ✓ Quantification

Peptide	Accuracy*	LOD (serum)
A _β 1-42	100%	0.05 pg/ml
A _β 1-28	84%	16.3 pg/ml
Tau 441	96%	4.6 pg/ml
P-Tau 441	86%	4.6 pg/ml

* At physiological range

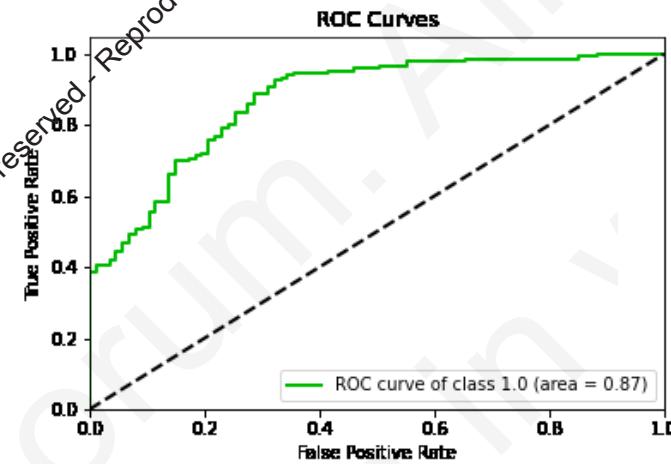
2. Disease Profiling

- Stratification b/w 3 classes
- ✓ Class 0: Healthy subjects
 - ✓ Class 1: Alzheimer's
 - ✓ Class 2: MCI

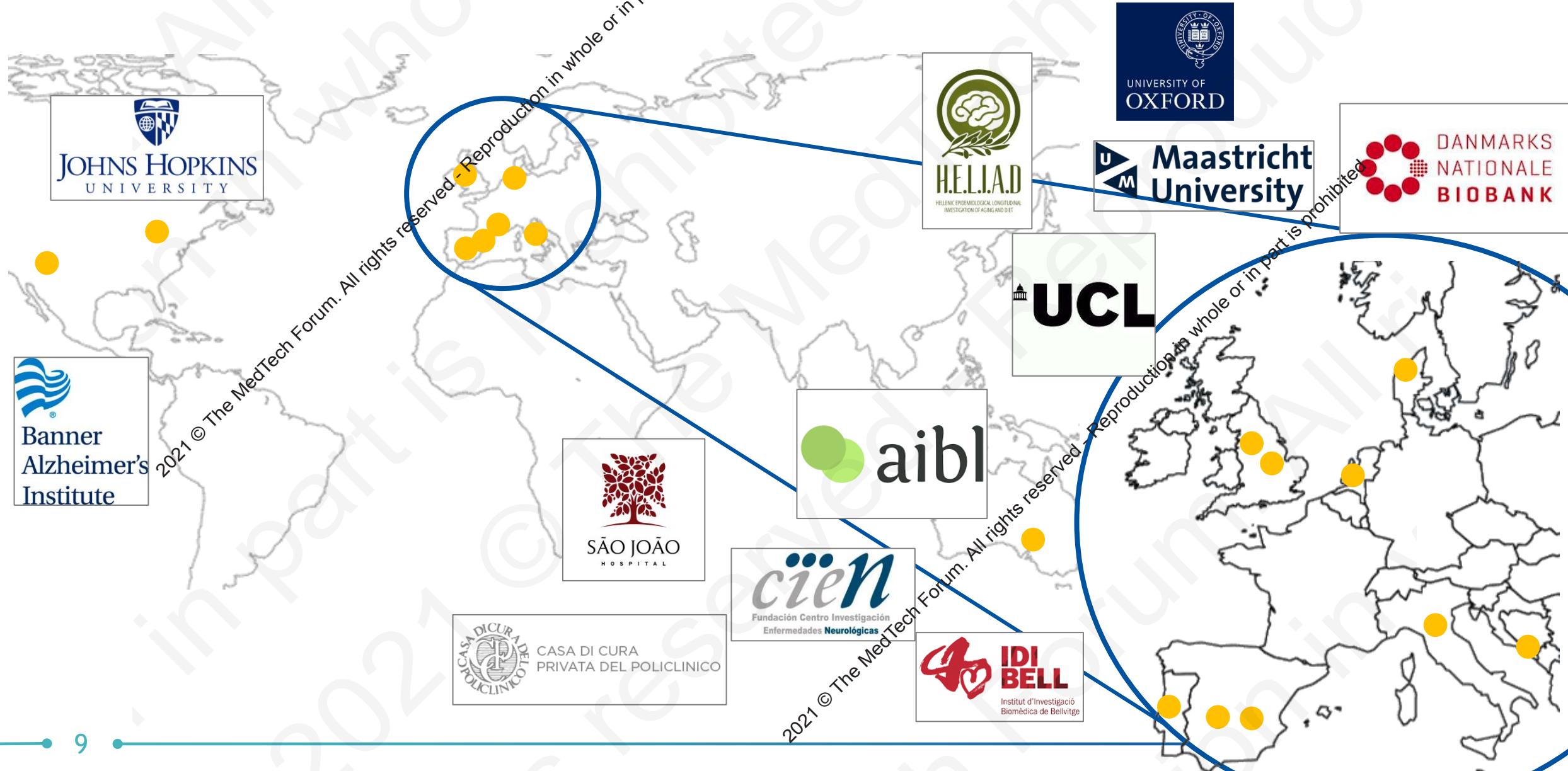


3. Disease Prognosis

- Stratification b/w COVID-19 infected classes
- ✓ Severe symptoms - ICU admittance
 - ✓ Mild symptoms



Built together with global leading institutions



Our roadmap



Pharmaceutical Companies



Healthcare Market

Dependent on breakthrough

2021

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Stratification/Clustering
based off biomarkers

Neuro-Drug
tracking

10



2021

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Risk Assessment
tool



Companion
diagnostic



Alzheimer's: Beachhead market size

Top 4
Pharma Groups

400M €

40k
patients

With PET/CSF

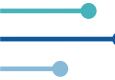
1.15B €

115k
patients

Trials open for
recruiting TODAY

1.6B €

160k
patients

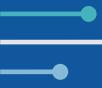


A risk-free business model for Pharma



Fee Dependent on # of patients in the trial

Risk-free win-win for iLoF and our partners

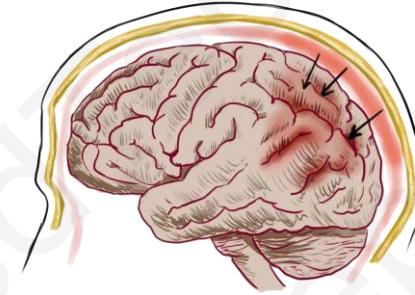


Future vision

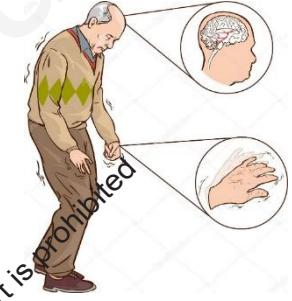


Using AI to accelerate
personalized treatments for
complex diseases

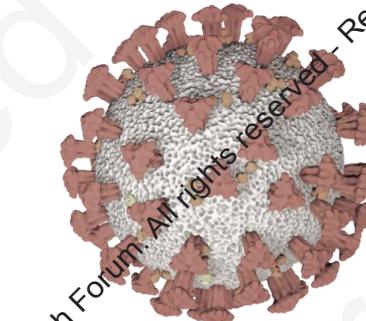
MULTIPLE SCLEROSIS



PARKINSON



COVID-19



BRAIN TUMORS



Current traction



>1000
Biological profiles stored



Maastricht University

Banner Alzheimer's Institute



12

Academic and Research partners



3.1M
Seed Funding (€)



1

Paying biotech client



>10
Awards



Management experience, technical skills, passion for healthcare



Luis Valente (Msc)
CEO

- Award-winning business manager
- Management & Engineering skills
- Founded first company at 18



Mehak Mumtaz (PhD)
COO

- Strategy consultant
- Fellow at Oxford University
- Personalised medicine expert



Joana S. Paiva (PhD)
CTO

- Inventor: 3 patents requests
- Scientist: > 30 publications
- Professor and Bio-AI engineer



Paula Sampaio (PhD)
CCO

- Research center coordinator
- Light technologies expert
- Senior scientist: >50 publications

Advisors



Derek Hill, PhD



Marcus East



Chris Chamberlain, MD-PhD



Priya Saiprasad



Pratyanka Mitra

> 15 FTE

(inc. 5 PhD /MBA)



“A good life is a collection of happy memories”

-Denis Waitley



Cloud-based intelligent platform to transform drug discovery

Luis Valente, Co-Founder & CEO

lvalente@ilof.tech

