



UZH IncubatorLab

EU-Innovation Network conference

“Strengthening life-sciences innovation across Europe”

21 November 2023, Dublin

Presented by: Dr. Deana Mohr, CEO Muvon Therapeutics



General introduction



Location

- Hosted by **the Institute for Regenerative Medicine · IREM** at the **University of Zurich (UZH)**, **Switzerland**.
- Access to a vibrant entrepreneurial community hosting 50+ life science entities, from start-ups to global companies.



Foundation

- Created in **April 2019**
- Supported by **Werner Siemens Stiftung (WSS)**, a philanthropic organization dedicated to advancing research and entrepreneurial activities, especially in the MedTech sector.



Aim

- Promote and support projects led by **UZH MedTech and BioTech Entrepreneur Fellows** for a duration of **18-months**.



Environment provided

The UZH IncubatorLab is supporting with the translation of UZH research into marketable business ideas through:

Lab space



Cutting-edge facilities

(advanced lab infrastructure with tools for DNA / RNA analyses, 3D printing, high-resolution microscopy, mass spectrometry; flow cytometry, etc.)

Community



Access to vibrant community and comprehensive networking

(peer-to-peer learning, collaboration opportunities, direct interactions with key industry stakeholders, mentoring by international community of entrepreneurs)

Expert advice



Additional support tailored to user needs

(e.g., regulatory and business training, marketing and scientific visuals, patenting advice, prototype development etc.)

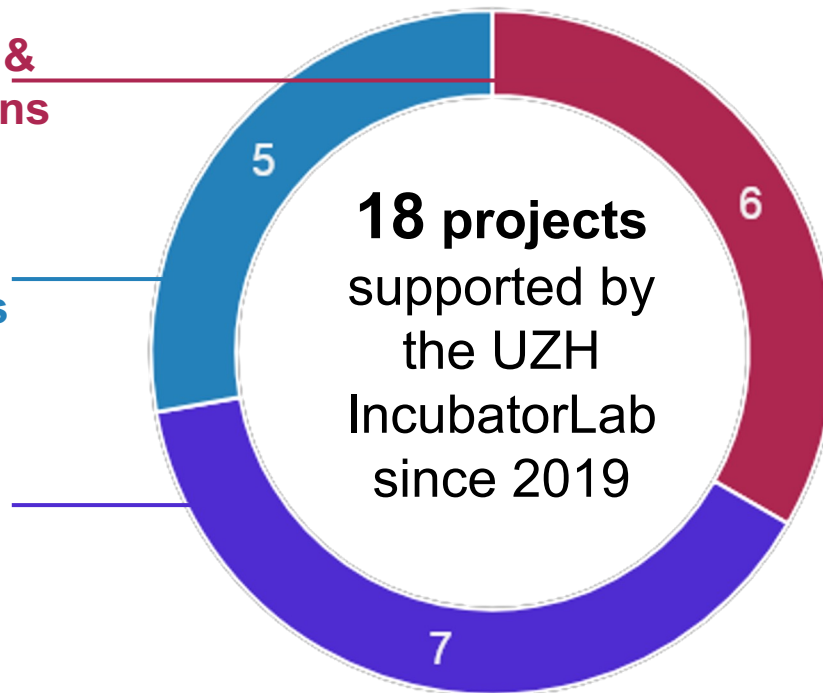


Overview of incubated projects

Medicinal Products & Therapeutic Solutions

Advanced Medical Devices & Platforms

Diagnostic & Biomarker Technologies



A total of **8** incorporated start-ups

 * * 	

* Clinical-stage companies



Overview of the incubated projects

Medicinal Products & Therapeutic Solutions



MedTech

Diagnostic & Biomarker Technologies

Advanced Medical Devices & Platforms



EraCal Therapeutics: Fighting Obesity

Joined UZH IncubatorLab in September 2018

Platform: Harnessing the power of zebrafish for drug discovery of intelligent phenotypes, e.g. food intake

Platform technology

- A** *in vivo* – whole-vertebrate
- B** Unbiased
- C** PK&safety
- D** Quantitative
- E** Large-scale

Intelligent phenotypes¹

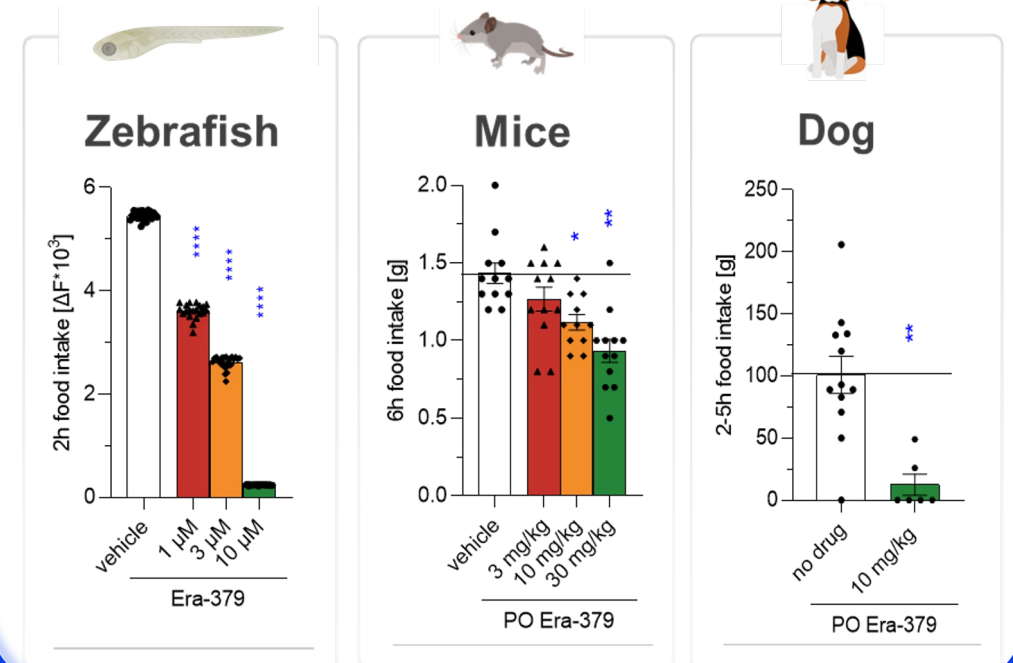
Food intake

Energy expenditure



- 1 Era-379: highly potent, orally active appetite suppressor across animal kingdoms
- 2 Novel molecular mechanism of action

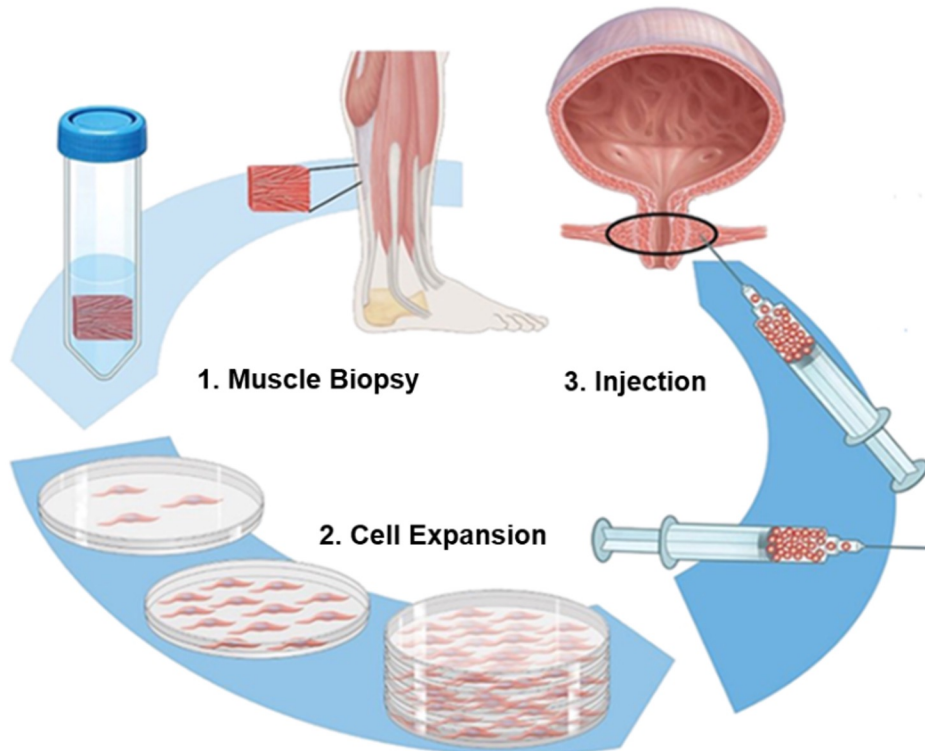
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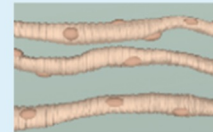
MUVON Therapeutics: REGAIN CONTROL

Joined UZH IncubatorLab in September 2019

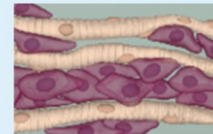
REGENERATING THE URINARY SPHINCTER USING THE PATIENTS' OWN CELLS



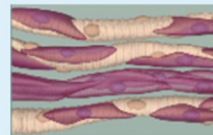
4. Functional Regeneration



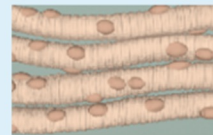
Weakened muscle



Injection



Integration of cells



Regenerated muscle

UNIQUE ADVANTAGES OF OUR TISSUE ENGINEERING APPROACH

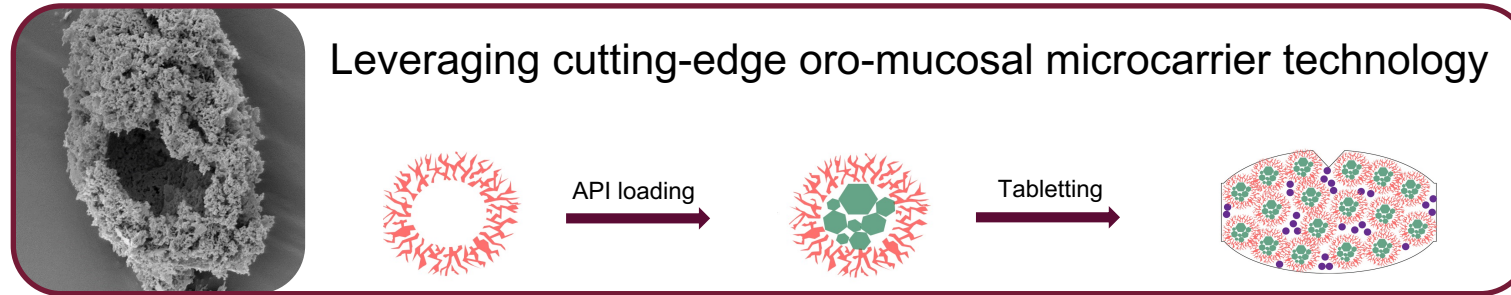
- ✓ No genetic modifications
- ✓ No synthetic material
- ✓ Minimally-invasive
- ✓ Low risk¹
- ✓ Potential cure
- ✓ No hindrance to child-birth
- ✓ Early Clinical PoC²

¹Demonstrated with 0 Serious Adverse Events in Phase I Trial
(9 Patients Treated) See Appendix

²Early efficacy measurements from Phase I Trial
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Reconnect Labs – Regenerative Therapeutics For Mental Health

Joined UZH IncubatorLab in October 2019



Asset	MoA	Indication	Clinical stage
RE01 <i>N,N-DMT + Harmine</i>	<ul style="list-style-type: none"> 5-HT_{2a} agonist Psychedelic Psychoplastogen 	Substance Abuse Disorder	Phase 1b – completed ✓ Phase 2a in Q3 2023
RE02 <i>5-MeO-DMT</i>	<ul style="list-style-type: none"> 5-HT_{1a} agonist Non-Psychedelic Psychoplastogen 	Generalized Anxiety Disorder	Phase 1b – completed ✓ Phase 2a in Q2 2023
RE03 <i>Dexmedetomidine</i>	<ul style="list-style-type: none"> Alpha2 NA agonist Regenerative sleep induction 	PTSD-related Insomnia	Phase 1b – completed ✓ Phase 2a in Q2 2023

- ✓ Addressing psychiatric indications with high unmet need
- ✓ Rapid-acting interventions
- ✓ Novel indications due to reformulation
- ✓ Exceptional pharmacokinetic profiles
- ✓ Established TOX and safety
- ✓ Promising efficacy from Ph1b trials
- ✓ Novel MoAs with plastogenic, restorative and disease modifying potential

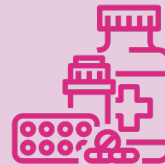
Scientific and regulatory challenges encountered

Research and Development



- RnD data translation into GLP documents
- Novel mechanisms of action: lack of guidance on pharmacodynamic profiling to define adequate therapeutic index
- FDA has released the draft Guidance for effectiveness evidence for well-controlled clinical trial and confirmatory evidence: EMA harmonization?

Regulatory and Compliance



- No aligned regulatory requirements/ product classifications by EMA and FDA: challenging parallel compliance for a small start-up
- Long-term changes in obesity clinical trial design. Will comparators become necessary with the recent successful drugs on the market
- Any plans to harmonize the regulatory requirements and terminology used by the regulatory Agencies for ATMP/regenerative therapies?

Market Access and Adoption



- Missalignment between regulatory endpoints and requirements by HTA
- How will payers react to novel anti-obesity drugs with comparable efficacy to the standard-of-care with improved safety?
- Any plans for the evolution/revisions of HTA requirements to consider the different nature of ATMPs vs. the existing and more traditional pharmaco-/bio-logical treatments?