

Massimo Alberti

973 Bukit Timah Road
Singapore 589648
massimo.alberti@revivobio.com
Tel.: +65 81643562

EDUCATION

Ph.D.
Micro- and Nanotechnology
Technical University of Denmark

MSc
Biomedical Engineering
Politecnico di Milano, Italy

BSc
Biomedical Engineering
Politecnico di Milano, Italy

LANGUAGES

English	fluent
Italian	mother tongue
Spanish	intermediate
Danish	beginner
Mandarin	beginner

IT skills

CRM	Navision, Zoho
OS	Windows - *Office* OSX - *iWork*
CAD	AUTOCAD, ProEngineer SolidWork
FEM	COMSOL
Coding	C++
Graphics	COREL, LEDIT
Others	LabView, EAGLE

Engineer | Scientist | Entrepreneur | Founder of REVIVO BioSystems

Aim: Make an impact on society & improve people's health & life

EXPERIENCE

Chief Executive Officer
REVIVO BioSystems Pte. Ltd.
Singapore, Nov 2019 – present

Oversee and manage the organization and its internal and external key stakeholders with the objective to scale the company to its next growth stage and prepare financial plans. Build and manage investor relationships, define and set the metrics & targets enabling ambitious & profitable growth, define the company's product, service & go-to-market strategies.

Scientist II
Singapore Institute of Manufacturing Technology, A*STAR
Singapore, Mar 2019 – Mar 2020

- **organ-on-chips** for **cosmetic and pharma testing**
- Collaborations with large **MNC**
- **Grants awarded** for 350,000 SGD
- **Presented at international congress** (+15000 attendees)

Research Fellow
Singapore Institute of Manufacturing Technology, A*STAR
Singapore, Aug 2014 – Feb 2019

- **organ-on-chips** for **translational skin research**
- **1 patent** and **2 peer reviewed journal articles**
- **4 international conferences** (audiences +1000)
- **2018 Global 3Rs award** for reduction of animal testing

Project Manager/Team Leader (respond to CEO)
Kem-En-Tec Diagnostics A/S Denmark, Feb 2012 - Jul 2014

- Strategic planning for R&D and business development
- Scientific marketing: **1 technical guide**, **2 white papers**
- International biomedical fairs (**Medica, Hospitalar**)
- Expanded **S. American market** to **1M DKK/year**
- Optimized processes and SOPs (**ISO9001:2000**)

Project Assistant
Kem-En-Tec Diagnostics A/S Denmark, Aug 2011 - Jan 2012

- R&D for ELISAs reagents, technical writing, marketing

Postdoctoral position
Technical University of Denmark May 2010 - Aug 2010

- microfluidic system for immunology: 2 journal articles

Sales Engineer
Pietro Fiorentini SpA Italy, Sep 2006 - Jan 2007

R&D Intern
JRC, European Commission Italy, Jan 2006 - Jun 2006

EDUCATION

Ph.D. Micro- and Nanotechnology, June 2010
Technical University of Denmark, Denmark

- **Ideation, design and prototyping of microfluidic** systems for neuronal **diagnostics**
- **2 peer reviewed publications as first author**
- **4 major international conferences** (audience +1000) and **2 poster awards**
- taught **2 courses for undergraduates**

MSc Biomedical Engineering, June 2006 — Final mark: **110/110**
Politecnico di Milano, Italy

BSc Biomedical Engineering, June 2003 — Final mark: **105/110**
Politecnico di Milano, Italy

SKILLS AND COMPETENCES

RESEARCH & DEVELOPMENT

- Organ-on-chip and tissue engineering
- Microfluidics & lab-on-chip for cell cultures
- *In vitro* skin testing
- Cleanroom photolithographic processes
- Microfabrication & rapid prototyping
- Electrochemical Impedance Spectroscopy
- ELISA and *in vitro* diagnostics assays

BUSINESS DEVELOPMENT

- B2B (*in vitro* diagnostics market)
- Commercialization of R&D technology
- Technical sales and marketing
- International fairs (Medica, Hospitalar, WCD)
- Sales reports, cost structures
- Benchmarking and market analysis
- Strong communication skills

PATENTS and INVENTIONS

- **"INTEGRATED MICROFLUIDIC SYSTEM FOR CULTURING AND TESTING"** Bigliardi PL, Wang Z, Wu R, Alberti M, Wu B, Bigliardi-Qi M, Gopu S, Ramasamy S, Dancik YH (WO2018030958A1, US2019177678A1, CN109789406A, EP3496858A1, PCT/SG2017/050400, SG/10201606627Q)

VOCATIONAL COURSES

- **SMART Innovation Bootcamp** – Singapore-MIT Alliance (Singapore), 2019
- **Business Model Canvas Workshop: Ideal Business Model for your Product or Technology** and **Financing Innovation Workshop** - ETPL and Expara Industry Seminar (Singapore), 2015
- **Growbiz Program, International Growth and Export Program** - Dansk Erhverv, Medicon Valley Alliance and Væksthus (Denmark), 2013
- **Strategic Innovation and Business Development, Executive Summer Programs** - Copenhagen Business School (Denmark), 2012
- **Knowledge based entrepreneurship** - Technical University of Denmark (Denmark), 2009

AWARDS

- Winner at the X-Pitch 2023 competition as "DeepTech Startup of The Year" and "Best Healthcare Startup".
- Winner of the 2019 IEEE N3XT® Star Award
- 2018 Global 3Rs Award from AAALAC International and the IQ Consortium (2018)
- Finalist in the Venture Cup Life Science & Medtech, Copenhagen, DK (2010)
- Poster Award from the Association for Laboratory Automation, USA (2010)
- Poster Award from the PENS Neuroscience School, Russia (2008)

ORIGINAL RESEARCH ARTICLES

- "Microphysiological Modeling of Gingival Tissues and Host-Material Interactions Using Gingiva-on-Chip", G. Muniraj, R. H. S. Tan, Y. Dai, R. W, **M. Alberti**, G. Sriram. *Advanced Healthcare Materials*, 2023, Sep 27:e2301472. doi: 10.1002/adhm.202301472
- "Editorial: Medical and Industrial Applications of Microfluidic-Based Cell/Tissue Culture and Organs-on-a-Chip", Q. Ramadan#, **M. Alberti**, M. Dufva, Y-C Tung. *Frontiers in Bioengineering and Biotechnology*, 2019, 7:151 (https://doi.org/10.3389/fbioe.2019.00151)
- "Full thickness human skin-on-chip with enhanced epidermal morphogenesis and barrier function", G. Sriram[#*], **M. Alberti**[#*], Y. Dancik[#], B. Wu, R.G. Wu, Z. Feng, S. Ramasamy, P.L. Bigliardi, M. Bigliardi-Qi*, Z.P. Wang*. *Materials Today*, Dec 2017 (https://doi.org/10.1016/j.mattod.2017.11.002)
- "Multi-chamber microfluidic platform for high-precision skin permeation testing", **M. Alberti**[#], Y. Dancik[#], G. Sriram, B. Wu, Y.L. Teo, Z. Feng, M. Bigliardi-Qi, R.G. Wu, Z.P. Wang, P.L. Bigliardi. *Lab on a Chip*, Vol. 17, No. 9, 2017 p. 1625-1634 (https://doi.org/10.1039/c6lc01574c)
- "Impedance spectra of patch-clamp scenarios for single cells immobilized on a lab-on-a-chip", **M. Alberti**, D. Snakenborg, J.M. Lopacinska, M. Dufva and J.P. Kutter. *Microfluidics and Nanofluidics*, Vol. 17, No. 2, 2014 p. 263–274 (https://doi.org/10.1007/s10404-013-1304-8)
- "The MainSTREAM component platform: A holistic approach to microfluidic system design", D. Sabourin, P. Skafte-Pedersen, M.J. Søe, M. Hemmingsen, **M. Alberti**, V. Coman, J. Petersen, J. Emnéus, J.P. Kutter, D. Snakenborg, F. Jørgensen, C. Clausen, K. Holmstrøm and M. Dufva. *Journal of Laboratory Automation*, 2012 (https://doi.org/10.1177/2211068212461445)
- "HistoFlex--a microfluidic device providing uniform flow conditions enabling highly sensitive, reproducible and quantitative in situ hybridizations", M.J. Søe, F. Okkels, D. Sabourin, **M. Alberti**, K. Holmstrøm and M. Dufva. *Lab on a Chip*, Vol. 11, No. 22, 2011, p. 3896-3907 (doi:10.1039/C1LC20748B)
- "Characterization of a Patch-Clamp Microchannel Array Towards Neuronal Networks Analysis", **M. Alberti**, D. Snakenborg, J.M. Lopacinska, M.Dufva and J.P. Kutter. *Microfluidics and Nanofluidics*, Vol. 9, No. 4-5, 2010, p. 963-972 (https://doi.org/10.1007/s10404-010-0619-y)

CONFERENCE CONTRIBUTIONS

- "Microfluidics meets skin research: novel technologies for automated and realistic ex vivo and in vitro skin testing", M. Alberti (invited speaker), 24rd World Congress of Dermatology 2019 and 6th Global Chinese Dermatological Summit, Milan, Italy, June 2019.
- "Microfluidics meets skin research: novel technologies for automated, high-throughput ex vivo and in vitro skin testing", M. Alberti, G. Sriram, Y. Dancik, B. Wu, R.G. Wu, S. Rastogi, Z. Feng, S. Ramasamy, P.L. Bigliardi, M. Bigliardi-Qi, Z.P. Wang. 3rd Singapore International Conference in Skin Research, Singapore, March 2018.
- "Superior differentiation in full thickness human skin-on-a-chip", M. Alberti, G. Sriram, Y. Dancik, B. Wu, R. Wu, S. Ramasamy, M. Bigliardi-Qi, P.L. Bigliardi, Z. Wang. MicroTAS 2017, Savannah, USA, Oct 2017
- "Skin-on-a-chip for human skin models with enhanced differentiation and barrier properties", M. Alberti, S. Gopu, B. Wu, R.G. Wu, Z.P. Wang. Optofluidics 2017, Singapore, Jul 2017
- "High-throughput microfluidic chip for automated in vitro release testing", M. Alberti, Y. Dancik, B. Wu, Z. Feng, R.G. Wu, M. Bigliardi-Qi, Z.P. Wang. MicroTAS 2016, Dublin, Ireland, Oct 2016
- "Electrical and Fluidic Characterization of a Novel Integrated System for Automatic Patch-Clamp on Cultured Neural Networks", M. Alberti, D. Snakenborg, J.M. Lopacinska, M. Dufva, J.P. Kutter. LabAutomation 2010, Palm Springs, California, USA, Jan 2010
- "Electrochemical Impedance Spectroscopy for Characterization of a Patch Clamp Microchannel Array and Detection of Cells", M. Alberti, D. Snakenborg, J.M. Lopacinska, M. Dufva, J.P. Kutter. MicroTAS 2009, Jeju, South Korea, Nov 2009
- "Cell Trapping Platform towards a Patch-Clamp Microchannel Array", M. Alberti, D. Snakenborg, J.P. Kutter. MicroTAS 2008, San Diego, California, USA, Oct. 2008
- "Electrical and Chemical Stimulation of Neuronal Cells in Microfluidic Systems", M. Alberti. PENS Neuroscience School "Models in Neuroscience". Saint Petersburg, Russia, May 2008