

Curriculum vitae

Matthias Pilecky, PhD

Personal Data

Date of birth 18th of September, 1988 in Melk

Contact University for Continuing Education
Department for Biomedical Research
Center for Biomedical Technology
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School Education

1998 - 2006 Stiftsgymnasium Melk with linguistic focus
Term paper in biology in context of the school leaving exams

Studies

2007 – 2010 Bachelor studies „Molecular Biotechnology“
University for Applied Science (FH Campus Wien), Vienna Austria

2010 - 2013 Master studies „Biological Chemistry“ with focus on food chemistry
University of Vienna, Vienna, Austria

2016 - 2020 PhD studies „Regenerative medicine“
Danube-University Krems, Krems, Austria

Research Experience

Since 2020 Post-doctoral fellow at WasserCluster Lunz and University of Continuous Education Krems

2016 - 2020 PhD Thesis
Danube-University Krems, Department of Biomedical Research
Influence of Antibiotic Pretreatment on Molecular Diagnostics for *Staphylococcus aureus* Blood Stream Infection Supervisor: Univ.-Prof. Dr. Viktoria Weber

Feb. 2016 - Jun. 2016 Drott Medizintechnik GmbH
Product Manager

- Coordinate a Team of 4 sales representatives
- Plan Marketing and Sales Strategies
- Provide scientific background and argumentation

Oct. 2014 - Feb. 2016 eBioscience - an Affymetrix company

Research & Development

- Development of ELISA
- Development of Bead-based Immunoassays
- Feasibility testing for new

technologies Business Development

- Identification of new promising Biomarkers
- Literature research and writing of internal reviews
- Support of R&D by providing detailed information about analytes (structure, interactions, physiological concentrations,...)
- Develop strategies for marker-combination and marketing for diseases panels (e.g. cardiovascular diseases)
- Design and development of new technologies
- Support of legal department regarding possible patent conflicts

Feb. 2013 - Oct. 2014 Anagnostics Bioanalysis GmbH

Project Management

- Design and Development of new products for in-vitro diagnostic according to ISO13485: Inflammation/Emergency Panel– a multianalyte immunological assay designed to simultaneously detect various biomarkers for inflammation and organ status (brain, heart, liver, kidney) to quickly assess the clinical condition of a patient from a small blood sample
- Compilation of SOPs for assay production
- Definition of Criteria for Quality Assurance
- Customer training and technical support
- Training, support and lectures for sales department
- Talks and lectures for medical staff regarding the values of sepsis biomarkers
- Representation on congresses and exhibitions
- Support of clinical studies
- Scientific support for key management

Further temporarily assigned tasks

- Assist Production and Logistics
- Assist and accompany sales personal

Jan. 2012 - Jan. 2013 Masterthesis

Department for Medical Biochemistry, Max F. Perutz Laboratories, Austria

„Development of a modified rhinovirus by using recently discovered fluorescence labelling techniques for in vivo live imaging of viral replication“

Supervisor: Univ-Prof. Dr. Karin Macfelda

Jan. 2010 - Jun. 2010 Bachelorthesis

Institute for Biomedical Research, Medical University Vienna, Austria
„Development of a tissue culture model for cardiac hypertrophy and testing of therapeutic micro current treatment“
Supervisor: Univ-Prof. Dr. Dieter Blaas

Sep. 2006 Internship

Institute for Biophysics, JKU Linz, Austria
“Structural research of S-layers by atomic force microscopy”
Supervisor: Univ-Prof. Dr. Peter Hinterdorfer

Honors and Awards

2017 Science-to-Business Award 2017 (€ 1,500)

2018 FFG-BRIDGE “Advanced Pathogen Detection in Bloodstream Infection” (€ 450,000)

2019 Tecnet-Accent Innovation Award (€ 4,000)

2020/21 Establishing Coronavirus-PCR-Test-Laboratory for Lower Austrian Hospitals

Further Training

Since 2007 Voluntary work with the Austrian red cross

Paramedic and group leader; frequent training on the (emergency) medical field

2013 Medical device consultant

Language Abilities

German Mother tongue

English Fluent in spoken and written

French Basic knowledge

Spanish Basic knowledge

Finnish Basic knowledge

Computer Literacy

Systems Apple, Linux, Microsoft

Software Microsoft office (Word, Excel,....)

SPSS and further statistic programs

Photoshop

Software of Laser Scanning Microscopes, Atomic Force Microscopes, HPLC, GC, CE and MS

Publications

Pilecky M, Harm S, Bauer C, Zottl J; Emprechtinger R, Eichhorn T, Schildböck C, Ecker M, Willheim M, Weber V, Hartmann J (2021) Performance of Lateral Flow Assays for SARS-CoV-2 compared to RT-qPCR, *J Infect* Jan 14:S0163-4453(22)00011-1.

Mathieu-Resuge M, Pilecky M, Twining CW, Martin-Creuzburg D, Parmar TP, Vitecek S, and Kainz, MJ (2021) Dietary availability determines metabolic conversion of long-chain polyunsaturated fatty acids in spiders: a dual compound-specific stable isotope approach. *OIKOS* 00:1-12.

Pilecky M, Kämmer SK, Mathieu-Resuge M, Wassenaar LI, Taipale SJ, Martin-Creuzburg D, and Kainz MJ (2021) Hydrogen isotopes ($\delta^2\text{H}$) of polyunsaturated fatty acids track bioconversion by zooplankton. *Functional Ecology* 00:1-12.

Pilecky M, Závorka L, Arts MT, and Kainz MJ (2021) Dietary omega-3 polyunsaturated fatty acids is central to neurophysiological development and behavior leading to strong and pervasive downstream effects on trophic ecology - A multi-perspective synthesis. *Biological Reviews* 96(5):2127-2145.

Pilecky M, Winter K, Wassenaar LI, and Kainz MJ (2021) Compound-specific deuterium analysis of lipids: applications for trophic ecology. *Rapid Com Mass Spectro* 35(16):e9135.

Huber S, Weinberger J, Pilecky M, Lorenz I, Schildberger A, Weber V, Fuchs S, Posch W, Knabl L, Würzner R, Posch AE, and Orth-Höller D (2021) A high leukocyte count and administration of hydrocortisone hamper PCR-based diagnostics for bloodstream infections. *Eur J Clin Microbiol Infect Dis* 40(7),1441-1449.

Rasconi S, Ptacnik R, Danner S, Van den Wyngaert S, Rohrlack T, Pilecky M, and Kainz MJ (2020) Parasitic chytrids convey and upgrade primary produced carbon during inedible algae proliferation. *Protist* 171(5):125768.

Huber S, Weinberger J, Pilecky M, Lorenz I, Schildberger A, Weber V, Orth-Höller D, Posch, AE (2020) Identification of potential factors interfering with molecular diagnostics for bloodstream infections: a retrospective data analysis. *Europ J Clin Microb Infect Dis* 40(7): 1441-1449.

Moosbrugger-Martinz V, Hackl H, Gruber R, Pilecky M, Knabl L, Orth-Höller D, Dubrac S (2020) First evidences of distinguishable bacterial and fungal dysbiosis in the skin of patients with Atopic Dermatitis or Netherton Syndrome. *J Invest Dermat* 141(1):114-123.

Pilecky M, Schildberger A, Orth-Höller D, and Weber V. (2019) Pathogen enrichment from human whole blood for the diagnosis of bloodstream infection: Prospects and limitations. *Diagn Microbiol Infect Dis* 94,7-14.

Pilecky M, Schildberger A, Knabl L, Orth-Höller D, and Weber V. (2019). Influence of antibiotic treatment on the detection of *S. aureus* in whole blood following pathogen enrichment. *BMC Microbiol* 19:180