

Markus Rechsteiner, Ph.D

Nationality: CH

Birth: 20.12.1976

Social state: married, 3 children

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Professional experience

- 06/2010 - present *Resident Scientist, University Hospital of Zurich, Switzerland*
- Coordinated the accreditation of the NGS facility at the Institute of Pathology, USZ, according to ISO 15189, ISO/IEC 17025, and ISO/IEC 17020 standards (August, 2015)
 - Organisation of NGS round robin tests in Switzerland and Europe (Initiator: USZ)
 - Assessment of NGS round robin test results from 3rd parties (Initiator: EMQN)
 - Board member of Diagnostic NGS Quality Control (Initiator: Swiss Institute of Bioinformatics (SIB))
 - Board member of NGS facility selection of the National Cancer Institute, France (INCA)
 - Organisation and coordination of multiple research projects involving next-generation sequencing with Principal Investigators from the USZ, UZH, ETHZ, external facilities, and industry
 - Set-up of and responsible for 454 Junior (Roche), Personal Genome Machine (Ion Torrent), and Ion Proton (Ion Torrent) next-generation sequencing units for research and diagnostics
 - Supervised PhD students and organized PhD student courses
- 06/2008 – 06/2010 *Post-Doctoral fellow, University Hospital of Zurich, Switzerland*
- Set up clinical trial to detect tissue and serum biomarkers
 - Set up in silico and in vitro assays to predict protein functionality and correlated them to clinical data
 - Established human pancreatic tissue bank and database with well characterized patient groups for T2DM biomarker screening
 - Supervised PhD students and organized PhD student courses
- 06/2003 – 12/2004 *Research Assistant, Agroscope FAL Reckenholz, Zurich, Switzerland*
- Set up a cDNA-AFLP/RT-PCR screening platform
 - Analyzed RNA expression changes of plants during infection with bacteria
 - Identified new resistance genes in *Lolium multiflorum* after infection with *Xanthomonas*
- 07/2002 – 10/2002 *Research Assistant, University of Sao Paulo, Brazil*
- Set up a 2-D gel electrophoresis platform
 - Analyzed bacterial proteome changes during infection of citrus plants
 - Identified new bacterial proteins from *Xanthomonas* which can be used as targets for inhibiting plant infection and citrus cancer disease
 - Supervised master students
- 04/2002 – 07/2002 *Management support, Credit Suisse Financial Services, Zurich, Switzerland*
- Set up an Access database for the international trainee exchange program
 - Supported project management in work law processes
 - Established and visualised work flow processes
- 04/2000 – 08/2000 *Supply manager, Xerox Engineering Systems, Zurich, Switzerland*
- Coordinated supply, order, and delivery to customers in whole Switzerland

Education

- 01/2005 – 06/2008 *Dr. sc. nat. UZH, University Hospital Zurich, Switzerland*
- Functionally characterized LMP2B as a therapeutic approach to destroy EBV-positive Burkitt's Lymphoma
 - Analyzed demethylating agents on virus reactivation and tumour cell death
- 10/1996 – 02/2002 *Dipl. Natw. ETHZ, Swiss Federal Institute of Zurich, Switzerland*
- Characterized gas kinetic profiles of bacterial flavo-/hemoglobins which can be used to increase gas solubility, i.e. O₂, in fermentation processes to achieve higher yields of the product of interest
 - Mastered in Immunology, Bioprocesses, Gentechnology, Enzymtechnology, Genetics and Chemistry of biological molecules
- 10/1989 – 02/1996 *Matura, Kantonsschule Rämibühl, Switzerland*
- Natural sciences with English and Latin (Typus B)

Advanced courses

- 09/2015 EQA Scheme Assessor training
Online (European Molecular Genetic Quality Network (EMQN))
- 02/2015 Oncomine Solid Tumour DNA and Oncomine Solid Tumour Fusion Transcript Kit training
Online (Life Technologies)
- 01/2013 Ion Library preparation and Torrent workflow training
Darmstadt, Germany (Life Technologies)
- 07/2011 454 Junior Training course
Penzberg, Germany (Roche)
- 12/2009 Good Clinical Practice course module 2 (Principal Investigator) at the Clinical Trial Centre of the
University of Zurich, Switzerland
- 11/2009 Good Clinical Practice course module 1 (Basic) at the Clinical Trial Centre of the University of Zurich,
Switzerland
- 07/2007 Lab Animal Course, LTK1
Institute of Lab Animal Science, University of Zurich, Switzerland
- 11/2006 Course "Embracing Life - Challenges and Questions in Patenting for Life Sciences"
Gwatt, Switzerland
- 05/2003 Web Supporter KSC, Webpage realization of 'Term-Project in Artificial Life' using Dreamweaver/HTML
KSC Internet – school Zurich, Switzerland.
- 10/2002 – 05/2003 Basic and advanced courses in Portuguese
Instituto cultural brasileiro Zurich, Switzelrand
- 07/1996 – 09/1996 Advanced courses in English
St. Giles college, London, UK.

IT literacy

- General Microsoft Office, Prism, Photoshop, EndNote
- DNA analysis CLC Genomic Workbench, Ion Reporter, IGV, UCSC genome browser, SDM
- Expression analysis SDS, analySIS, FlowJo, MeV, AltAnalyze
- Statistics SPSS Statistics

Languages

German	Fluent (mother tongue)
English	Fluent (working language)
French	High school level
Portuguese	Basic

Grants

2015	Swiss National Science Foundation: open
2015	Förderung durch den Innovationspool des UniversitätsSpital Zürich
2014	Förderung durch den Innovationspool des UniversitätsSpital Zürich
2013	Swiss Cancer League
2012	Ida De Pottère-Leupold-Fonds
2011	Sassella Foundation
2010	Cancer League of the Canton Zurich
2007	Cancer League of the Canton Zurich
2006	UBS Research grant

Memberships

Swiss Society of Molecular Pathology
European Molecular Genetic Quality Network (EMQN)
PhD Programs from the EHTZ/UZH/USZ/KispiZH