

**Personal Details**

Date of birth: 19<sup>th</sup> of January 1978

Address: 4056 Basel, Switzerland

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Place of birth: Lugano (Switzerland)

Citizenship: Swiss and Italian

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**Languages**

Italian (native speaker), German (fluent), English (fluent), French (good), Spanish (basal skills)

**Skills and Achievements**

During my academic education, training and professional experiences, I acquired strong practical competencies in molecular biology (PCR, RT-PCR, qPCR, cloning), DNA detection assay (SNP analysis), expression variation analysis (mRNA and miRNA), population genetics (microsatellites), biotechnology (protein expression and purification), protein characterization (SDS-PAGE and western blot) and *in vivo* experimentation (fish and rats).

As scientific collaborator at the University of Applied Sciences in the laboratory of Prof. Dr. Eric Kübler I carried on several CTI projects in collaboration with different companies, i.e. Hoffman La Roche, Novartis, RedBiotec, Biolytics, Evolva and InSphero. Furthermore, I took care of projects which were directly supported by the Cantonal Laboratory of Basel Stadt and Hutman Diagnostics AG.

Within the school, I have been involved in a large number of internal projects, as various other laboratories (i.e. Prof. Dr. Laura Suter-Dick, Dr. Armin Zenker and Prof. Dr. Veronika Butterweck) address to our expertise for support, development and analysis (e.g. miRNA/mRNA expression analysis in different 2D and 3D cell cultures, mRNA expression analysis in *Danio rerio*, Microsatellite-based population study of crawfish).

As supervisor in the field of molecular biology at the School of Life Science I acquired experience in management of practical course, students training, proof reading of written thesis, and supervision of projects (from bachelor to PhD thesis).

Currently, I am also involved in the acquisition of new projects (e.g. mRNA expression of different target genes in *Danio rerio*).

Thanks to a strong collaboration with Apprentas and Roche (Ausbildungszentrum), I also trained several apprentices ranging from the 1<sup>st</sup> to the 3<sup>rd</sup> year of formation as biology laboratory technicians.

**Education**

October 1997-March 2003:

M.Sc. in Biology, with Neurobiology track, Swiss Federal Institute of Technology (ETHZ), 8000 Zürich, Switzerland

September 1993- June 1997:

Matura type C (scientific track), Liceo cantonale Lugano 1, 6900 Lugano, Switzerland

**Work experiences**

March 2010-to date:

Expert examiner, Biology Apprentice for Baselland, Arentas, 4132 Muttenz, Switzerland

February 2007-to date:

Scientific collaborator, University of Applied Science, Institute of Chemistry and Bioanalytics, 4132 Muttenz, Switzerland

- Development and analysis of mRNA and miRNA expression
- Cloning, expression and purification of protein (in *Pichia pastoris*)
- Development of SNP and general DNA detection analysis (cells, blood, GMO plants)
- General protein analysis techniques (SDS-PAGE, Western blot)
- Technical support for Bachelor, Master and PhD thesis
- Management of the laboratory
- Supervision of practical courses in molecular biology
- Acquisition of new projects (first steps)
- Apprenticeship's training (1<sup>st</sup> to 3<sup>rd</sup> year of apprenticeship from Roche and Novartis)

September 2004-January 2007:

Scientific collaborator, University of Applied Science, Institute of Ecopreneurship, 4132 Muttenz and Springborn Smithers Laboratories, 9326 Horn, Switzerland

- *In vivo* toxicological tests (*Daphnia magna*, *Pimephales promelas*)
- Development and analysis of mRNA expression
- Protein quantification (ELISA)
- Enzyme activity (fluorescent based assays)
- General protein detection analysis (SDS-PAGE, Western blot)

February 2004-Juli 2004:

Internship, Laboratorio di diagnostica molecolare, 6900 Lugano, Switzerland

- Development and validation of SNP analysis
- Routine analysis of bacterial infection on human sample(restriction fragment analysis, SNP analysis)
- Paternity tests and unidentified corpses (in collaboration with the scientific police of Canton Ticino)

June 2003-November 2003:

Scientific collaborator, Laboratory of Behavioural Neuroscience, Swiss Federal Institute of Technology, 8603 Scherzenbach, Switzerland

- Behavioural tests on rats
- Post-mortem analysis of neurotransmitter in rat brain (HPLC)
- Extraction and detection of neurotransmitter in primates spinal cord

October 2002-April 2003:

Master student, Laboratory of Behavioural Neuroscience, Swiss Federal Institute of Technology, 8603 Scherzenbach, Switzerland

- Behavioural tests on rats
- Pharmaceuticals treatment on rat (antidepressant)

#### **Presentations and Posters**

Weston A.; Kübler E.; Summer school in advance biotechnology (2011) Berlin, Germany; *Taq* DNA Polymerase: new environment for a practical approach, *Oral contribution*

Weston A.; Galicia H.; Caminada D.; Fent K.; SETAC (2006) Lille, France; Effects of the lipid-lowering pharmaceutical bezafibrate on *Daphnia magna* and fathead minnows, *Poster and oral presentation*

Weston A.; Caminada D.; Fent K.; SETAC (2005) The Hague, Netherland, Ecotoxicological effects of human pharmaceuticals, *Poster presentation*

#### **Publications**

Prestigiacomo V, Weston A, Messner S, Lampart F, Suter-Dick L.; Pro-fibrotic compounds induce stellate cell activation, ECM-remodelling and Nrf2 activation in a human 3D-multicellular model of liver fibrosis. *PLoS One*. (2017)

Wedler J, Weston A, Rausenberger J, Butterweck V.; In vitro modulation of inflammatory target gene expression by a polyphenol-enriched fraction of rose oil distillation waste water. *Fitoterapia*. (2016), 114, 56-62.

Vanella, R; Weston A; Brodmann P.; Kübler E.; Development of an event-specific assay for the qualitative and quantitative detection of the genetically modified flax CDC Trifid (FP967), *Food Control* (2014), 41, 128-133

Weston A; Caminada D.; Galicia H.; Fent K.; Effects of lipid-lowering pharmaceuticals bezafibrate and clofibrate acid on lipid metabolism in fathead minnow (*Pimephales promelas*), *Environ Toxicol Chem* (2009), 28 (12), 2648-55

Fent K.; Weston A; Caminada D.; Ecotoxicology of human pharmaceuticals, *Aquat Toxicol* (2006), 76(2), 122-59  
Rüedi-Bettschen D.; Zhang W.; Russig H.; Ferger B.; Weston A; Pedersen EM.; Feldon J.; Pryce CR.; Early deprivation leads to altered behavioural, autonomic and endocrine responses to environmental challenge in adult Fischer rats, *Eur J Neurosci* (2006), 24(10), 2879-93

Pryce CR.; Rüedi-Bettschen D.; Dettling AC.; Weston A; Russig H.; Ferger B.; Feldon J.; Long-term effects of early-life environmental manipulations in rodents and primates: Potential animal models in depression research, *Neurosci Biobehav Rev* (2005), 29(4-5), 649-74

#### **Information technology skills**

Microsoft office, Lasergene, Rotorgene 6000, REST, EndNote, Adobe InDesign, SPSS, Stat View, Prism, Sigma Plot, Origin, Chromeleon, Infinite M200 Reader, Chem Alpha

#### **References**

Prof. Dr. Eric Kübler, University of Applied Sciences, Institute of Chemistry and Bioanalytics, Gründenstr.40, 4132 Muttenz, Switzerland (+41 61 467 46 38)

Prof. Dr. Karl Fent, University of Applied Sciences, Institute of Ecopreneurship, Gründenstrs. 40, 4132 Muttenz, Switzerland (+41 61 467 45 71)

Dr. Mauro Gola, Dr. Gianni Soldati, Dr. Tiziano Balmelli, In Pasquée 32, 6925 Gentilino, Switzerland (+41 91 960 37 00)

Dr. Christopher R. Pryce and Prof. Dr. Joram Feldon (+41 79 572 65 59), Institute of Behavioural Neuroscience, Swiss Federal Institute of Technology, Schörenstrasse 16, 8603 Scherzenbach, Switzerland