

CURRICULUM VITAE



SHORT PROFILE

- Biochemist, specialized in protein analytics and mass spectrometry
- Experienced in plasma protein fractionation and characterization
- Experienced in automation of data evaluation and data mining
- Fluency in English

PERSONAL INFORMATION

Name: Daniel Stalder
Date of birth: 4. 8.1978
Nationality: Swiss
Family status: Partnership, two children
Home town: Hasle-Rüegsau, BE

EDUCATION

1994-1999 Freies Gymnasium Bern
1999 Matura Typus C

STUDIES

2000-2001 Studies in Chemistry, University of Bern
2001-2004 Studies in Biochemistry, University of Bern
2004 Master of Science in Biochemistry, University of Bern
Since 2004 PhD-thesis, University of Bern

LANGUAGE SKILLS

German Mother tongue
English Written and oral excellent (bilingual parents' house)
French Written and oral good

RESEARCH AND WORK EXPERIENCE

- 09/2004-12/2007 **PhD-thesis at the Department of Clinical Research, Bern**
Development, evaluation and application of a gel-free human plasma protein profiling platform for biomarker discovery.
- Development and evaluation of a reproducible plasma protein fractionation protocol for Off-gel isoelectric focusing coupled to RP-HPLC.
 - Reproducibility evaluation of protein identifications by LC-Ms/Ms in complex protein samples.
 - Evaluation of relative protein quantification by LC-Ms/Ms.
 - Application of the platform to a clinical question in collaboration with clinical researchers. This involved the planning and the implementation of a clinical study with 80 patients.
 - Statistical validation of the results by immunologic assays.
- 03/2004-09/2004 **Internship at the Department of Clinical Research, Bern**
Fractionation and characterization of human lipoproteins
- Development and evaluation of a rapid method for the isolation of lipoproteins from a small amount of blood plasma
 - Development and evaluation of a method for profiling the relative protein content in lipoproteins by mass spectrometry
 - Development of several software tools for data manipulation and data mining, specifically validation of relative protein concentrations
- 08/2003-08/2004 **Diplomawork at the University of Bern in the lab of Prof. Erni**
Title: “Comparative proteome analysis of *E.coli* wild-type and a *crr* H90Q phosphotransferase system (PTS) mutant”
- Introduction of a specific point mutation into the genome of *E.coli* applying state of the art molecular biology techniques
 - Comparative explorative study between wild-type and mutated *E.coli* strain, using reproducible high resolution 2D-PAGE gels
 - Statistical evaluation of the produced data
 - Identification and characterization of the differently expressed proteins
 - Validation of the obtained results by reporter gene assays
- 08/2001-11/2001 **Software development and validation at the ZLB Bioplasma AG**
Development and validation of software in a team
- Validation and standardization of quantitative analysis software
 - Development of new quantitative analysis software
 - First contacts with GLP, SOPs and standardized documentation

FURTHER EDUCATION WORTH NOTING

- 2007 *2nd Summer Course on Mass Spectrometry in Biotechnology and Medicine*, Center for Advanced Academic Studies, Dubrovnik, Croatia
- 2006 *Statistische Prinzipien für medizinische Projekte*, University of Bern, Prof. J. Hüsler and Prof H. Zimmermann
- 2006 Training on the Summit HPLC System and Chromeleon software system, Dionex instructors
- 2005 Development of a decentralized yellow pages know-how platform for the members of the University of Bern. <http://knowhow.unibe.ch>

RECENT TALKS

- 15/07/2007 *2nd Summer Course on Mass Spectrometry in Biotechnology and Medicine*, Apolipoprotein(a) Concentration and Isoform Type in Patients with good and poor Collateral Flow Index (CFI)
- 17/04/2007 *Cardiovascular Research Conference*, Apolipoprotein(a) Concentration and Isoform Type in Patients with good and poor Collateral Flow Index
- 26/04/2007 *F+E Forum, CSL Behring AG*, Gel-free Biomarker Mining in Human Blood Plasma
- 06/03/2006 *Club am Mittag des Uni-Zentralbereichs*, Der Know-how Manager der Universität Bern – Networking leicht gemacht

PUBLICATIONS

Stalder D, Haerberli A, Heller M. Evaluation of Reproducibility of Protein Identification Results after Multidimensional Human Serum Protein Separation. *Proteomics*. Accepted for publication with minor revisions.

Stalder D, Cung T, Gloeker S, Meier P, Haerberli A, Marcovina S, Seiler C, Heller M. Apolipoprotein(a) Concentration and Isoform Type in Patients with good and poor Collateral Flow Index (CFI) – An Interrelation Discovered by a Proteomic Screening of Pooled Plasma Samples. *Proteomics, Clinical Applications*, currently under review.

Ambort D, **Stalder D**, Lottaz D, Huguenin M, Oneda B, Heller M, Sterchi E. Meprin – a metalloendopeptidase and its substrate repertoire – a systems biology-based approach. *Molecular and Cellular Proteomics*. Under review

Heller M, Schlappritzi E, **Stalder D**, Nuoffer JM, Haerberli A. Compositional Protein Analysis of High Density Lipoproteins in Hypercholesterolemia by Shotgun LC-MS/MS and Probabilistic Peptide Scoring. *Molecular and Cellular Proteomics*. 2007 Jun; 6(6):1059-1072.

Heller M, Ye M, Michael PE, Morier P, **Stalder D**, Junger MA, Aebersold R, Reymond F, Rossier JS. Added value for tandem mass spectrometry shotgun proteomics data validation through isoelectric focusing of peptides. *J Proteome Res.* 2005 Nov-Dec; 4(6):2273-82.

Heller M, **Stalder D**, Schlappritzi E, Hayn G, Matter U, Haerberli A. Mass spectrometry-based analytical tools for the molecular protein characterization of human plasma lipoproteins. *Proteomics.* 2005 Jul; 5(10):2619-30.

PERSONAL INTERESTS

Chess, Swimming, Kite surfing, Snowboarding
Cooking for/with friends, organizing small social events
Stock, commodity and currency trading (wealth building)
Reading English literature, especially classic science fiction
Photography, Film and Video
Political and scientific discussion
Programming and planning of Web applications

REFERENCES

Prof. André Haerberli Department of Clinical Research, University of Bern
Thromboselabor G3 841
Kinderklinik, Inselspital
3010 Bern
Tel: 031 / 632 30 89
andre.haerberli@dkf.unibe.ch

Dr. Manfred Heller Department of Clinical Research, University of Bern
Thromboselabor G3 844
Kinderklinik, Inselspital
3010 Bern
Tel: 031 / 632 84 04
manfred.heller@dkf.unibe.ch

Peter Baillod CSL Behring AG
Wankdorfstrasse 10
3014 Bern
Tel: 031 344 43 61
peter.baillod@cslbehring.com

Bern, 31.10.2007

Daniel Stalder