

Stephanie Hoffmann (former Tscherneck), M. Sc.



Background

- Since October 2011: Research assistant at the Center for Bioinformatics (ZBIT), Universität Tübingen
- 2009 - 2010: Research assistant at the University of Applied Science Wildau, at the group of Prof. Dr. Peter Beyerlein
- 2007 - 2008: Student assistant at the Max-Planck-Institute for Molecular Genetics, at the group of Dr. Margret Hoehe
- 2006 - 2007: Internship at the Bundesinstitut für Risikobewertung (Berlin), at the group of Dr. Stefan Hertwig
- 2004 - 2009: Studies of Biosystems Engineering/Bioinformatics at the University of Applied Sciences Wildau (UASW)
- 2001 - 2004: Gymnasium (high school) "Carl-Zeiss-Oberstufe" in Berlin

Research Interests

- Systems Biology

Current Projects

Projects funded by the University of Tuebingen:

- Inference of biochemical reaction systems considering physico-chemical constraints

Projects funded by the BMBF:

- [Virtual liver network](#)
- Nuclear receptor influenced human hepatocyte model

Supervised theses

Status	Kind	Title	Announcement
current work	Master thesis	Implementierung und Entwicklung verschiedener Zielfunktionen für ein graphisch unterstütztes Flussbilanzanalyse-Modul	
open	Bachelor thesis	Entwicklung eines Reduktions- und Mapping-Algorithmus für Messdaten auf ein rekonstruiertes Netzwerk	
open	Master thesis	Entwicklung eines logischen Modells für den transkriptionellen Einfluss von nukleären Rezeptoren in Hepatozyten	
finished in Feb. 2013	Bachelor thesis	Integration der dynamischen Flussbilanzanalyse in den SBMLsimulator	

Publications

Click here for my [Google scholar profile](#)

- [1] Stephanie Tscherneck, Sarah Strunk, Christian Schmidt, Paul Hammer, Ronny Amberg, Chong Wang, Rainer Gillert, Antje Krause, Gabriele Petznick, and Peter Beyerlein. On the Mutual Information Between Interaction Perplexity and Function of Proteins. In *IEEE*

International Workshop on Genomic Signal Processing and Statistics, pages 1--4,
Minneapolis, MN, USA, May 2009. IEEE. [[DOI](#) | [link](#)]

Theses

- [1] Stephanie Tscherneck. Aufbau einer integrierten Wissensbasis zur quantitativen Modellierung von Proteininteraktionen. Masterthesis, University of Applied Sciences Wildau (UASW), Bahnhofstr. 1, 15745 Wildau (Germany), August 2009.
- [2] Stephanie Tscherneck. Identifizierung und Charakterisierung der Prophagen Repressor Bindungsstellen auf den Genomen PY54 und phiKO2. Bachelorthesis, University of Applied Sciences Wildau (UASW), Bahnhofstr. 1, 15745 Wildau (Germany), August 2007.

Selected posters

- [1] Andreas Dräger, Ute Hofmann, Roland Keller, Stephanie Tscherneck, Benjamin Kandel, Maria Thomas, Marcus Klein, Klaus Maier, Klaus Mauch, Ulrich M. Zanger and Andreas Zell. Modeling and simulating the effects of atorvastatin on the central carbon metabolism of rat hepatocytes using SBMLsimulator. 4th Conference on Systems Biology of Mammalian Cells (SBMC), 2012.
- [2] Gabriele Petznick, Sarah Strunk, Stephanie Tscherneck, Ronny Amberg, Paul Hammer, Chong Wang, and Peter Beyerlein. WINTER - Knowledgebase with integrates search and analysis tool using the example of an in silico cell cycle model. In German Conference on Bioinformatics, 2009.

Address, Phone, Fax, E-Mail

University of Tuebingen
Center for Bioinformatics Tuebingen (ZBIT)
Department Cognitive Systems
Room A315
Sand 1
72076 Tübingen
Germany
Phone: +49 70 71 29-7 89 78
Fax: +49 70 71 29-50 91
E-Mail: stephanie.hoffmann@uni-tuebingen.de