

# Thomas Hildebrandt

Pestalozzistr. 73 • 10627 Berlin, Germany • +49 (0) 17622215847 • [Th.Hildebrandt@gmx.de](mailto:Th.Hildebrandt@gmx.de)

## Education

---

10/2004 – 03/2012 **Technische Universität Berlin, Germany**

Studies in Biotechnology • Grade: 1.4 (very good) • Degree: Diplom-Ingenieur

**Diploma thesis** (grade 1.1)

Charité – Universitätsmedizin Berlin, Berlin, Germany

*‘Functional analysis of mesenchymal stromal cells labeled with superparamagnetic iron oxide nanoparticles’*

**Student research project** (grade 1.0)

Instituto de Tecnologia Química e Biológica – Universidade Nova de Lisboa, Lisbon, Portugal

*‘Enzymatic studies on E.coli flavorubredoxin nitric oxide and oxygen reductase’*

08/1995 – 06/2003 **Luisenschule Mülheim Ruhr, Germany**

Abitur (A-levels)

## Professional Experience

---

10/2013 – 02/2014 **Fraunhofer Institute for Biomedical Engineering**

5 months **Potsdam, Germany** (Research associate)

*‘Cell-free protein synthesis, labeling and characterization of hEGFR and mutant variants’*

09/2012 – 06/2013 **Department Biophysical Chemistry, Technische Universität Berlin**

10 months **Berlin, Germany** (Research associate)

*‘Characterization of a novel near infrared bacteriophytochrome with potential application for in vivo imaging’*

08/2009 – 07/2010 **Berlin Brandenburg Center for Regenerative Therapies**

12 months **Berlin, Germany** (Student research assistant)

(part-time) *‘Establishment of a rapid diagnostic test kit for the prognostic evaluation of bone healing impairments’*

09/2009 – 10/2009 **Instituto de Tecnologia Química e Biológica - Universidade Nova de**

2 months **Lisboa, Lisbon, Portugal** (Student research assistant)

*‘Structural Characterization of E.coli Flavorubredoxin Reductase and Flavorubredoxin’*

05/2008 – 11/2008 **Julius Wolff Institute – Charité Universitätsmedizin Berlin**

7 months **Berlin, Germany** (Student research assistant)

(part-time) *‘Isolation, characterization and enrichment of hematopoietic precursor cells’*

08/2006 – 09/2006 **Max-Planck-Institute for Bioinorganic Chemistry**

2 months **Mülheim Ruhr, Germany** (Student research assistant)

*Lab assistant*

08/2005 **Evonik Degussa GmbH**

1 months **Essen, Germany** (Internship)

*‘Modeling of an in-plant waste and fresh water simulation’*

09/2003 – 08/2004 **Lebenshilfe e.V**

12 months **Mülheim Ruhr, Germany** (Civilian service)

# Skills and Others

---

## Lab Skills and Techniques (most relevant)

- Cell culture (hMSCs, rMSCs, hHSCs); Isolation from fat, peripheral blood and bone marrow
- Multilineage differentiation, proliferation, and apoptosis analysis (assays, histology)
- Flow Cytometry; MACS
- Molecular cloning; RNA-Isolation; qPCR; Recombinant protein expression; Purification; Protein characterization; Isotopic labeling
- UV/VIS spectroscopy; Resonance Raman spectroscopy; NO- and O<sub>2</sub>-electrode

## Administration

- Coordination of taking standardized samples (human hematoma) during surgery
- Maintaining communication and collaboration between clinic and research within a translational project

## PC Skills

- MS-Office, Origin, Corel Draw, FlowJo, Visual Molecular Dynamics

## Interests

- Cooking, reading, football (club member of BW Mintard e.V.)

# Publications

---

## *Structural parameters controlling the fluorescence properties of phytochromes*

(Biochemistry ACS, 2013)

Francisco Velazquez Escobar<sup>§</sup>, Thomas Hildebrandt<sup>§</sup>, Tillmann Utesch, Ina Seuffert, Norbert Michael, Claudia Schulz, Maria Andrea Mroginiski, Thomas Friedrich, and Peter Hildebrandt

<sup>§</sup>Equal contribution to this work

# Scholarships

---

## 10/2008 – 04/2009 Erasmus Scholarship

For a student research project at Instituto de Tecnologia Química e Biológica  
Universidade Nova de Lisboa, Lisbon, Portugal

# References

---

Prof. Dr. Thomas Friedrich • +49 3031424128 • [Friedrich@chem.tu-berlin.de](mailto:Friedrich@chem.tu-berlin.de)

Technische Universität Berlin - Institut für Chemie Berlin, Germany

Prof. Dr. Roland Lauster • +49 3031472090 • [Roland.Lauster@TU-Berlin.de](mailto:Roland.Lauster@TU-Berlin.de)

Technische Universität Berlin - Institut für Biotechnologie  
Berlin, Germany

Prof. Dr. Miguel Sepúlveda Teixeira • +351 214469322 • [miguel@itqb.unl.pt](mailto:miguel@itqb.unl.pt)

Instituto de Tecnologia Química e Biológica - Universidade Nova de Lisboa  
Lisbon, Portugal

Prof. Dr.-Ing. Georg N. Duda • +49 30450559079 • [georg.duda@charite.de](mailto:georg.duda@charite.de)

Charité - Universitätsmedizin Berlin, Julius Wolff Institut & Center for Musculoskeletal  
Surgery, Berlin, Germany