

## Peer Review Publications

- H. Helmholz**, B. Johnston, C. Ruhnau, A. Prange, Gill cell toxicity of northern boreal scyphomedusae *Cyanea capillata* and *Aurelia aurita* measured by an in vitro cell assay, *Hydrobiologia* 645 (2010) 223-234.
- A. Wiebring, **H. Helmholz**, S. Lassen, A. Prange, G. Jarms, Separation and analysis of different types of nematocysts from *Cyanea capillata* (L.) medusae, *Hydrobiologia* 645 (2010) 203-212.
- S. Lassen, **H. Helmholz**, C. Ruhnau, A. Prange, Characterisation of neurotoxic polypeptides from *Cyanea capillata* medusae (Scyphozoa), *Hydrobiologia* 645 (2010) 213-221.
- H. Helmholz**, S. Naatz, S. Lassen, A. Prange, Isolation of a cytotoxic glycoprotein from the Scyphozoa *Cyanea lamarckii* by lectin-affinity chromatography and characterization of molecule interactions by surface plasmon resonance, *Journal of Chromatography B* 871 (2008) 60-66.
- H. Helmholz**, C. Ruhnau, C. Schütt, A. Prange, Comparative study on the cell toxicity and enzymatic activity of two northern scyphozoan species *Cyanea capillata* (L.) and *Cyanea lamarckii* (Peron & Leslieur), *Toxicon* 50 (2007) 53-64.
- G. Butschak, U. Karsten, U. Schelhaas, H. Ott, A. Emmendorffer, B. Niemeyer, **H. Helmholz**, S. Goletz, Detection, isolation and partial characterization of an immunostimulating glycoprotein from *Rhodococcus fascians*, *International Immunopharmacology* 6 (2006) 1441-1450.
- H. Rosenfeld, J. Anilyte, **H. Helmholz**, J. Liesiene, P. Thiesen, B. Niemeyer, A. Prange, Comparison of modified supports on the base of glycoprotein interaction studies and of adsorption investigations, *Journal of Chromatography A* 1092 (2005) 76-88.
- H. Helmholz**, S. Cartellieri, L. He, P. Thiesen, B. Niemeyer, Process development in affinity separation of glycoconjugates with lectins as ligands, *Journal of Chromatography A* 1006 (2003) 127-135.
- L.Z. He, S. Andre, H.C. Siebert, **H. Helmholz**, B. Niemeyer, H.J. Gabius, Detection of ligand- and solvent-induced shape alterations of cell-growth-regulatory human lectin galectin-1 in solution by small angle neutron and x-ray scattering, *Biophys. J.* 85 (2003) 511-524.
- S. Cartellieri, O. Hamer, **H. Helmholz**, B. Niemeyer, One-step affinity purification of fetuin from fetal bovine serum, *Biotechnol. Appl. Biochem.* 35 (2002) 83-89.
- S. Cartellieri, **H. Helmholz**, B. Niemeyer, Preparation and Evaluation of *Ricinus communis* Agglutinin Affinity Adsorbents Using Polymeric Supports, *Analytical Biochemistry* 295 (2001) 66-75.
- L.-Z. He, V. Garamus, B. Niemeyer, **H. Helmholz**, R. Willumeit, Determination of micelle structure of octyl- $\beta$ -glucoside in aqueous solution by small angle neutron scattering and geometric analysis, *Journal of Molecular Liquids* 89 (2000) 239-249.
- H. Helmholz**, P. Etoundi, U. Lindequist, Cultivation of the marine basidiomycete *Nia vibrissa* (Moore & Meyers), *Journal of Biotechnology* 70 (1999) 203-206.

U. Lindequist, C. Kusnick, **H. Helmholz**, K. Liberra, Neue Wirkstoffe aus Pilzen des Meeres, Zeitschrift für Phytotherapie 20 (1999) 29-36.

### Miscellaneous publications (non Peer Review)

**Helmholz H**, Wichels A, Gerdts G, Screening for bioactive glycolipids in sponges from the Orkney Islands: *Biomolecular Engineering*, **20/2** (2003), 79

J. Anilyte, J. Liesiene, **H. Helmholz**, B. Niemeyer, Immobilization of Lectins on Cellulose Matrices Activated with Sodium Periodate, Proceedings of the Baltic Symposium, Jurmala, Latvia, 2003, 178 -182.

S. Cartellieri, **H. Helmholz**, B. Niemeyer, Long term stability of selective adsorbents for glycoconjugate separation. *Chemie Ingenieur Technik* **73** (2001), 733

L. He, **H. Helmholz**, B. Niemeyer, X. Luo A Diffusion Model for Affinity Adsorption of Glycoprotein on Immobilized Lectin in: K.-J. Bathe (ed.), Proceedings, First MIT Conference on Computational Fluid and Solid Mechanics, Cambridge, MA, USA, Volume **2** (2001), 1232 – 1235

S. Cartellieri, O. Braaß, **H. Helmholz**, Thiesen. P H, B. Niemeyer, Functionalization of Silica for the Immobilization of Lectins, *Biotechnology 2000*, Berlin **4** (2000) 79-81.

### Selected oral presentations

**Helmholz H**, Johnston B, Ruhnau Ch, Lassen S, Prange A: In vitro-cell-based assays for the determination of toxic effects of northern scyphozoan species *Cyanea spec.* and *Aurelia aurita* ASLO Aquatic Science Meeting, Nice 2009

**Helmholz H** and Prange A: Toxic components in the venom of the Lion's mane jellyfish *Cyanea spec.* 2<sup>nd</sup> International Symposium on Jellyfish Blooms, Gold Coast/Aus 2007

**Helmholz H**, Naatz S, Lassen S and Prange A: Isolation of a cytotoxic glycoprotein from the Scyphozoa *Cyanea lamarckii* by lectin affinity chromatography and characterization of molecule interactions by surface plasmon resonance. Biacore Anwender Symposium München 2007

**Helmholz H** and Niemeyer B (2002): Silica- and Polymer-based Lectin Adsorbents for Glycoconjugate Separation. XXI International Carbohydrate Symposium, Cairns/Aus

**Helmholz H**, Cartellieri S and Niemeyer B: Preparation of Biospecific Adsorbents for the Purification of Bioactive Glycoproteins and Glycolipids 3rd Workshop on Functional Materials: Biophysical Properties of Glycolipids and Related Problems, Hamburg 2000

**Helmholz H** : Biologisch aktive Glycolipide aus marinen Organismen. Workshop Adsorbate und Adsorbentien. Helmut-Schmidt-Universität, Universität der Bundeswehr Hamburg 1999

### Selected poster presentations

**Helmholz H**, Lassen S, Ruhnau Ch, Prange A: Toxicological and biochemical characterization of northern scyphozoan species. ICES Annual Science conference, Berlin 2009

Zimmermann A, **Helmholz H**, Proefrock D, Prange A: A new enzyme-assay for PLA<sub>2</sub> activity in jellyfish venom based on phosphorus detection using HPLC-CC-ICP-MS. 2nd International Jellyfish Blooms Symposium 2007, Gold Coast/Aus

**Helmholz H**, Wichels A and Gerdts G: Screening for bioactive glycolipids in sponges from the Orkney Islands. Marine Biotechnology: Basics and Application, 2003 Matalascanas/E

**Helmholz H** and Niemeyer B: Biospecific Affinityseparation for the preparation of glycoconjugates from microalgae. Symposium: Natural Products from Marine Organisms, Greifswald 2002

**Helmholz H**, Witt S and Lindequist U: Investigation of immunomodulating effects of marine fungi. Symposium: Marine Biotechnologie und Biosensorik: neue Anwendungen für Medizin, Umwelt und Ernährung, Greifswald 1999, transkript 12, P11

**Helmholz H**, Witt S and Lindequist U: Untersuchungen zum Einfluß von marinen Pilzen auf die Bindung von LPS and den Endotoxinrezeptor CD14. DECHEMA Symposium „Aktuelle Entwicklungen in der Naturstoffforschung“ X. Irseer Naturstofftage 1998