

APPENDIX

STATEMENT

Erklärung gemäß §5, (4) der Promotionsordnung

Ich versichere an Eidesstatt, dass ich die vorliegende Arbeit selbständig und ohne Verwendung anderer Hilfsmittel und Hilfern als der in der Arbeit angegebenen verfaßt habe.

ARTICLES AND POSTERS

Proceedings and publications

- **L. Dalla Puppa**, N.E. Savaskan, A. Kyriakopoulos and D. Behne. *Inhibitory effects of selenium on the activation and migration of microglia during oxidative stress*. Schriftenreihe der Gesellschaft für Mineralstoffe und Spurenelemente e.V. **Wissenschaftliche Verlagsgesellschaft GmbH Stuttgart 2004**, pages 132-136.
- **L. Dalla Puppa**, N.E. Savaskan, A.U. Bräuer, D. Behne and A. Kyriakopoulos. *Selenoproteins in Microglial Cells*. **Proceedings of the VII European Meeting on Glial Cell Function in Health and Disease**. Amsterdam (The Netherlands) May 2005. MEDIMOND S.r.l. F517C0069, pages 59-64.
- **L. Dalla Puppa**, N.E. Savaskan, A.U. Bräuer, D. Behne and A. Kyriakopoulos. *Protection of microglial cells against oxidative stress: role of selenoproteins*. **Proceedings of the 4th Fall Conference on Metalloproteins and Metalloidproteins**. Berlin (Germany), November 2005. Herbert Utz Verlag München ISBN 3-8316-0576-9.
- **L. Dalla Puppa**, N.E. Savaskan, A.U. Bräuer, D. Behne and A. Kyriakopoulos. The role of selenite on microglial migration. *Ann N Y Acad Sci*. Submitted February 2006.
- I.Y. Eyüpolgu*, **L. Dalla Puppa***, U. Schweizer, A.U. Bräuer, D. Behne, A. Kyriakopoulos, R. Nitsch, N.E. Savaskan. Essential role for Selenoprotein P in microglial activation. To be submitted (* These authors contributed equally to this work).

Attended Conferences with Poster Presentations

- **L. Dalla Puppa**, N.E. Savaskan, I.Y. Eyüpoglu, A.U. Bräuer, A. Kyriakopoulos, D. Behne and R. Nitsch. *Inhibition of microglial activation and proliferation by the essential trace element selenium*. **VI European Meeting on Glial Cell Function in Health and Disease**. Berlin (Germany), September 2003.
- **L. Dalla Puppa**, N.E. Savaskan, I.Y. Eyüpoglu, A.U. Bräuer, A. Kyriakopoulos, D. Behne and R. Nitsch. *Regulation of microglial activation and proliferation by the essential trace element selenium*. **Herbsttagung Metalloproteine and Metalloidproteine**. Berlin (Germany), November 2003.
- **L. Dalla Puppa**, N.E. Savaskan, A. Kyriakopoulos and D. Behne. *Protective effect of selenium and selenoproteins on microglial and neuronal cells*. **4th Forum of European Neuroscience (FENS)**. Lisbon (Portugal), July 2004.
- **L. Dalla Puppa**, N.E. Savaskan, A. Kyriakopoulos and D. Behne. *Which selenoproteins protect microglial cells from oxidative stress?* **Herbsttagung Metalloproteine and Metalloidproteine**. Berlin (Germany), November 2004.
- **L. Dalla Puppa**, N.E. Savaskan, A.U. Bräuer, D. Behne and A. Kyriakopoulos. *Selenium attenuates oxidative stress responses through modulation of selenium-containing proteins in microglial cells*. **30th FEBS Congress - 9th IUBMB Conference**, The protein World. Budapest (Hungary), July 2005.
- **L. Dalla Puppa**, N.E. Savaskan, A.U. Bräuer, D. Behne and A. Kyriakopoulos. *Protection of microglial cells against oxidative stress: role of selenoproteins*. **Herbsttagung Metalloproteine and Metalloidproteine**. Berlin (Germany), November 2005.
- **L. Dalla Puppa**, N.E. Savaskan, A.U. Bräuer, D. Behne and A. Kyriakopoulos. *Selenium supplementation acting through the induction of specific selenoproteins protects microglial cells from damage by hydrogen peroxide*. **“Cell Signaling World 2006: Signal Transduction Pathways as therapeutic targets”**. Luxembourg, January 2006.

AWARDS

- **11/2004 - 2nd Prize for the Poster Presentation** “*Which selenoproteins protect microglial cells from oxidative stress?*” at the Herbsttagung Metalloproteine and Metalloidproteine. Berlin, Germany.

ACKNOWLEDGEMENTS

This work was carried out at the Department of Molecular Trace Element Research in the Life Sciences at the Hahn-Meitner-Institut (Helmoltz-Gemeinschaft, Berlin, Germany) in cooperation with the Institute of Cell Biology and Neurobiology (Medical School Charité, Berlin).

I wish to express my gratitude to all those who have given me valuable assistance during this project. I am grateful to Prof. Dr. Dietrich Behne for valuable discussion and criticisms of this work. I would also thank Dr. Antonios Kyriakopoulos for giving me the opportunity to carry out this project and to attend various international conferences. Many thanks are for Prof. Dr. med. Robert Nitsch (Charité) for giving me the chance to cooperate with his team. In particular, thanks to Dr. Nicolai Savaskan and Dr. Anja Bräuer (and their technical assistants, in particular Bettina and Miam) for the exciting uncomplicated cooperation and for their competence in the molecular biology field.

I acknowledge the financial support by the Deutsche Forschungsgemeinschaft (DFG Priority Programme 1087 Selenoproteins).

Thanks also to the following people who put time and energy into my PhD project in various ways:

Thanks to Methap for the AAS measurements.

To Herrn Franke (Charité Campus Benjamin Franklin) many thanks for the animal experiments.

Thanks to Dr. Antje Diestel and Dr. Christine Brandt for introducing me to the exciting work of the FACS analysis.

Thanks to Jürgen for the enzyme-activity measurement.

Thanks to Dr. Ulrich Schweizer and Prof. Dr. med. Katja Becker-Brandenburg for the kind supply of the SelP and TrxR1 antibody, respectively.

I would like to thank a very helpful person: thanks Alex for your experience with the cell cultures and for your patience with all my questions.

Thanks to all the PhD students and post-docs of the SF6 department: Alexei, Andrea, Barbara, Christian, Gundolf, Holger and Markus for supporting and helping me in different ways. Especially thanks to my Kaczuska for the wonderful Italian-Polish understanding. Dzięk!

I would also like to thank all members of the department for their support and for creating a warm and family- like atmosphere. It was always most enjoyable to work in this group and I had a wonderful time in Wannsee. Thanks to all of them.

Many thanks to Prof. Dr. Dietrich Behne for the review of this work.

I also acknowledge Prof. Dr. Petra Knaus for accepting to be the second referee of this thesis.

Finally, thanks to all my friends in Venice (in particular Cri and Dori) and in Berlin (especially Andy, Andrea and Lena) for their important support outside the lab during all these years.

Last but not the least, I would like to thank my parents, my sister and my family for being always there for me.