

Angelika Margarete Dierolf

Research Interests and Experience

- Age-related changes in pain perception and pain modulation using EEG and fMRI
- Stress-reactivity and executive functions in aging
- Impact of acute and basal stress on executive functions, with special focus on information processing, measured via EEG (event-related potentials)
- Interaction of stress and aggression as well as affective information processing (psychoendocrine and central physiological methods)
- Neural basis of hypnotic trance and hypnotic suggestion
- Neural correlates of interoception and stress reactivity in patients with medically unexplained symptoms

Education

- 2010 – 2014 Ph.D. Psychobiology
University of Trier, Germany
Within the International Research Training Group (IRTG) “Psychoneuroendocrinology of Stress: From Molecules and Genes to Affect and Cognition” of the German Research Foundation (DFG), Project GRK 1389/1, and within the research focus “Psychobiology of Stress” founded by the Ministry of Science of the State Rhineland-Palatinate within the Research Initiative of the State Rhineland-Palatinate
Dissertation title: “The Relation between Stress and Aggression and the Role of Inhibitory Control and Social Information Processing within- A Psychophysiological Approach”
<http://ubt.opus.hbz-nrw.de/volltexte/2014/897/>
Supervisors: Dr. Ewald Naumann, Prof. Dr. med. Hartmut Schächinger
- 2004 – 2010 Certified psychologist (‘Diplom Psychologie’ comparable to MSc)
University of Trier, Germany
Thesis: „Ostracism and Aggression - Influence of increasing provocation by peers on aggressive behaviour after acute experience of ostracism”
- 2006 -2011 Certified applied environmental scientist (‘Diplom Angewandte Umweltwissenschaften’ comparable to MSc)
University of Trier
Subjects: geobotany, ecotoxicology, chemistry, hydrology
Thesis: „Ausbreitung des invasiven Neophyten *Fallopia japonica* s.l. - Neue Gefahren durch die sexuelle Reproduktion der Hybride?!”

Research and Professional Experience

- 2018 - Now University of Luxemburg , FLSHASE, Research Unit INSIDE (Institute for Health and Behavior, Research Group Stress, Pain, and pain modulation)
Postdoctoral Fellow, PI: Dr. Marian van der Meulen
“Age-related Changes in Human pain perception and modulation: Evidence from functional brain imaging” (ACHE).”; fMRI and EEG Study with young and older to old healthy participants on perception and modulation of acute pain
- 2016-2017 University of Luxemburg , FLSHASE, Research Unit INSIDE (Institute for Health and Behavior, Research Group Self-Regulation and Health)
Postdoctoral Fellow, PI: Dr. André Schulz
“Interoception in medically unexplained symptoms”; EEG Study with patients with somatoform disorder or Major Depression and healthy controls
- 2015-2016 Ruhr-University Bochum, Cognitive Psychology
Postdoctoral Fellow, Advisor: Oliver T. Wolf
EEG and peripheral physiological studies on acute stress on executive functions
- 2014-2015 University of Trier, EEG Laboratory
Psychological technical assistant
PhD student, finalization of PhD thesis
EEG and behavioral studies on stress and aggression
- 2012-2013 University of Trier, Psychobiology
Graduate Researcher within the research focus “Psychobiology of Stress” founded by the Ministry of Science of the State Rhineland-Palatinate
- 2010-2012 University of Trier, EEG Laboratory
Graduate Researcher/ scholar within International Research Training Group (IRTG)
“Psychoneuroendocrinology of Stress: From Molecules and Genes to Affect and Cognition” of the German Research Foundation (DFG), Project GRK 1389/1
- 2007-2010 University of Trier, EEG Laboratory
Student Assistant to E. Naumann; EEG studies, support in statistic courses

Teaching and Mentoring Experience

2017	BrainVision Analyzer (EEG analyzing software) workshops with Dr. E. Naumann by order of Brain Products GmbH
2015- 2016	Ruhr-University Bochum Experimental psychological practical course, BSc Psychology Project Seminar, BSc Psychology Cognitive Psychology I + II, seminar, BSc Psychology
2010-2015	University of Trier Experimental psychological practical course, BSc Psychology Scientific Project Course, BSc Psychology Statistical IT course
Since 2011	Mentoring of > 10 BSc and MSc theses

Further Education and Administrative Experience

2012-2018	Advanced education: Clinical Hypnosis (Milton H. Erickson Society for clinical hypnosis (MEG))
Since 2017	Vice- representative for the young scientist of the German Society for Physiology and its Application (Deutsche Gesellschaft für Physiologie und Ihre Anwendungen, DGPA)
2010-2014	Representative of the PhD students of the International Research Training Group and the research focus as well as the Institute of Psychobiology
Since 2018	Seminar on psychometric single-case diagnosis within the education for psychotherapy at the "Institut für Psychotherapie und Psychoanalyse Rhein-Eifel GmbH -Annelise Heigl-Evers Institut-"
2013	Organization of the Autumn School „Psychobiology and Psychophysiology of Stress“, 27.09. to 01.10.2013 Mezzano, Chianti, Italy

Awards and Funding

2016	Stress- resilience through hypnosis, physiological study, granted sum 7725€ by the foundation of the Milton H. Erickson Society for clinical hypnosis
2015	Advancement award for outstanding PhD thesis (circle of the University of Trier)
2014	Neurobiology of Hypnosis, two physiological studies (EEG), granted sum 5000€ by Research Fond of the University of Trier

Publications

- Dierolf, A. M., Schoofs, D., Hervas, E. M., Falkenstein, M., Otto, T., Paul, M., Suachn, B., & Wolf, O. T. (2018). Good to be stressed? Improved response inhibition and error processing after acute stress in young and older men. *Neuropsychologia*, 119, 434-447. DOI: <https://doi.org/10.1016/j.neuropsychologia.2018.08.020>
- Schulz, A., Stammet, P., Dierolf, A. M., Vögele, C., Beyenburg, S., Werer, C., & Devaux, Y. (2018). Late heartbeat-evoked potentials are associated with survival after cardiac arrest. *Resuscitation*, 126, 7-13. DOI: [10.1016/j.resuscitation.2018.02.009](https://doi.org/10.1016/j.resuscitation.2018.02.009)
- Dierolf, A. M., Fechtner, J., Böhnke, R., Wolf, O. T., & Naumann, E. (2017). Influence of acute stress on response inhibition in healthy men: An ERP study. *Psychophysiology*, 54(5), 684-695. DOI: [10.1111/psyp.12826](https://doi.org/10.1111/psyp.12826)
- Kinner, V. L., Kuchinke, L., Dierolf, A. M., Merz, C. J., Otto, T., & Wolf, O. T. (2017). What our eyes tell us about feelings: Tracking pupillary responses during emotion regulation processes. *Psychophysiology*, 54(4), 508-518. DOI: [10.1111/psyp.12816](https://doi.org/10.1111/psyp.12816)
- Dierolf, A. M., Arlt, L. E., Roelofs, K., Kölsch, M., Hülsemann, M. J., Schächinger, H., & Naumann, E. (2016). Effects of basal and acute cortisol on cognitive flexibility in an emotional task switching paradigm in men. *Hormones and Behavior*. [doi:10.1016/j.yhbeh.2016.02.002](https://doi.org/10.1016/j.yhbeh.2016.02.002)
- Paul, M., Lech, R. K., Scheil, J., Dierolf, A. M., Suchan, B., & Wolf, O. T. (2016). Acute stress influences the discrimination of complex scenes and complex faces in young healthy men. *Psychoneuroendocrinology*. [doi:10.1016/j.psyneuen.2016.01.007](https://doi.org/10.1016/j.psyneuen.2016.01.007)
- Pramme, L., Dierolf, A., Naumann, E., Frings, C. (2015) Distractor Inhibition: Evidence from Lateralized Readiness Potentials. *Brain and Cognition*, 98, 74-81. doi: [10.1016/j.bandc.2015.06.003](https://doi.org/10.1016/j.bandc.2015.06.003)
- Schulz, A., Ferreira de Sá, D., Dierolf, A., Lutz, A., van Dyck, Z., Vögele, C., Schächinger, H. (2015) Short-term food deprivation increases amplitudes of heartbeat-evoked potentials. *Psychophysiology* 52(5). doi: [10.1111/psyp.12388](https://doi.org/10.1111/psyp.12388)
- PhD thesis is a monography (<http://ubt.opus.hbz-nrw.de/volltexte/2014/897/>)

Reviewer for peer-reviewed international journals

Psychoneuroendocrinology
Biological Psychology
Psychophysiology
Stress
Journal of Epidemiology and Public Health Reviews

Conference Presentations and Poster (Selection)

Dierolf, A., Wortmeier, T., Zeyer, R., Wolf, O.T. (2019) Impact of a hypnotic trance on the physiological and subjective stress response to an acute stressor. Symposiumvortrag auf der 45. Tagung „Psychologie und Gehirn“ der Deutschen Gesellschaft für Psychophysiologie und deren Anwendung (DGPA). Dresden.

Dierolf, A., Rost, S., Lutz, A., Flasinski, T., Münch, E., Vögele, C., Witthöft, M., Schulz, A. (2018) Kardiale Modulation der Schreckreaktion bei hoher gegenüber niedriger Symptombelastung: afferente Signalübermittlung auf der Hirn-Körper-Achse beeinflusst frühe Stimulus-Verarbeitung bei hoher Symptombelastung. Poster präsentiert auf der 44. Tagung „Psychologie und Gehirn“ der Deutschen Gesellschaft für Psychophysiologie und deren Anwendung (DGPA). Gießen.

Dierolf, A., Wortmeier, T., Zeyer, R., Wolf, O.T. (2017). *Stress reduction via hypnosis? Influence of hypnosis on the physiological stress response*. Poster präsentiert auf der 57. Tagung der Society for psychophysiological research (SPR) in Wien.

Dierolf, A., Hesses, E., Schoofs, D., Paul, M., Suchan, B., Falkenstein, M., Wolf, O.T. (2016). *Bessere Verhaltensinhibition nach Stress bei Jung und Alt – eine EKP Studie*. Vortrag auf der 42. Tagung „Psychologie und Gehirn“ der Deutschen Gesellschaft für Psychophysiologie und deren Anwendung (DGPA). Berlin

Dierolf, A., Kerscher, L., Miltner, W., Naumann, E. (2015). *Visuelle Blockade durch hypnotische Suggestion*. Poster präsentiert auf der 41. Tagung „Psychologie und Gehirn“ der Deutschen Gesellschaft für Psychophysiologie und deren Anwendung (DGPA). Frankfurt am Main.

Dierolf, A., Arlt, L., Christians, B., Rapoport, O., Naumann, E. (2014). *Ein Teufelskreis von Stress und Aggression? - Einfluss von Provokation und aggressivem Verhalten auf die Stressachse unter Berücksichtigung von Testosteron*. Poster präsentiert auf der 40. Tagung „Psychologie und Gehirn“ der Deutschen Gesellschaft für Psychophysiologie und deren Anwendung (DGPA). Lübeck.

Dierolf, A., Rapoport, O., Blumenthal, T.D., Naumann, E. (2014). *Interruption vs. protection hypotheses - Further investigations of the role of Prepulse Inhibition (PPI) of acoustic startle – An ERP study*. Poster präsentiert auf der 2nd International Conference European Society for Cognitive and Affective Neuroscience, Dortmund.

Dierolf, A., Fechtner, J., & Naumann, E. (2014). *Neuronale Korrelate der Verarbeitung emotionaler Bilder*. Vortrag auf dem Wintersymposium Ereigniskorrelierte Potentiale, St. Gallenkirch, Österreich.

Dierolf, A., Fechtner, J., & Naumann, E. (2012). *Stress and Aggression – The influence of stress on processing of provoking stimuli during a retaliation paradigm- an ERP study*. Vortrag auf dem XXth International Society for Research on Aggression (ISRA) World Meeting, Luxembourg, Luxembourg.

Dierolf, A., Fechtner, J., Böhnke, R., & Naumann, E. (2012). *The influence of acute stress and provocation on affective picture processing: An event-related potential study*. Poster präsentiert auf dem Annual Meeting, Cognitive Neuroscience (CNS), Chicago, IL, USA.

Dierolf, A., Fechtner, J., Böhnke, R., & Naumann, E. (2010). *Go no-go performance under socially evaluated physiological stress: Influences on inhibitory control - an ERP-study*. Poster präsentiert auf dem 7th World Congress on Stress, Leiden, Niederlande.

Memberships

German Society for Physiology and its Application (DGPA – Deutsche Gesellschaft für Psychophysiologie und Ihrer Anwendung)