

Dr. rer. nat. Holger Hill

List of Publications

submitted/in revision

- Hill H. Rowing electrified: Event-related potential measures in moving subjects. Results from three pilot studies
- Hill H. Modulation of frontal and parietal neuronal activity by visuomotor learning. An ERP analysis of implicit and explicit pursuit tracking tasks
- Leménager, Tagrid*; Hill, Holger*; Reinhard, Iris*; Hoffmann, Sabine; Vollstädt-Klein, Sabine; Zimmermann, Ulrich S; Hermann, Derik; Heinz, Andreas; Smolka, Michael N; Kiefer, Falk; Mann, Karl: Can alcohol-cue modulated startle responses help to differentiate acamprosate from naltrexone responders in the treatment of alcoholism? (* Equally contributed)
- Sebastian Domsch, Jascha Zapp, Lothar R. Schad, Frauke Nees, Holger Hill, Derik Hermann, Karl Mann, Sabine Vollstädt-Klein: Comparison of standard and high resolution EPI in functional MRI at 3 Tesla
- Sharma, A., Sauer, H., Hill, H., Kaufmann, C., Bender, S., Weisbrod, M.. Abnormal N400 effect reflects psychopathological processes in schizophrenia: a twin study. Schizophrenia Research, submitted

The First Book

- **Hill H** (1995). *Inter- und intraindividuelle Veränderungen von Koordinationsmustern im Rudern*. Roderer-Verlag, Regensburg.

Journal publications

- Kröger, Sören; Rutter, Barbara; **Hill, Holger**; Windmann, Sabine; Hermann, Christiane; Abraham, Anna (2013) An ERP study of passive creative conceptual expansion using a modified alternate uses task. *Brain Research*, 1527, 189-198.
- Rutter, Barbara; Kröger, Sören; **Hill, Holger**; Windmann, Sabine; Hermann, Christiane; Abraham, Anna (2012) Can clouds dance? Part 2: An ERP investigation of passive conceptual expansion. *Brain and Cognition*, 80, 301-310.
- **Hill H**, Fahrig S. (2009) The impact of fluctuations in boat velocity during the rowing cycle on race time. *Scandinavian Journal of Medicine & Science in Sports*, 19, 585-594. [Epub ahead of print 2008 May 27.]
- **Hill H** (2009) An event-related potential evoked by movement planning is modulated by performance and learning in visuomotor control. *Experimental Brain Research*, 195 (4), 519-529.
- Streitberger K, Steppan J, Maier C, **Hill H**, Backs J, Plaschke K. (2008) Effects of verum-acupuncture compared to placebo-acupuncture on quantitative EEG and heart rate variability in healthy volunteers. *The journal of alternative and complementary*

medicine, 14 (5), 505-513.

- Streitberger K, Steppan J, Plaschke K, Maier C, **Hill H**, Backs J (2008) Placebokontrollierte Untersuchung zerebraler und vegetativer Effekte von Akupunktur an Di 4. *Deutsche Zeitschrift für Akupunktur*, 51 (4), 12-19.
- Plaschke K, **Hill H**, Engelhardt R, Thomas C, von Haken R, Scholz M, Kopitz J, Bardenheuer HJ, Weisbrod M, Weigang MA (2007) EEG changes and serum anticholinergic activity measured in patients with delirium in the intensive care unit. *Anaesthesia*, 62, 1217-23.
- **Hill H**, Ott F, Herbert C, Weisbrod M. (2006) Response execution in lexical decision tasks obscures sex specific lateralization effects in language processing: Evidence from event-related potential measures during word reading. *Cerebral Cortex*, 16, 978-989.
- Kaiser S, Weiss O, **Hill H**, Markela-Lerenc J, Kiefer M, Weisbrod M (2006) N2 event-related potentials correlates of response inhibition in an auditory Go/Nogo task. *International Journal of Psychophysiology*, 61, 279-282.
- **Hill H**, Raab M. (2005). Analysing a complex visuomotor tracking task with brain-electrical event related potentials. *Human Movement Science*, 24(1), 1-30.
- **Hill H**, Ott F, Weisbrod M (2005). SOA-dependent N400 and P300 semantic priming effects using pseudoword primes and a delayed lexical decision. *International Journal of Psychophysiology*, 56, 209-221.
- Weisbrod M, **Hill H**, Sauer H, Niethammer R, Guggenbühl S, Hell D, Stassen HH (2004). Nongenetic Pathologic Developments of Brain Wave Patterns in Monozygotic Twins Discordant and Concordant for schizophrenia. *American Journal of Medical Genetics Part B (Neuropsychiatric Genetics)*, 125B, 1-9.
- **Hill H**, Strube M, Roesch-Ely D, Weisbrod M (2002). Automatic vs. controlled processes in semantic priming - differentiation by event related potentials. *International Journal of Psychophysiology*, 44, 197-218.
- **Hill H** (2002). Dynamics of coordination within elite rowing crews: evidence from force pattern analysis. *Journal of Sports Sciences*, 20, 101-117.
- Fritzsche M, Heller R, **Hill H**, Kick H (2001). Sleep deprivation as a predictor of response to light therapy in major depression. *Journal of affective disorders*, 62, 207-215.
- Heller R, Fritzsche M, **Hill H**, Kick H (2001). Schlafentzug als Prädiktor für das Ansprechen auf Lichttherapie bei Major Depression. *Fortschritte der Neurologie - Psychiatrie*, 69, 156-163.
- **Hill H**, Weisbrod M (1999). The relation between asymmetry and amplitude of the P300 field in schizophrenia. *Clinical Neurophysiology*, 110, 1611-1617.
- Weisbrod M, **Hill H**, Niethammer R, Sauer H (1999). Genetic influence on auditory information processing in schizophrenia - P300 in monozygotic twins. *Biological Psychiatry*, 46, 721-725.
- Weisbrod M, Kiefer M, Winkler S, Maier S, **Hill H**, Roesch-Ely D, Spitzer M (1999). Electrophysiological correlates of direct versus indirect semantic priming in normal volunteers. *Cognitive Brain Research*, 8, 289-298.
- Weisbrod M, Trage J, **Hill H**, Sattler HD, Maier S, Kiefer M, Grothe J, Spitzer M (1999). Emotional priming in depressed patients. *German Journal of Psychiatry*, 2, 19-

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- Weisbrod M, Kiefer M, **Hill H**, Spitzer M (1999). Der Einsatz evozierter Potentiale zur Untersuchung von Störungen der auditorischen Informationsverarbeitung schizophrener Patienten. *Nervenheilkunde*, 18, 79-83.
- **Hill H**, Batt C, Maier S, Weisbrod M, Kick H (1998). Light-therapy treatment of affective disorder with and without seasonality: Biological markers. *German Journal of Psychiatry*, 1, 41-52. www.gwdg.de/~bbandel/gjp-homepage.htm
- Such E, **Hill H**, Kick H (1998). Spektralanalytische Differenzierung des EEGs bei Patienten mit affektiver Psychose nach therapeutischem Schlafentzug. *Klinische Neurophysiologie*, 29, 308-313.
- Weisbrod M, Winkler S, Maier S, **Hill H**, Thomas C, Spitzer M (1997). Left lateralized P300 amplitude deficit in schizophrenic patients depends on pitch disparity. *Biological Psychiatry*, 41, 541-549.
- Such E, **Hill H**, Petri I, Kick H (1997). Prädiktion der Schlafentzug-Reaktion (Response) durch quantitative EEG-Parameter bei Depression. *Z. EEG-EMG*, 28, 158-163.
- Petri I, **Hill H**, Richter P, Kick H (1995). Akustisch evozierte Potentiale (N1, P2, P3) bei depressiven Schlafentzugs-Respondern und Non-Respondern im Vergleich. *Z. EEG-EMG*, 26, 146-151.

Conference proceedings (full text)

- **Hill H** (1999). Der Effekt von Krafttraining im Boot und an Land an Kraft-Zeit-Verläufen sichtbar gemacht - eine Methodendarstellung am Einzelfall. In: Fritsch W (Hrsg.) *Rudern - informieren, reflektieren, innovieren*, pp. 200-207. Limpert-Verlag, Wiebelsheim. Symposium an der Universität Konstanz 1997.
- **Hill H** (1997). Zur Auswirkung rudertechnischer Fehler auf die Renngeschwindigkeit - eine Untersuchung an zwei Fallbeispielen. In: Fritsch W (Hrsg.) *Rudern - erleben, gestalten, organisieren*, pp. 113-123, Limpert-Verlag, Wiesbaden. Symposium an der Universität Konstanz 1995.
- Weisbrod M, Kiefer M, Maier S, Winkler S, **Hill H**, Spitzer M (1997). Difficulty of the Auditory Oddball Paradigm Determines P300 Topography in Schizophrenic Patients. In: Witte H, Zwiener U, Schack B, Doering A (Eds.) *Quantitative and Topological EEG and MEG Analysis*, pp. 158-169. Druckhaus Mayer, Jena.
- **Hill H** (1996). Die Variabilität des Koordinationsmusters Rudern im Mannschaftsboot. In: Gollhofer A (Hrsg.) *Integrative Forschungsansätze in der Bio & Mechanik*. (Schriften der Deutschen Vereinigung für Sportwissenschaft 71), pp. 139-147. Academia-Verlag, St. Augustin. Symposium der Sektion Biomechanik der Deutschen Vereinigung für Sportwissenschaft in Herzogenhorn/Schwarzwald 1995.
- **Hill H**, Damm KL, Buchholtz C (1995). Die Optimierung des Kraft-Zeit-Verlaufs des Ruderschlages durch objektives visuelles Feedback. In: Fritsch W (Hrsg.) *Rudern - Lehren, Lernen, Trainieren*, pp. 95-104. Limpert-Verlag, Wiesbaden. Symposium an der Universität Konstanz 1993.
- **Hill H** (1995). Die interindividuelle Anpassung im Kraft-Zeit-Verlauf im Mannschaftsboot. In: Fritsch W (Hrsg.) *Rudern - Lehren, Lernen, Trainieren*, pp. 239-

251. Limpert-Verlag, Wiesbaden. Symposium an der Universität Konstanz 1993.

Oral presentations

- **Hill H.** The investigation of brain functions in ecological settings using electroencephalography. A methodological challenge and perspective. Society for Ambulatory Assessment. 3rd conference. June, 20-22 2013, Amsterdam, The Netherlands
- **Hill H, Raab M.** Task dependent use of feedback and feedforward processes in sensorimotor control in complex movements. Evidence from event related potentials. 29. Arbeitstagung „Psychophysiologische Methodik“ der Deutschen Gesellschaft für Psychophysiologie und ihre Anwendung. Würzburg 19.6.-21.6.2003. *Journal of Psychophysiology*, 2003, 17, 154-155.
- **Hill H, Raab M.** The application of event related potential measures for the analysis of a complex visuo-motor tracking task. 11th World Congress of Psychophysiology, Montreal, 29th July - 3th August 2002. *International Journal of Psychophysiology*, 2002, 45, 90-91.
- **Hill H, Raab M.** Spatio-temporal analysis of a complex visuo-motor tracking task with brain electrical event related potentials. 6th Annual Congress of the European College of Sport Science (ECSS), Cologne, 24-28th July 2001.
- **Hill H, Strube M, Weisbrod M.** Automatic vs. controlled processes in semantic priming - differentiation by ERPs. 4th European Conference of the Federation of European Psychophysiology Societies, Amsterdam 2000. *Journal of Psychophysiology*, 2000, 14, S32-33.
- **Hill H, Batt C, Herwig K, Maier S, Kick H.** Akustisch evozierte P300 bei depressiven Lichttherapie-Respondern und non-Respondern im Vergleich. *Kongress der Deutschen Gesellschaft fuer Psychiatrie, Psychotherapie und Nervenheilkunde (DGPPN)* in Duesseldorf 1996.

Poster

- **Holger Hill, Sabine Hoffmann, Tagrid Leménager, Iris Reinhard, Karl Mann & PREDICT Study Group.** Die Modulation der affektiven eyeblink-startle response als impliziter Indikator für das Rückfallrisiko von alkoholabhängigen Patienten (PREDICT-Studie). Kongress der Deutschen Gesellschaft fuer Psychiatrie, Psychotherapie und Nervenheilkunde (DGPPN) in Berlin 2011.
- **Hill H.** Modulation of Parieto-Frontal Feedback Loops in Continuous Visuomotor Learning Identified by Event-Related Potentials. *Psychophysiology*, Vol. 46 (Issue s1, September 2009) S45-46. Special Issue: Society for Psychophysiological Research Abstracts for the Forty-Ninth Annual Meeting Berliner Congress Center, Berlin, Germany October 21-24, 2009
- **Hill H, Beuth S, Teufel K, Windmann S.** Electrophysiological correlates of experimentally induced decision biases in recognition memory. *Psychophysiology*, Vol. 46 (Issue s1, September 2009) S146. Special Issue: Society for Psychophysiological Research Abstracts for the Forty-Ninth Annual Meeting Berliner Congress Center,

Berlin, Germany October 21-24, 2009

- **Hill H**, Beuth S, Teufel K, Windmann S. Electrophysiological correlates of experimentally induced decision biases in recognition memory. 15th Annual Meeting, Organization for Human Brain Mapping, June 18 - 23, 2009 San Francisco. *NeuroImage*, Vol. 47, Supp. 1, 2009. S76.
- **Hill H**. An event-related potential evoked by movement planning is modulated by performance and learning in visuomotor control. 15th Annual Meeting, Organization for Human Brain Mapping, June 18 - 23, 2009 San Francisco. *NeuroImage*, Vol. 47, Supp. 1, 2009. S103.
- **Hill H**, Ott F, Herbert C, Weisbrod M. EKP-Messungen belegen geschlechtsspezifische Lateralisierungseffekte in der Sprachverarbeitung. TeaP, Regensburg 2005.
- **Hill H**, Ott F, Weisbrod M. SOA-dependent N400 and P300 semantic priming effects using pseudoword primes and a delayed lexical decision. 30. Arbeitstagung „Psychophysiologische Methodik“ der Deutschen Gesellschaft für Psychophysiologie und ihre Anwendung. Freiburg 10.-12.6.2004. *Journal of Psychophysiology*, 2004, 18, 222.
- **Hill H**, Raab M. The application of event related potential measures for the analysis of a complex visuo-motor tracking task. In: M. Ullsperger & M. Falkenstein [Hrsg.]. *Errors, conflicts, and the brain: current opinions on performance monitoring*; proc. of the Conference held in Dortmund, Germany, July 3-5, 2003. Leipzig: MPI f. Kognition- und Neurowiss., 2004 (MPI special issue in human cognitive and brain sciences, 1)
- **Hill H**, Raab M. The application of event related potential measures for the analysis of a complex visuo-motor tracking task. 28. Arbeitstagung „Psychophysiologische Methodik“ der Deutschen Gesellschaft für Psychophysiologie und ihre Anwendung. Tübingen 30.5.-1.6.2002. *Journal of Psychophysiology*, 2002, 16, 241.
- **Hill H**, Strube M, Ott F, Weisbrod M. Memory Access and Context Integration in Semantic Processing. Differentiation by Event Related Potentials. 8th annual meeting of the Cognitive Neuroscience Society, New York, March 24-26, 2001.

Miscellaneous

- **Hill H**. Zur Struktur des Ruderschlages und der Rudertechnik. In: Fritsch W (Hrsg.) *Workshop Leichtgewichtsrudern*, unveröff. Protokoll des Fortbildungslehrganges des Deutschen Ruderverbandes in München 1988, 25-34. [Brosch.]
- **Hill H**. *Zum Lernen von cyclischen Bewegungen beim Menschen am Beispiel von Ruderbewegungen*. Diplomarbeit am FB Biologie der Univ. Marburg 1986.

Reviewer for

- Applied Physiology, Nutrition and Metabolism
- Biological Psychology
- BMC Neuroscience
- Brain & Cognition
- Cerebral Cortex
- Clinical Neurophysiology
- European Journal of Neuroscience
- Experimental Brain Research
- Human Brain Mapping
- International Journal of Psychophysiology
- Journal of Neurolinguistics
- Journal of Psychophysiology
- Journal of Sports Engineering and Technology
- Journal of Sports Sciences
- Medicine & Science in Sports & Exercise
- Neuroreport
- Neuroscience and Biobehavioral Reviews
- Neuroscience Letters
- PLOS ONE
- Psychophysiology
- Research Quarterly for Exercise and Sport
- Scandinavian Journal of Medicine and Science in Sports
- Sports Biomechanics
- Technology Foundation STW, Utrecht/NL
- Yonsei Medical Journal