PD DR. DR. PATRICK BACH

Date of birth: 20 June, 1987
Gender: Male
Address: Central Institute of Mental Health
Department of Addiction Medicine and
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Current position: Research Associate, Head of the Research groups *Neuroenhancement* and *Behavioural Addictions* and Senior physician

CURRICULUM VITAE

University education

2010 - 2016	University of Heidelberg (Medicine)
2007 - 2010	University of Mannheim (Psychology)

Scientific degrees

2022	Ph.D. in Addiction Medicine, Medical Faculty Mannheim, Heidelberg University, Germany
2021	Habilitation, Experimental Psychiatry, Medical Faculty Mannheim, Heidelberg University, Germany
2017	M.D. in Medicine, Medical Faculty Mannheim, Heidelberg University, Germany
2010	B.Sc. Psychology, University of Mannheim, Germany

Academic positions

Since 05/2022	Head of the Research Group Behavioral Addictions at the Department of Addictive Behavior and Addiction Medicine, Central Institute of Mental Health, Mannheim (Prof. Kiefer)
Since 05/2022	Senior Physician at the Department of Addictive Behavior and Addiction Medicine, Central Institute of Mental Health, Mannheim (Prof. Kiefer)
Since 05/2022	Visiting Researcher at the Karolinska Institute, Stockholm, Sweden
Since 02/2020	Head of the Research Group Neuroenhancement at the Department of Addictive Behavior and Addiction Medicine, Central Institute of Mental Health, Mannheim (Prof. Kiefer)
Since 09/2019	Clinician Scientist within the Collaborative Research Centre TRR265 „Loosing and Regaining Control over Drug Intake”
Since 02/2017	Physician at the Clinic for Addictive Behavior and Addiction Medicine, Central Institute of Mental Health, Mannheim
02/2017 – 01/2020	Deputy Head of the Research Group Neuroenhancement at the Department of Addictive Behavior and Addiction Medicine, Central Institute of Mental Health, Mannheim (Prof. Kiefer)

11/2010 - 02/2017	Research assistant at the Department of Addictive Behavior and Addiction Medicine, Central Institute of Mental Health, Mannheim (Prof. Kiefer)
08/2010 - 11/2010	Research assistant at the Behavioural and Clinical Neuroscience Institute University of Cambridge, UK (Dr. Dalley)

Awards and honours:

2022	Early Career Scientist Award of the German Association of Chairs of Psychiatry and Psychotherapy (LIPPS e.V.)
2022	Early Career Scientist Award of the German Society on Biological Psychiatry (DGBP)
2022	Norddeutscher Suchforschungsverbund (NSF) e.V. Research Award
2020	European Society of Biomedical Research on Alcoholism (ESBRA) Nordmann Award
2020	International Society of Biomedical Research on Alcoholism (ISBRA) Early Career Investigator Award
2019	European Society of Biomedical Research on Alcoholism (EBSRA) Young Investigator Award
2013 - 2015	Fellowship within the graduate college of the research collaborative SFB636 “Learning and Plasticity”
2007 - 2010	Fellow of the German National Academic Foundation

Publications:

Bach, P., Reinhard, I., Koopmann, A., Vollstädt-Klein, S., Kiefer, F. Test–retest reliability of neural alcohol cue-reactivity: Is there light at the end of the magnetic resonance imaging tube? *Addiction Biology*. [Epub ahead of print] (2021) DOI: 10.1111/adb.13069.

Bach, P., Weil, G., Pompili, E., Hoffmann, S., Hermann, D., Vollstädt-Klein, S., Kiefer, F., Mann, K., Sommer, W.H. FMRI-based prediction of naltrexone response in alcohol use disorder: a replication study. *Eur Arch Psychiatry Clin Neurosci* [Epub ahead of print] (2021) DOI: 10.1007/s00406-021-01259-7.

Bach, P., Schuster, R., Koopmann, A., Vollstaedt-Klein, S., Spanagel, R., Kiefer, F. Plasma calcium concentration during detoxification predicts neural cue-reactivity and craving during early abstinence in alcohol-dependent patients. *Eur Arch Psychiatry Clin Neurosci* [Epub ahead of print] (2021) DOI: 10.1007/s00406-021-01240-4.

Bach, P., Koopmann, A., Bumb, J.M., Vollstädt-Klein, S., Reinhard, I., Rietschel, M., Witt, S.H., Wiedemann, K., Kiefer, F. Leptin predicts cortical and subcortical gray matter volume recovery in alcohol dependent patients: A longitudinal structural magnetic resonance imaging study. *Hormones and Behavior* **124**: 104749 (2020) DOI: 10.1016/j.yhbeh.2020.104749.

Bach, P., Koopmann, A., Bumb, J.M., Zimmermann, S., Buhler, S., Reinhard, I., Witt, S.H., Rietschel, M., Vollstadt-Klein, S., Kiefer, F. Oxytocin attenuates neural response to

emotional faces in social drinkers: an fMRI study. *Eur Arch Psychiatry Clin Neurosci* [Epub ahead of print] (2020) DOI: 10.1007/s00406-020-01115-0.

Bach, P., Reinhard, I., Buhler, S., Vollstadt-Klein, S., Kiefer, F., Koopmann, A. Oxytocin modulates alcohol-cue induced functional connectivity in the nucleus accumbens of social drinkers. *Psychoneuroendocrinology* **109**, 1-5 [Epub ahead of print] (2019) DOI: 10.1016/j.psyneuen.2019.104385.

Bach, P., Weil, G., Pompili, E., Hoffmann, S., Hermann, D., Vollstädt-Klein, S., Mann, K., Perez-Ramirez, U., Moratal, D., Canals, S., Dursun, S.M., Greenshaw, A.J., Kirsch, P., Kiefer, F., Sommer, W.H. Incubation of neural alcohol cue reactivity after withdrawal and its blockade by naltrexone. *Addiction biology* [Epub ahead of print] (2019) DOI: 10.1111/adb.12717.

Bach, P., Bumb, J. M., Schuster, R., Vollstädt-Klein, S., Reinhard, I., Rietschel, M., Witt, S. H., Wiedemann, K., Kiefer, F. & Koopmann, A. Effects of leptin and ghrelin on neural cue-reactivity in alcohol addiction: Two streams merge to one river? *Psychoneuroendocrinology* **100**, 1-9 [Epub ahead of print] (2019) DOI: 10.1016/j.psyneuen.2018.09.026.

Bach, P., Zois, E., Vollstadt-Klein, S., Kirsch, M., Hoffmann, S., Jorde, A., Frank, J., Charlet, K., Treutlein, J., Beck, A., Heinz, A., Walter, H., Rietschel, M. & Kiefer, F. Association of the alcohol dehydrogenase gene polymorphism rs1789891 with gray matter brain volume, alcohol consumption, alcohol craving and relapse risk. *Addiction biology* **24**, 110-120 (2019), DOI: 10.1111/adb.12571.

Bach, P., Kirsch, M., Hoffmann, S., Jorde, A., Mann, K., Frank, J., Charlet, K., Beck, A., Heinz, A., Walter, H., Rietschel, M., Kiefer, F. & Vollstadt-Klein, S. The effects of single nucleotide polymorphisms in glutamatergic neurotransmission genes on neural response to alcohol cues and craving. *Addiction biology* **20**, 1022-1032 (2015) DOI: 10.1111/adb.12291.