Full list of peer Reviewed Papers (in chronological order)

1. Wagner, I. C., Rütgen, M., & **Lamm, C**. (2020). Pattern similarity and connectivity of hippocampal-neocortical regions support empathy for pain. *Social Cognitive and Affective Neuroscience*, nsaa045. Advance online publication. https://doi.org/10.1093/scan/nsaa045
2. Adriaense, J., Koski, S. E., Huber, L., & **Lamm, C**. (2020). Challenges in the comparative study of empathy and related phenomena in animals. *Neuroscience and biobehavioral reviews*, *112*, 62–82. Advance online publication. https://doi.org/10.1016/j.neubiorev.2020.01.021
3. Pfabigan, D. M., Mielacher, C., Dutheil, F., & **Lamm, C**. (2020). ERP evidence suggests that confrontation with deterministic statements aligns subsequent other-and self-relevant error processing. *Psychophysiology*, e13556. https://doi.org/10.1111/psyp.13556
4. Riečanský, I., Lengersdorff, L. L., Pfabigan, D. M., & **Lamm, C**. (2020). Increasing self-other bodily overlap increases sensorimotor resonance to others' pain. *Cognitive, Affective, & Behavioral Neuroscience*, *20*(1), 19-33. https://doi.org/10.3758/s13415-019-00724-0
5. Bartel, G., Marko, M., Rameses, I., **Lamm, C**., & Riečanský, I. (2020). Left Prefrontal Cortex Supports the Recognition of Meaningful Patterns in Ambiguous Stimuli. *Frontiers in Neuroscience*, *14*, 152. https://doi.org/10.3389/fnins.2020.00152
6. Knight, E.L., McShane, B.B., Kutlikova, H.H., ... , **Lamm, C**., Mehta, P.H., Carré, J.M. (in press). Weak and variable effects of exogenous testosterone on cognitive reflection task performance in three experiments: Commentary on Nave et al. (2017). *Psychological Science*
7. Tomova, L., Saxe, R., Klöbl, M., Lanzenberger, R., & **Lamm, C**. (2020). Acute stress alters neural patterns of value representation for others. *NeuroImage*, 209, 116497 https://doi.org/10.1016/j.neuroimage.2019.116497
8. Vermeer, A. L., Krol, I., Gausterer, C., Wagner, B., Eisenegger, C., & **Lamm, C**. (2019). Exogenous testosterone increases status-seeking motivation in men with unstable low social status. *Psychoneuroendocrinology*, *113*, 104552 https://doi.org/10.1016/j.psyneuen.2019.104552
9. Riečanský, I., & **Lamm, C**. (2019). The Role of Sensorimotor Processes in Pain Empathy. *Brain Topography*, *32*(6), 965-976. https://doi.org/10.1007/s10548-019-00738-4
10. Rosenberger, L.A., Pfabigan, D., Lehner, B., Keckeis, K., Seidel, E.-M., Eisenegger, C., & **Lamm, C.** (2019). Fairness norm violations in anti-social psychopathic offenders in a repeated trust game. *Translational Psychiatry, 9*, 266. https://doi.org/10.1038/s41398-019-0606-3
11. Adriaense, J.E.C., Martin, J.S., Schiestl, M., **Lamm, C.,** & Bugnyar T. (2019, August 20). Reply to Vonk: Disentangling emotional contagion from its underlying causes. *PNAS, 201910556* (Letter to editors). https://doi.org/10.1073/pnas.1910556116
12. Jensen, K., Gollub, R., Kong, J., **Lamm, C.**, Kaptchuk, T., & Petrovic, P. (2020). Reward and Empathy in the treating clinician: The neural correlates of successful doctor-patient interactions. *Translational Psychiatry*, *10*, 17. https://doi.org/10.1038/s41398-020-0712-2
13. Karl, S., Boch, M., Virányi, Z., **Lamm, C.,** & Huber, L. (2019). Training pet dogs for eye-tracking and awake fMRI. *Behavior Research Methods,* 1-19. https://doi.org/10.3758/s13428-019-01281-7
14. Ekhtiari, H., …, **Lamm, C.,** …, & Hanlon, C. (2019). Transcranial electrical and magnetic stimulation (tES and TMS) for addiction medicine: A consensus paper on the present state of the science and the road ahead. *Neuroscience & Biobehavioral Reviews, 104,* 118-140. https://doi.org/10.1016/j.neubiorev.2019.06.007

15. Kraus, C., Seiger, R., Pfabigan, D. M., Sladky, R., Tik, M., Paul, K., Woletz, M., Gryglewski, G., Vanicek, T., Komorowski, A., Kasper, S., **Lamm, C.** , Lanzenberger, R. (2019). Hippocampal subfields in acute and remitted depression – An ultra high field magnetic resonance imaging treatment study. *International Journal of Neuropsychopharmacology, 22*(8), 513-522. https://doi.org/10.1093/ijnp/pyz030
16. Adriaense, J. E. C., Martin, J., Schiestl, M., **Lamm, C.**, & Bugnyar, T. (2019). Negative emotional contagion and cognitive bias in common ravens (Corvus corax). *Proceedings of the National Academy of Sciences, 116*(23), 11547-11552. https://doi.org/10.1073/pnas.1817066116
17. Rütgen, M., Pletti, C., Tik, M., Kraus, C., Pfabigan, D. M., Sladky, R., Klöbl, M., Woletz, M., Vanicek, T., Windischberger, C., Lanzenberger, R., & **Lamm, C.** (2019). Antidepressant treatment, not depression, leads to reductions in behavioral and neural responses to pain empathy. *Translational Psychiatry, 9*(1), *164.* https://doi.org/10.1038/s41398-019-0496-4
18. Morese, R., **Lamm, C**., Bosco, M. F., Valentini, M. C., & Silani, G. (2019). Social support modulates the neural correlates underlying social exclusion. *Social Cognitive and Affective Neuroscience*, *14(6)*, 633-643. https://doi.org/10.1093/scan/nsz033
19. **Lamm, C.**, Rütgen, M., Wagner, I. (2019). Imaging empathy and prosocial emotions. *Neuroscience Letters*, *693*, 49-53. https://doi.org/10.1016/j.neulet.2017.06.054
20. Tomova, L., Heinrichs, M., & **Lamm, C**. (2019). The Other and Me: Effects of oxytocin on self-other distinction. *International Journal of Psychophysiology, 136*, 49-53. https://doi.org/10.1016/j.ijpsycho.2018.03.008
21. Riečanský, I.*, Lengersdorff, L.*, Pfabigan, D.M., **Lamm, C.** (2019). Increasing self-other bodily overlap increases sensorimotor resonance to others' pain. *Cognitive, Affective, and Behavioral Neuroscience.* https://doi.org/10.3758/s13415-019-00724-0
22. Wilson, R. P., …, **Lamm, C.**, … & Bhattacharyya, S. (2018). The neural substrate of reward anticipation in health: A meta-analysis of fMRI findings in the Monetary Incentive Delay Task. *Neuropsychology Review, 28(4)*, 496-506. https://doi.org/10.1007/s11065-018-9385-5
23. Pfabigan, D., Wucherer, A., Wang, X., Pan, X., **Lamm, C.**, Han, S. (2018). Cultural influences on the processing of social comparison feedback signals – An ERP study. *Social Cognitive and Affective Neuroscience, 13*(12), 1317-1326. https://doi.org/10.1093/scan/nsy097
24. Rauchbauer, B.*, Pfabigan, D.*, **Lamm, C**. (2018). Event-related potentials of automatic imitation are modulated by ethnicity during stimulus processing, but not during motor execution. *Scientific Reports*, 8. https://doi.org/10.1038/s41598-018-30926-4
25. Zunhammer, M., Bingel, U., Wager, T. D., for the Placebo Imaging Consortium. (2018). Placebo Effects on the Neurologic Pain Signature: A Meta-analysis of Individual Participant Functional Magnetic Resonance Imaging Data. *JAMA Neurology*, *5*(11):1321-1330. https://doi.org/10.1001/jamaneurol.2018.2017
26. Pilcher, J. J., Switzer, F. S., Munc, A., Donnelly, J, Jellen, J. C., & **Lamm, C.** (2018). Psychometric properties of the Epworth Sleepiness Scale: A factor analysis and item-response theory approach. *Chronobiology International, 35*(4), 533-545. https://doi.org/10.1080/07420528.2017.1420075
27. Shamay-Tsoory, S. & **Lamm, C.** (2018). The neuroscience of empathy – from past to present and future. *Neuropsychologia*, *116*, 1-4. https://doi.org/10.1016/j.neuropsychologia.2018.04.034
28. Pfabigan, D. M., Wucherer, A. M., & **Lamm, C**. (2018). Internal control beliefs and reference frame concurrently impact early performance monitoring ERPs. *Cognitive, Affective, & Behavioral Neuroscience, 18*, 778-795. https://doi.org/10.3758/s13415-018-0604-6

29. Riva, F., Tschernegg, M., Chiesa, P. A., Wagner, I. C., Kronbichler, M., **Lamm, C.***, & Silani, G.* (2018). Age-related differences in the neural correlates of empathy for pleasant and unpleasant touch in a female sample. *Neurobiology of Aging, 65*, 7-17. https://doi.org/10.1016/j.neurobiolaging.2017.12.028
30. Kraus C., Klöbl M., Tik M., Auer B., Vanicek T., …, **Lamm, C.**, Lanzenberger, R. (2018). The pulvinar nucleus and antidepressant treatment: dynamic modeling of antidepressant response and remission with ultra-high field functional MRI. *Molecular Psychiatry, 24*(5), 746. https://doi.org/10.1038/s41380-017-0009-x
31. Sladky, R., Geissberger, N., Pfabigan, D. M., Kraus, C., Tik, M., Woletz, M., Paul, K., Vanicek, T., Auer, B., Kranz, G. S., **Lamm, C.,** Lanzenberger, R., & Windischberger, C. (2018). Unsmoothed functional MRI of the human amygdala and bed nucleus of the stria terminalis during processing of emotional faces. *NeuroImage, 186*, 383-391. https://doi.org/10.1016/j.nicl.2016.12.024
32. Boch, M., & **Lamm, C**. (2017). The multiple facets of empathy. *Animal Sentience: An Interdisciplinary Journal on Animal Feeling, 2*(14), 14.
33. Pfabigan, D. M., Gittenberger, M., & **Lamm, C.** (2017). Social dimension and complexity differentially influence brain responses during feedback processing. *Social neuroscience*, *14*(1), 26-40. https://doi.org/10.1080/17470919.2017.1395765
34. Coll, M. P., Viding, E., Rütgen, M., Silani, G., **Lamm, C.**, Catmur, C., & Bird, G. (2017). Are we really measuring empathy? Proposal for a new measurement framework. *Neuroscience & Biobehavioral Reviews, 83*, 132-139. https://doi.org/10.1016/j.neubiorev.2017.10.009
35. Tik, M., Hoffmann, A., Sladky, R., Tomova, L., Hummer, A., Navarro de Lara, L., ..., **Lamm, C.** & Windischberger, C. (2017). Towards understanding rTMS mechanism of action: stimulation of the DLPFC causes network-specific increase in functional connectivity. *Neuroimage, 162*, 289-296. https://doi.org/10.1016/j.neuroimage.2017.09.022
36. Tamm, S., Nilsonne, G., Schwarz, J., **Lamm, C.**, Kecklund, G., Petrovic, P., ... & Lekander, M. (2017). The effect of sleep restriction on empathy for pain: An fMRI study in younger and older adults. *Scientific Reports, 7*(1), 12236. https://doi.org/10.1038/s41598-017-12098-9
37. Rütgen, M., Seidel, E. M., Pletti, C., Riecansky, I., Gartus, A., Eisenegger, C., & **Lamm, C.** (2017). Psychopharmacological modulation of event-related potentials suggests that first-hand pain and empathy for pain rely on similar opioidergic processes. *Neuropsychologia*, *116*, 5-14. http://doi.org/10.1016/j.neuropsychologia.2017.04.023
38. Gangl, K., Pfabigan, D., **Lamm, C**., Kirchler, E., & Hoffmann, E. (2017). Coercive and legitimate authority impact tax honesty. Evidence from behavioral and ERP experiments. *Social Cognitive and Affective Neuroscience, 12*(7), 1108-1117. http://dx.doi.org/10.1093/scan/nsx029
39. Tomova, L., Majdandžić, J., Hummer, A., Windischberger, C., Heinrichs, M., & **Lamm, C**. (2017). Increased neural responses to empathy for pain might explain how acute stress increases prosociality. *Social Cognitive and Affective Neuroscience, 12*(3), 401-408. https://doi.org/10.1093/scan/nsw146
40. Huber, L., & **Lamm, C.** (2017). Understanding dog cognition by functional magnetic resonance imaging. *Learning & Behavior, 45*(2)*,* 101-102. https://doi.org/10.3758/s13420-017-0261-6
41. Niedermeier, M., Weisleitner, A., **Lamm, C.**, Ledochowski, L., Frühauf, A., Wille, M., … Kopp, M. (2017). Is decision making in hypoxia affected by pre-acclimatisation? A randomized controlled trial. *Physiology & Behavior*, *173*, 236-242. https://doi.org/10.1016/j.physbeh.2017.02.018
42. Spies, M., Kraus, C., Geissberger, N., Auer, B., Klöbl, M., Tik, M., … **Lamm, C.**, ... (2017). Default mode network deactivation during emotion processing predicts early

antidepressant response. *Translational Psychiatry, 7,* e1008. https://doi.org/10.1038/tp.2016.265

43. Majdandžić, J., Amashaufer S., Hummer, A., Windischberger, C., & **Lamm, C.** (2016). The selfless mind: How prefrontal involvement in mentalizing with similar and dissimilar others shapes empathy and prosocial behavior. *Cognition, 157,* 24-38. https://doi.org/10.1016/j.cognition.2016.08.003
44. Rauchbauer, B., Majdandžić, J., Stieger, S., & **Lamm, C.** (2016). The modulation of mimicry by ethnic group-membership and emotional expressions. *PLoS ONE*, *11*, e0162935. https://doi.org/10.1371/journal.pone.0162935
45. Pintzinger, N. M., Pfabigan, D. M., Pfau, L., Kryspin-Exner, I., & **Lamm, C.** (2017). Temperament differentially influences early information processing in men and women: Preliminary electrophysiological evidence of attentional biases in healthy individuals. *Biological Psychology, 122,* 69-79. https://doi.org/10.1016/j.biopsycho.2016.07.007
46. Sladky, R., Stepniczka, I., Boland, E., Tik, M., **Lamm, C.**, Hoffmann, A., Buch, J.P., Niedermeier, D., Field, J., & Windischberger, C. (2016). Neurobiological differences in mental rotation and instrument interpretation in airline pilots. *Scientific Reports*, *6,* 28104. https://doi.org/10.1038/srep28104
47. Pfabigan, D. M., Holzner, M. T., & **Lamm, C.** (2016). Performance monitoring during a minimal group manipulation. *Social Cognitive and Affective Neuroscience, 11,* 1560-1568. https://doi.org/10.1093/scan/nsw071
48. Riva, F., Triscoli, C., **Lamm, C.**, Carnaghi, A., & Silani, G. (2016). Emotional Egocentricity Bias across the life-span. *Frontiers in Aging Neuroscience, 8,* 74. https://doi.org/10.3389/fnagi.2016.00074
49. Pintzinger, N., Pfabigan, D., Tran, U., Kryspin-Exner, I. & **Lamm, C.** (2016). Attentional biases in healthy adults: Exploring the impact of temperament and gender. *Journal of Behavior Therapy and Experimental Psychiatry, 52,* 29-37. https://doi.org/10.1016/j.jbtep.2016.02.003
50. Lehrner, J., Bodendorfer, B., **Lamm, C.**, Moser, D., Dal-Bianco, P., Auff, E., & Pusswald, G. (2016). Subjective memory complaints and conversion to dementia in patients with subjective cognitive decline and patients with mild cognitive impairment. *Zeitschrift für Neuropsychologie, 27,* 85-93. https://doi.org/10.1024/1016-264X/a000175
51. **Lamm, C.**, Bukowski, H., & Silani, G. (2016). From shared to distinct self–other representations in empathy: evidence from neurotypical function and socio-cognitive disorders. *Philosophical Transactions of the Royal Society B, 371*, 20150083. http://doi.org/10.1098/rstb.2015.0083
52. Preusche, I. & **Lamm, C.** (2016). Reflections on empathy in medical education: What can we learn from social neurosciences? *Advances in Health Sciences Education, 21,* 235-249. https://doi.org/10.1007/s10459-015-9581-5
53. Vandenbroucke, S., Bardi, L., **Lamm, C.**, & Goubert, L. (2016). The role of the right temporoparietal junction in the elicitation of vicarious experiences and detection accuracy while observing pain and touch. *Experimental Brain Research, 234*, 1019-32. http://doi.org/10.1007/s00221-015-4516-1
54. Rütgen, M., Seidel, E. A., Silani, G., Riecansky, G., Hummer, A., Windischberger, C., Petrovic, P., & **Lamm, C.** (2015). Placebo analgesia and its opioidergic regulation suggest that empathy for pain is grounded in self pain. *Proceedings of the National Academy of Sciences, 112*(41), E5638–E5646. https://doi.org/10.1073/pnas.1511269112
55. Pfabigan, D. M., Pripfl, J., Kroll, S. L., Sailer, U., & **Lamm, C.** (2015). Event-related potentials in performance monitoring are influenced by the endogenous opioid system.

Neuropsychologia, 77, 242-252. https://doi.org/10.1016/j.neuropsychologia.2015.08.028

56. Görlich-Dobre, K. S., **Lamm, C.,** Pripfl, J., Habel, U., & Votinov, M. (2015). The left amygdala: A shared substrate of alexithymia and empathy. *NeuroImage, 122,* 20-32. https://doi.org/10.1016/j.neuroimage.2015.08.014
57. Votinov, M., Pripfl, J., Windischberger, C., Moser, E., Sailer, U.*, & **Lamm, C.*** (2015). A functional polymorphism in the prodynorphin gene affects cognitive flexibility and brain activation during reversal learning. *Frontiers in Behavioral Neuroscience, 9,* 172. https://doi.org/10.3389/fnbeh.2015.00172
58. Görlich-Dobre, K.S., Votinov, M., Habel, U., Pripfl, J., & **Lamm, C.** (2015). Neuroanatomical profiles of alexithymia dimensions and subtypes. *Human Brain Mapping, 36*(10), 3805-3818. https://doi.org/10.1002/hbm.22879
59. Seidel, S., Dal-Bianco, P., Pablik, E., Müller, N., Schadenhofer, C., **Lamm, C.**, Klösch, G., Moser, D., Klug, S., Pusswald, G., Auff, E., & Lehrner, J. (2015). Depressive symptoms are the main predictor for subjective sleep quality in patients with mild cognitive impairment. *PLoS ONE, 10*(6), e0128139. https://doi.org/10.1371/journal.pone.0128139
60. Rütgen, M., Seidel, E.M., Riecansky, I., & **Lamm, C.** (2015). Reduction of empathy for pain by placebo analgesia suggests functional equivalence of empathy and first-hand emotion experience. *Journal of Neuroscience, 35*(23), 8938–8947. https://doi.org/10.1523/JNEUROSCI.3936-14.2015
61. Votinov, M., Pripfl, J., Windischberger, C., Sailer, U.*,& **Lamm, C.*** (2015). Better you lose than I do: neural networks involved in winning and losing in a real time strictly competitive game. *Scientific Reports, 5,* e11017. https://doi.org/10.1038/srep11017
62. Pfabigan, D.M., Sailer, U., & **Lamm, C.** (2015). Size does matter! Perceptual stimulus properties affect event-related potentials during feedback processing. *Psychophysiology, 52*(9), 1238-1247. https://doi.org/10.1111/psyp.12458
63. Rauchbauer, B., Majdandžić, J., Hummer, A., Windischberger, C., & **Lamm**, **C.** (2015). Distinct neural processes are engaged in the modulation of mimicry by social group-membership and emotional expressions. *Cortex, 70,* 49-67. https://doi.org/10.1016/j.cortex.2015.03.007
64. Lehrner, J., Krakhofer, H., Macher, S., **Lamm, C.**, Moser, D., Klug, S., Pusswald, G., Dal-Bianco, P., Pirker, W., & Auff, E. (2015). Visuo-constructional functions in patients with Mild Cognitive Impairment, Alzheimer's disease and Parkinson's disease. *Neuropsychiatrie, 29*(3), 112-119. https://doi.org/10.1007/s40211-015-0141-2
65. **Lamm, C.*,** Silani, G.*, & Singer, T. (2015). Distinct neural networks underlying empathy for pleasant and unpleasant touch. *Cortex, 70,* 79-89. https://doi.org/10.1016/j.cortex.2015.01.021
66. Riecansky, I., Paul, N., Kölble, S., Stieger, S., & **Lamm, C.** (2015). Beta oscillations reveal ethnicity ingroup bias in sensorimotor resonance to pain of others. *Social Cognitive and Affective Neuroscience, 10*(7), 893-901. https://doi.org/10.1093/scan/nsu139
67. Pfabigan, D.M., Seidel, E.-M., Paul, K., Grahl, A., Sailer, U., Lanzenberger, R., Windischberger, C., & **Lamm, C**. (2015). Context-sensitivity of the Feedback-Related Negativity for zero-value feedback outcomes. *Biological Psychology, 104,* 184–192. https://doi.org/10.1016/j.biopsycho.2014.12.007
68. **Lamm, C.**, & Majdandžić, J. (2015). The role of shared neural activations, mirror neurons, and morality in empathy - A critical comment. *Neuroscience Research, 90,* 15-24. https://doi.org/10.1016/j.neures.2014.10.008

69. Seidel E. M.*, Pfabigan D. M.*, Hahn A., Sladky R., Grahl A., Paul K., Kraus C., Küblböck M., Kranz G. S., Hummer A., Lanzenberger R., Windischberger C., & **Lamm C.** (2014). Uncertainty during pain anticipation: The adaptive value of preparatory processes. *Human Brain Mapping, 36*(2), 744-755. https://doi.org/10.1002/hbm.22661
70. Lehrner, J., Kogler, S., **Lamm, C.**, Moser, D., Klug, S., Pusswald, G., Dal-Bianco, P., Pirker, W., & Auff, E. (2015). Awareness of memory deficits in Mild Cognitive Impairment, Alzheimer's Disease and Parkinson's Disease. *International Psychogeriatrics, 27*(3), 357-366. https://doi.org/10.1017/S1041610214002245
71. Pripfl, J., & **Lamm, C.** (2014). Focused transcranial direct current stimulation (tDCS) over the dorsolateral prefrontal cortex modulates specific domains of self-regulation. *Neuroscience Research, 91,* 41-47. https://doi.org/10.1016/j.neures.2014.09.007
72. Koller, I., & **Lamm, C.** (2014). Item Response Model Investigation of the (German) Interpersonal Reactivity Index Empathy Questionnaire Implications for Analyses of Group Differences. *European Journal of Psychological Assessment, 31*(3), 211-221. https://doi.org/10.1027/1015-5759/a000227
73. Pfabigan, D.M., Seidel, E.M., Wucherer, A.M., Keckeis, K., Derntl, B. & **Lamm, C.** (2014). Affective empathy differs in male violent offenders with high- and low-trait psychopathy. *Journal of Personality Disorders, 28,* 1-20. https://doi.org/10.1521/pedi_2014_28_145
74. Pfabigan*, D.M., Seidel*, E.M., Sladky, R., Hahn, A., Paul, K., Grahl, A., Küblböck, M., Kraus, C., Hummer, A., Kranz, G.S., Windischberger, C., Lanzenberger, R., & **Lamm, C.** (2014). P300 amplitude variation is related to ventral striatum BOLD response during gain and loss anticipation: An EEG and fMRI experiment. *NeuroImage, 96,* 12-21. https://doi.org/10.1016/j.neuroimage.2014.03.077
75. Pripfl, J., Tomova, L., Riečanský, I., & **Lamm, C.** (2014). Transcranial magnetic stimulation of the left dorsolateral prefrontal cortex decreases cue-induced nicotine craving and EEG delta power. *Brain Stimulation, 7*(2), 226-233. https://doi.org/10.1016/j.brs.2013.11.003
76. Tomova, L., von Dawans, B., Heinrichs, M., Silani, G., & **Lamm, C.** (2014). Is stress affecting our ability to tune into others? Evidence for gender differences in the effects of stress on self-other distinction. *Psychoneuroendocrinology, 43,* 95-104. https://doi.org/10.1016/j.psyneuen.2014.02.006
77. Votinov, M., Pripfl, J., Windischberger, C., Kalcher, K., Zimprich, A., Zimprich, F., Moser, E., **Lamm, C.***, & Sailer, U. * (2014). A genetic polymorphism of the endogenous opioid dynorphin modulates monetary reward anticipation in the corticostriatal loop. *PLoS ONE, 9*(2), e89954. https://doi.org/10.1371/journal.pone.0089954
78. Pfabigan, D.M., Zeiler, M., **Lamm, C.**, & Sailer, U. (2014). Blocked versus randomized presentation modes differentially modulate Feedback-Related Negativity and P3b amplitudes. *Clinical Neurophysiology, 125,* 715-726. https://doi.org/10.1016/j.clinph.2013.09.029
79. Silani*, G., **Lamm*, C.**, Ruff, C.C., & Singer, T. (2013). Right supramarginal gyrus is crucial to overcome emotional egocentricity bias in social judgments. *Journal of Neuroscience, 33*(39), 15466-15476. https://doi.org/10.1523/JNEUROSCI.1488-13.2013
80. Pripfl, J., Neumann, R., Köhler, U., & **Lamm, C.** (2013). Effects of transcranial direct current stimulation on risky decision making are mediated by 'hot' and 'cold' decisions, personality, and hemisphere. *European Journal of Neuroscience, 38*(12), 3778-3785. https://doi.org/10.1111/ejn.12375
81. Seidel, E.M., Silani, G., Metzler, H., Thaler, H., **Lamm, C.**, Gur, R.C., Kryspin-Exner, I., Habel, U., & Derntl, B. (2013). The impact of social exclusion vs. inclusion on

subjective and hormonal reactions in females and males. *Psychoneuroendocrinology, 38*(12), 2925-2932. https://doi.org/10.1016/j.psyneuen.2013.07.021

82. Seidel, E.M.*, Pfabigan, D.M.*, Keckeis, K., Wucherer, A.M., Jahn, T., **Lamm, C.**, & Derntl, B. (2013). Empathic competencies in violent offenders. *Psychiatry Research, 210,* 1168-1175. https://doi.org/10.1016/j.psychres.2013.08.027
83. Riečanský, I., Tomova, L., Katina, S., Bauer, H., Fischmeister, F., & **Lamm, C.** (2013). Visual image retention does not contribute to modulation of event-related potentials by mental rotation. *Brain and Cognition, 83,* 163-170. https://doi.org/10.1016/j.bandc.2013.07.011
84. Klimecki, O.M., Leiberg, S., **Lamm, C.,** & Singer, T. (2013). Functional neural plasticity and associated changes in positive affect after compassion training. *Cerebral Cortex, 23*(7), 1552–1561. https://doi.org/10.1093/cercor/bhs142
85. Hahn, A., Kranz, G.S., Seidel, E.M., Sladky, R., Kraus, C., Küblböck, M., Pfabigan, D.M., Hummer, A., Grahl, A., Ganger, S., Windischberger, C., **Lamm, C.,** & Lanzenberger, R. (2013). Comparing neural response to painful electrical stimulation with functional MRI at 3 and 7 T. *NeuroImage, 82,* 336-343. https://doi.org/10.1016/j.neuroimage.2013.06.010
86. Kalcher, K., Boubela, R.N., Huf, W., Biswal, B.B., Baldinger, P., Sailer, U., Filzmoser, P., Kasper, S., **Lamm, C.,** Lanzenberger, R., Moser, E., & Windischberger, C. (2013). RESCALE: Voxel-specific task-fMRI scaling using resting state fluctuation amplitude. *NeuroImage, 70,* 80-88. https://doi.org/10.1016/j.neuroimage.2012.12.019
87. Pfabigan, D.M., Pintzinger, N.M., Siedek, D.R., **Lamm, C.,** Derntl, B., & Sailer, U. (2013). Feelings of helplessness increase ERN amplitudes in healthy individuals. *Neuropsychologia, 51*(4), 613-621. https://doi.org/10.1016/j.neuropsychologia.2012.12.008
88. Majdandžić, J., Bauer, H., Windischberger, C., Moser, M., Engl, E., & **Lamm, C.** (2012). The human factor: Behavioral and neural correlates of humanized perception in moral decision making. *PLoS ONE, 7*(10), 1-14. https://doi.org/10.1371/journal.pone.0047698
89. Ugazio, G., **Lamm, C.,** & Singer, T. (2012). The role of emotion for moral judgments depends on the type of emotion and moral scenario. *Emotion, 12*(3), 579-590. https://doi.org/10.1037/a0024611
90. Alexopoulos, J., Pfabigan, D.M., **Lamm, C.,** Bauer, H., & Fischmeister, F.Ph.S. (2012). Do we care about the powerless third? An ERP study of the three-person ultimatum game. *Frontiers in Human Neuroscience, 6*(59), 1-9. https://doi.org/10.3389/fnhum.2012.00059
91. Pfabigan, D.M., Alexopoulos, J., Bauer, H., **Lamm, C.,** & Sailer, U. (2011). All about the money – external performance monitoring is affected by monetary, but not by socially conveyed feedback cues in more antisocial individuals. *Frontiers in Human Neuroscience, 5*(100). https://doi.org/10.3389/fnhum.2011.00100
92. **Lamm, C.,** Decety, J., & Singer, T. (2011). Meta-analytic evidence for common and distinct neural networks associated with directly experienced pain and empathy for pain. *NeuroImage, 54*(3), 2492-502. https://doi.org/10.1016/j.neuroimage.2010.10.014
93. Hein, G.*, **Lamm, C.***, Brodbeck, C., & Singer, T. (2011). Skin conductance response to other's pain predicts later costly helping. *PloS One, 6*(8), e22759. https://doi.org/10.1371/journal.pone.0022759
94. Yamada, M., **Lamm, C.,** & Decety, J. (2011). Pleasing frowns, disappointing smiles – an ERP investigation of counterempathy. *Emotion, 11*(6), 1336-1345. https://doi.org/10.1037/a0023854

95. Perry, A., Bentin, S., Bartal, I.B.A., **Lamm, C.,** & Decety, J. (2010). "Feeling" the pain of those who are different from us: Modulation of EEG in the mu/alpha range. *Cognitive, Affective and Behavioral Neuroscience, 10*(4), 493-504. https://doi.org/10.3758/CABN.10.4.493
96. **Lamm, C.,** & Singer, T. (2010). The role of anterior insular cortex in social emotions. *Brain Structure and Function, 214*(5-6), 579-591. https://doi.org/10.1007/s00429-010-0251-3
97. **Lamm, C.,** Meltzoff, A.N., & Decety, J. (2010). How do we empathize with someone who is not like us? A functional magnetic resonance imaging study. *Journal of Cognitive Neuroscience, 22*(2), 362-376. https://doi.org/10.1162/jocn.2009.21186
98. Singer, T.*, & **Lamm, C.*** (2009). The social neuroscience of empathy. *Annals of the New York Academy of Science, 1156*(1), 81-96. https://doi.org/10.1111/j.1749-6632.2009.04418.x
99. **Lamm, C.,** Porges, E.C., Cacioppo, J.T., & Decety, J. (2008). Perspective taking is associated with specific facial responses during empathy for pain. *Brain Research, 1227,* 153-161. https://doi.org/10.1016/j.brainres.2008.06.066
100. **Lamm, C.,** & Decety, J. (2008). Is the extrastriate body area (EBA) sensitive to the perception of pain in others – an fMRI study. *Cerebral Cortex, 18*(10), 2369-2373. https://doi.org/10.1093/cercor/bhn006
101. Windischberger, C., Cunnington, R., **Lamm, C.,** Lanzenberger, R., Langenberger, H., Deecke, L., Bauer, H., & Moser, E. (2008). Time-resolved analysis of fMRI signal changes using brain activation movies. *Journal of Neuroscience Methods, 169*(1), 222-230. https://doi.org/10.1016/j.jneumeth.2007.11.033
102. **Lamm, C.,** Nusbaum, H., Meltzoff, A.N., & Decety, J. (2007). What are you feeling? Using functional magnetic resonance imaging to assess the modulation of sensory and affective responses during empathy for pain. *PLoS One, 2*(12), e1292. https://doi.org/10.1371/journal.pone.0001292
103. Decety, J., & **Lamm, C.** (2007). The role of the right temporoparietal junction in social interaction: How low-level computational processes contribute to meta-cognition. *The Neuroscientist, 13*(6), 580-593. https://doi.org/10.1177/1073858407304654
104. **Lamm, C.,** Batson, C.D., & Decety, J. (2007). The neural substrate of human empathy: Effects of perspective-taking and cognitive appraisal. *Journal of Cognitive Neuroscience, 19*(1), 42-58. https://doi.org/10.1162/jocn.2007.19.1.42
105. **Lamm, C.,** Fischer, M., & Decety, J. (2007). Predicting the actions of others taps into one's own somatosensory representations - An fMRI study. *Neuropsychologia, 45*(11), 2480-2491. https://doi.org/10.1016/j.neuropsychologia.2007.03.024
106. **Lamm, C.,** Windischberger, C., Moser, E., & Bauer. H. (2007). The functional role of dorso-lateral premotor cortex during mental rotation. An event-related fMRI study separating cognitive processing steps using a novel task paradigm. *NeuroImage, 36*(4), 1374-1386. https://doi.org/10.1016/j.neuroimage.2007.04.012
107. Decety, J., & **Lamm, C.** (2006). Human empathy through the lens of social neuroscience. *The Scientific World Journal, 6,* 1146-1163. https://doi.org/10.1100/tsw.2006.221
108. **Lamm, C.,** Fischmeister, P.H.S., & Bauer, H. (2005). Individual differences in brain activity during visuo-spatial processing assessed by slow cortical potentials and LORETA. *Cognitive Brain Research, 25*(3), 900-912. https://doi.org/10.1016/j.cogbrainres.2005.09.025

109. Windischberger, C., **Lamm, C.,** Bauer, H., & Moser, E. (2003). Human motor cortex activity during mental rotation. *NeuroImage, 20*(1), 225-232. https://doi.org/10.1016/S1053-8119(03)00235-0
110. Bauer, H., Pripfl, J., **Lamm, C.,** Prainsack, C., & Taylor, N. (2003). Functional neuroanatomy of learned helplessness. *NeuroImage, 20*(2), 927-939. https://doi.org/10.1016/S1053-8119(03)00363-X
111. Windischberger, C., Barth, M., **Lamm, C.,** Bauer, H., Schroeder, L., Gur, R.C., & Moser, E. (2003). Fuzzy cluster analysis of high-field functional MRI data. *Artificial Intelligence in Medicine, 29*(3), 203-223. https://doi.org/10.1016/S0933-3657(02)00072-6
112. Windischberger, C., **Lamm, C.,** Bauer, H., & Moser, E. (2002). Consistency of inter-trial activation using single-trial fMRI: Assessment of regional differences. *Cognitive Brain Research, 13*(1), https://doi.org/10.1016/S0926-6410(01)00101-X
113. **Lamm, C.,** Windischberger, C., Leodolter, U., Moser, E., & Bauer, H. (2001). Evidence for premotor cortex activity during dynamic visuo-spatial imagery from single-trial functional magnetic resonance imaging and event-related slow cortical potentials. *NeuroImage, 14*(2), 268-283. https://doi.org/10.1006/nimg.2001.0850
114. **Lamm, C.,** Windischberger, C., Leodolter, U., Moser, E., & Bauer, H. (2001). Co-registration of EEG and MRI data using matching of spline interpolated and MRI-segmented reconstructions of the scalp surface. *Brain Topography, 14*(3), 93-100. https://doi.org/10.1023/A:1012988728672
115. **Lamm, C.,** Bauer, H., Vitouch, O., Durec, S., Gronister, R., & Gstättner, R. (2001). Restriction of task processing time affects cortical activity during processing of a cognitive task: An event-related slow cortical potential study. *Cognitive Brain Research, 10,* 275-282. https://doi.org/10.1016/S0926-6410(00)00048-3
116. Fitzgerald, R., **Lamm, C.***, Oczenski, W., Stimpfl, T., Vycudilik, W., & Bauer, H. (2001). Direct current auditory evoked potentials during wakefulness, anesthesia, and emergence of anesthesia. *Anesthesia and Analgesia, 92*(1), 154-160. https://doi.org/10.1097/00000539-200101000-00030
117. Flexer, A., Bauer, H., **Lamm, C.,** & Dorffner, G. (2001). Single trial estimation of evoked potentials using Gaussian Mixture Models with integrated noise component. *Lecture Notes in Computer Science, 2130,* 609-616. https://doi.org/10.1007/3-540-44668-0_85
118. Sauter, C., Asenbaum, S., Popovic, R., Bauer, H., **Lamm, C.,** Klösch, G., & Zeilhofer, J. (2000). Excessive daytime sleepiness in patients suffering from different levels of obstructive sleep apnoea syndrome. *Journal of Sleep Research, 9,* 293-301. https://doi.org/10.1046/j.1365-2869.2000.00211.x
119. **Lamm, C.,** Bauer, H., Vitouch, O., & Gstättner, R. (1999). Differences in the ability to process a visuo-spatial task are reflected in event related slow cortical potentials of human subjects. *Neuroscience Letters, 269,* 137-140. https://doi.org/10.1016/S0304-3940(99)00441-3
120. **Lamm, C.** (1999). Radical explanations, but trivial descriptions (commentary). *Behavioral and Brain Sciences, 22*(5), 843-844.
121. **Lamm, C.** (1998). Does brain activity-oriented modelling solve the problem? Commentary on Green on Connectionist-Explanation. *PSYCOLOQUY, 9*(19)

*equal contributions/shared authorship

Books (B), Book Chapters (BC), Proceedings (P)

1. **Lamm, C.** (2019). Empathie und Schmerz. In Bornemann-Cimenti, H., Lang-Illievich, K. (Eds.), *Schmerz im Fokus – ein bio-psycho-sozio-kulturelles Phänomen* (pp. 107-116). Wien: Maudrich Verlag. *(BC)*
2. **Lamm, C.**, Riva, F., & Silani, G. (2018). Empathy decline at older age? *Aging, 10*(6), 1182-1183. doi:10.18632/aging.101467 (Editorial)
3. Bukowski, H., **Lamm, C.** (2018) Superior Temporal Sulcus. In V. Zeigler-Hill & T. Shackelford (Eds) *Encyclopedia of Personality and Individual Differences*. Cham: Springer International Publishing. doi: 10.1007/978-3-319-28099-8_463-1 *(BC)*
4. **Lamm, C.**, Tomova, L. (2018). The neural bases of empathy in humans. In E. Knapska & K. Meyza (Eds.). *Neuronal correlates of empathy – from rodent to man* (pp. 25-36). Amsterdam: Elsevier. doi: 10.1016/B978-0-12-805397-3.00003-6 *(BC)*
5. Bukowski, H., & **Lamm, C.** (2017). Temporoparietal Junction. In V. Zeigler-Hill & T. Shackelford (Eds.), *Encyclopedia of Personality and Individual Differences*. Cham: Springer International Publishing. doi:10.1007/978-3-319-28099-8_863-1 (*BC)*
6. Stepniczka, I., Tomova, L., Niedermeier, D., Peschl, M., **Lamm, C.** (2015). Social Situation Awareness: Empathic Accuracy in the Aircraft Cockpit. In D. C. Noelle, R. Dale, A. S. Warlaumont, A. S., Yoshimi, J., Matlock, T., Jennings, C. D., & Maglio, P. P. (Eds.). *Proceedings of the 37th Annual Meeting of the Cognitive Science Society*. Austin, TX: Cognitive Science Society. (*P)*
7. Söchting, E., Hartl, J., Riederer, M., Schönauer, C., Kaufmann, H., & **Lamm, C.** (2015). Development of Tests to Evaluate the Sensory Abilities of Children with Autism Spectrum Disorder. *Procedia Computer Science*, *67*, 193-203. (*P)*
8. Riederer, M., Schoenauer, C., Kaufmann, H., Soechting, E., & **Lamm, C.** (2014). Development of tests to evaluate the sensory abilities of children with Autism Spectrum Disorder using touch and force sensors. In *Wireless Mobile Communication and Healthcare (Mobihealth), 2014 EAI 4th International Conference on* (pp. 160-163). IEEE.
   doi: 10.1109/MOBIHEALTH.2014.7015935. (*P)*
9. Ugazio, G., Majdandžić, J., & **Lamm, C.** (2014). Are empathy and morality linked? Insights from Moral Psychology, Social and Decision Neuroscience, and Philosophy. In H. Maibom (Ed.), *Empathy in Morality* (pp. 155-171). Oxford: Oxford University Press. (*BC)*
10. **Lamm, C.,** & Silani, G. (2014). The neural underpinnings of empathy and their relevance for collective emotions. In C. Scheve & M. Salmella (Eds.), *Collective Emotions* (pp. 63-77). Oxford University Press. *BC*
11. Ansorge, U., Kirchler, E., **Lamm, C.**, Leder, H. (2013). *TeaP 2013 – Abstracts of the 55th Conference of Experimental Psychologists.* Lengerich: Pabst Science Publishers. (*B)*
12. Silani, G., Zucconi, A., & **Lamm, C.** (2013). Carl Rogers meets the neurosciences: Insights from social neuroscience for client-centered therapy. In J.H.D. Cornelius-White, R. Motschnig, & M. Lux (Eds.), *Interdisciplinary Handbook of the Person-Centered Approach: Research and Theory* (pp. 63-78). Wien: Springer-Verlag. (*BC)*
13. Guwak, B., & **Lamm., C.** (2010). Einer Intuition folgend - Auf der Suche nach Anknüpfungspunkten und Synergien zwischen Neurowissenschaften und systemischer Beratung. In W. Knopf & I. Walther (Hg.), *Beratung mit Hirn. Neurowissenschaftliche Erkenntnisse für die Praxis von Supervision und Coaching* (pp. 72-84). Wien: facultas.wuv. [following an intuition – searching for connections and synergies between neurosciences and systemic counseling] (*BC)*

14. Decety, J., & **Lamm, C.** (2009). The biological basis of empathy. In J. T. Cacioppo & G. G. Berntson (Eds.), *Handbook of Neuroscience for the Behavioral Sciences (pp. 940-957).* New York: John Wiley and Sons. *BC*
15. Decety, J., & **Lamm, C.** (2009). Empathy vs. personal distress – new evidence from social neuroscience. In J. Decety & W. Ickes (Eds.), *The Social Neuroscience of Empathy (pp. 199-214)*. Cambridge: MIT Press. (*BC)*
16. **Lamm, C.,** Windischberger, C., Moser, E., & Bauer, H. (2006). Functional relevance of motor areas during mental rotation. In F.J. Chen (Ed.), *Trends in brain mapping research.* New York: Nova Science Publishers. *BC*
17. Tscheligi, M., Giller, V., **Lamm, C.,** & Beranek, G. (2004). Multichannel Usability – Grundlagen und Richtlinien für die optimale Berücksichtigung des Faktors Mensch bei der Gestaltung von Multichannel Systemen. In O. Merx, C. Bachem, (Hrsg.). *Multichannel – Marketing Handbuch.* x.media.press, Berlin: Springer [Multichannel Usability – basics and guidelines for optimal consideration of human factors in designing multichannel systems; In Multichannel – Handbook Marketing] *(BC)*
18. Tscheligi, M., Giller, V., & **Lamm, C.** (2002). Der mobile Benutzer und seine Sorgen mit mangelnder Benutzbarkeit. In *Handbuch Internet. Der Business-Guide für optimale Präsenz und langfristigen Erfolg im Netz.* Wien: Falter Verlag. [The mobile user and his problems with inefficient usability; In Handbook internet. Business guide for optimal representation and lasting success in the world wide web] *(BC)*
19. Bauer, H., & **Lamm, C.** (2001). Kognitive Neurowissenschaften und Neuroimaging. *Psychologie in Österreich, 21*(5), 429-433. [Cognitive Neurosciences and Neuroimaging] (*P)*
20. **Lamm, C.,** Windischberger, C., Leodolter, U., Moser, E., & Bauer, H. (2001). Combination of functional magnetic resonance and slow cortical potential imaging in the assessment of cognitive processing. In K.W. Kallus, N. Posthumus, & P. Jiménez (Eds.), *Current psychological research in Austria. Proceedings of the 4th scientific conference of the Austrian Psychological Society (ÖGP).* Graz: Akademische Druck- u. Verlagsanstalt. (*P)*
21. Flexer, A., Bauer, H., **Lamm, C.,** & Dorffner G. (2001). Model-based noise reduction for single trial evoked potentials. In D.J. Miller et al. (eds.), *Neural networks for signal processing XI.* New York: Institute of Electrical and Electronics Engineers. (*P)*
22. **Lamm, C.** (1999). Bewußtsein: neurale Grundlagen, subjektives Erleben und Grenzen menschlicher Erkenntnis. In T. Slunecko, O. Vitouch, C. Korunka, H. Bauer & B. Flatschacher (Hrsg.), *Psychologie des Bewußtseins - Bewußtsein der Psychologie.* Wien: Wiener Universitäts Verlag. [Consciousness: neural bases, subjective experience and limitations of human understanding; In Psychology of consciousness – awareness of psychology] (*BC)*
23. Bauer, H., **Lamm, C.,** & Vitouch, O. (1998). Topographie der Bestandspotentialänderungen bei Bearbeitung räumlicher Aufgaben. In J. Glück, O. Vitouch, M. Jirasko & B. Rollett (Hg.), *Perspektiven psychologischer Forschung in Österreich.* Wien: WUV-Universitätsverlag. (B) [Topography of steady potentials in processing spatial tasks; In Perspectives of psychological research in Austria] (*P)*
24. Bauer, H., **Lamm, C.,** & Vitouch, O. (1998). Slow potential topography and cognitive anatomy. In F. Rattay (Ed.), *Proceedings TU-BioMed Symposium 1998 'Brain Modelling'* (ARGESIM Report No. 10). Vienna: ARGESIM. (*P)*
25. **Lamm, C.,** Klauda, E., Bauer, H., Vitouch, O., & Leodolter, M. (1998). Kortikale Korrelate unterschiedlicher Bearbeitungspräferenzen bei visuell und akustisch evozierten Vorstellungsprozessen. In J. Glück, O. Vitouch, M. Jirasko & B. Rollett (Hg.), *Perspektiven psychologischer Forschung in Österreich.* Wien: WUV-Universitätsverlag.

[Cortical correlates of differing processing strategies during visual and acoustic imagery; In Perspectives of psychological research in Austria] (*P)*

26. Vitouch, O., Bauer, H., **Lamm, C.,** Vanecek, E., & Leodolter, M. (1998). DC-Potentialtopographien musikbezogener Kognitionen: Imaginative und motorische Komponenten beim Klavierspiel. In J. Glück, O. Vitouch, M. Jirasko & B. Rollett (Hg.), *Perspektiven psychologischer Forschung in Österreich.* Wien: WUV-Universitätsverlag. [DC-potential topographies during musical cognitions: imaginative and motor components during piano playing; In Perspectives of psychological research in Austria] (*P)*

Monographs (unpublished)

1. **Lamm, C.** (2001). *Functional neuroanatomy of dynamic visuo-spatial imagery.* Unpublished Ph.D. thesis, University of Vienna.
2. **Lamm, C.** (1996). *Raumvorstellungstraining & langsame ereigniskorrelierte Potentiale. Eine Untersuchung von Trainingseffekten auf DC-EEG derivierte corticale Aktivitätsmaße unter Verwendung Rasch-homogenen Stimulusmaterials.* Master's thesis, University of Vienna. [Training of spatial cognition and slow event-related cortical potentials. An investigation of training effects on measures of cortical activity using Rasch-homogeneous task materials]