

Jinhee Kim, Ph.D.

Post-doctoral fellow

Research Imaging Centre, Centre for Addiction and Mental Health,
250 College St. Toronto, ON, Canada M5T 1R8
(416) 535-8501 ext. 30630
jin-hee.kim@camhpet.ca

EDUCATION

- | | |
|-------------|---|
| 2010 - 2016 | Ph.D. Dept. Psychology, Kangwon National University, South Korea
Dissertation: <i>Neural substrates during feedback based learning in Internet gaming overusers</i>
(PI: Eunjoo Kang) |
| 2008 - 2010 | M.A., Dept. Psychology, Kangwon National University, South Korea
Thesis: <i>Reward and punishment in feedback learning: an fMRI study</i> (PI: Eunjoo Kang) |
| 2002 - 2007 | B.A., Dept. Psychology, Kyungpook National University, South Korea |

CAREER ACHIEVEMENT AND SKILLS

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|---------------------|---|
| 2016.1 - current | Postdoctoral research fellow, Research Imaging Centre, Centre for Addiction and Mental Health, Toronto, Canada (PI: Antonio P. Strafella) |
| 2007. 1. - 2008. 2. | Research Assistant, Cognitive Neuroimaging lab, Department of Psychology, Kangwon National University (PI: Eunjoo Kang) |
| 2006. 3-6 | Undergraduate Student Researcher, Clinical Neuroscience lab, Department of Psychology, Seoul National University (Advisor J. Chey), South Korea |

TEACHING AND EDUCATION WORK

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|---------------------------------|---|
| 2015 1 st semester | <i>Instructor</i> on "Instruction to Psychology" |
| 2014 2 nd semester | <i>Instructor</i> on "Biological Psychology" and "Motivation and Emotion" |
| 2011 1 st semester | <i>Instructor</i> on "Instruction to Psychology" |
| -2013 1 st semester. | |
| 2010 1 st semester. | <i>Guest lecturer</i> "How Our Brains Feel Emotions?" on "Brain and Human"
(Instructor: Prof. E. Kang) |
| 2008 2 nd semester | <i>Teaching Assistant</i> |
| -2009 2 nd semester. | Courses: Statistics of Psychology I, Statistics of Psychology II |

PUBLICATIONS

Journal Articles (Peer-reviewed)

- Kim, J.**, Kang E. (in press). Internet game overuse is associated with an alteration of fronto-striatal functional connectivity during reward feedback processing. *Frontiers in Psychiatry*. doi:10.3389/fpsyt.2018.00371
- Mihaescu, A., Masellis, M., Graff-Guerrero, A., **Kim, J.**, Criaud, M., Cho, S. S., Ghadery, C., Valli, M., Strafella, A. P. Brain degeneration in Parkinson's disease patients with cognitive decline: a coordinate-based meta-analysis. *Brain Imaging and Behavior*. 1-14. doi: 10.1007/s11682-018-9922-0. [Epub ahead of print]
- Kim, J.** *, Kang E. (2018). Strength of resting-state functional connectivity associated with performance-adjustment ability. *Behavioral Brain Research*. 347, 377-384. doi: 10.1016/j.bbr.2018.02.024. (* the corresponding author)
- Coakeley, S., Cho, S. S., Koshimori, Y., Rusjan, P., Ghadery, C., **Kim, J.**, Lang, A. E., Houle, S., Strafella, A. P. (2018). [18F]AV-1451 binding to neuromelanin in the substantia nigra in PD and PSP. *Brain Structure and Function*. 223(2), 589-595. doi:10.1007/s00429-017-1507-y.
- Diez-Cirarda, M., Strafella, A. P., **Kim, J.**, Peña, J., Ojeda, N., Cabrera-Zubizarreta, A., Ibarretxe-Bilbao, N. (2018). Dynamic functional connectivity in Parkinson's disease patients with mild cognitive impairment and normal cognition. *Neuroimage Clinical*. 17, 547-855. doi:10.1016/j.nicl.2017.12.013
- Kim, J.** *, Criaud, M., Cho, S. S., Diez-Cirarda, M., Mihaescu, A., Coakeley, S., Ghadery, C., Valli, M., Jacobs, M.F., Houle, S., Strafella, A. P. (2017). Abnormal intrinsic brain functional network dynamics in Parkinson's disease. *Brain*, 140(11), 2955-2967. doi:10.1093/brain/awx233 (* the corresponding author)
- Kim, J.**, Kim, H., & Kang, E. (2017). Impaired feedback processing for symbolic reward in individuals with internet game overuse. *Frontiers in Psychiatry*, 8(195). doi:10.3389/fpsyt.2017.00195
- Coakeley, S., Cho, S. S., Koshimori, Y., Rusjan, P., Harris, M., Ghadery, C., **Kim, J.**, Lang, A.E., Wilson A., Houle, S., Strafella, A. P. (2017). Positron emission tomography imaging of tau pathology in progressive supranuclear palsy. *Journal of Cerebral Blood Flow and Metabolism*, 37(9), 3150-3160. doi:10.1177/0271678X16683695
- Choi, J. C., Park, Y. H., Park, S. K., Lee, J. S., **Kim, J.**, Choi, J. I., Yoon, K. B., Lee, S., Lim, D. E., Choi, J. Y., Kim, M. H., Park, G., Choi, S. S., Lee, J. M. (2017). Testosterone effects on pain and brain activation patterns. *Acta Anaesthesiologica Scandinavica*, 61(6), 668-675. doi: 10.1111/aas.12908.
- Ghadery, C., Koshimori, Y., Coakeley, S., Harris, M., Rusjan, P., **Kim, J.**, Houle, S., Strafella, A. P. (2017). Microglial activation in Parkinson's disease using [18 F]-FEPPA. *Journal of Neuroinflammation*, 14(1), 8. doi:10.1186/s12974-016-0778-1
- Choi, J. C., **Kim, J.**, Kang, E., Lee, J-M., Cha, J., Kim, Y. J., Lee, H.G. and Yi, D-J. (2016). Brain mechanisms of pain relief by transcutaneous electrical nerve stimulation: A functional magnetic resonance imaging study. *European Journal of Pain*. 26, 92-105. doi: 10.1002/ejp.696
- Choi, J. C., **Kim, J.**, Kang, E., Choi, Y-S., Cha, J., Han, C., Park, S. K., Kim, H., Lee, G. H., Choi, J-H., Do, H., and Lee, J-M. (2016). Step-down versus step-up noxious stimulation: differential effects on pain perception and patterns of brain activation. *Acta Anaesthesiologica Scandinavica*, 60(1), 117-127. doi:10.1111/aas.12607

Articles in Domestic Peer-reviewed Journals (in Korean)

- Jung, H., **Kim, J.**, Kang, E. (2017). Behavioral approach system (BAS) sensitivity and functional brain networks during rest: graph-theory analysis. *The Korean Journal of Cognitive and Biological Psychology*, 29(2), 105-125. doi: 10.22172/cogbio.2017.29.2.001
- Kim, J.**, Kang, E. (2017). Learning-associated reward and penalty in feedback learning: an fMRI activation study. *Korean Journal of Cognitive Science*, 28(1), 65-90. doi: 10.19066/cogsci.2017.28.1.004
- Kim, J.**, Kim, H. Cho, H., Jung, H., Kang, E. (2017). Neuroanatomical correlates of personality traits for internet gaming overuse: a VBM study. *Korean Journal of Psychology: General*, 36(1), 109-135. doi:

10.22257/kjp.2017.03.36.1.109

Kim, J., Kang, E. (2017). Impaired resting-state functional connectivity of frontostriatal regions in internet game over-user. *The Korean Journal of Cognitive and Biological Psychology*, 29(1), 63-80. doi: 10.22172/cogbio.2017.29.1.004

Kim, S., **Kim, J., Kang, E.** (2015). Dynamic changes in feedback processing as learning progresses. *The Korean Journal of Cognitive and Biological Psychology*, 27(3), 419-450. doi: 10.22172/cogbio.2015.27.3.005

Kim, J., Kang, E. (2013) Individual differences in feedback learning and regional gray matter volume. *The Korean Journal of Cognitive and Biological Psychology*, 25(4), 517-538. doi: 10.22172/cogbio.2013.25.4.007

WORKINGS IN PROGRESS

In Revision

Fiorenzato E., Biundo, R., Cecchin, D., Frigo, D. C., **Kim, J.**, Strafella, A.P., Antonini, A. Brain amyloid contribution to cognitive dysfunction in early-stage Parkinson's disease: The PPMI dataset. *Journal of Alzheimer's Disease*.

Under Review

Criaud, M., **Kim, J.**, Zurowski, M., Lobaugh, N., Chavez, S., Houle, S., Strafella, A. P. Anxiety in Parkinson's Disease: Abnormal resting activity and connectivity.

Ghadery, C., Koshimori, Y., Christopher, L., **Kim, J.**, Rusjan, P., Lang, A., Houle, S., Strafella, A. P. The interaction between neuroinflammation and β -amyloid in cognitive decline in Parkinson's disease

Working Papers (available upon request)

Kim, J., Ghadery, C., Christopher, L., Cho, S. S., Mihaescu, A., Valli, M., Rusjan, P., Houle, S., Strafella, A. P. Network Patterns of Amyloid- β deposition in Parkinson's Disease.

Navalpotro-Gomez, I., **Kim, J.**, Paz-Alonso, K., Strafella, A.P., Rodriguez-Oroz M. C. Disrupted functional salience network dynamics in impulse control disorders in Parkinson's disease.

ABSTRACT AND CONFERENCE PROCEEDING:

Boileau, I., Green, D., Williams, B., Richardson, D., **Kim, J.**, Lobaugh, N., Tyndale, R.F., Bazinet, R., Houle, S., Tong, J., Kish, S. J., Fatty Acid Amide Hydrolase: Investigating potential brain-based biomarkers in Post-Traumatic Stress Disorder. Canadian College of Neuropsychopharmacology 41st Annual Meeting, Vancouver, Canada, June 2018

Kim, J., Ghadery, C., Christopher, L., Cho, S. S., Mihaescu, A., Valli, M., Rusjan, P., Houle, S., Strafella, A. P., Graph analysis of brain networks in Parkinson's disease patients with beta-amyloid positive. The Annual Meeting of Organization for Human Brain Mapping, Singapore, June 2018

Kim, J., Criaud, M., Cho, S. S., Diez-Cirarda, M., Mihaescu, A., Coakeley, S., Ghadery, C., Valli, M., Jacobs, M. F., Houle, S., Strafella, A.P. Abnormal dynamic functional networks in Parkinson's disease: a resting-state fMRI study. Society for Neuroscience 47rd annual meeting, Washington, USA, November 2017

Kim, J., Diez-Cirarda, M., Criaud, M., Cho, S. S., Mihaescu, A., Valli, M., Ghadery, C., Coakeley, S., Strafella, A. P., Abnormal dynamics of intrinsic brain functional networks in Parkinson's disease. The Annual Meeting of Organization for Human Brain Mapping, Vancouver, Canada, June 2017

Ghadery, C., Koshimori Y., **Kim, J.**, Coakeley, Sarah., Harris, M., Christopher, L., Rusjan, P., Lang, A.E., Houle, S.,

Strafella, A.P. Interactions between amyloid- β and microglial activation in Parkinson's disease. The 20th International Congress of the international Parkinson and Movement Disorder, June 2017

Kang, E., Jeong, H., **Kim, J.** Individual differences in right DLPFC volume and repetition of error responses during S-R learning. *The Annual Meeting of Organization for Human Brain Mapping*, Hawaii, USA, June 2015

Kim, J., Kang, E. Putamen's response to negative feedback is associated with repetition of error. *Society for Neuroscience 43rd annual meeting*, San Diego, USA, November 2013

Kim, S., **Kim, J.**, and Kang, E. Personality differences in sensitivity to punishment and medio-dorsal thalamic activity after high-penalty. *Society for Neuroscience 43rd annual meeting*, San Diego, USA, November 2013

Kim, J., Kang, H., Kang, E. Different cortical modulatory effects on subcortical regions for reward and penalty processing. *The 16th Annual Meeting of the Organization for Human Brain Mapping*, Barcelona, Spain, June 2010

Kim, J., Na, D.L., and Kang, E. Learning-associated reward and punishment processing: an fMRI study. *Society for Neuroscience 39th annual meeting*, Chicago, USA, October 2009.

Kang, E., **Kim, J.**, and Kim, H. Changes in hippocampal response to cue and feedback during association learning. *The 16th Annual Cognitive Neuroscience Society Meeting*, San Francisco, USA, April 2008.

Domestic:

Jung H.J., **Kim, J.**, Kim, H., Kang, E. Properties of functional brain networks are related to individual differences in the behavioral approach system (BAS). *Korean Human Brain Mapping*, 2016

Jung H.J., Kim, H., **Kim, J.**, Kang, E. Individual differences in experience-dependent emotional reactivity - Functional network organization. *Annual Conference of the Korean Psychological Association*, 2015

Jung H.J., **Kim, J.**, Kang, E. Brain's spontaneous oscillation relates to individual differences in sensitivity of Gray's behavioral system. *Annual Conference of the Korean Psychological Association*, 2015

Choi H.Y., **Kim, J.**, Kang, E. Ventrolateral prefrontal cortex and individual differences in emotional changes after learning feedback experience: a voxel based morphometry study. *The 52nd Korean Journal of Cognitive and Biological Psychology*, 2014

Jung H.J., **Kim, J.**, Kang, E. Previous feedback experience and personality modulate efficiency of reward feedback processing: fMRI study. *The 52nd Korean Journal of Cognitive and Biological Psychology*, 2014

Kim, J., and Kang, E. Neural mechanisms associated with successful negative feedback processing in learning: an event related fMRI study. *The 51th Korean Journal of Cognitive and Biological Psychology*, 2013

Kim, J., Na, D.L., and Kang, E. Regional gray matter differences associated with individual differences in feedback learning: A voxel-based morphometry study, *2012 Cognitive Neuroscience Conference*, South Korea, 2012.

Kim, S.H., **Kim, J.**, Kang, E. Intrinsic Functional Connectivity of Caudate for Better Learning. *Conference of Korean Society for Human Brain Mapping*, 2011.

Yim, Y-K., **Kim, J.**, Kang, E. Effective Connectivity of Associative Memory: Encoding vs. Retrieval. *2011 Cognitive Neuroscience Conference*, South Korea, 2011

Kim, S.H., **Kim, J.**, Kang, E. Recognition Possibility Modulated Encoding. *The 49th Korean Journal of Cognitive and Biological Psychology*, South Korea, 2011

Kim, J., Na, D.L., and Kang, E. Neural Substrates of Feedback based learning: fMRI study, *2009 Cognitive Neuroscience Conference*, South Korea, 2009

Kim, J., and Kang, E. Learning-associated reward and punishment processing: an fMRI study. *The 47th Korean Journal of Cognitive and Biological Psychology*, South Korea, 2009

Kim, J., Kim, H., Kang, E. Changes in Parahippocampal Feedback Processing in S-R Learning in Human: an Event-Related fMRI Study. *Conference of Korean Society for Human Brain Mapping*, South Korea, 2007

GRANTS, AWARDS AND FELLOWSHIPS

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| 2018-2019 | Discovery Fund: Talent Development Competition
Awarded by Centre for Addiction and Mental Health. \$65,000 (CDN). |
| 2018 | Mimi and Charles Hollenberg research award
Department of Medicine, University of Toronto
2 nd place in the Reports of research projects of a mechanistic mature category |
| 2010-2011 | Full-time excellence graduate student scholarship
Awarded by Kangwon National University, South Korea |
| 2008-2009 | Honors scholarships
Awarded by Kangwon National University, South Korea |