

# Curriculum Vitae

## Areum Jo

Center for Neuroscience Imaging Research (CNIR),  
Institute for Basic Science (IBS)  
SungKyunKwan University  
Suwon, South Koera  
Office : 82-31-299-4503  
Fax : 82-31-299-4506  
E-mail :areumjo1@gmail.com

## Education

- 2014 -Present :Postdoctoral Researcher, Center for Neuroscience Imaging Research (CNIR),Institute for Basic Science (IBS), Sungkyunkwan University, South Korea
- 2009-2014 : Ph.D. student,Department of Biological Science, Sungkyunkwan University, South Korea
- 2005-2009 :B.S.,Department of Biological Science, Sungkyunkwan University, South Korea

## Publications

1. **Jo A**, Heo C, Schwartz TH, Suh M. Nanoscaleintracortical iron injection induces chronic epilepsy in rodent. J Neurosci Res. 2014.
2. Heo C, Lee SY, **Jo A**, Jung S, Suh M, Lee YH.Flexible, Transparent, and NoncytotoxicGraphene Electric Field Stimulator for Effective Cerebral Blood Volume Enhancement. ACS Nano. 2013.
3. Lee S, Koh D, **Jo A**, Lim HY, Jung YJ, Kim CK, Seo Y, Im CH, Kim BM, Suh M. Depth-dependent cerebral hemodynamic responses following direct cortical electrical stimulation (DCES) revealed by in vivo dual-optical imaging techniques. Opt Express. 2012.
4. Heo C, Hong MY, **Jo A**, Lee YH, Suh M.Study of the primo vascular system utilizing a melanoma tumor model in a green fluorescence protein expressing mouse.J Acupunct Meridian Stud. 2011.
5. **Jo A**, Do H, Jhon GJ, Suh M, Lee Y.Electrochemical nanosensor for real-time direct imaging of nitric oxide in living brain.Anal Chem. 2011.
6. **Jo A**, Do H, Jhon GJ, Suh M, Lee Y.Real-time evaluation of nitric oxide (NO) levels in cortical and hippocampal areas with a nanopore-based

electrochemical NO sensor. *NeurosciLett*. 2011.

7. Heo C, Yoo J, Lee S, **Jo A**, Jung S, Yoo H, Lee YH, Suh M. The control of neural cell-to-cell interactions through non-contact electrical field stimulation using graphene electrodes. *Biomaterials*. 2011.

## Awards

1. Poster award, GT10 Bio Research group, 2012.
2. Scholarship for Honor Graduate Student, 2011.
3. Sungkyunkwan University Alumni Association Scholarship, 2009.

## Manuscripts in preparation

1. **Jo A**, Song H, Sim J, Heo C, Kim BM, Suh M. Multimodal hemodynamic imaging in chronic epileptic mouse model.
2. Sim J, **Jo A**, Heo C, Bang O, Lee Y, Jhon GJ, Suh M. The in vivo assessment of post-stroke effect on decreased cerebral blood flow regulation in MCAO model.

## Conference Presentation

1. **Jo A**, Song H, Sim J, Heo C, Kim BM, Suh M. Multimodal hemodynamic imaging in chronic epileptic mouse model. Society for Neuroscience 2013. (Poster)
2. Lee S, **Jo A**, Sim J, Koh D, Song H, Kim BM, Suh M. Induction of chronic epileptic seizure and corresponding hemodynamic monitoring in mouse model. SPIE Photonics West 2013. (Slide)
3. **Jo A**, Heo C, Schwartz TH, Minah S. Nanoscale intracortical iron injection-induced chronic rodent epilepsy alters neurovascular coupling through a reduction in GABAergic interneurons. GT10. 2012. (Poster)
4. Heo C, Yoo J, Lee S, **Jo A**, Jung S, Lee Y, Suh M. Noncontact electrical field stimulation by graphene electrodes controls neural cell-to-cell interaction Society for Neuroscience 2011. (Poster)
5. **Jo A**, Do H, Jhon GJ, Lee Y, Suh M. In vivo brain mapping of NOS releasing site with electrochemical nano-sensor. The Korean Society for Brain and Neural Science. 2010. (Poster)
6. Song CK, **Jo A**, Chang H, Jeon H, Kwon G, Choi J, Hong MY, Suh M. Whole brain cerebral hemodynamic responses during unilateral direct electrical stimulation in the somatosensory cortex in animal model of epilepsy. Society

for Neuroscience 2009. (Poster)