

Pei-Ching Chang

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EDUCATION

Northwestern University, Chicago, IL, USA 2010-
Ph.D. Candidate in Neuroscience

Brandeis University, Waltham, MA, USA 2006-2007
M.S. in Neuroscience

National Central University, Taiwan 1999-2003
B.S. in Chemistry

PUBLICATIONS

- Chang P.C., Pollema-Mays S.L., Centeno M.V., Procissi D, Contini M, Baria A.T., Martina M. & Apkarian A.V. Role of Nucleus Accumbens in the Transition to Neuropathic Pain. *Pain*. 2014 Jun;155(6):1128-39
- Mansour A., Baliki M.N., Baria A.T., Chang P.C., Huang L., Apkarian A.V. Hub disruption of brain functional networks: a hallmark of chronic pain (Under Review).
- Becerra L., Upadhyay J., Chang P.C., Bishop J., Anderson J., Baumgartner R., Schwarz A.J., Coimbra A., Wallin D., Nutile L., George E., Maier G., Sunkaraneni S., Iyengar S., Evelhoch J.L., Bleakman D., Hargreaves R., Borsook D. (2013) Parallel buprenorphine pHMRI responses in conscious rodents and healthy human subjects. *J Pharmacol Exp Ther*. 345(1):41-51.
- Becerra, L., Pendse, G., Chang, P.C., Bishop J. & Borsook D. (2011) Robust reproducible resting state networks in the awake rodent brain. *PLoS One*. 6(10): e25701.
- Becerra, L., Chang, P.C., Bishop, J. & Borsook, D. (2011) Validation of awake rat model for measures of pain and analgesia. *Neuroimage*. 54(2): 1355-66.

PROFESSIONAL SOCIETIES

- Society for Neuroscience, Member
- International Society for Magnetic Resonance in Medicine, Member

AWARDS

- International Society for Magnetic Resonance in Medicine Travel Award (2012)

CONFERENCE PRESENTATIONS

- Baliki M.N., Mansour A., Baria A.T., Chang P.C., Huang L., Apkarian A.V. (2013) Hub reorganization of brain functional networks: A hallmark of the chronic pain state in Society for Neuroscience 43th Annual Meeting. San Diego, California
- Becerra L., Bishop J., Kainz V., Barmettler G., Chang P.C., Rubstein R., Borsook D. (2013) Resting state alterations in a model of headache-like pain in rodents in Society for Neuroscience 43th Annual Meeting. San Diego, California
- Centeno M.V., Chang P.C., Pollema S.L., Procissi D., Baliki M.N., Martina M. & Apkarian A.V. (2012) NAc in the transition to chronic pain: Relationship between behavior, functional and receptors expression in Society for Neuroscience 42th Annual Meeting. New Orleans, Florida
- Chang P.C., Pollema S., Centeno M.V., Procissi D, Baliki M.N., Martina M. & Apkarian A.V. (2012) Resting-State fMRI and NAc in the transition to Chronic Pain in International Society for Magnetic Resonance in Medicine 20th annual meeting. Melbourne, Australia
- Becerra L., Brenner G., Bishop J., Chang P.C., Shin H.S., Yang A., Baratta M., Mo-nahan P., Boyden E., Borsook D. (2011) Opto-fMRI in awake rodents: activation and deactivation fMRI signals induced by excitation and inhibition of neurons in International Society for Magnetic Resonance in Medicine 19th annual meeting in Montréal, Québec, Canada
- Becerra, L., Chang, P.C., Bishop, J., Upadhyay, J., Pendse, G., Lyengar, S., Coimbra, A.,
- Baumgartner, R., Schwarz, A., Evelhoch J., Nisenbaum, E., Robertson, B., Large, T.,
- Bleakman, D., Hargreaves, R. & Borsook, D. (2010) De novo Buprenorphine pHMRI effects in conscious rats parallels brain activation in humans in International Society for Magnetic Resonance in Medicine 18th annual meeting. Stockholm, Sweden
- Becerra, L., Chang, P.C., Bishop, J., Crown, E., Tsai, Y.H., Urban, M., Coimbra, A., Klimas, M., Hargreaves, R., Iyengar, S., Simmons, R.M., Peters, S.C., Schwarz, A., Bleakman, D. & Borsook, D. (2009) Validation of awake rat model for measures of pain and analgesia with fMRI in International Society for Magnetic Resonance in Medicine 17th annual meeting. Honolulu, Hawaii
- Chang, P.C., Bishop, J., Pendse, G., Schwarz, A., Coimbra, A., Williams, M., Iyengar, S.,

- Bleakman, D., Borsook, D. & Becerra, L. (2008) fMRI Activation to mechanical and thermal (heat) in awake rodents with and without external Contrast Agent in Society for Neuroscience 38th Annual Meeting. Washington, DC
- Liang, H.F., Sun, S.W., Chang, P.C., Chang, C., Cross, A.H. & Song, S.K. (2007) Reversible Axonal Injury Detected by DTI and Immunohistochemistry in International Society for Magnetic Resonance in Medicine 15th annual meeting. Berlin, Germany
- Lin, C.Y., Chang, P.C., Hong, C.Y., Chen, J.H. & Chang, C. (2006) The analysis of the water diffusivity within white matter tract in cuprizone-induced mouse model using various indices by the Diffusion Tensor Ellipsoid in International Society for Magnetic Resonance in Medicine 14th annual meeting. Seattle, Washington
- Chang, P.C., Lin, C.Y., Hsu, Y.H., Hong, C.Y. & Chang, C. (2005) Axonal damage and myelin loss in white disease: Temporal evaluations of cuprizone model using DTI and T2WI in Society for Neuroscience 35th Annual Meeting. Washington, DC