

## DR. MATTHIAS RINGKAMP

Date of birth: 30 June, 1964

Gender: male

Address: Dept of Neurosurgery, School of Medicine, Johns Hopkins University  
600 N Wolfe St., Meyer 5-109  
Baltimore, MD 21287

Phone: +1 410 614 1998

Email: [platelet@jhmi.edu](mailto:platelet@jhmi.edu)

Current position: Assoc. Prof., Dept. Neurosurgery, School of Medicine, Johns Hopkins University, Baltimore

## CURRICULUM VITAE

### University education

1985-1991 Medical School (Univ. Erlangen, Germany)

### Doctoral degree

1993 Dr. med.  
Medical thesis "Regeneration of the Neurogenic Inflammation: an *in vivo* investigation of the saphenous nerve of the rat"  
Thesis advisor: Prof PW Reeh, Dept. Physiology, Univ. Erlangen-Nuremberg, Germany

### Postgraduate training

1993-1994 Postdoctoral Fellow, Dept. of Physiology, University Erlangen Germany, Director: Prof. Dr. H.O. Handwerker  
1995 – 1996 Postdoctoral Fellow, Dept of Anesthesiology, School of Medicine, Johns Hopkins University, Baltimore, MD, USA, advisor: Prof. SN Raja  
1996 – 1998 Postdoctoral Fellow, Dept of Neurosurgery, School of Medicine, Johns Hopkins University, Baltimore, MD, USA, advisors: Prof. JN Campbell, Prof RA Meyer

### Professional Experience

1998 – 2000 Research Associate, Dept of Neurosurgery, School of Medicine, Johns Hopkins University, Baltimore, MD, USA  
2000 – 2009 Assistant Professor, Dept of Neurosurgery, School of Medicine, Johns Hopkins University, Baltimore, MD, USA  
2009 – present Associate Professor, Dept of Neurosurgery, School of Medicine, Johns Hopkins University, Baltimore, MD, USA

### Current grant awards:

04/01/2016-03/31/2021 SIV-induced Inflammation Causes Functional Impairment of the PNS  
1R01 NS097221-01  
NIAID  
Principal Investigators: Bosmans, Mankowksi, Ringkamp  
Role: Co-PI

- 09/01/2015-06/30/2017      Neuronal mechanisms of itch  
 NIAMS  
 1R56 AR066610-01A1  
 Principal Investigators: LaMotte, Ringkamp  
 Role: Co-PI
- 10/01/2011-09/31/2016      Injury induced Pain: Chemical modulation of nociceptors  
 2R01NS26363-2  
 NIH  
 Principal Investigator: SN Raja  
 Role: Co-Investigator

### Memberships, panels and coordinating functions:

Memberships:      Society for Neuroscience, International Association for the Study of Pain (IASP), American Pain Society (APS), founding member of International Forum for the Study of Itch (IFSI)

### Max. 10 most important publications

1.      Wooten M, Weng HJ, Hartke TV, Borzan J, Klein AH, Turnquist B, Dong X, Meyer RA, **Ringkamp M**. Three functionally distinct classes of C-fibre nociceptors in primates. *Nature communications* 2014;5:4122.
2.      LaMotte RH, Dong X, **Ringkamp M**. Sensory neurons and circuits mediating itch. *Nature Reviews Neuroscience* 2014;15(1):19-31.
3.      **Ringkamp M**, Tal M, Hartke TV, Wooten M, McKelvy A, Turnquist BP, Guan Y, Meyer RA, Raja SN. Local loperamide injection reduces mechanosensitivity of rat cutaneous, nociceptive C-fibers. *PLoS one* 2012;7(7):e42105.
4.      **Ringkamp M**, Schepers RJ, Shimada SG, Johaneck LM, Hartke TV, Borzan J, Shim B, LaMotte RH, Meyer RA. A role for nociceptive, myelinated nerve fibers in itch sensation. *J Neurosci* 2011;31(42):14841-14849.
5.      Laast VA, Shim B, Johaneck LM, Dorsey JL, Hauer PE, Tarwater PM, Adams RJ, Pardo CA, McArthur JC, **Ringkamp M**, Mankowski JL. Macrophage-mediated dorsal root ganglion damage precedes altered nerve conduction in SIV-infected macaques. *Am J Pathol* 2011;179(5):2337-2345.
6.      **Ringkamp M**, Johaneck LM, Borzan J, Hartke TV, Wu G, Pogatzki-Zahn EM, Campbell JN, Shim B, Schepers RJ, Meyer RA. Conduction properties distinguish unmyelinated sympathetic efferent fibers and unmyelinated primary afferent fibers in the monkey. *PLoS ONE* 2010;5(2):e9076.
7.      Johaneck LM, Meyer RA, Friedman RM, Greenquist KW, Shim B, Borzan J, Hartke T, LaMotte RH, **Ringkamp M**. A role for polymodal C-fiber afferents in nonhistaminergic itch. *J Neurosci* 2008;28(30):7659-7669.
8.      Namer B, Carr R, Johaneck LM, Schmelz M, Handwerker HO, **Ringkamp M**. Two separate pathways for pruritus in man. *J Neurophysiol.* (2008); 100: 2062-2069.
9.      Johaneck LM, Meyer RA, Hartke T, Hobelmann JG, Maine DN, LaMotte RH, **Ringkamp M**. Psychophysical and physiological evidence for parallel afferent pathways mediating the sensation of itch. *J Neurosci* 2007;27(28):7490-7497.
10.    **Ringkamp M**, Peng YB, Wu G, Campbell JN, Meyer RA. Capsaicin responses in heat-sensitive and heat-insensitive A-fiber nociceptors. *J. Neurosci.* (2001); 21: 4460-4468.