

講演会のお知らせ

この度、世界トップレベル研究者招聘プログラム「Progress 100」で、トロント大学の Min Zhuo 教授を薬学研究院にお招きします。Zhuo 教授は、脳の帯状回や精神機能、シナプス可塑性などに注目した慢性疼痛の基礎的研究を精力的にされている神経科学領域の世界トップレベル研究者で、最新の疼痛研究の成果をお話しいたします。ご興味のある皆様方のご来聴を心より歓迎申し上げます。

演者: Min Zhuo 教授 (トロント大学)

タイトル: Synaptic mechanisms for chronic pain in the cortex

日時: 3月12日(木) 17時~19時

場所: コラボステーション II 2F 大セミナー室(予定)

<主要論文>

Koga K, Descalzi G, Chen T, Ko HG, Lu J, Li S, Son J, Kim T, Kwak C, Haganir RL, Zhao MG, Kaang BK, Collingridge GL, **Zhuo M**: Coexistence of Two Forms of LTP in ACC Provides a Synaptic Mechanism for the Interactions between Anxiety and Chronic Pain. *Neuron* 85: 377-389 (2015)

Nicolas CS, Peineau S, Amici M, Csaba Z, Fafouri A, Javalet C, Collett VJ, Hildebrandt L, Seaton G, Choi SL, Sim SE, Bradley C, Lee K, **Zhuo M**, Kaang BK, Gressens P, Dournaud P, Fitzjohn SM, Bortolotto ZA, Cho K, Collingridge GL: The Jak/STAT pathway is involved in synaptic plasticity. *Neuron* 73: 374-390 (2012)

Kim JI, Lee HR, Sim SE, Baek J, Yu NK, Choi JH, Ko HG, Lee YS, Park SW, Kwak C, Ahn SJ, Choi SY, Kim H, Kim KH, Backx PH, Bradley CA, Kim E, Jang DJ, Lee K, Kim SJ, **Zhuo M**, Collingridge GL, Kaang BK: PI3K γ is required for NMDA receptor-dependent long-term depression and behavioral flexibility. *Nat Neurosci* 14: 1447-1454 (2011)

Wang H, Xu H, Wu LJ, Kim SS, Chen T, Koga K, Descalzi G, Gong B, Vadakkan KI, Zhang X, Kaang BK, **Zhuo M**: Identification of an adenylyl cyclase inhibitor for treating neuropathic and inflammatory pain. *Sci Transl Med* 3: 65ra3 (2011)

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Slutsky I, Abumaria N, Wu LJ, Huang C, Zhang L, Li B, Zhao X, Govindarajan A, Zhao MG, **Zhuo M**, Tonegawa S, Liu G: Enhancement of learning and memory by elevating brain magnesium. *Neuron* 65: 165-177 (2010)

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Wei F, Qiu CS, Kim SJ, Muglia L, Maas JW, Pineda VV, Xu HM, Chen ZF, Storm DR, Muglia LJ, **Zhuo M**: Genetic elimination of behavioral sensitization in mice lacking calmodulin-stimulated adenylyl cyclases. *Neuron* 36: 713-726 (2002)

Wei F, Qiu CS, Liauw J, Robinson DA, Ho N, Chatila T, **Zhuo M**: Calcium calmodulin-dependent protein kinase IV is required for fear memory. *Nat Neurosci* 5: 573-579 (2002)

Kerchner GA, Wang GD, Qiu CS, Huettner JE, **Zhuo M**: Direct presynaptic regulation of GABA/glycine release by kainate receptors in the dorsal horn: an ionotropic mechanism. *Neuron* 32: 477-488 (2001)

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Li P, Kerchner GA, Sala C, Wei F, Huettner JE, Sheng M, **Zhuo M**: AMPA receptor-PDZ interactions in facilitation of spinal sensory synapses. *Nat Neurosci* 2: 972-977 (2001)

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Kavalali ET, **Zhuo M**, Bito H, Tsien RW: Dendritic Ca²⁺ channels characterized by recordings from isolated hippocampal dendritic segments. *Neuron* 18: 651-663 (1997)

Zhuo M, Hu Y, Schultz C, Kandel ER, Hawkins RD: Role of guanylyl cyclase and cGMP-dependent protein kinase in long-term potentiation.

Nature 368: 635-639 (1994)

Zhuo M, Small SA, Kandel ER, Hawkins RD: Nitric oxide and carbon monoxide produce activity-dependent long-term synaptic enhancement in hippocampus.
Science 260: 1946-1950 (1993)

お問い合わせ先

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