BIOGRAPHICAL SKETCH

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NAME	POSITION TITLE
Yan Lu	Research Assistant Professor

EDUCATION/TRAINING *(Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.)*

INSTITUTION AND LOCATION	DEGREE *(if applicable)*	YEAR(s)	FIELD OF STUDY
Fourth Military Medical University, Xian, China	BS	1981-1986	Medicine
Fourth Military Medical University, Xian, China	MS	1990-1993	Neuroscience
Fourth Military Medical University, Xian, China	PhD	1994-1997	Neuroscience
Kurume University, Fukuoka, Japan	Postdoc	1998-2000	Neurophysiology
Univ of NC at Chapel Hill, Chapel Hill	Postdoc	2000-2001	Neurophysiology

A. Positions and Honors.

Positions

1986-1990 Medical Residency, Internal Medicine (Neurology), Twenty-second Hospital, Qinghai, China
1993-1994 Assistant Professor, K. K. Leung Brain Research Center, Fourth Military Medical University, Xi'an, China
1996-1997 Visiting Scientist, Department of Physiology, Kurume University, Fukuoka, Japan
1997-1998 Associate Professor, K. K. Leung Brain Research Center, Fourth Military Medical University, Xi'an, China
2001-2004 Lecturer, Department of Cell and Molecular Physiology, University of North Carolina at Chapel Hill, Chapel Hill, NC
2004- Research Assistant Professor, Department of Cell and Molecular Physiology, University of North Carolina at Chapel Hill, Chapel Hill, NC

Honors

1999 State Nature Science Award, The Ministry of Science and Technology, China
1999 Award of the Progress of Science and Technology of the PLA, China

B. Selected peer-reviewed publications

1. **Lu Y**, Du YJ, Qin BZ, Li JS, The subdivisions of the intermediolateral nucleus in the sacral spinal cord of the cat. Brain Res. 632(1993)352-355.
2. **Lu Y**, Ding YQ, Qin BZ, Li JS, The distribution and origin of axon terminals with NADPH diaphorase activity in the nucleus of the solitary tract of the rat. Neurosci Lett. 171(1994)70-72.
3. **Lu Y**, Jin SX, Xu TL, Qin BZ, Li JS, Ding YQ, Shigemoto R, Mizuno N. Expression of c-fos protein in substance P receptor-like immunoreactive neurons in response to noxious stimuli on the urinary bladder: an observation in the lumbosacral cord segments of the rat. Neurosci Lett. 198(1995)139-142.
4. **Lu Y**, Ding YQ, Zheng HX, Qin BZ, Li JS. Co-existence of substance P immunoreactivity and μ-opioid receptor immunoreactivity in dorsal root ganglionic neurons of the cat. J Brain Res. 30(1997)102-106.
5. Ding YQ, Zheng HX, Gong LW, **Lu Y**, Zhao H, Qin BZ. Direct projection from the lumbosacral cord to Barrington's nucleus in the rat: a special reference to micturition reflex. J Comp Neurol. 389(1997)149-160.

6. Ding YQ, Zheng HX, Wang DS, Xu JQ, Gong LW, **Lu Y**, Qin BZ, Shi J, Li JL, Li JS, Shigemoto R, Kaneko T, Mizuno N. The distribution of substance p receptor (NK1)-like immunoreactive neurons in the newborn and adult human spinal cord. Neurosci Lett. 266(1999)133-136.
7. **Lu Y**, Inokuchi H, Tanaka E, Li JS, Higashi H. A spinal cord slice preparation for analyzing synaptic responses to stimulation of pelvic and pudendal nerves in mature rats. J Neurosci Methods. 100(2000)71-78.
8. **Lu Y**, Inokuchi H, McLachlan EM, Li JS, Higashi H. Correlation between electrophysiology and morphology of three groups of neuron in the dorsal commissural nucleus of lumbosacral spinal cord of mature rats studied in vitro. J Comp Neurol. 437(2001)156-169
9. **Lu Y**, Perl ER. A specific inhibitory pathway between substantia gelatinosa neurons receiving direct C-fiber input. J Neurosci. 23(2003)8752-8758.
10. **Lu Y**, Perl ER. Modular organization of excitatory circuits between neurons of the spinal superficial dorsal horn (laminae I and II). J Neurosci. 25(2005)3900-3907.

Publications in Chinese Journals

11. **Lu Y**, Du YJ, Qin BZ, Li JS. The distribution of efferent and secondary afferent neurons in the sacral “visceral field” of the cat. Chin J Neuroanat. 8(1992)239-246.
12. **Lu Y**, Lou XF, Qin BZ, Li JS. The distribution and projection of the neurons containing L-ENK in the sacral “visceral field” of the cat. Chin J Neuroanat. 9(1993)246-252.
13. Zheng HX, **Lu Y,** Qin BZ Li JS. The distribution of I-B4-like fibers and SPR-LI in the rat lumbosacral spinal cord. Acta Anatomica Sinica. 27(1996)378-382.
14. Zheng HX, **Lu Y,** Wu SX, Ding YQ, Gong LW, Qin BZ. Changes of substance P in dorsal commissural nucleus of the rat lumbosacral cord and dorsal root ganglia responding to bladder nociceptive stimulus. Chin J Neuroanat. 12(1996)239-244.
15. Zheng HX, **Lu Y,** Qin BZ. Changes of substance P, Calcitonin Gene-related Peptide, Leucine-Enkephalin in rat spinal cord responding to formalin-induced nociceptive stimulus. Chin J Neuroanat. 12(1996)27-32.
16. **Lu Y**, Li JS, Qin BZ, Ding YQ, Zheng HX, Gong LW. Morphological evidence that dorsal commissural nucleus of rat lumbosacral spinal cord receives noxious information from the pelvic viscera. Chin J Neuroanat. 13(1996)201-208.
17. **Lu Y**, Li JS, Qin BZ. Synaptic connections between substance P receptor positive neurons and SP-ergic terminals in dorsal commissural nucleus of rat lumbosacral spinal cord. Chin J Neuroanat. 12(1996)109-114.
18. Ding YQ, Zheng HX, Gong LW, **Lu Y**, Xong KH, Qin BZ, Li JS. Immunohistochemical localization of substance P receptor in the medullary and spinal dorsal horns of the human. Acta Anatomica Sinica. 28(1997)218-222.
19. Gong LW, Ding YQ, **Lu Y**, Zheng HX, Qin BZ, Li JS. Distribution of μ opioid receptor in the spinal cord of the cat. Acta Anatomica Sinica. 28(1997)147-151.
20. Jin SX, **Lu Y**, Li JS, Qin BZ. The relationship between nitric oxide synthase positive structures and FOS positive neurons following noxious stimulation of urinary bladder in the lumbosacral cord segments of the rat. Chin J Neuroanat. 13(1997)266-270.
21. **Lu Y**, Ding YQ, Wang D, Gong LW, Qin BZ, Li JS. GABA-ergic synapses on substance P receptor expressing neurons in the dorsal commissural neurons of the rat. Acta Anatomica Sinica. 28(1997)355-360.

22. Xu JQ, **Lu Y,** Pang ZP, Qin BZ, Li JS. Responses of DCN neurons to putative neurotransmitters involved in nociceptive transmission and inhibition --- blind patch-clamp whole-cell recordings in adult rat spinal cord slices. Chin J Neuroanat. 14(1998)111-117.
23. **Lu Y**, Inokuchi H, Higashi H, Li JS. Blind patch-clamp recordings from neurons of dorsal commissural nucleus in a novel adult spinal slice preparation. Chin J Neuroanat. 14(1998)1-7.

Book Chapters

1. Inokuchi H, **Lu Y**, Higashi H. Fast and slow synaptic responses to dorsal root stimulation in dorsal commissural nucleus neurons of rat sacral spinal cord in vitro. In: Slow Synaptic Responses and Modulation, K. Kuba, H.Higashida, D.A.Brown, T.Yoshioka (Eds), Springer-Verlag Tokyo Inc. 2000, 397-402.
2. Inokuchi H, **Lu Y**. The nature of the sensory neurons: I. The morphology and electrophysiology of neurons in dorsal commissural nucleus of the sacral spinal cord. In: Exploration of the Brain Function --- toward 21st century, N.Akaike, H.Higashi (Eds), Kyushu University Press, Fukuoka, 1998, 159-163.

C Research Support

Ongoing research Support

Yan Lu (PI) 1/1/06-12/31/07
Christopher Reeve Foundation
The role of cation-Cl^- cotransporters in neuropathic pain after spinal cord injury
Role: PI

2R01NS010321-32A2 E.R. Perl (PI) 4/1/04-3/31/09

NIH/NINDS

Spinal and Projection Mechanisms Related to Pain

Role: Co-Investigator

Completed Research Support

39970249 Yan Lu (PI) 1/1/99-12/31/01

National Nature Science Foundation of China

The plasticity of synaptic mechanisms that underlie visceral hyperalgesia in the spinal cord

Role: PI

98230 Hiroe Inokuchi (PI) 9/2/98-9/1/00

Grants-in-Aid for Scientific Research from the Ministry of Education, Science and Culture of Japan

Transmission and modulation of the visceral nociception in the lumbosacral spinal cord

Role: Co-Investigator