

### 1. Personal Information

<b>First Name</b>	Qiufu
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<b>Affiliation</b>	Westlake University
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### 2. Curriculum Vitae

#### ◆ Educational Background & Experience

Year	Affiliation	Position
1987	Fudan University	B.S.
1994	University of California, Los Angeles	Ph.D.
1995-1998	California Institute of Technology	Postdoctoral fellow
1999-2022	Harvard Medical School	Assistant, Associate and full professor
2022	Westlake University	Professor

#### ◆ Publications

No.	Contents
1	<u>Qi L, Lin SH, Ma Q. Spinal VGLUT3 lineage neurons drive visceral mechanical allodynia but not sensitized visceromotor reflexes. <i>Neuron</i>. 2023;111:669-681.</u>
2	<u>Liu S, Wang ZF, Su YS, Yang W, Fu M, Jing XH, Wang YQ, Ma Q. A neuroanatomical basis for acupuncture to drive the vagal-adrenal axis. <i>Nature</i> 2021;598:641-645. PMID: <a href="#">PMC9178665</a> doi: 10.1038/s41586-021-04001-4</u>
3	<u>Liu S, Wang ZF, Su YS, Ray RS, Jing XH, Wang YQ, Ma Q. Somatotopic organization and intensity dependence in driving distinct NPY-expressing sympathetic pathways by electroacupuncture. <i>Neuron</i> 2020;108:436-450; PMID: <a href="#">PMC7666081</a>. DOI: <a href="#">10.1016/j.neuron.2020.07.015</a></u>
4	<u>Huang T, Lin SH, Malewicz NM, Zhang Y, Zhang Y, Goulding M, LaMotte RH, Ma Q. Identifying the pathways required for coping behaviours associated with sustained pain. <i>Nature</i> 2019;565:86-90 PMID: <a href="#">PMC6461409</a></u>
5	<u>Duan B, Cheng L, Bourane S, Britz O, Padilla C, Garcia-Campany L, krashes M, Knowlton, W, Ren Y, Ross S, Lowell BB, Wang Y, Goulding M, Ma Q. Identification of Spinal Circuits Transmitting and Gating Mechanical Pain. <i>Cell</i> 2014; 159:1417-32. PMID: <a href="#">PMC4258511</a>.</u>



# ICMART 2024

## 37<sup>th</sup> ICMART World Medical Acupuncture Congress

September 27 – 29, 2024 | Shinhwa World, Jeju, Korea

### 3. Abstract

Lecture Title	A neuroanatomical basis for electroacupuncture to drive anti-inflammatory neural pathways
<p>Acupuncture at specific body regions can distantly modulate body physiology. Since the 1970s, researchers from Japan, Germany, and China have discovered that this long-range acupuncture effect partially operates via somatosensory-autonomic reflexes. For example, we and others found that low-intensity electroacupuncture (EA) at limb-region acupoints, such as "Zusanli", can drive the vagal-adrenal reflexes and powerfully modulate systemic inflammation induced by bacterial endotoxin. We then identified a group of sensory neurons that are necessary for EA to drive this anti-inflammatory axis. Based on the projections of these sensory nerves to tissues, we can predict effective and non-effective body regions. Most recently, we found that high-intensity EA is needed to attenuate post-surgery pain, likely via driving a different somatosensory-autonomic pathway. These findings offer neuroanatomical support for EA to modulate inflammation and disease progression, helping establish a bridge between modern scientific knowledge and traditional medical wisdoms.</p>	

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