Post-doctoral Fellow Recruitment
Takeuchi Laboratory, Shanghai Jiao Tong University (SJTU)

1. **Position Title**
   • Post-doctoral Research Fellow
   • Number of Openings: 1

2. **Laboratory Introduction**
   Our laboratory investigates the systems and molecular mechanisms of learning and memory, building on the Principal Investigator's influential work on memory selectivity and assimilation (*Science*, 2011; *Nature*, 2016). We aim to elucidate how the hippocampus selectively retains memories and integrates them into neocortical schemas, with a specific focus on catecholaminergic modulation via the locus coeruleus–hippocampus dopamine pathway. Beyond basic neuroscience, we are pioneering translational approaches, including transcutaneous auricular vagus nerve stimulation (taVNS) for memory restoration and AI-driven schema therapy. We are seeking a highly motivated postdoctoral fellow to lead innovative projects bridging molecular biology, systems neuroscience, and cognitive intervention.

3. **Employment Type**
   • Full-time; initial 2-year contract with the possibility of renewal for a maximum total of 4 years
   • Flexible start date (immediate start available). We will accommodate Ph.D. candidates who will defend soon—please indicate your expected defense date in the application.

4. **Qualifications**
   1. Ph.D. (obtained / expected within 6 months) in Neuroscience, Physiology, Pharmacology, Biomedical Engineering, or related fields
   2. Under 35 years of age at the time of application (may be extended to 40 years of age with documented special circumstances)
   3. First-author publications in peer-reviewed international journals (not mandatory for Ph.D. candidates)
   4. Minimum 1 year of rodent research experience
   5. Proficiency in English for daily research communication (lab language is English; Chinese skills are welcome but not required)
   6. Demonstrated expertise in one or more of the following:
      -Quantitative behavior analysis and computational pipelines (Python/MATLAB)
      -*In vivo* imaging (two-photon, fiber photometry, or miniscope)
      -Neural manipulation (optogenetics and/or chemogenetics)
      -Electrophysiology (slice patch-clamp, in vivo silicon-probe, or EEG/EMG)
   7. Preferred (not mandatory):
      -Molecular and cellular neurobiology or immunohistochemistry of brain tissue
      -Advanced data-science / machine-learning skills for large-scale neural datasets
      -Experience mentoring students or coordinating collaborative projects

5. **Job Responsibilities**
   1. Lead independent projects on memory assimilation mediated by hippocampal–midline neocortical networks (Tse, Takeuchi *et al*., **Science**, 2011; Takeuchi *et al*., **Molecular**

Brain, 2022) using cutting-edge techniques
2. Design and execute experiments (behavior, *in vivo* imaging, neural manipulation, electrophysiology) and analyze multimodal datasets
3. Draft manuscripts, present findings at international conferences, and contribute to grant proposals
4. Collaborate with internal and external partners across GIFT, SJTU, and global networks
5. Assist with supervising master's and Ph.D. trainees while fostering an inclusive, high-performance lab culture
6. Perform additional scholarly duties assigned by the PI when necessary

6. **Compensation & Benefits**
• Annual salary: no less than CNY 240,000, with full support for applications to Shanghai's "Super Post-doctoral" Incentive Program and the National Post-doctoral Innovative Talent Support Program
• Eligibility to apply for post-doctoral apartments provided by the university
• Household registration processed in accordance with Shanghai's post-doctoral management regulations
• Performance bonuses granted based on work results and research achievements.

7. **Application Materials**
• Please merge the following documents into a single PDF in English and email to the contact below:
1. Curriculum Vitae (including publication list)
2. Cover letter (300 – 500 words) describing research achievements, fit with our lab, and preferred start date
3. Names and contact details of three referees (or three recommendation letters, if available)

8. **Application Deadline**
January 31, 2027

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We look forward to building breakthrough neuroscience together in an energetic, international environment!