

诚聘博士后,博士生和学士后实习生

王映雪博士实验室@马克斯·普朗克研究院佛罗里达神经科学研究所

马克斯·普朗克研究院佛罗里达神经科学研究所(Max Planck Florida Institute for Neuroscience, https://www.maxplanckflorida.org/) 座落于风景秀丽的海滨小镇 Jupiter,是德国马克斯·普朗克研究院在北美设置的唯一一所科学研究机构,主要致力于对大脑神经环路的研究。

王映雪博士领导的实验室主要研究情节记忆(episodic memory)的神经环路机制。情节记忆是我们对日常生活情景与经历的记忆。这些记忆的存在使得每个人成为了独一无二的自己。情节记忆赋予了我们在精神世界中遨游于过去、现在和未来的能力。正是这种能力使得追溯过去、认识现在、思考规划未来得以成为现实。大脑海马体对于情节记忆的形成至关重要,但目前对于其运作机制却是知之甚少。

实验室以小鼠为动物模型,运用活体电生理记录、脑功能光学成像、光遗传学和神经药理学等方法,结合计算建模,探究海马体及相关环路如何触发、存储与情节记忆相关的神经元活动模式,进而揭示情节记忆形成和巩固的原理。

具体的招聘信息请见下文。欢迎有兴趣的同学与王映雪博士联系(<u>Yingxue.Wang@mpfi.org</u>)。

Postdoctoral Fellow

Department: Wang Lab @ Max Planck Florida Institute for Neuroscience

Summary

The Wang Lab at the Max Planck Florida Institute for Neuroscience (links to website and research overview) is inviting applications for postdoctoral positions. Our group seeks highly motivated and independent individuals to join our effort focused on the neuronal mechanisms of learning and episodic memory.

Essential Duties & Responsibilities

The Wang Lab investigates the circuit underpinnings of episodic memory. In particular, we intend to isolate the hippocampal neuronal activities that are independent of sensory inputs and potentially represent memory traces. We seek to understand how elements of the hippocampal circuit cooperate to generate the internally generated neuronal activities and support the formation and retrieval of memory.

Our investigation employs a combination of in vivo electrophysiological, advanced two-photon imaging, optogenetic, and pharmacological approaches, and couples experiments with computational modeling. We encourage applications from candidates who are interested in applying multidisciplinary approaches to examine circuit mechanisms of memory.

Education and/or Experience

The ideal candidates should have an upcoming or recent Ph.D. or MD/Ph.D. in neuroscience or related fields. Candidates holding a Ph.D. in electrical engineering, biomedical engineering, computer science, or physics and interested in understanding the neuronal mechanisms of learning and memory are also welcome to apply.

Previous experience with in vivo electrophysiology and/or two-photon imaging, quantitative data analysis and computer programming is highly preferred. Excellent communication skills and an ability to work well in a team are required.

Additional Information

Max Planck Florida Institute for Neuroscience is part of the Jupiter Neuroscience Research Campus that also includes the Scripps Research Institute Florida and Florida Atlantic University. It provides a flourishing interdisciplinary research environment for neuroscience.

We offer outstanding benefits and salary compensation above the NIH scales.

Interested candidates are encouraged to send the following documents to Dr. Yingxue Wang (email address: Yingxue.Wang@mpfi.org):

- Curriculum vitae with a list of publications
- A statement of research experiences and interests (1-2 pages)
- The names and contact information of three references

Personal contact can be addressed to the above email address prior to the application.

Graduate Students

Department: Wang Lab @ Max Planck Florida Institute for Neuroscience

Summary

The Wang Lab at the Max Planck Florida Institute for Neuroscience (links to website and research overview) is inviting applications for graduate students. Our group seeks highly motivated and independent individuals to join our effort focused on the neuronal mechanisms of learning and episodic memory.

Essential Duties & Responsibilities

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Our investigation employs a combination of in vivo electrophysiological, advanced two-photon imaging, optogenetic, and pharmacological approaches, and couples experiments with computational modeling. We encourage applications from candidates who are interested in applying multidisciplinary approaches to examine circuit mechanisms of memory.

Education and/or Experience

The ideal candidates should have an upcoming or recent bachelor or master degree in neuroscience or related fields. Candidates holding a degree in electrical engineering, biomedical engineering, computer science, or physics and interested in understanding the neuronal mechanisms of learning and memory are also welcome to apply.

Previous experience with in vivo electrophysiology and/or two-photon imaging, quantitative data analysis and computer programming is highly preferred. Excellent communication skills and an ability to work well in a team are required.

Additional Information

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The selected candidates would have an opportunity to enroll in the International Max Planck Research School (IMPRS) for Brain and Behavior, which is a transatlantic collaboration between the University of Bonn and the Max Planck associated Center of Advanced European Studies and Research (CAESAR) and the USA partners Florida Atlantic University and the Max Planck Florida Institute for Neuroscience (MPFI). The IMPRS for Brain and Behavior offers a competitive, interdisciplinary, world-class PhD training and research program in neuroscience.

Interested candidates are encouraged to send the following documents to Dr. Yingxue Wang (email address: Yingxue.Wang@mpfi.org):

- Curriculum vitae with a list of publications
- A statement of motivation and interests (1-2 pages)
- Academic certificates and transcripts
- The names and contact information of three references

Personal contact can be addressed to the above email address prior to the application.

Post-Baccalaureate Research Experience

Department: Wang Lab @ Max Planck Florida Institute for Neuroscience

Summary

The Wang Lab at the Max Planck Florida Institute for Neuroscience (links to <u>website</u> and <u>research</u> <u>overview</u>) is inviting applications for the post-baccalaureate research program. This one-year program provides research experience and exposure to students who have graduated from college and are planning to apply to graduate school. We seek highly motivated and independent individuals to join our effort focused on the neuronal mechanisms of learning and episodic memory.

Essential Duties & Responsibilities

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- Curriculum vitae
- A statement of motivation and interests (1-2 pages)
- Academic certificates and transcripts
- The names and contact information of two references

Please find more details about this program at https://www.maxplanckflorida.org/education/training-programs/pre/.

Personal contact can be addressed to the above email address prior to the application.