

香港城市大学 Dr. Bing Fu 课题组诚招博后/全奖博士研究生/访问学生学者

香港城市大学生物医学工程系**傳冰**课题组诚招博后(可立刻开始),全奖博士研究生(开始时间 2024年 1 月或之后),并欢迎交流访问学者/学生。课题组致力于用单细胞-单分子超分辨荧光成像技术研究复杂生物体系,包括活体微生物金属稳态机理、微生物-宿主互作、细胞膜界面电子转移机制等。详细信息见课题组主页 https://www.bingfu-lab.org/

导师介绍: 傅冰博士,博士生导师,独立 PI,香港城市大学生物医学工程系助理教授(2023 年 7 月入职),本科就读于山东大学;博士毕业于美国密歇根大学 Julie Biteen 教授课题组,利用超分辨成像技术研究纳米颗粒与荧光分子的相互作用;博士后在美国康奈尔大学陈鹏教授课题组,研究方向为微生物体系中的超分辨/多模态成像。截止目前,以一作在 *Nature Chemistry, PNAS, ACS Nano* 等国际高水平杂志上发表论文多篇,获得 Graduate Women in Science National Fellowship (Honorable Mention,全美范围内评选),Karle symposium travel award 等奖项。

岗位介绍及要求:

1. 博士后 (postdoc)

已经或即将取得博士学位,与 PI 合作进行项目规划并开展科学研究,探索未知前沿领域。拥有以下领域研究经验的学者将优先考虑:光学成像/单分子超分辨技术/微生物/无机半导体材料/生物-无机界面等。

<u>如何申请</u>: 感兴趣的申请人,请将简历、成绩单、研究兴趣/经历阐述、1-3 篇代表作**合并为 1 个 PDF** 文件,发送至 Dr. Bing Fu 邮箱 (bingfu@cityu.edu.hk),主题请注明"博士后申请+姓名"。

2. 博士生(PhD Student)

在 PI 的指导下设计实验,开展科学研究,并发表高水平学术论文。学生将有机会接触并掌握先进生物成像技术及其他光学手段,学习多种分子生物学/生物化学/生物物理实验技术,掌握图像分析、编程等技术,对生物医学的前沿科学问题展开深入研究;参与合作项目,参加国际学术会议,进行学术交流。具体研究项目包括:

- 1) 活细菌中单分子超分辨成像及追踪
- 2) 超分辨成像手段研究宿主与病原微生物相互作用
- 3) 生物-无机材料复合体系界面的多模态成像及机理研究

<u>申请要求</u>: 课题组欢迎所有拥有相关领域本科/硕士学位或即将毕业的同学,专业包括但不限于生物医学工程、化学、生物、生物化学、微生物、生物物理等。课题组提供全额奖学金(HK\$210,120/每年)及 医 疗 保 险 , 并 有 机 会 申 请 薪 酬 更 有 竞 争 力 的 其 他 奖 学 金 项 目 (如 HKPFS, https://www.cityu.edu.hk/pg/hong-kong-phd-fellowship-scheme)。**已提交博士项目申请或即将提交的申请者均欢迎联系**。博士研究生项目申请详见 https://www.cityu.edu.hk/bme/prg-phdmphil.htm.

如何申请: 感兴趣的申请人,请将简历、成绩单、研究兴趣/经历阐述发送 Dr. Bing Fu 邮箱 (bingfu@cityu.edu.hk),主题请注明"博士生申请+姓名"。

3. 访问学者/学生(Visiting Scholar/student)

欢迎对课题组研究方向感兴趣的访问学者/学生的加入,有光学成像/生物材料/微生物研究/图像分析背景或对此方向感兴趣的申请者会优先考虑。有意向请联系 Dr. Bing Fu (bingfu@cityu.edu.hk),主题请注明 "访问学者申请+姓名"。

学校介绍

香港城市大学坐落于香港市中心,地理位置优越,拥有丰富的科学研究及高等教育资源,以解决全球性问题、推进社会进步为宗旨。根据 2023 年 QS 世界大学排名,香港城市大学排名 54。生物医学工程系在学校院系中排名前列,旨在提供世界级的跨学科课程和教育,以培养科综合工程技术与生命科学从而促进人类健康的卓越人才。该系在世界大学学术排名(Academic Ranking of World Universities)当中的生物医学工程学科排名位于全球第 29 名。

The Fu lab in the Department of Biomedical Engineering at City University of Hong Kong is seeking highly motivated and enthusiastic candidates to join the team. PhD student is expected to start on or after January 2024. Research in the lab focuses on utilizing single-cell single-molecule super-resolution imaging techniques to study complex biological systems, including microbial metal homeostasis mechanisms, host-pathogen interactions, interfacial charge transfer, etc. For more information about the lab, please visit https://www.bingfu-lab.org/.

About the PI: Dr. Bing Fu joins City University of Hong Kong, Department of Biomedical Engineering as an Assistant Professor starting July 2023. She graduated with a bachelor's degree from Shandong University; obtained her PhD from the University of Michigan, Ann Arbor in the group of Prof. Julie Biteen, studying light-matter interaction with super-resolution microscopy; currently is a postdoctoral associate at Cornell University in the group of Prof. Peng Chen, focusing on live-cell super-resolution and multifunctional imaging. Dr. Fu has published as first authors in high-impact journals such as *Nature Chemistry, PNAS, ACS Nano*, etc. She has received several awards including the nation-wide Graduate Women in Science National Fellowship (Honorable Mention), Karle symposium travel award, etc.

Position Description and Requirement:

1. Postdoc

The candidate should have obtained or will soon obtain a PhD degree. The candidate will collaborate with the PI to develop scientific projects, conduct experiments and explore the frontiers of research. Priority will be given to candidates with research experience in the following areas, including but not limited to: optical imaging/single-molecule super-resolution techniques/microbiology/semiconductors/bio-inorganic interface, etc.

<u>How to apply</u>: Interested applicants should submit a cover letter describing your research experience and interests, Curriculum Vitae, transcripts and 1-3 representative publications. Please combine the above materials **to a single PDF** and send to Dr. Bing Fu at bingfu@cityu.edu.hk, indicating "Postdoc application + Name" in the subject line.

2. PhD students

The candidate will work closely with the principal investigator to design and implement experiments to answer unknown scientific questions in the following topics:

- 1) Single-molecule super-resolution microscopy of live bacteria cells
- 2) Imaging of host-pathogen interactions
- 3) Investigation of inorganic-microbial hybrid systems

The students will gain extensive training on cutting-edge fluorescence microscopy and other optical imaging techniques; molecular biology, genetic engineering, and other biochemical skills; image analysis and computer coding. There will also be many collaboration opportunities with other BME research groups. The successful candidate will be expected to conduct experiments under the PI's supervision, perform data analysis, present results at international conferences and publish in high-impact journals.

<u>Requirements:</u> A bachelor's or master's degree in related fields, including Biomedical Engineering, Chemistry, Biology, Biochemistry, Microbiology, Biophysics, etc. The benefit package includes a stipend of at least HK\$210,120 per year (~US\$26,764) for 4 years and health insurance, and there are many opportunities to apply for fellowships, such as the HKPFS (https://www.cityu.edu.hk/pg/hong-kong-phd-fellowship-scheme). Applicants who are interested or already submitted the application for PhD program are all welcome to contact Dr. Fu for more information. See https://www.cityu.edu.hk/bme/prg-phdmphil.htm for the PhD program application process.

<u>How to apply</u>: Interested applicants should submit a cover letter describing your research experience and interests, Curriculum Vitae, and transcript. Please send these to Dr. Bing Fu at bingfu@cityu.edu.hk, indicating "PhD application + Name" in the subject line.

3. Visiting Scholar/Students

We welcome everyone who is interested in the research topic of the lab to join as a visiting scholar or student. Priority will be given to applicants with optical imaging/biomaterials/microbiology/coding experience. Interested applicants should contact Dr. Fu at bingfu@cityu.edu.hk, indicating "visiting scholar application + Name" in the subject line.

About the School

Located in the heart of Hong Kong, CityU has a well-earned reputation as an innovative hub for research and professional education and for addressing global issues and empowering positive change. City University of Hong Kong ranks 54th based on the QS World University Rankings. BME is a strong department at CityU, aiming to provide world-class interdisciplinary curriculum and education, and to create the next generation of leaders in both engineering technology and biological science with the goal of improving human health. BME ranks 29th worldwide in the discipline of biomedical engineering based on the Academic Ranking of World Universities.