

Towards New Possibilities of Bio-HCI: Exploring Future Scenarios of Bio-HCI Innovation

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Future Ecologies Group



Participants:

10 – 20 Participants

Workshop Language:

English/Chinese

Workshop Duration:

9:00 – 12:00 (with one coffee break with refreshments)

Workshop Location:

Rm.1108, Bldg. C1, iPark

Workshop Description:

With the development of science and technology, the integration of biology and human-computer interaction (HCI) has become an emerging and promising research direction, leading to the development of the new research direction of Bio-HCI. Bio-HCI uses innovative biotechnology, biosensors and biomaterials to redefine the relationship between humans, organisms, and computers through bio-design and examines ways in which such interaction experiences can be supported and enhanced. This workshop aims to provide participants with an open-ended discursive space to understand the basic concepts, trends, and cutting-edge cases of Bio-HCI. At the same time, the workshop will guide participants to experiment with these concepts in a design exercise to generate new interaction models and to discuss the future application scenarios and possibilities of Bio-HCI in order to promote the innovative application of Bio-HCI in different fields.

Target Audience:

- Design students, interaction designers, artists and HCI researchers with an interest in Bio-HCI topics
- engineers and scientists with cross-disciplinary research and innovation interests
- Students with an interest in the Bio-HCI



(Image source: <https://www.helenesteiner.com/>)

Expected Outcomes:

1. Understand new research directions of human-computer interaction.
2. Understand the development trends, application methods and tools/technologies of Bio-HCI (sensors, IoT etc).
3. Enhance the design team's ability to collaborate and communicate across disciplines.
4. Inspire participants to think extensively about the future innovation and application scenarios of Bio-HCI.
5. Experimental design Bio-HCI design concepts.

Workshop participants bring their own equipment:

- Laptops
- mobile phones

生物HCI的可能性：探索生物HCI创新的未来场景

作者：何净植、田皓瑞、乌玛鲁·穆罕默德

未来生态研究组



人数：

10 – 20 位参与者

工作坊语言：

英语/中文

工作坊时长：

9:00 – 12:00 (含一次茶歇)

工作坊地点：

南山智园C1栋，第10或11层，房间待定

工作坊描述：

随着科学技术的发展，生物学与人机交互（HCI）的融合已成为一个新兴且有前景的研究方向，进而催生了生物人机交互（Bio-HCI）的新研究领域。Bio-HCI 利用创新的生物技术、生物传感器和生物材料，通过生物设计重新定义人类、生命体与计算机之间的关系，并探讨如何支持和增强这种交互体验。本工作坊旨在为参与者提供一个开放的讨论空间，以理解 Bio-HCI 的基本概念、发展趋势和前沿案例。同时，工作坊将引导参与者在设计练习中尝试这些概念，生成新的交互模型，并讨论 Bio-HCI 未来的应用场景和可能性，以促进 Bio-HCI 在不同领域的创新应用。

目标受众：

对 Bio-HCI 主题感兴趣的设计学生、交互设计师、艺术家和人机交互（HCI）研究人员

具有跨学科研究和创新兴趣的工程师及科学家

对 Bio-HCI 感兴趣的学生



(图片来源 <https://www.helenesteiner.com/>)

预期成果：

- 理解人机交互 (HCI) 的新研究方向。
- 理解 Bio-HCI 的发展趋势、应用方法及工具/技术（传感器、物联网等）。
- 提升设计团队跨学科协作和沟通的能力。
- 激发参与者广泛思考 Bio-HCI 的未来创新及应用场景。
- 实验性设计 Bio-HCI 的设计概念。

工作坊参与者自带设备：

笔记本电脑

手机