## 大学院特別講義

(医歯学先端研究特論) (生命理工学先端研究特論) (医歯理工医療科学先端研究特論)

(医歯理工学先端研究特論)

【難研セミナー・難治疾患共同研究拠点セミナー共催】下記により大学院特別講義を行いますので多数ご来聴下さい。

## 記

演 題:Polymers and novel polymer technologies for biomedical applications

講 師: Prof. Mark Bradley (The University of Edinburgh School of Chemistry)

日 時: 2022年11月24日(木)18時00分~20時00分

場所: Zoomによるオンライン講義

受講希望者は 11 月 23 日(水)までに、下記の連絡先にお問い合わせ下さい。

講義要旨: The Bradley group has used (with collaborators) a variety of polymers and novel polymer-based technologies to control and modulate cells and impact on their biomedical function. In my talk I will introduce some of our technologies and their applications in areas such as: (i). The high-throughput discovery novel substrates that allows the controlled differentiation (and at times harvesting) of a variety of stem cells. I will cover areas such as hepatocytes, bone repair and chondrocytes. (ii). The use of polymers to reinforce native tissues and construct 3D environments that drive cellular differentiation and cellular function. (iii). Explore the new area of "in vivo" polymer synthesis and illustrate how this might be used in future therapeutic applications.

参考文献: Geng J et al., Nature Chemistry, 2019; López-Ruiz E et al., Scientific Reports, 2017; Zhang Y et al., Advanced Healthcare Materials, 2020; Nakamura A et al., Stem Cell Reports, 2022; Zhang R et al., Nature Communications, 2013; Hay DC et al., Stem Cell Research, 2011; Rashidi H et al., Archives of Toxicology, 2018; Tabu K et al., Stem Cells, 2016; Khan F et al., Advanced Functional Materials, 2013

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