

Stanford



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Dr. Lyu is a postdoctoral scholar in the Department of Neurosurgery at Stanford University. He obtained his PhD at Soochow University, China, where he gained training in Biomedical Engineering and led multidisciplinary research under the advice of Prof. Hong Chen. During his PhD, he worked as a visiting student researcher at Canary Center at Stanford for Early Cancer Detection where he gained training in microfluidics and cancer metastasis.

Under the guidance of Prof. Jon Park and Dr. Wonjae Lee, the overall goal of Dr. Lyu's research is to develop an in vitro stroke model and use it as a platform to look for stem cell therapy for stroke treatment.

PROFESSIONAL EDUCATION

- Doctor of Philosophy, Soochow University , Biomedical Engineering (2017)

Publications

PUBLICATIONS

- **A neurovascular-unit-on-a-chip for the evaluation of the restorative potential of stem cell therapies for ischaemic stroke.** *Nature biomedical engineering*
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- **Promoting neural differentiation of embryonic stem cells using beta-cyclodextrin sulfonate** *JOURNAL OF MATERIALS CHEMISTRY B*
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- **Glycosaminoglycans (GAGs) and GAG mimetics regulate the behavior of stem cell differentiation** *COLLOIDS AND SURFACES B-BIOINTERFACES*
Wang, M., Liu, X., Lyu, Z., Gu, H., Li, D., Chen, H.
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- **A Universal Platform for Macromolecular Delivery into Cells Using Gold Nanoparticle Layers via the Photoporation Effect** *ADVANCED FUNCTIONAL MATERIALS*
Lyu, Z., Zhou, F., Liu, Q., Xue, H., Yu, Q., Chen, H.
2016; 26 (32): 5787–95
- **Interactions of biomaterial surfaces with proteins and cells** *Polymeric Biomaterials for Tissue Regeneration*
Lyu, Z., Yu, Q., Chen, H.
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- **Bioinspired Blood Compatible Surface Having Combined Fibrinolytic and Vascular Endothelium-Like Properties via a Sequential Coimmobilization Strategy** *ADVANCED FUNCTIONAL MATERIALS*
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