

Department of Biosciences:
Projects available for prospective CSC Studentship applicants

Project Title: Comparative analysis of cytonemes transporting components of the Wnt and FGF family (Collaboration project between LSI, Exeter - Kunming University of Science and Technology)

Lead Supervisor: Prof Steffen Scholpp

Second Supervisor: Dr Chengting Zhang

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Project Title: Comparative analysis of cytoneme-mediated signalling in Drosophila and zebrafish (Collaboration project with Zhejiang University, Hangzhou)

Lead Supervisor: Prof Steffen Scholpp

Second Supervisor: Dr Hai Huang

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Project Title: Decoding the RNA Virus World through Environmental Transcriptomics

Lead Supervisor: Adam Monier

Second Supervisor: TBD

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Project Title: Nature's smallest propeller: Unlocking the structure and function of the archaeal flagellum

Lead Supervisor: Bertram Daum

Second Supervisor: Dr Kirsty Wan

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Project Title: Molecular dissection of the acute signalling response in human pluripotent cells

Lead Supervisor: Brian Hendrich

Second Supervisor: TBD

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Project Title: Design of a photo-controlled genome editing enzyme

Lead Supervisor: Dr Jonathan Phillips

Second Supervisor: Dr Alexis Perry

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Project Title: Comparative single-cell genomics and the evolution of novel cell types

Lead Supervisor: Dr Jordi Solana

Second Supervisor: TBD

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Project Title: Mechanisms of adaptive evolution in Mytilus mussels in response to environmental stress

Lead Supervisor: Dr Robert Ellis

Second Supervisor: Dr Bonnie Fraser

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Project Title: Pangenome analysis of oysters

Lead Supervisor: Dr Robert Ellis

Second Supervisor: Dr Bonnie Fraser

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Project Title: Biophysical Insights into Collagen IV Network Architecture and Mechanics in Organ Formation

Lead Supervisor: Dr Stefan Harmansa

Second Supervisor: Dr Junning Chen

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Project Title: Understanding and improving the hailstorm resistance of crop plants

Lead Supervisor: Dr Ulrike Bauer

Second Supervisor: Dr Jiajia Shen

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Project Title: Thinking Big: Structural and Transcriptional Insights into Therapeutic Jumbophages

Lead Supervisor: Dr Vicki Gold

Second Supervisor: Ben Temperton

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Project Title: Biochemistry and Epigenetics in Plants

Lead Supervisor: Hans Wilhelm Nuetzmann

Second Supervisor: TBD

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Project Title: How Microbes Work Together: Using Multi-Omics to Decode Polymicrobial Interactions in Tuberculosis Co-infections and Advance AI-Assisted Rapid Diagnostics

Lead Supervisor: Khushboo Borah Slater

Second Supervisor: Prof. Stineke van Houte

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Project Title: Bat microbiome responses to environmental stress
Lead Supervisor: Orly Razgour
Second Supervisor: Duncan Wilson
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Project Title: Organelle interplay under cellular stress conditions
Lead Supervisor: Prof Michael Schrader
Second Supervisor: TBD
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Project Title: Filopodia-based cell-cell communication in embryogenesis and diseases
(Collaboration project between LSI, Exeter - Tsinghua University, Beijing)
Lead Supervisor: Prof Steffen Scholpp
Second Supervisor: Prof Li Yu, Cell- and Developmental Biology, Tsinghua University
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Project Title: Naive pluripotent stem cells and germ cells from livestock animals
Lead Supervisor: Professor Austin Smith
Second Supervisor: Ge Guo
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Project Title: Understanding the direct and indirect effects of climate change on marine zooplankton and quantifying the biogeochemical consequences
Lead Supervisor: Professor Daniel Mayor
Second Supervisor: Dr Kathryn Cook
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