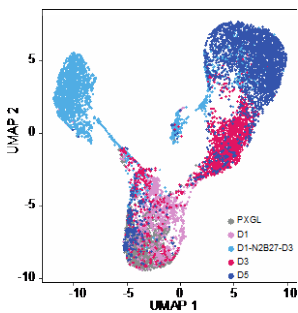


Research positions in human pluripotency and synthetic embryogenesis

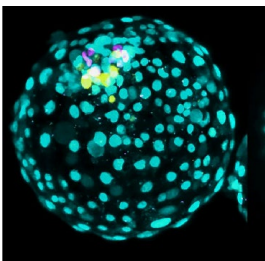
Laboratories of Prof Austin Smith and Dr Ge Guo

We study the nature and regulation of pluripotency in stem cell cultures and the mammalian embryo. In human, naïve pluripotent stem cells can differentiate into both embryonic and extraembryonic cell types. It should therefore be possible to synthesise a faithful cellular model of the early human embryo solely from naïve stem cells. We are seeking talented post-doctoral scientists to: (i) explore the mechanics of transition from extraembryonic to embryonic lineage competence; (ii) expand the horizon of synthetic embryogenesis.



Post 1: You will investigate the process and underlying mechanisms through which human naïve stem cells progressively change lineage competence. You will study this formative transition using a combination of single cell 'omics and focussed perturbations of signalling and transcription factors. You will have broad expertise in molecular biology and a strong interest in cell state transitions.

Blastoid



Post 2: You will extend from our recently developed human blastoid culture system to peri- and early post-implantation embryogenesis. You will study morphogenesis, cell fate specification and molecular signalling using lineage reporters, live cell imaging and single cell omics. You will have expertise and interest in developmental biology. Experience in high resolution live imaging and/or biomimetic culture systems will be an advantage but are not essential.

Both posts are available from June 2022 and funded for 3 years. Candidates will have a PhD and be motivated primarily by scientific curiosity. Prior experience with pluripotent stem cells is not essential.

Application details @ <https://jobs.exeter.ac.uk/>

Job references: P81536 (post 1), P78210 (post 2); closing date 12 May, 2022

Enquiries are welcome to:

Austin Smith, austin.smith@exeter.ac.uk (Post 1); Ge Guo, g.guo@exeter.ac.uk (Post 2).