Member Newsletter

Issue 9 - November 2015



Project Capella



Work is now underway on the future site of the Capella building and planning permission is under review. The design is now in Stage 4 which means that the team are starting to really focus on the details, working on room layouts and preliminary locations for main equipment including tissue culture, wet labs, and core facilities, as well as considering how best to integrate the building into the Biomedical Campus with wellplaced access routes and footpaths.

The Capella team continues to consult with representatives from the SCI and our co-occupiers to keep the design on track and in line with our needs.

SCI Retreat 2016

The 2016 SCI Retreat will take place at Tattersall's, Newmarket on the 25th and 26th of February.



Registration opens soon. Save the date!

There will be a full programme scientific talks as well of plenty of chances to relax and socialise.

5th SCI International Symposium

18th and 19th July 2016

Featuring Alexander Meissner. Alexander van Oudenaarden and Richard Young.

Visit bit.ly/1PErpDo to find out more and sign up for the mailing list for updates on the programme and registration.



Simon Méndez-Ferrer

Simon Méndez-Ferrer recently relocated to Cambridge as an SCI Group Leader. Simon's lab focuses on the regulation of

the haematopoietic stem-cell niche in health and disease.



Blood stem cells reside in specialised niches that allow them to self-renew, proliferate, differentiate and migrate according to an organism's requirements. The Mendez group studies multisystem regulatory mechanisms through which the haematopoietic stem cell niche fulfils these complex

functions, aiming to understand how the deregulation of these mechanisms contributes to haematological disorders.

The co-workers are Andres Garcia, Anne Francis, Maria Garcia, Claire grow, increasing the potential for Fielding and Claudia Körn (joining in January). Cora Olpe is a rotating successful clinical translation of our

student in the lab. Thanks to ERC Consolidator and NHSBT grants, the team is findings. expanding. Simon will be happy to consider applications from motivated candidates.

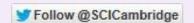
"This is simply the best environment for our research to flourish and

Cambridge is also a fantastic place to live and bring up a family."











Seed Funding

Congratulations to Paul Bertone and Sanjay Sinha, who successfully applied for SCI seed funding this year:



Dr Paul Bertone

Establishment of subtype-specific GBM stem cell lines from multisector tumor biopsies (18 months)

This project will use a joint experimental and computational approach to unravel tumor subtypes from tissue samples and apply these findings to the

production of novel GBM stem cells.



Dr Sanjay Sinha

Inhibition of p38 to rescue hiPSCderived models of genetically triggered aortic aneurysms (12 months)

The first aim of this project is to use hiPSC to generate models of various genetic TAA, including Loeys-Dietz, ACTA2 and Ehlers-Danlos type IV Syndromes. The

second aim is to then use these models to test specific p38 inhibitors, which have been shown to prevent cell death in hiPSC-derived models of Marfan syndrome.

New Administrator



Louise Balshaw joined SCI in September as our new Administrator. Louise responsible for the Institute's dayto-day operations and is currently work managing preparations for the Institute's core grant renewal application.

Luca Peruzzotti-Jametti

Dr Luca Peruzzotii-Jametti, a PhD candidate in the Pluchino lab, is one of five Cambridge delegates taking part in the Global Young Scientists Summit@One-North, Singapore. Over a five-day programme, bright young researchers will interact with eminent scientists and peers to discuss key areas of science and



research, technology innovation and society, solutions to global challenges.

Research Interfaces Workshop



Kevin Chalut, Paul Bertone and Kristian Franze organised a Research Interfaces workshop at Madingley Hall on the 28th of October. The workshop saw SCI researchers common ground and

collaborative opportunities with colleagues from working in technology, engineering and the physical sciences representing both academia and industry.

Victoria Mascetti



Victoria Mascetti, SCI PhD student in the Anne McLaren Laboratory, won the Young Investigator award at the Slovak Academy of Sciences International Symposium: Advances in Cardiovascular Research 2015, held in Smolenice, Slovakia, September 2015.

Be Wise - Protect your Eyes

In the last 3 years, 66 incidents involving eyes have been reported to the University safety office. No major injuries but have we been lucky? An accident could happen in a second, when opening a microfuge flip-top

lid, when pipetting, pouring or transferring liquids...

To raise awareness, we have invited a supplier, ARCO, to visit the Gleeson Building, Tennis Court Road on Wednesday 25th November. Everyone is welcome to come along to the canteen to try on some stylish, comfortable and affordable eyewear and discuss when eye protection should be used in day-to-day experiments.

"In a split second when the colour goes out of your eyes, it becomes black and white. Then you see silhouettes. Then you see white. Then it's grey".

-Ken Woodward, blinded in an industrial accident in 1990

Public Engagement Snapshot

Events

Game Lab



At this pilot event, 20 games developers were offered a crash course in stem cell biology, including a hands-on tour of the laboratories. They then had 48 hours to create a new computer game on the theme 'Destiny & Decisions' in stem cell research.

During the two days of coding and coffee, the teams were supported by researchers from Professor Austin Smith's lab group. Thank you to Mariya Rostovskaya, Masaki Kinoshita, Nicholas Bredenkamp, Stanley Strawbridge, Tuzer Kalkan, & Yaoyao Chen for making the event such a success. We hope to work with the winning team to develop their game into a full prototype.

"As an animator, it was really fun to see the personalities behind stem cell research, which is initially a daunting subject for a complete outsider. The scientists would light up whenever they talked about what they do" - Jim

Reprogramming Your Cells

'Science Uncovered' sees the doors of the Natural History Museum in London open until 10pm and the exhibition rooms taken over by researchers from every walk of science. Members of the public are encouraged to meet active researchers and to find out more about their day jobs.

We decided to use the opportunity to talk to the public about reprogramming technologies. By playing with sweets, some (pretty retro) pipettes and coloured water, visitors learnt about induced pluripotency and current applications of this technique.

Huge thanks to our fantastic team of researchers who were always on-hand to discuss, debate and inspire:

Agata Kurowski. Antonella Santoro, Elena Itskovitch. Emily Calderbank, Charlotte Handford, Masaki Kinoshita, & Maria Barreira-Gonzalez





Big Biology Day



Big Biology Day is an annual science fair held at Hills Road Sixth Form College in Cambridge. The event aims to inspire young people about all things biological. We took several activities suited to different age-groups: 'Reprogramming Your Cells', 'Race to Myelinate' & 'The Blood Station'. Several of the team of volunteers (including one Hills Road alumna) were involved in a public event for the first time and really enjoyed meeting people who were curious about stem cells. Well done to Alise Molotova, Blanca Sala, Caroline Oedekoven, Fiona Hamey, Julia Spindel & Theresa Bartels who did a fantastic job of explaining complex research in a fun and exciting way.

"Big Biology Day was a lot of fun; thank you very much that we had a chance to participate! I am already very much looking forward to the next outreach event" - Theresa

Advanced Therapies Workshop



In partnership with UK charity **Genetic Alliance**, we invited a group of representatives from patient charities and the biopharmaceutical sector

to discuss the development of advanced stem cell therapies. Prof. **Robin Franklin** gave an overview of the potential of ongoing research as well as the challenges of bringing therapies to clinic.

Visitors then met with **Cora Olpe, Dan Howard, Simón Méndez-Ferrer & Thomas Moreau,** who are conducting pioneering research in the field of haematology.

Alumni: Behind the Scenes



As part of the Cambridge University Alumni Festival, we invited a small group of alumni to see 'behind the scenes' at the Institute.

Guests were fascinated by the use of organoids as disease models in the **Koo** lab and enjoyed attempting some every-day laboratory procedures with the **Hendrich** group.

"What impressed me most was the commitment of the people here and the huge strides you are making ... I would love to come back in 20 years and see where you have got to!"

Thanks to: Amanda Andersson-Rolf, Julie Cramard, Maria Barreira-Gonzalez, Roxana Mustata & Sarah Gharbi





Training

Communication Masterclass

Six female SCI researchers received bespoke research communication training led by Dr Maggie Aderin-Pocock, MBE.

Delegates benefited from voice coaching and analysis of filmed rehearsals to create unique and engaging research stories. It is hoped that the skills developed will encourage participants to share their research more prominently in both professional and public settings.

"This was a rare & very useful opportunity - I will definitely change the way I prepare my presentations in the future" - Ana



Staff Engagement Talks



Over the past 4 months, support staff have been able to learn more about the research happening around us. 12 group leaders have attended the weekly admin meetings to give a brief presentation about what they do and why.

This has been a great opportunity for all members of the institute to feel engaged in a shared initiative as well as an opportunity for our senior researchers to practice communicating effectively with non-scientists.

Writing Workshops

Dr David Kent has led three workshops with researchers who are keen to develop their writing skills. The sessions have covered writing for academic purposes and for public audiences. Some participants are hoping to contribute to popular science blogs or to use their skills for public engagement projects.

The next workshop will tackle how to write a strong cover letter and will take place at 5.30pm on Wednesday the 2nd of December at Tennis Court Road.

Coming Up

'What am I made of?'

We are pleased to announce that in partnership with Chesterton Primary School, Cambridge, we have been awarded a highly sought after **Royal Society Partnership Grant**.

Our winning proposal is a project called 'What am I made of?'. Over the course of the spring term 2016, a team of SCI researchers will work closely with Chesterton teaching staff to offer a series of hands-on science experiences for year 1 pupils (ages 5 & 6!). We are aiming to create excitement about investigation and discovery.

Prof. Christine Watson, Dr David Kent & Emily Calderbank will be leading 3 workshops. If you would like to help, please contact Philippa: scipeo@stemcells.cam.ac.uk

Translational Videos

The Institute has been awarded knowledge-exchange grant funding to develop a series of videos about our research and its impact.

We will be working with patient representatives and other public stakeholders to create short, introductory videos to three important areas of research. Each video will be led by a Principal Investigator:

Demyelination Conditions: Mark Kotter

Blood Cancers: Brian Huntly

Chronic Neurodegenerative Disorders: Roger Barker

Filming is expected to start in January, 2016.

CALL FOR APPLICATIONS: PUBLIC ENGAGEMENT SEED FUND: £1,000

We are now accepting applications for the SCI Public Engagement Seed Fund. The fund is intended to encourage the development of new and original activities or materials that help to share our research with the public.

All SCI students and researchers, including affiliates, can submit an application. Awarding of the funding will be decided by the Public Engagement Steering Committee.

For example projects, application guidelines and to download an application form, please visit: http://intranet.stemcells.cam.ac.uk/publicengagement/pegrants/seedfund

Application deadline: 16th December, 2015