

SAMBa Newsletter

Issue 17, January 2021



Cohort 7 join SAMBa

It's been wonderful welcoming our 7th cohort to Bath and SAMBa and they have done a great job of building a strong group, despite difficult circumstances. We are sad not to be seeing more of them, but enjoying getting to know them through online murder mysteries, symposia sessions, and presentations about themselves and each other!

Delivering improvements to systems with different data types through ITT12

In September we held our 12th Integrative Think Tank with partners Rolls-Royce and Novartis, and it was a great success! Teams worked on formulating routes to explore challenges involving pharmacokinetics models, drug development for liver disease, mapping aviation routes, and understanding engine performance. There were some fantastic ideas explored, which have already led to joint PhD projects and student internships, and look set to lead to some significant ongoing research relationships. The event garnered praise from all participants, with Dr Rory Clarkson MBE from Rolls-Royce commenting: "The ITT was good fun and produced some truly innovative thinking. SAMBa staff and students came up with concepts and ideas that look like they offer a route to solving some of our more challenging problems."



Coming up ...

- 25th - 29th Jan** ITT13
- 2nd - 4th Feb** Modelling solutions to the impact of COVID-19 on cardiovascular waiting lists (V-KEMS)
- 25th Feb** Careers day
- 10th - 15th May** 2nd ITT de Mexico: Exploring challenges in disaster prediction and management
- 14th - 18th Jun** ITT14
- September** Interdisciplinary workshop on evolution and ecology



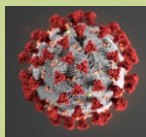
Our co-Director, Andreas Kyprianou has been appointed Director of the Institute for Mathematical Innovation (IMI). IMI stimulates mathematically focused research and innovation, driving impact in academia and industry. Together, IMI and SAMBa are working towards deeper and stronger relationships with our partners, exploring a wider platform of engagement and opportunity, particularly for students, postdocs and early career researchers.



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Engineering and Physical Sciences
 Research Council



Understanding and predicting the pandemic with mathematical models

SAMBa students have been involved in COVID-19 related research.

A team led by Phil Trinh, joined the **Royal Society's RAMP (Rapid Assistance in Modelling the Pandemic) initiative**. With researchers across the UK, Allen Hart, Tom Penington, Piotr Morawiecki, Yyanis Johnson-Llambias, and Hayley Wragg worked to better understand the transmission of coronavirus via surface contact. Hayley commented: "the RAMP scheme was a great opportunity, and I feel very privileged to have been involved. At a time of crisis, it felt good to be contributing my skills and I've been exposed to new techniques."

Tosin Babasola, Simone Appella, Tina Zhou, Piotr Morawiecki, and Eileen Russell have participated in **Virtual Study Groups run by V-KEMS**, which have explored topics such as managing crowds, feeding vulnerable groups, and reducing virus transmission on trains.

Sam Moore, who graduated from SAMBa last year, is now working on epidemiological modelling of the pandemic with members of the **JUNIPER modelling consortium** at the University of Warwick. See <https://plus.maths.org/content/covid-19-vaccines-your-questions-answered> to find out how Sam and the team helped advise the UK's vaccination strategy.

In December, we welcomed Lindsay Melling to SAMBa as our Operations Officer. Lindsay was previously at Bath Spa, Imperial College, and the London School of Hygiene and Tropical Medicine so brings a wealth of experience, which will improve and expand the activities that SAMBa offers.



Tim Rogers stepped down from our Executive Team this summer, having done a sterling job of supporting a lot of SAMBa activity over the last two years. Tristan Pryer has filled the vacant spot, bringing his experience from being part of the Maths of Planet Earth CDT at the University of Reading.

Places we dream of visiting (thanks to our student cohort for generating this list): Amsterdam · Athens · Australia · Budapest · Canada · Caribbean · castles in Wales · Clifton Suspension Bridge · Germany · Hull (yes, really!) · Japan · Lake District · Mexico · New York · Paris · Peak District · Places to kayak · Portugal · North Africa · Scotland · Seaside · Sweden · Tasmania

Where are they now?

Anna Senkevich, cohort 2, finished SAMBa December 2019



What are you doing now?

I work for HSBC as a Quantitative Analyst in Foreign Exchange Spot eRisk (electronic market making).

What are you enjoying the most about it?

Working on a variety of research projects in parallel, taking them on from their conception, and following through until they are implemented and put into production.

What are you planning to do next?

Continue learning and to get as much exposure to the business as possible.

What do you miss most about SAMBa?

The incredibly friendly and supportive environment, ideal for pursuing interests in mathematics or otherwise.

What was the most fun thing you did whilst in Bath?

Picking up rock climbing as a hobby, something I cannot imagine myself trying if I would not have been in Bath.

Congratulations to...

Andrea Lelli, Ben Robinson, Trish Gunaratnam, John Fernley for passing their vivas.

Sergey Dolgov, Daniel Kious, Phil Trinh, who were awarded New Investigator awards from EPSRC.

Jonathan Dawes, Sergey Dolgov, Matt Nunes, Tim Rogers, awarded funding from EPSRC through the New Horizons scheme.

Yyanis Llambias-Johnson, selected by UKRI for a placement with the Government Office for Science on COVID-19 policy.

All of cohort 6, who passed their MRes year.

Kit Yates for being invited to join independent SAGE.

For more details on these stories and to see how you can get involved, visit the SAMBa website: go.bath.ac.uk/samba



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