



IMAGE: IMaging reseArch exchanGes with Europe

A Proposal for the SFC Saltire Emerging Researcher Scheme

Host University: University of Glasgow
Consortium Members: Universities of Aberdeen, Dundee, Edinburgh, Glasgow, St Andrews,
Stirling, Strathclyde and the Scottish Government Medical Directorate's
Chief Scientist Office.



Public Summary of Exchange Programme

Researcher exchanges are a vital way to exchange knowledge, share unique equipment and skills, form new relationships, and found collaborations for the future. The pandemic has shown that good healthcare and people's wellbeing are essential to all aspects of society, and proven why they are central to government strategy. Maintaining and strengthening links with our neighbours in Europe will keep Scotland part of the healthcare research community there.

IMaging reseArch exchanGes with Europe (IMAGE) is a programme for supporting exchanges between emerging researcher members of the Scottish Imaging Network: A Platform for Scientific Excellence (SINAPSE) research pool and recognised companies and centres of excellence for imaging research within Europe. Researchers will gain new skills, create new collaborations, and work with colleagues to produce novel research outcomes. The programme will fund research visits of approximately 1 month, and short funding development visits up to 3 days, outward or inward, to work with Scottish or European imaging experts.

SINAPSE, first funded in 2007, is a pan-Scotland network focussed on developing and applying imaging in medical and experimental environments to help researchers better understand biological systems and improve diagnosis and treatment in healthcare. Healthcare and wellbeing are at the heart of Scottish and European economic and social strategies. Since 2012 SINAPSE has supported over 57 international exchanges and collaboration development visits. These have improved the careers of those taking them, by leading to high-quality publications, grant funding, faster promotion and in at least one case, millions of pounds in licence revenue.

Introduction to SINAPSE

The Scottish Imaging Network: A Platform for Scientific Excellence (SINAPSE) is a research pool first funded in 2007 with a focus on imaging. Imaging research brings together existing and enabling technologies to image the external and internal function and anatomy of people and animals, minimally invasively. This supports research into physiological processes, diagnosis of medical conditions, and the causes of disease and effectiveness of new treatments. Our activities encompass pre-clinical work, the study of normal human function, support every stage of the clinical trials process and optimise the imaging techniques applied in routine healthcare provision. We have strong links with the NHS and healthcare providers, with many SINAPSE members working in both academia and the health service. Increasingly, imaging is being combined with data processing and AI techniques and methods to facilitate and improve diagnoses and identify novel biomarkers. With members across 7 universities and partner NHS boards (collectively represented by the Chief Scientist Office), our areas of expertise include MRI, PET and SPECT molecular imaging, EEG and fMRI for cognitive neuroimaging, Ultrasound, image analysis and imaging trials. With healthcare and wellbeing now seen as central to government economic and social strategies, we are in a good position to directly respond to this need.

As well as general support for the research pool and its work from SFC, we have previously received Postdoctoral and Early Career Researcher Exchanges (PECRE) and Pools Engagement in European Research (PEER) funding. When that funding ended, the programme had worked so well for SINAPSE researchers, with such success, that we continued the support for ECRs, but at a much-reduced capacity, so we welcome the opportunity to invigorate the exchange programme again through the new Saltire Emerging Researcher Scheme. The PECRE scheme funded early career researchers to spend at least one month in Europe, North America, India or China. Details of 57 international exchanges SINAPSE supported since 2012 can be found here: <http://www.sinapse.ac.uk/research-resources/pecre>. PEER concentrated on assisting members to participate in and compete for European funding, helping them meet with potential partners and develop grant applications. We supported 7 PEER visits to institutions of European collaborators, as well as financing protected time for SINAPSE members to build and strengthen joint funding bids. We have also funded internal exchanges to allow cross-network visits between SINAPSE partner institutions for imaging-related training and skills development while strengthening intra-pool connections.

Many of our exchange awardees have used the programme to boost research collaborations and establish themselves in their careers. These exchanges have led to at least 22 publications, 3 Fellowships, 3 new grants, 7 continuing collaborations, 6 new skillsets gained, and registered IP with 2 license agreements and over £2m in sales. For example, David Dickie, a PhD student at the time of his exchange in 2013, went on to become a postdoctoral research fellow and is now Principal Data Scientist at Optum Health Solutions UK, part of the UnitedHealth Group. The exchange he made to leading imaging research laboratories outwith Scotland directly led to 8 research papers being published, in quality journals such as Stroke, and David receiving research funding from the Stroke Association in 2017. David credits the PECRE funded exchange as pivotal to his successes. We are confident such successes would be possible with this new round of funding.

Exchange Programme Outline

Key Aims & Objectives

The SINAPSE IMaging reseArch exchanGes with Europe (IMAGE) programme will be a continuation of the internal funding scheme SINAPSE has been running since the end of formal PECRE/PEER funding, with a focus on European centres of excellence in imaging research.

The main purpose of IMAGE is to provide research training and development opportunities for the most able postgraduate and early career researcher members of SINAPSE, while at the same time building experience of international collaboration with academia and/or industry. We will also support researchers participating in specific networking activities both for policy influencing and project preparation, in addition to developing proposals and applying for funding under the European Framework Programme.

Our previous schemes have only been able to fund outward placements. With IMAGE we will take the chance to invite applications from our European colleagues who would like to collaborate with researchers in Scotland, sharing our skills and unique resources, creating new bonds and opening up networks. We will also seek additional funding from the continent to increase the opportunities to support these bilateral exchanges.

We will fund at least 7 exchanges of approximately one month, and up to 5 short visits for research funding proposal and network development. These will lead to at least 15 quality research papers and 1 new European funding application within the next 3 years.

Programme Focus

As a multidisciplinary research pool SINAPSE focuses on technical developments in imaging, how imaging can be deployed to improve understanding of biological systems and applied to healthcare to benefit wellbeing. These interests create avenues for potential synergy with colleagues from a broad range of disciplines. This includes those in fellow research pooling groups (SUPA, SICSA, SULSA and ScotCHEM) but extends beyond to include mathematicians, social scientists and those in the arts and humanities whose insights can help us, for example: use imaging to predict tumour growth, assess how new imaging approaches will be accepted by or integrated into society, or discover how culture affects our physiological wellbeing.

The IMAGE programme will be prepared to support members of those networks carrying out work that uses or has the potential to advance imaging capability.

The IMAGE programme will focus on supporting both established connections with European imaging research colleagues and nurture new connections with European researchers from a wide range of backgrounds where imaging can provide or derive benefit.

Applicant Criteria

Applications are welcome from any members of SINAPSE who belong to one of the seven partner Universities: Aberdeen, Dundee, Edinburgh, Glasgow, St. Andrews, Stirling, and Strathclyde.

It is expected that applicants will mainly be (and we will give priority in awarding funds to) postgraduate and Early Career Researchers. Members of other research pools will also be considered where their exchange is related to imaging research.

We will also welcome applications from colleagues within Europe who wish to conduct exchange visits with one of our partners, on the same terms.

Exchange visits must be:

- Approximately 1 month (although longer exchanges are possible, no more than 3 months).
- To or from 1 recognised company or centre of excellence for imaging research within one of the member states of the European Union.
- Up to a maximum of £7,500.

Eligible costs are restricted to economy travel and subsistence at the agreed institutional rate up to a maximum of £7,500.

Networking/policy/proposal development must be:

- No longer than 3 days.
- To build a consortium, or work with one to develop a clear activity towards a funding application target.
- Up to a maximum of £1,000.

Eligible costs are restricted to economy travel and subsistence at the agreed institutional rate up to a maximum of £1,000.

In both cases research costs are not eligible, and the funding must not be used for attendance at conferences, training seminars, and the like. Reasonable EDI costs can also be covered.

Match Funding

SINAPSE have begun exploring the opportunity for two-way exchanges with an existing partner network in Europe. SINAPSE coordinated the formation of a consortium making an MSCA ITN bid which we called 'Clinically Relevant Analysis of Neuroimaging In Ageing' (CRANIA). The consortium comprised organisations in Holland (Erasmus MC Rotterdam), Belgium (Icometrix NV, Stroke Alliance for Europe), France (University of Bordeaux, National Institute for Health and Medical Research), Germany (Technical University Berlin, Ludwig-Maximilians-University Munich), Luxembourg (Alzheimer Europe), and the European Institute for Biomedical Imaging Research. Although the CRANIA application did not cross the ITN funding threshold, the partnership still exists (e.g., the lead applicant from LMU Munich, internationally renowned for his imaging research into neurodegenerative disease, will be a keynote speaker at the 2021 SINAPSE Annual Scientific Meeting) and we hope to leverage the previous work to build more ties with these organisations and set up two-way exchanges and explore other matched-funding for inward exchanges. Although the original partnership was focussed on neuroimaging we would be looking at a wider imaging research remit for IMAGE exchanges.

Through our partner universities SINAPSE also has access to various European networks that can be explored. For example, the University of Glasgow is part of [The Guild of European Research-Intensive Universities](#), comprising 20 distinguished research universities from across the continent, and [CIVIS](#).

Programme Timeline

	2021				2022							
	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug
Call For Applications												
Awards												
Exchanges												

An open call will be advertised throughout the SINAPSE network with application deadlines in November 2021 (for January '22 start), February 2022 (for March '22 start), and a final call in May 2022 (for June '22 start) if funds remain.

A panel comprising the SINAPSE Executive Director, Operations Manager, and one of the Executive team will convene to decide which exchanges receive funding.

Finance Plan

Activity	Source	Income (£)	Expenditure (£)
SINAPSE European Exchange Activity	SFC	62,179	
Advertising, Promotion & Web costs	SINAPSE: in-kind		
Administrator (1 day/month for 12 months)*0.33			£2,179
10 Exchanges			50,000
5 Network development visits			5,000
Contingency for EDI			5,000
Total		62,179	62,179

Based on our experience running an exchange programme up until the start of the pandemic lockdown, we have found that most visits to Europe cost less than £5,000 each. Although the IMAGE programme will offer to fund exchange visits up to a maximum of £7,500, we feel that we can fund and deliver 10 exchanges in the course of the programme for £50,000.

We will also fund ~5 short visits to support activities leading directly to funding applications for £5,000 total.

We want our programme to be accessible to all applicants, recognising some may need assistance beyond basic travel costs, such as childcare support, or mobility assistance during their stay. Given the unpredictable nature of these needs we have added an additional 10% contingency fund for EDI matters.

SINAPSE along with the Scottish Universities Physics Alliance (SUPA) and the Scottish Universities Life Sciences Alliance (SULSA) are requesting funds to employ a shared administrator within our host university, the University of Glasgow. To minimise duplication and maximise on efficiency we are

requesting a Grade 5.22 administrator at 0.2 FTE to support in administration (this equates to 330 hours in total and so 110 hours for each consortium to request).

The administrator would carry out the following:

- Be the point of contact for all applicants (SUPA, SULSA, SINAPSE)
- Collate all applications at the closing date and send to each consortia
- Manage communication of the result of the review process to each applicant
- Process the claims on expenditure for all applicants throughout the exchange period
- Provide financial updates to manage any unexpected underspend

Risks and Contingency Planning

A risk register is presented below with key risks and mitigations we anticipate may affect the delivery of the programme.

Risk	Probability	Impact	Risk Level	Mitigation
Travel limitations lead to delays/cancellations of journeys	3	4	12	Work with exchange host and awardee to develop partnership through other means – see below
Low take-up of funding	2	5	10	PECRE funding in SINAPSE is well known, and 18 months of lockdown will see ECRs keen to engage with Europe Ensure high awareness of funding in all channels
Awardee is stranded overseas due to sudden lockdown	2	5	10	Work with awardee to get correct insurance before leaving Ensure regular updates on government advice Make early decision to return and continue as risk above
Shared administrator illness leads to delay in awardee reimbursement	1	3	3	Put in place alternative means to apply for expenses. Main pool Operation Manager can process in their absence

In the event that travel is restricted, or visits are cut short, SINAPSE will work with the awardee and the proposed host institution to develop a plan of cooperation and relationship building. Most likely this will involve regular video calls with participants and an option that a nominated person at the host institution will carry out the functions on behalf of the awardee in performing experiments, if they are allowed in the local lockdown conditions, with the funding used to buy-out that person’s time.

Cohort Building and Networking

Research Innovation Scotland (RIS) is an overarching umbrella for joint activities conducted by SFC funded consortia (Research Pools, Innovation Centres, and Interface) and aligned partners. RIS is a platform for the delivery and signposting of multidisciplinary and cross-sectoral events, workshops, and networking activities. Owing to its strong foundation in collaborative working of many consortia and its existing links into our Scottish Universities, we believe it is best placed to deliver the Saltire Cohort program of events and activities to support, enable networking and showcase the work of the Saltire Emerging Researchers. ScotCHEM as one of the constituting parts of RIS has been nominated to coordinate and deliver the entire cohort program of activities on behalf of RIS and other consortia supporting this proposal. ScotCHEM has developed a proposal (cf ScotCHEM proposal document) for a program of activities, in consultation with all entities who support it. ScotCHEM is willing to deliver this cohort proposal on behalf of RIS regardless of being successful in securing the principal Saltire Emerging Researcher award. ScotCHEM will work with and coordinate the proposed range of activities with all the consortia delivering the Saltire Emerging Researcher Scheme and will be open to reasonable changes to the range of activities offered to the full Saltire cohort, to ensure inclusion of consortia who have not been involved in this current proposal.

SINAPSE has given its full support for this proposition and will, if successful in securing the Saltire Emerging Researcher Award, work together with RIS (through ScotCHEM) to deliver the program of activities, including a financial contribution to achieve maximum impact.

Signature

I write on behalf of the University of Glasgow to confirm our full support for the SINAPSE IMAGE proposal, led by the University of Glasgow, in partnership with the Universities of Aberdeen, Dundee, Edinburgh, St Andrews, Stirling, Strathclyde and the Scottish Government Medical Directorate's Chief Scientist Office.



Professor Sir Anton Muscatelli

Principal and Vice-Chancellor



SINAPSE European Exchange Activity

Appendix A - Equality and Human Rights Impact Assessment

Equality Impact Assessment Form

Please ensure you have read the EIA Policy and Guidance document before completing this form. If you need assistance please contact the EDU. Please return the completed form to the EDU.

STEP 1 - Define policy/ practice
i. Name of policy/ practice/ significant change
Transition funding for the SINAPSE research pool
ii. Owner of policy/ practice (College, School or Service)
Institute of Neuroscience & Psychology (MVLS) on behalf of SINAPSE
iii. Date of policy/ practice approved
iv. Approved by? (Committee, College, School or Service)

STEP 2 - Description of policy/ practice
i. What are the aims?
Transition funding will support continued work of SINAPSE (Scottish Imaging Network: A Platform for Scientific Excellence) in medical imaging research, education, and knowledge exchange, while SFC consider in detail recommendations from the Heathwaite review of Scottish research pooling.
ii. Who does it cover?
Staff and students involved in the SINAPSE research pool
iii. How often is this policy / practice reviewed?
This is to be a one-year period July 2021 - July 2022

STEP 3 - Could there be any implications for a protected characteristic group (as defined by the Equality Act 2010) in this (or the development of) policy/ practice?
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STEP 3a - Yes, there is a potential implication or barrier for a protected characteristic group.		Go to Step 4
Please tick all that are relevant ✓		
Notes		
Age	✓	
Disability (include BSL Users)	✓	
Gender Reassignment (including Gender Neutral language)	✓	
Marriage and Civil Partnership		
Pregnancy and maternity	✓	
Race	✓	
Religion or Belief		
Sex	✓	
Sexual Orientation	✓	

STEP 3b - No, there is no potential implication for a protected characteristic group.	Go to Step 8
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STEP 4 - What evidence do you have for this conclusion (potential implication for a protected characteristic group)?
Briefly explain:

SINAPSE Executive Committee

The SINAPSE Executive Committee is made up of SINAPSE Director, SINAPSE Operations Manager, and appointed representatives from SINAPSE's 8 partner institutions. Of 13 Executive Committee members, the gender balance is 5 female (including the Director) and 8 male (including the Operations Manager). Equality and diversity are central considerations in Executive Committee composition. As the Operations Manager is based at and employed by the University of Glasgow, they have completed the online Equality and Diversity Essentials training and the online Unconscious Bias training.

SINAPSE Annual Scientific Meeting

We will adhere to the University of Glasgow's guidelines on Embedding EDI into all conference and events organised by SINAPSE, as administered from the University of Glasgow: (<https://www.gla.ac.uk/myglasgow/ris/researchpolicies/ourpolicies/equalityevents/>);


SINAPSE ASM registration is free of charge for all students, to maximise inclusiveness. We continually monitor the student/staff presenting authors of abstracts selected for oral presentations to ensure gender, age, race and ethnic origin are equally represented. If there is found to be under representation in any areas we address this via promotion materials and targeting communication; We are likewise cognisant of ensuring that we promote a diversity of ASM keynote speakers; We ensure staff who are organising events are aware of their responsibilities under the Equality Act 2010 and this policy all events are fully accessible to our delegates, speakers and visitors. Referring to the University of Glasgow's Policy (<https://www.gla.ac.uk/myglasgow/humanresources/equalitydiversity/policy/accessevents/>).

SINAPSE Seed Fund

Funding earmarked for use by internal competition, to support pilot projects enhancing intersectoral (academic/clinical/industry) engagement, will be allocated with a commitment to inclusiveness. Seed Fund recipients will be continuously monitored to ensure gender, age, race and ethnic origin are equally represented.

SINAPSE IMAGE Programme

This programme is for exchanges of ECRs to and from imaging centres of excellence and companies in Europe. Host institutions/companies will be responsible for ensuring reasonable adjustments are in place, where required. Students and staff participating in the exchange will be responsible for selecting a host site where any adjustments can be met. In order to ensure the opportunities are open to all we have included additional funding to meet the needs of those researchers requiring additional support to participate. We will embed encouragement and support for researchers from underrepresented groups in SINAPSE, particularly female/BAME/disabled staff and students to apply for the programme in communications and advertising. Decision makers on the scheme will undertake unconscious bias training to help promote awareness of potential bias when selecting candidates for the exchange. There may be researchers who might feel uncomfortable or unsafe going on exchange to certain European countries based on prevailing cultural norms and views and/or treatment of members of the LGBT+ community. Applicants to the scheme will be encouraged to research the culture of countries of exchange before selecting their host institution and to discuss any concerns with the exchange coordinator/relevant member of staff coordinating the scheme (or their supervisor(s) or line manager(s)) before submitting their application. The current funding is only for exchanges to be taken by August 2022, so it will not be possible to defer an awarded exchange due to pregnancy or maternity. However, if new funding for exchanges is made available, e.g. the scheme is extended to 2023, the award will be honoured from this new source.

STEP 4a - Does the evidence show a positive impact?		Go to Step 5
Please provide an example and attach evidence: As detailed above the SINAPSE Executive Committee considers inclusion in all aspects of the work, and therefore this shows a positive impact.		
STEP 4b - Does the evidence show a negative impact?		Go to Step 6
You need to consult with relevant stakeholders - the EDU will assist with this process Please provide brief details and attach evidence:		
STEP 4c - Does the evidence show no impact?		Go to Step 8
Attach evidence to this form		
STEP 5 - Continue to promote good opportunity for all people		Go to Step 8
Promote and implement as exemplar policy/ practice		
STEP 6 - Involve and consult stakeholders to address any negative impacts		Go to Step 7
EDU will assist with this process Please provide brief details of involvement and consultations:		
STEP 7 - Outline any changes made to the policy/ practice as a result of the consultation		Go to Step 8
Please provide details of changes: Changes are detailed in Step 4.		
STEP 8 - Publish results (as required by law)		Go to Step 9
Please return this form, once completed, along with copy of amended policy or practice and any relevant information, to the EDU for annual reporting and for inclusion on the University website. Please note items sent to EDU here:		
STEP 9 - Regular review		
Regular reviews ensures that policy and practice is kept up to date and meets the requirements of current equality legislation. Where a negative impact has been identified and remedial actions is being implemented, the policy owner should define a timescale for review.		
Please give details of review process:		
SIGNING OFF PROCESS		
Name of EIA Owner		Richard Mosses
Signature		
College/ School/ Service		Institute of Neuroscience & Psychology on behalf of SINAPSE
Date of Completion		30/06/2021
Date received by EDU		06-Feb-20
Approved in principle?		Yes No
Any actions required? Please specify N/A NA		
Signed on behalf of EDU Date: 02/07/2021 Katie Farrell		Signature 