### Biomedical Signal and Image Processing

**The Biomedical Signal and Image Processing project team organised three interdisciplinary workshops to enable the networking of researchers working in the processing of biomedical signals and images across different Schools and Colleges.**

The objectives of the project were to bring together and provide networking opportunities to a critical mass of researchers. There were a few strong on-going interactions between specific groups but there were a number of groups with potential for collaborations that were not aware of each other.

A first general workshop took place in December and two follow-up events, which focus on biomedical “image” and “signal” processing, respectively, were held in May. All workshops provided the opportunity to interested researchers to present their research and provided ample opportunities for interaction. The 2nd event (on biomedical image processing) was attended by representatives of two relevant local companies (Holoxica and Toshiba Medical Visualisation Systems Europe) and the final event ended with a presentation by ERI on potential funding options for pilot projects and the new EPSRC Healthcare strategy.

107 researchers were involved in this programme of activities. As a general comment, the attendees found the interaction between researchers with clinical/physiological and mathematical/computational backgrounds very stimulating.

Participants have expanded their network of contacts across the University, creating opportunities for future collaboration in potential research projects or helping each other tackle some problems in the analysis of biomedical datasets. Proposals for larger projects and further workshops in the area of biomedical signalling are planned.

### Edinburgh Environmental Humanities Network (EEHN)

**The Edinburgh Environmental Humanities Network aimed to develop its relatively new network by equipping its members with the skills needed to make innovative contributions to the Environmental Humanities.**

To accomplish this, the project team ran four workshop events focusing on different aspects of practice: teaching (December); writing (February); creating (May); and collaborating (June). Each event included prominent UK and international scholars and used a range of participatory formats.

Their objectives were to a) promote Edinburgh as a key location for Environmental Humanities research by developing connections between EEHN and other networks and individuals working in the field; b) to develop member’s core skills for working in an interdisciplinary context within the University.

The network has also grown in size and scope as a result of the workshops. The interdisciplinary connections within and beyond the University have expanded to include contact with new disciplines, and the list of network email subscribers has grown from 44 members to 73. More significantly, the range of UK-wide and international speakers and participants involved has meant that the extent of the network’s connections and reach has increased substantially.

The profile of the University in the area of Environmental Humanities has been greatly advanced, with IASH having agreed to host two Environmental Humanities Visiting Fellows per year from 2015-16, coming from internationally-renowned centres for Environmental Humanities studies. The project team also received an IASH International Interdisciplinary Research Group grant and further work will take place in the next Academic Year.

### Edinburgh Interdisciplinary Energy Research Community (EIERC)

**With energy having been identified as one of six priority areas for investment in multidisciplinary research by RCUK, Edinburgh Interdisciplinary Energy Research Community aimed to harness the vast array of energy research expertise across the University, encouraging mutual learning and knowledge exchange, as well as fostering interdisciplinary links to improve preparedness to capitalise on funding and research opportunities.**

The project team held steering group meetings at one to two month intervals involving people with a very diverse disciplinary background; engineering, chemistry, geography, science & technology studies, anthropology, politics, geology, business school, informatics, sociology and economics. The group shared information on calls for proposals, suggested collaborators, and shared ideas. To date at least one joint research proposal has been submitted (to Leverhulme) and the group developed teaching- focused collaborations on a new interdisciplinary Masters programme. A website has also been developed to archive all of the significant work of the network.

### The Edinburgh Fluid Dynamics Group (EFDG)

**Having identified more than 60 academics and 200 postgraduate researchers across 7 different Schools in the Colleges of Science & Engineering and Medicine & Veterinary Medicine involved in Fluid Dynamics research, the Edinburgh Fluid Dynamics Group was established to promote a sustainable culture of cooperation and leadership in fluid dynamics and underpin major grant applications.**

Fluid dynamics is the science of fluids in motion and is relevant to a wide variety of fields including bio-medicine, aerodynamics, renewable energy and many more. A series of workshops are regularly run to connect people across these areas and to coordinate a University strategy on fluid dynamics. A wiki and a website were created to communicate information to the network as well as collating information about projects, activities and opportunities, and to promote internationally the Edinburgh research in fluid dynamics. The growth of the group has been used to demonstrate a strong and collaborative community at the University when submitting proposals. The group has raised awareness of the wide range of activities and expertise in fluid dynamics, has contributed to enhance the international profile of the University in fluid dynamics, and has enable inter-disciplinary collaborations which will underpin collaborative proposals for EPSRC Centres for Doctoral Training, EPSRC Programme Grants, EU Horizon2020 networks and ERC Grants in fluid dynamics.

### SoMatEd: Soft Matter Edinburgh

**The project established a network of researchers working in making, understanding and utilising soft matter across a range of Schools including Chemistry, Biology, Engineering and Edinburgh College of Art, collaborating to discuss global challenges in this specific field in a multi-disciplinary way.**

A series of networking and ideas generation meetings were held which led to the Soft Matter network becoming well established with various new connections.

Interactions and collaborations from the Soft Matter network events informed and shaped two major grant applications totalling nearly £10 million which have been submitted to the EPSRC. There are also smaller collaborative projects taking place such a CDT studentships, and thanks to the new community established in this field, future grant applications are also being looked at.

### Mind in Animals

### **This project brought researchers from Edinburgh College of Art and The Royal (Dick) School of Veterinary Studies together to identify shared interests and potentially-shareable methods, as well as gaining useful insights into different individual practices and teaching to address the question of how to work in a truly interdisciplinary – not multi-disciplinary - way.**

The researchers attended an interdisciplinary Donkey and Mule conference on the Greek Island of Hydra, taking part in various events there over three days, as well as attending technical preparatory workshops before the conference.

They also developed and ran a taxidermy masterclass workshop for vet and art students, delivered a successful interactive workshop at the Vet Ed 2014 Conference in Bristol and presented at a specialist workshop on approaches to creative interdisciplinary research to share their experience with other University of Edinburgh colleagues. An application is soon to be made to the Leverhulme Trust as a result of this work and further conference papers are in progress.

### Knowledge on Trial: Uses of Scientific Evidence and Professional Judgment in the Legal Context

**This project formed a network across six Schools and two Colleges around the overlapping interests in the production and use of expert knowledge claims, with a focus on the role of professional judgement and scientific expertise in collecting and presenting legal evidence.**

A workshop with an outside expert from the US was held in February in addition to other planning meetings. Events included participants from science, technology and innovation studies, fire safety engineering, law, mathematics, sports science and architecture.

As a result of this project an ESRC grant application on arson and fire investigation is being prepared and a joint paper is in draft.

### Dementia and Design Network

**The project aimed to build a cross-School and sector network focussing on methodological dialogue to explore participatory approaches in designing environments that are responsive and enabling for people with dementia.**

Three workshops were run as part of this project, engaging not only University staff but also practitioners from industry and people with dementia. The group addressed the challenges of adopting a design methodology structured on social methods of engagement involving people with dementia and the effectiveness of interventions through participatory design. People with dementia were involved in the workshops to influence and inform the priorities to be taken forward by the researchers.

From this project a new network that spans across Schools and sectors has been constructed and a huge amount learned about working through practical problems from various disciplinary perspectives. Going forward, a writing retreat focussing on funding applications to the AHRC is being arranged.

### Food Researchers in Edinburgh (FRiED) network

**The Food Researchers in Edinburgh (FRIED) network was established in 2013 to bring together researchers across disciplines interested in food-related issues with funding being sought for further development of the network as a food research hub, encouraging interdisciplinary food research at the University.**

Four full-day events were run for FRiED members, including 2 writing retreats and 2 future planning events, one of which focussed on network funding. The FRIED seminar series which also took place over the course of the year, which was partly funded by individual schools.

Participants felt that they had improved their ability to undertake research about food and to work in an interdisciplinary way, whilst also identifying potential research collaborators. The project also supported specific research outputs such as publications, grant applications and PhD theses through the writing retreats. The activities increased visibility of the network and the profile of participants, leading to other internal connections, invitations and opportunities, as well as tangible career developments.

### Medicine & Science in Sport & Physical Activity

**This project aimed to develop a University-wide network on medicine and science in sport and physical activity to facilitate collaborative research and research-led teaching.**

One networking event (of two planned) was held in January 2015 and pulled together 26 researchers from across the University. Key topics for future and potential collaborations were collated for further investigation at a sand pit event (to be scheduled).

The team used a less formal approach to teaching collaboration, identifying course leaders in key topics to consider pragmatic ways to share learning and integrate physical activity for health teaching into the undergraduate medical curricula.

The main outcome for the network members is interdisciplinary working leading to sharing of skills, research tools, and teaching materials and practices.