Centre for Innovative Human Systems

School of Psychology
Trinity College Dublin

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Why?

Organisations of all kinds are facing extraordinary demands for innovation and change to improve their performance and need to understand and manage the risks this involves. Transport, manufacturing and services are changing not only because of relentless commercial and budgetary pressures but also because the deployment of new technologies creates unprecedented opportunities to reorganize. New business models and new regulation call for leaner processes, system integration, joined-up management systems, system performance measurement, managing system change – in order to develop resilient, adaptable socio-technical systems.

Research and development in process innovation and the application of new technologies are esential to transforming productivity and competitiveness in both public and private sectors. Design for future operations, managing people in changing organisations, creating new standards of practice, implementing regulatory systems that actually work – all of these bring human systems to the centre of a smart, competitive economy in which safety, quality, cost and environmental impact are reconciled.

What will it do?

The Centre for Innovative Human Systems brings together a critical multidisciplinary RTD capability in process innovation, development and application of new technologies, and managing risk and organisational change. It comprises a multidisciplinary capability including Psychology, Business and Organisation, Engineering and Computer Science, and Health Sciences. It offers knowledge and technology transfer through research, education and training, information technology development, consulting, evaluation.

How will it do it?

Overcoming the barriers to innovation requires a new research and development partnership with industry and services. Building on a strong track record of action-oriented collaborative industrial research (national, European, global), the Centre will foster research-led innovation to help organisations improve their performance, manage their risks and implement change. It will foster long term strategic links with the organisations it partners. It will develop a new Masters program in Innovation in Human Systems, which will be a vehicle for translating knowledge into innovation and change.

Staff

• Director or Academic Champion: Nick McDonald (*pro tem*)
• Principal researchers: Sam Cromie, Mac Maclachlan, Tim Trimble, Michael Gormley (School of Psychology), Elizabeth Curtis (School of Nursing), Martin Fellenz (School of Business Studies)
• Further associated researchers. Siobhan Corrigan
• Current Postgraduates and/or Postdoctorates: Chiara Leva, Michael Cooke, Joan Cahill, Paul Liston, Daniele Baranzini, Rabea Morrison, Alison Kay, Derek Ross
• Emeritus staff
Administrative and technical staff: Gerry Reynolds (Financial manager); Brian O'Flanagan (Administrator); Fabio Mattei (Programmer)

Financial viability

The core financial infrastructure will be built around the Aerospace Psychology Research Group (APRG)'s programme of funded research. This will be extended to include the research contracts of other Principle Investigators in the centre, as appropriate. Forming a centre will provide an important opportunity to seek core funding from external sources. Nevertheless it is expected that the great majority of its ongoing funding will come from ongoing research contracts.

The APRG have a long track record of financially sustainable research, development and knowledge transfer. Its research program has been developed though ten European framework projects (from FP4 to FP7), many co-ordinated by TCD, including HILAS (a large IP with 40 partners) tasked to develop a new framework for Human Factors in aviation. This research has spawned a network of collaboration of over 100 industrial partners, across Europe and globally (including China). Nationally, the APRG are a partner in the EI funded Irish Centre for Manufacturing Research. Overall this represents an investment in R&D of around 200 million euro, about 7% of which was spent in Ireland. The APRG's research income and expenditure over the last five years has been approximately five million euro. This has provided provided the basis for developing a strong project management team, including a dedicated financial manager.

The new centre will build on this track record and create a larger and growing research income, based on a core management team and group of PIs and senior researchers capable of sustaining a continuing programme of funded research and related activities.

Governance

The Governance structure of the Centre will have the following components:

A Board, responsible for policy and oversight of the Centre's management, comprising

- Independent Chairperson – Jim Lawler (formerly Enterprise Ireland) (to be confirmed)
- External representatives (to be appointed)
- Representatives of School (Head of School) and College (as appropriate)
- Representatives of the Principle Investigator members of the Centre
- Representatives of the research staff of the centre
- The Director, Deputy Director, Financial Manager and Administrator will be in attendance a Board meetings

Director of the Centre, appointed by and reporting to the Board
Deputy Director, appointed by the Board
Executive Committee, comprising Director, Deputy Director, Management Team, a PI representative, a research staff representative.
Management Team, comprising in the first instance Financial Manager and Administrative Officer.

The Director will submit a report to the Dean of Research, before 12 July each year.

The Centre and the School of Psychology

The School of Psychology has agreed to host the research accounts for this new Centre within the School of Psychology cost centre. All overhead income transferred to the School arising from the research activities of the Centre will be made available to cover the support costs of the new Centre. Any costs incurred by the School as a result of hosting the Centre (including costs such as administrative/technical assistance and consumables) will be charged by the School to the Centre's overhead income. The Director of the Centre will be required to make regular reports to the Head of School and School Executive in relation to the financial position of the Centre. The Director of the Centre will be responsible for ensuring that the research accounts of the Centre are managed within the budgets which have been set and will also be responsible for completing a financial plan for the intended use of the projected overhead income.

With regard to space for the new Centre, the School of Psychology is willing to permit the new Centre to continue to occupy the space currently allocated to the Aerospace Psychology Research Group. However, given the current constraints on space, the School is not in a position to expand the space allocation for the new Centre. If more space will eventually be required to accommodate the new Centre, a request for additional space would be made at College level, through the Faculty Dean.