

# Research Matters

Cúrsaí Taighde in Ollscoil na hÉireann, Gaillimh

## SFI Awards Major Research Centre to NUI Galway

"Science Foundation Ireland (SFI) has recently announced major funding for three new Centres for Science, Engineering and Technology (CSETs) at NUI Galway, Royal College of Surgeons and UCC. The three successful centres received their awards against competition from 23 other applicants. The new Digital Enterprise Research Institute (DERI) at NUI Galway will receive €12m from SFI over the next five years (with a review for further funding after two years), with significant resource investment being contributed by Hewlett-Packard's European Software Centre in Galway. DERI will conduct basic and applied research on the Semantic Web and Semantic Web-enabled Web Services, and on the innovative implications of this emerging technology for industry and society.

The importance of this research to business and the public alike is evidenced by the already widespread use of the Web as a tool for communication, accessing and distributing information and conducting business. However, the success of the Web has made it increasingly difficult to find, sort, present and maintain the information distributed globally.

Fortunately, the Semantic Web provides a way of handling this explosion of information and DERI will be at the forefront of this step into the second generation of Web technology. Conceived by the architects of the original web, the Semantic Web is

still in its infancy, but when fully developed it will enable computers to talk meaningfully to each other.

The new Institute will be directed by Prof. Dieter Fensel, a leading figure in Semantic Web research world-wide, and co-directed by a leading industrial researcher, who brings significant experience to DERI from the US. Prof. Fensel plans to increase the number of research staff in DERI to over 60 post-graduate and post-doctoral researchers by 2008. DERI will be a rich collaboration between NUI Galway researchers from the Computer Integrated Manufacturing Research Unit, the Centre for Innovation and Structural Change, the Departments of Information Technology and Electronic Engineering, and key industrial researchers from Hewlett-Packard's European Software Centre in Galway. In addition, DERI will attract world-class researchers from around the globe.

While DERI will be based on the NUI Galway campus, it will also have a laboratory at the Hewlett-Packard European Software Centre, allowing easy physical and intellectual exchange of researchers between academia and industry. DERI has also developed strong academic links with the Next Web Generation Group at the University of Innsbruck in Austria, through joint projects headed by Prof. Fensel, and plans to foster an extensive researcher exchange programme with the Group. This international sharing of ideas and personnel will greatly enhance the potential of DERI to establish



itself as a world-leader in the Semantic Web.

The involvement of Hewlett-Packard's European Software Centre in Galway is particularly important for DERI's mission to support the future development of indigenous Irish industry. In the commercial world, where software technologies for different parts of a business have not been based on a common foundation, there are serious problems with trying to connect these various data-handling applications. Semantic Web-enabled Web Services will allow the development of simple interfaces between these applications. With over 100 interconnected systems and interface technology ranging over 30 years, Hewlett-Packard's European Software Centre represents an ideal 'real-life' laboratory in which the research carried out by DERI can be case-studied and applied.

Pictured from left: Mr. Rory O'Connor, Managing Director, HP European Software Centre, Galway; Professor Dieter Fensel, Institute Director; Professor Jim Browne, Registrar, NUI Galway; and Professor Manfred Gantner, Vice-Rector, University of Innsbruck.

### RESEARCH MATTERS

VOLUME 2

ISSUE 1

BEALTAINE, 2003

### IN THIS ISSUE

The Centre for the Study of Human Settlement and Historical Change

Page 3

Marine and Freshwater modelling research at NUI Galway

Page 5

Harmful Algal Blooms research underway at the Martin Ryan Institute

Page 7

## Message from the Dean of Research

Fáilte chuig eagrán eile de Chúrsaí Taighde. Welcome to another edition of Research Matters. The recent Science Foundation Ireland Award of €12m to the Digital Enterprise Research Institute (DERI) has been warmly welcomed by the University. DERI is one of three Centres for Science, Engineering and Technology (CSET) to be funded nationally and the first in Information and Communications Technology (ICT). The partnership with Hewlett-Packard Galway is the culmination of 25 years of research

collaboration. Congratulations to all concerned! This brings the total funding in the last four years to over €100m and confirms our place among the top rank of research intensive universities in Ireland.

Research is a major element of the University's new Strategic Plan 2003-2008 and the Research Office is committed to playing its role in realising the aims of the Plan. The new Research Committee has been formally established by Údarás na hOllscoile (Governing Authority).

Plans for the new Research Support System are well advanced and pilot training projects will take place over the Summer (see page 8). Up to date information on all matters related to research is available on the Research Office website.



Professor W.G. Hurley  
Dean of Research

Research Matters is published by the Press & Information Office, in association with the Office of the Dean of Research. Items for publication, views, comments, and suggestions are all welcome. Please send these to: The Editor, Máire Mhíic Uidhir, Press & Information Officer. Email: m.mhicuidhir@mis.nuigalway.ie

## Tracing the Social and Cultural Networks of the Sciences of the Nineteenth Century

Modern science as we know it today traces its origins back to the nineteenth century. However, very little research into the popularisation of the sciences in Ireland has been carried out to date. Dr. Aileen Fyfe, of NUI Galway's Department of History has been awarded a Major Project Grant from the Irish Research Council for Humanities and Social Sciences, to trace the social and cultural networks of the sciences in the nineteenth century. Dr. Fyfe was appointed a Lecturer in History of Science and Medicine at NUI Galway in 2000, and is the only such appointment in the State.

The 'Networks of Science and Culture' project

proposal involves applying some of the new methodologies for dealing with science popularisation and dissemination - which have been developed for Britain, Germany and the USA - to Ireland. In the nineteenth century, the sciences became recognised disciplines and gained institutional foundations; their practitioners (newly labelled as 'scientists') were gradually granted significant cultural authority; and the sciences entered government policy due to their potential economic contribution.

"The nineteenth century was, therefore, the period in which the modern sciences with which we are familiar were born, and it can be expected to be a

critical period in the history of science in Ireland", says Dr. Fyfe. "It was also the time when innovations in publishing, education and communication technologies transformed the way in which people outside the small circle of scientific elites, mostly based in Dublin, could learn about the sciences".

Dr. Fyfe will be collaborating with Professor Peter Bowler and Dr Iwan Morus at Queen's University, Belfast on the current project.

## New GIS Facility boosts research at NUI Galway

NUI Galway has introduced the latest technology to support advanced research projects at the University's Environmental Change Institute. The Geographical Information Systems (GIS) facility, valued at €300,000, has been opened in the Applied Geophysics Unit. The equipment includes a satellite receiver and high-speed ISDN lines for data transfer to the University's atmospheric research station at Mace Head, Connemara.

"Access to state-of-the-art GIS hardware and software is essential in order to underpin and facilitate high quality interdisciplinary research in environmental change," says Professor Emer Colleran, Director of the Environmental Change Institute. She explains that the particular resources that will be used include small-area

census data, digitised mapped imagery, selected raster (marine) maps and orthophotos, or live satellite pictures.

"Together these resources will permit existing demographic and economic patterns to be identified and will permit modelling of future scenarios", she says. "Thus, our research programme under HEA (Higher Education Authority) PRTL Cycle 2, will be conducted more effectively and the scope for future research, interdisciplinary and inter-institutional collaboration will be expanded."

Pictured are from left, Professor Emer Colleran, Director of ECI; Dr Mary Cawley, Department of Geography; and Conor Delaney, Department of Experimental Physics.



## Focus on

# The Centre for the Study of Human Settlement and Historical Change



The Centre for the Study of Human Settlement and Historical Change (CSHSHC) was established in October 2000 following a grant of €2,901,352 under the second Programme for Research in Third Level Institutions (PRTLII) and the centre moved into its new building in October 2002. The initial purpose of the Centre was to complete the research agenda laid out in the proposal that was submitted for competition, which drew upon the expertise of a broad number of personnel and disciplines in the Faculties of Arts and Celtic Studies. Subsequently, the research programme was augmented following a successful bid for further funding (€940,000) under Cycle 3 of the same programme.

The work of the Centre has advanced the commitment of the University to fostering primary research of the highest international standards. The participants have established and maintained links that relate their research agenda to that conducted in corresponding research institutions throughout Europe, the United States, and Australasia, thus assuring originality and quality. The work of the Centre has established NUI Galway as the pre-eminent location in Ireland for the study of European and Irish developments overseas. Such research has ensured that events in Ireland are viewed, interpreted and understood in a transnational framework.

The Centre has not merely been committed to providing new additions to the knowledge of settlement and change but is also providing that knowledge in forms that avail of the retrieval and access capacities of new technologies. The Centre ensures, by availing of expertise in the advanced use of such technologies, that it actively contributes to a strategy by which the University is not merely a consumer of information but a producer and a provider of information.

The Centre provides accommodation for 30 researchers plus a small number of support staff. These scholars hold university qualifications from Canada, the United States, Britain, France,

Germany, Spain, Italy, the Netherlands, Israel, Norway, Bosnia-Herzegovina, as well as from Ireland. Each researcher attached to the Centre is allocated appropriate study space that includes access to computing and printing facilities with online access. The Centre also has a dedicated well equipped seminar room which accommodates up to 60 people. This room is used exclusively for the purpose of training those formally attached to the Centre and for postgraduate activity of departments in the Faculty of Arts. For example, the departments of French, Political Science & Sociology, Philosophy, History, English, Economics and the Centre for Women's Studies, hold regular seminars which are of benefit to their graduate students as well as faculty.

Because of the availability of this infrastructure, members of the Faculty of Arts have been in a position to encourage applications for predoctoral and postdoctoral funding as well as major research grants under the various schemes promoted by the Irish Research Council for the Humanities and Social Sciences. Several of these bids have been successful and the beneficiaries have been accommodated within the Centre, thus giving rise to new research projects and interests which extend from "The History of Science in Nineteenth Century Ireland" to "German Travel Literature" and "Irish and German Migration to Argentina". The Centre has also been facilitating those within the Faculty of Arts who wish to apply for research funding under the European Union Framework 6 programme.

The introduction of postdoctoral researchers within the Faculty of Arts has been a welcome development. The Centre has supported these dedicated fulltime researchers in organising symposia and conferences within their specialist areas to which leading international scholars have been invited. The involvement of postdoctoral fellows has also been one of the principal factors contributing to an unprecedented schedule of research seminars

within the Faculty of Arts. As part of their training, all predoctoral students attached to the Centre have been required to present at least one seminar to their peers during the course of the academic year.

Among the notable events sponsored by the Centre during the academic year have been:

- One Day Symposium on Slavery: Linking Literary and Historical Perspectives.
- Public Lecture by Professor Bernard Bailyn, Director, International Seminar on the History of the Atlantic World, Harvard University: 'On the Contours of Atlantic History'.
- One Day Symposium: Out of Africa: Exploring Histories of Slavery.
- Public Lecture by Prof. Philip Morgan, Johns Hopkins University, entitled 'The World of Books and the World of Slavery'.
- The Ascendancy and the Gaelic World Conference.

### Upcoming Event

A Conference on Frontiers and Historiography will take place on May 30 & 31, 2003

"The Centre has established itself as an international dynamic hub of research characterised by a sizeable high-quality research output in a remarkably short time" says Prof. Nicholas Canny, Academic Director. The Research Co-ordinator of the Centre, Prof. Kevin Barry, says that the key to the Centre's success is its ability to accommodate a varied group of scholars in one location which creates its own dynamic.

Pictured at the Centre's inaugural lecture are from left, Professor Jim Browne, Registrar; Professor Maurice Bric, Director of the William Jefferson Clinton Centre for American Studies at UCD; Professor Bernard Bailyn, Harvard University; and Professor Nicholas Canny, Academic Director of the CSHSHC.



Pictured: Samantha Broaders and John Curtin

## Research students scoop US Fellowships

Two out of just three prestigious Research Fellowships awarded to non-US nationals have been won by John Curtin and Samantha Broaders, currently completing PhD. degrees at NUI Galway's Department of Microbiology.

The fellowships are awarded annually by the American Society of Microbiology (ASM), in conjunction with the National Centre for Disease Control in Atlanta, Georgia (CDC). Samantha and John will commence the two-year post-doctoral fellowships in October 2003.

Both research students are carrying out biofilm research in the areas of catheter infection and biofilm growth in prosthetic devices. A biofilm occurs when bacteria form a living coating on a surface. This can cause serious medical complications.

Central venous catheters, one of the most indispensable and frequently used tools for the treatment of patients with chronic or critical illnesses, are inserted in millions of hospital patients in Europe and the USA each year. Their use is often severely compromised as a result of bacterial biofilm infection, which is associated with significant mortality and increased costs.

During the next two years in Atlanta, John Curtin will investigate the potential use of bacteriophage (bacterial viruses) for the treatment of central venous catheter-related biofilm infections. According to John, "phage have recently been used to successfully treat experimental infections, including blood stream infections and meningitis in poultry and animals and also to treat antibiotic-resistant infections in humans."

Samantha Broaders' research in Atlanta will address

a particular strain of pneumonia which causes up to 30% of all pneumonias in the general population. *Mycoplasma pneumoniae* has been associated with respiratory diseases such as asthma and also with chronic conditions, such as arthritis and encephalitis. It colonises the bronchial passages of the lungs and is active throughout the year.

"Despite this", says Samantha, "it is among the least frequently diagnosed respiratory infections in the clinical setting, mainly because of the lack of standardised, rapid and specific diagnostic tests." Samantha aims to study the interaction of the organism with the cells of the lung and to analyse the effect of *M. pneumoniae* infection on the immune system.

John Curtin's research is supervised by Professor Emer Colleran and Dr. Anthony Moran is supervising Samantha Broaders's research.

Samantha and John are thrilled at the prospect of continuing their research in one of the world's premier research centres. "This is a tremendous honour for the Department and the University and is an acknowledgement of the high standards of research conducted at NUI Galway," said Professor Emer Colleran.

The American Society of Microbiology (ASM) was founded in 1899 and is the largest single biological sciences membership organisation in the world (46,000 members). The National Centre for Infectious Diseases (NCID) is the agency of the US Public Health Service and is committed to the prevention and control of endemic, new and re-emerging infectious diseases. The National Centre for Disease Control in Atlanta, Georgia (CDC) is one of NCID's research centres.

## Probability distribution of chemical elements in a large geochemical database

The probability distribution features of chemical element concentrations in sediments and soils of a large environmental geochemical database with 48,544 samples and 40 chemical elements are under investigation by NUI Galway researchers. The database is a subset of the National Uranium Evaluation (NURE) Program of the U.S.

Geological Survey. This is a collaborative project between NUI Galway staff, Dr. Chaosheng Zhang, Department of Geography and Prof. John Hinde, Department of Mathematics, and the U.S. Geological Survey, funded by Enterprise Ireland under the International Collaboration Programme.



# Marine and Freshwater modelling research at NUI Galway



There is a strong tradition at NUI Galway of undertaking research into various aspects of marine and freshwater modelling. The core strengths in modelling in the University stem from the development of systems modelling in hydrology by J.E. Nash as far back as the 1960s followed in the 1970s by the development of marine physical systems modelling in the Departments of Civil and Mechanical Engineering and Oceanography. This tradition continues to thrive with the current strong levels of research funding in the area of water modelling. At NUI Galway, water related research is now being carried out in two of the main research institutions of the University: the Martin Ryan Institute (MRI) and the Environmental Change Institute (ECI).

Modelling activities of marine-based processes have been consolidated in the recently formed Marine Modelling Centre at the MRI. Currently projects being undertaken in the Centre are being funded by national and international funding agencies such as the Higher Education Authority, European Commission and the Irish Environmental Protection Agency. Typical projects include:

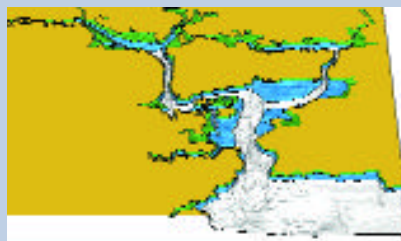
- Water circulation model of the North East Atlantic
- Biological modelling of the kinetics and transport of scallop and jellyplankton larvae
- Flushing studies of Irish coastal waters.

Dr. Michael Hartnett, Department of Civil Engineering, is the Research Director of this Centre and is also on the Board of Management of the MRI. Dr. Hartnett is the first non-US citizen to be appointed to the Doherty Visiting Associate Professorship of Ocean Engineering at Florida Institute of Technology (FIT) for the academic year 2003-2004. It is anticipated that this position will lead to future collaborations with FIT and other US institutions.

Modelling physical, biological and chemical processes is fundamental to a more detailed description of the marine environment and its management. "Modelling complements field based

marine research by providing predictions of complex systems such as thermal and density-induced hydrodynamic structures, phytoplankton production and distribution of biological activity," says Dr. Hartnett. He explains that modelling "enables predictions to be made of oil slick transport, environmental impacts of domestic and industrial discharges into seas, impacts of and on aquaculture activities and many more processes".

Relatively little is known of the detail of the hydrodynamic structures of Irish Atlantic territorial waters. The Marine Modelling Centre is currently concentrating on developing models of the Atlantic Ocean west of Ireland to provide this information. "Such models are nationally significant and will be invaluable when resources in this environment are being exploited in the future", says Dr. Hartnett.



Bathymetric Model of Cork Harbour

Modelling activities being carried out at the new research centre include:

- Deep ocean water circulation modelling
- Heavy metal modelling
- Estuarine and coastal circulation modelling
- Wave climate modelling
- Nutrient modelling
- Modelling air-sea interfaces
- Water quality modelling
- Biological modelling

Nationally, NUI Galway is an important centre for marine modelling and provides advice to government agencies and local groups such as search and rescue bodies. The Centre has established excellent links with many national agencies such as Met Éireann, the Marine Institute,

the Radiological Protection Institute, the Department of Environment and Local Government, Enterprise Ireland and the Irish Environmental Protection Agency. The Centre is engaged in research activities with several other Irish Universities and research institutes and is also gaining international recognition. Currently the Centre is involved in research projects with partners from over 10 EU countries and has strong links with universities in Scotland, Wales, Northern Ireland, USA, Portugal and Norway.

Most models now developed in the Centre are running on the supercomputer facilities at the University. Current research projects are using Geographic Information Systems (GIS) with web technology to allow remote users perform model simulations.

One of seven Research Clusters of the Environmental Change Institute is the Modelling Systems Cluster. This Cluster led by Dr. Hartnett, enhances environmental research in a number of ways including the development and provision of tools which are essential for the management of eco-systems whereby the effects of various management scenarios, especially in the context of EU Water Framework Directives, can be tested.

Photo: Dr. Michael Hartnett



Pictured: Prof. Kassakian (centre) on a recent visit to the Power Electronics Research Centre with Dr Chunbo Zhu (postdoctoral student) and Martin Coleman (PhD student).

## NUI Galway Engineers Developing Car of the Future

Research engineers at NUI Galway are lending their expertise to the development of an in-vehicle generator of electrical power for cars. This would reduce fuel consumption and emissions and improve safety.

The Power Electronics Research Centre at NUI Galway has joined an international consortium working on the transformation of cars into mini power plants in the next decade.

The consortium is led by Professor John Kassakian at the Massachusetts Institute of Technology in Boston and includes representatives of such car industry giants as Ford, General Motors, Audi and Toyota.

Professor Ger Hurley of PEI Technologies at the Power Electronics Research Centre at NUI Galway was approached by the consortium in recognition of the centre's excellent track record in power electronics research.

The Consortium on Advanced Automotive Electrical/Electronic Components and Systems is currently developing a new 42-volt electrical system which will lead to cars generating kilowatts of power.

The system will let auto designers adopt many electronic systems that improve fuel conservation and air quality. Such systems could include electronically controlled valves, electronic clutches, drive-by-wire steering and braking systems that do not require hydraulics.

"Up to about 30 years ago, the on-board electronics of an automobile with an internal combustion motor consisted essentially of the ignition system, lighting, indicators, signalling system, windscreen

wipers, and perhaps a car radio," says Prof Hurley. "Today's vehicle has more on-board computing power than the Apollo spacecraft of the late 1960s. Each new generation of vehicles contains even more sophisticated electrical and electronic components to create comfort and safety. In the future, with electrical suspension and air conditioning, and many other advances, more power will be needed. This is the reason why the main car manufacturers have agreed upon a new vehicle electrical power system of 42 volts," he says.

The centre was established in 1992 under the Programme of Advanced Technologies (PATs) and is part of PEI Technologies. The centre is also collaborating with the Czech Technical University of Prague on sensor technology for the new automotive systems and with the University of Limerick on battery management. More than €350,000 has been awarded for this research by Enterprise Ireland under the Advanced Technologies Research Programme.

Two indigenous companies, Connaught Electronics (CEL) Ltd. and CELTRAK Ltd., are sponsoring an on-going programme of research on the development of wireless technology for automotive applications. Currently, the research group is developing a Bluetooth Remote Vehicle Controller (BRVC) for remote access to, and control of vehicles. This work is carried out by Martin Glavin of the Department of Electronic Engineering.

"Drivers need not hold their breath – it will be a few years yet before the joystick will replace the steering wheel", remarked Prof Hurley.

## Combustion Chemistry joint research project

The Combustion Chemistry Group has been granted an International Collaboration award from Enterprise Ireland in 2003 for a working visit to the Engine Research Center (ERC) at the University of Wisconsin-Madison, USA, to undertake a joint research project with Prof. Rolf D. Reitz, Wisconsin, Distinguished Professor of the Department of Mechanical Engineering, Director of the ERC, and Editor-in-

Chief of the International Journal of Engine Research.

The award will enable a Combustion Group postgraduate, Judith Würmel, M.Sc., to avail of the excellent facilities and expertise of the ERC and will assist her in her work on combined computational fluid dynamic and detailed chemistry studies of the burning of fuels in a rapid compression machine.

# Harmful Algal Blooms research underway at the Martin Ryan Institute



Dr. Robin Raine of the Martin Ryan Institute, NUI Galway has recently been appointed to the Scientific Steering Committee of GEOHAB (Global Ecology and Oceanography of Harmful Algal Blooms). GEOHAB is the international programme on harmful blooms sponsored by the Intergovernmental Oceanographic Commission and the international Scientific Committee on Oceanic Research.

Harmful Algal Blooms are occurrences of certain species of micro-algae which cause either severe water quality problems or else introduce toxicity at farmed shellfish sites resulting in a product which cannot be sold on the home or international markets. The financial hardship caused to shellfish farmers is considerable; approximately 8 million euro has been lost to the Irish mussel farming sector alone over the past five years.

Dr. Raine has been researching the causes of harmful algal events since the early 1990s. His studies have clearly shown that occurrences of these blooms around Ireland are entirely natural phenomena and that many are caused by oceanic currents which transport harmful algae onto the coastline from offshore. Work nearing completion shows that it is now feasible to forecast harmful events around the economically important region of southwestern Ireland with approximately four days notice. His appointment to GEOHAB reflects international recognition of his efforts.

One of the functions of GEOHAB is to see how closely national programmes meet the group's objectives. The recently initiated Irish Biological Oceanography of Harmful Algal Blooms (BOHAB) project has been endorsed by GEOHAB. This project, led by Dr. Raine and with additional partners from the Irish Marine Institute and the Woods Hole Oceanographic Institution, US, will

conduct a detailed sampling programme in Bantry Bay and Killary Harbour over the next three years. Activities will include the use of moored oceanographic instrumentation, weekly sampling of micro-algae to identify potentially harmful species, and chemical analysis of shellfish flesh to ascertain the toxin content. BOHAB is now the lead project within the national Harmful Algal Blooms research effort.

Dr. Raine is completing a practical guide on how to sample and identify micro-algae, including potentially harmful species. The book will be published later this year and is partly sponsored by the Marine Institute.

Photo: Dr. Robin Raine

## Study to investigate link between adolescent depression and heart disease

The first study to investigate an association between adolescent depressive symptoms and cardiovascular risk, will be carried out by Professor Jack James and Dr Elizabeth Gregg, Department of Psychology, with the aid of a Millennium Research Grant. Mortality from cardiovascular disease accounts for 43% of all deaths in Ireland and adult depression has been identified as a risk factor for cardiovascular morbidity and mortality.

However, no such study of adolescents has been reported. "The early identification and treatment of individuals with depressive symptoms thus represents an important public health prevention strategy", explains Dr Gregg. "Furthermore, as depression is a risk factor for adolescent self-harm and suicide, intervention is critical in reducing this major cause of mortality in young people".

The specific aims of the project, entitled "Cardiovascular risk and adolescent depressive

symptoms," are to investigate associations between depressive symptoms and a range of cardiovascular measures. A new model for measuring blood pressure response to laboratory stress developed by Dr Gregg and others will be applied, with the aim of exploring cardiovascular pathogenesis in the context of negative mood.

# NUI Galway to implement a 'One-Stop-Shop' Research Support System

NUI Galway has been singularly successful in winning national and international research funding over the past 5-10 years. However, along with that success comes an increasing demand to report on how we spend that money and what impacts it has had at a local and national level. Because it is not available in a single place, research information is currently collected in a labour-intensive way that demands significant researcher and administrative time and effort and frequently results in an unnecessary duplication of effort by all concerned.

In an effort to address this issue, the Office of the Dean of Research will introduce a Research Support System (RSS) over the summer and autumn of 2003. The project is being lead by Dr. Maura Hiney of the Research Office, with support from the Industrial Liaison Office and MIS. The RSS will permit the sharing of appropriate information between researchers and administrators in an efficient manner. In addition, the RSS will be linked to a broader research database (SPIN/Global Genius) allowing the

promotion of researcher expertise at home and abroad and giving researchers access to up-to-the-minute information on funding opportunities through electronic targeted funding alerts and access to funding directories.

It is envisaged that most Irish universities North and South, will eventually introduce this system. The data will be individually and university owned, with multi-level access to permit confidential data to be protected by the researcher and the university. An added-value component to the RSS at NUI Galway will be a facility for CV generation in any format specified by the researcher, once they have entered their profiles on the system. The RSS will be linked to an all-Ireland Web Portal ([www.expertiseireland.com](http://www.expertiseireland.com)), which is due to be launched in July 2003. The Portal is sponsored by InterTrade Ireland and the IDA and is intended to link industry with academic researchers, as well as providing a single entry point to the rich research expertise residing within Irish Universities. Watch this space for more information as the year rolls on.

## Managing a Research Account How can we help?

Many staff members are managing Research Accounts and whether the financial amount is great or small, the format is the same. There have been great developments in this field over the last few years that have resulted in changes in some of the related procedures. The following is a brief outline of the areas that are still attracting a lot of queries.

- **Financial Policy and Procedure Manual**

This contains a number of topics including Contract Research, Travel and Subsistence, Scholarships and Fellowships. It is available on the web at [http://www.mis.nuigalway.ie/finance\\_office/financial\\_policy\\_and\\_procedural\\_manual.html](http://www.mis.nuigalway.ie/finance_office/financial_policy_and_procedural_manual.html). The Contract Research Policy is currently under review.

- **Agresso**

This is the financial accounting package introduced by NUI Galway in 2001. As it is a new Windows-based package, introductory training sessions are available and can be arranged by contacting Kathleen Keane ([c.nicathain@mis.nuigalway.ie](mailto:c.nicathain@mis.nuigalway.ie)). More advanced training sessions will also be available during the summer.

- **Access to Accounts:**

For a budget holder to gain access to their account, they should contact Orla Timon,

Research Accountant ([o.timon@mis.nuigalway.ie](mailto:o.timon@mis.nuigalway.ie)). A list of Agresso codes must be provided to Orla and the request will then be sent to MIS. The budget holder may also request access to his account for others working on the project.

- **Tax codes on Purchase Orders:**

There are two types of Research accounts: VATable and non-VATable. In the process of completing the initial contract set-up form, the Director of Industrial Liaison indicates the vatable status of the account.

- **P3, P4, U3, U4:**

These codes should be used on purchase orders for VATable accounts (i.e. where VAT is reclaimed from the Revenue Commissioners).

- **P1, P2, U1, U2:**

These codes should be used on purchase orders for non-VATable accounts (i.e. the net and VAT cost is charged to the account).

- **Financial Reports:**

It is important to note that all external financial reports must be approved by the Research Accounting Office, prior to submission to the Funding Authority.

For further information on the management of Research Accounts, please contact Orla Timon. Ext. 3588