



GMIT

GALWAY-MAYO INSTITUTE OF TECHNOLOGY
INSTITIÚID TEICNEOLAÍOCHTA NA GAILLIMHE-MAIGH EO

News

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& Development

Galway-Mayo Institute of Technology

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“Born in a land, I wake in a globe”.

Micheal O'Siadhail

The poet W.H. Auden was once asked how he wished to be remembered. He said he would like to be seen as a good regional cheese – prized locally and valued everywhere. I hope this magazine will give you a sense of how GMIT is trying its own version of cheese-making. You will get a flavour of how we are changing in GMIT as we attempt to shape a future for our students, our region and for the Institute.

We have deliberately focussed in one section of GMIT Today on a group of our graduates – all people “born in a land” who see the globe as their living and working environment. We have a peculiar sense of time in higher education. Institutes of Technology are still in the minds of many as the ‘start-ups’ of Irish higher education and yet we forget that the first students arrived in RTC Galway in September 1972. September 2009 saw the arrival of the largest ever group of first years to GMIT. Twenty eight groups of first years have joined us and our graduates are now to be found across the world leading change, developing new businesses, inspiring the next generation of scientists, and working to support the developing world. They provide inspiration for this generation of students and advise us on how to shape our future.

You will be introduced to some of GMIT's students and see how they too are setting high standards of achievement for those who will walk in the doors of GMIT over the next thirty years.

The regional and local ‘flavour’ of the Institute is evident in staff and student involvement in promoting innovation in business and community settings. The EU Project FutureSME is a particularly interesting example of how GMIT is working with companies in the West of Ireland in collaboration with a wide range of EU partners to develop the potential of the SME sector. Work of this nature will be key to the sustainability of the region and there is increasing recognition that local sustainability requires attention to a broader global context.

I had the privilege to be present at a very ‘local’ event earlier this year in Kilmaley in Co Clare as John Tunney and the community of Kilmaley came together to share the experience of the first Percent for Art Scheme in Ireland awarded to a traditional singer. John worked with the people who use the local voluntary Day Care Centre to compose new songs in a traditional style inspired by the people and place of Kilmaley. John also gave voice to an older generation who individually and collectively sang their songs. It was a night of pure pride and I mean pure. The men and women of Kilmaley who worked with John were not, on that night, ‘old people’. They were not the nameless material of a research project focussed on ageing. They were people who, in their own right, were part of an innovation. There were ‘prized locally’ and their achievement and what it teaches us about knowledge, learning and innovation could and should be utilised everywhere.

Marion Coy
Director

Cuireadh an cheist ar an bhfile W.H. Auden uair amháin cén chuimhne ab fhearr leis a bheith air. Dúirt sé go mba mhaith leis go mbreathnófaí air mar cháis mhaith réigiúnach – an-mheas air go háitiúil agus deacháil air go forleathan. Is é mo dhúil go dtabharfaidh an iris seo tuiscint duit ar conas tá GMIT ag iarraidh a leagan féin den cháis a dhéanamh. Gheobhaidh tú tuairim maidir le conas tá muide in GMIT ag athrú agus iarraidh á tabhairt againn dán a chruthú dár neacha léinn, dár réigiún agus dár nInstitiúid.

Tá dírithe againn d’aon turas i roinn amháin de GMIT Today ar ghrúpa dár gcéimithe – daoine iad uile “born in a land” (a rugadh i dtír) ach a bhreathnaíonn ar an gcruinne mar imshaol maireachtála agus oibre dóibh féin. Bíonn tuiscint aisteach ar chúrsaí ama againn san ardoideachas. I dtuairim roinnt mhaith daoine níl sna hInstitiúidí Teicneolaíochta ach “tosaitheoirí” san ardoideachas in Éirinn. Ach déanaimid dearmad gur tháinig na chéad neacha léinn go dtí RTC na Gaillimhe in Meán Fómhair 1972. I mí Mheán Fómhair 2009 tháinig an grúpa céad bhliana is mó riamh go dtí GMIT. Tháinig ocht ngrúpa is fiche neach léinn céad bhliana chugainn. Agus i láthair na huairé tá ár gcéimithe le fáil ar fud an domhain, iad ag treorú athruithe, ag forbairt gnólachtaí nua, ag spreagadh na chéad ghlúine eile eolaithe agus ag tacú leis an domhan atá i mbéal forbartha. Cuireann siad spreagadh ar fáil don ghlúin neach léinn seo agus cuireann comhairle orainn maidir le conas cruth a chur ar ár ndán.

Cuirfidh tú aithne ar roinnt neach léinn de chuid GMIT agus feicfidh tú conas tá siadsan freisin ag leagan síos caighdeán éachta dóibh siúd a thiocfaidh isteach thar thairseacha GMIT le linn na dtíocha bliain seo romhainn.

Tá an ‘dearcadh’ réigiúnach agus áitiúil le feiceáil go soiléir ins an mbaint a bhíonn ag baill foirne agus ag neacha léinn le cur chun cinn na nuálaíochta i suíomhanna gnó agus pobail. Is sampla spéisiúil ar leith é an tionscadal AE FutureSME den bhealach ina n-oibríonn GMIT in éineacht le cuideachtaí in Iarthar na hÉireann i gcomhar le raon leathan comhpháirtithe AE chun acmhainneacht na hearnála SME a fhorbairt. Beidh obair den chineál sin rithábachtach d’inhuaire an réigiúin agus tuigtear níos fearr anois nach mór aird a thabhairt ar chomhthéacs domhanda níos leithne ar mhaithe le hinbhuaire áitiúil.

Bhí de phribhléid agam a bheith i láthair ag imeacht ‘an-áitiúil’ níos luaithe i mbliana i gCill Mháille i gCo. an Chláir nuair a tháinig John Tunney agus pobal Chill Mháille le chéile chun páirt a ghlacadh sa chéad Percent for Art Scheme in Éirinn a bronnadh ar amhránaí traidisiúnta. Bhí John ag obair i gcomhar leis na daoine a bhaineann leas as an Ionad deonach áitiúil Cúraim Lae chun amhráin nua a chumadh sa stíl thraidisiúnta a bhí á spreagadh ag muintir Chill Mháille agus ag an áit. Chuir John guth ar fáil freisin don ghlúin níos sine, daoine a chan a gcuid amhrán ina n-aonar agus in éineacht. Ba oíche í de ghlánbhród agus is glan is mian liom a rá. Níor ‘sheandaoine’ iad an oíche sin na fir agus na mná de chuid Chill Mháille a bhí ag obair i gcomhar le John. Níor ábhar tionscadal taighde gan ainm a bhí dírithe ar an aosú iad. Daoine a bhí iontu a bhí mar chuid ina gceart féin den nuálaíocht. Bhí ‘meas go háitiúil orthu’ agus d’fhéadfaí agus ba chóir a n-éacht siúd agus a mhúineann sé dúinn i dtaca le cúrsaí eolais, léinn agus na nuálaíochta a úsáid i ngach uile áit.

Marion Mhic Aodha
Stiúrthóir

TK Whitaker visits GMIT



Eminent Irish Civil Servant Dr TK Whitaker paid a short visit to GMIT in September as a guest of the Irish Academy of Management's 12th annual conference hosted by the Institute.

Dr Whitaker is a former Secretary at the Department of Finance and author of the report 'Economic Development', which led to the 1958 First Programme for

Economic Expansion that transformed the Irish economy. Dr Whitaker was presented with a Lifetime Achievement in Management Award from IAM. He attended a reception with the GMIT President and staff where he was presented with a hand-carved ornate gift box made by GMIT Letterfrack students.

INCREASE IN ENROLMENTS ON LIFELONG LEARNING COURSES

GMIT's Lifelong Learning Centre enrolled over 2,900 students during 2008/9, up 20% from the previous year. The centre extended its range of accredited and general interest programmes this year, introducing seven new courses in February (09), all with full enrolment, and 11 new accredited courses in Science and Engineering, in September. For further details on all evening courses see: www.gmit.ie/lifelong-learning

Full intake for Energy Engineering Programme

The Department of Mechanical & Industrial Engineering and Admissions Office have been submerged with queries since the launch in April of a new Energy Engineering Degree, commencing this year.

"The degree is a natural addition to the department's portfolio considering the success of both the Energy stream in the Honours Degree in Mechanical Engineering and the Building Energy

Rating course that, to date, trained more than 400 assessors." says Carine Gachon, Head of Dept. "€1.2 million of research funding has already been invested in the field and a new undergraduate laboratory has opened this September. Year two of the degree also started this September to allow people from cognate disciplines, faced with unemployment, to come back to education."

New suite of evening courses in Sustainable Energy



A new suite of evening courses in Sustainable Energy commenced at the Dublin Road campus in September. The courses are on the installation of the following systems: Biomass/Wood Pellet Burners, Heat Pumps, Solar Heating and Wind Turbines as well as courses on Building Energy Rating, Air Pressurisation, Infrared Thermography and Energy Management Systems. The individual courses are modules from the HETAC-Accredited Degree in Energy Engineering which GMIT offers to school leavers.

The courses range in duration from four to 13 weeks (39 to 65 hours) with classes taking place on Thursdays and Fridays in the new hi-tech Energy Laboratory which recently opened in the School of Engineering.

Energy Programmes Course Co-ordinator Peter Butler says: "This new facility is probably the most technologically advanced energy lab in the West of Ireland. The skills acquired from these courses will enable service providers to assist house owners and businesses in reducing their energy usage, which is a key part of making Ireland sustainable. The course delivery mode is designed to suit people who are not available for full-time study."

For further information contact the Lifelong Learning Centre, GMIT, Dublin Road, Galway, Telephone 091-742145, email lifelonglearning@gmit.ie or Peter Butler, Course Co-ordinator 091-742734, email peterbutler@gmit.ie

Mary Robinson opens McDonagh Library in Castlebar

Former President of Ireland Mrs Mary Robinson formally opened the Rev Prof Enda McDonagh library collection in GMIT Castlebar earlier this year, and attended a GMIT national conference on "Ethics and the Irish Economy" to mark the occasion.

Mrs Robinson is currently Executive Director of Realising Rights: The Ethical Globalisation Initiative (EGI). Professor McDonagh, a moral theologian of international standing with a distinguished publication record, donated his personal library of some 20,000 volumes and personal papers to the Castlebar Campus of GMIT.

His library reflects his broad interests in theology, religion, literature, poetry, history, sociology, politics, economics, world affairs and third-world issues.



Pictured l-r: Marion Coy, GMIT President, Rev Prof Enda McDonagh, Mrs Mary Robinson, and Bernard O'Hara, GMIT Registrar.

New Event Management and PR Degree

The Hotel School at GMIT has launched a new degree in Event Management and Public Relations in response to demand from both the market place and learners. GMIT is one of the first colleges outside of Dublin to offer this programme.

"Employment opportunities on a global scale are available in this field and formal event management qualifications are highly regarded by associates and directors managing event organisations." says Cait Noone, Head of the Hotel School.

"The Public Relations strand further enhances the degree offering and offers an additional unique selling point for learners as few institutes currently include this remit with event management. Public relations skills are highly valued and offer learners additional skills when seeking employment upon completion of the programme."

"CAO demand for this new programme was exceedingly high with over 1,000 potential learners applying for the programme. Entry points were 320 and the School increased the intake for September to help meet demand for the programme.

"Already event management companies and international partners are working with the GMIT Links office to provide real work placement opportunities for students during their studies."

SECOND CHANCE MATHS

For the second year in a row, GMIT ran a three-week mathematics course for school leavers who were not successful in Leaving Certificate maths. This year the course was offered in two campuses - Castlebar and Galway. In all, some seventy students registered for the programme including a large number of mature students, the majority of whom went on to study on GMIT programmes. The programme, titled Enabling Maths, was designed by GMIT maths lecturers Fanchea Caden and Donncha Ó hEallaithe.

FIRST YEAR INTAKE HIGHEST EVER

Some 1900 first year students commenced programmes in all GMIT campuses in September, the highest intake ever in the history of the college. The overall number of applications to GMIT increased on 2008, despite a big reduction in construction-related programmes. There was a strong demand for three new programmes - Energy Engineering, Event Management and Applied Social Studies.

CAO points for GMIT programmes were up this year across all disciplines - Science, Computing, Nursing, Agriculture, Electronic Engineering, Mechanical Engineering and programmes at the Letterfrack campus, while points for construction-related programmes dropped in line with the national trend.

Major interest in free course in Enterprise Development



Pictured left are some of the staff involved in delivering the programme.

GMIT launched several initiatives this year in a bid to help stimulate economic recovery, in line with its remit to support regional development (GMIT Strategic Plan 2004 – 2009).

One initiative, the Higher Certificate in

Enterprise Development, attracted major interest with over 145 people signing up for the course. The 15-month part-time level 6 course is delivered Thursdays and Fridays “pro bono” and at no extra cost to the Institute.

Deirdre Lusby, Head of Dept, School of Business, says: “Feedback is very positive. The enthusiasm for and breadth of new business ideas is excellent. Attendance is extremely high at approximately 95%. The lecturers are enjoying the experience immensely and I have no doubt in the long run the region and GMIT will benefit greatly from the participants and the contribution they will make to the economy.

“The people lecturing and supporting the programme pro bono are to be commended - there is no financial reward for their efforts but the level of satisfaction and enjoyment is evident each week. We are delighted we took the initiative - certainly we had some teething problems but it has all been worth it.”

Ros na Rún internship for Film & TV graduates

A new scholarship scheme for graduates of the GMIT Bachelor of Arts in Film & Television has been set up by Máire Ní Thuathail, Managing Director of film production company Eo Teilifis and Executive Producer of Ros na Rún.

The award is in the form of a year’s internship in the Art Department of TG4’s flagship programme, the Irish-language soap Ros na Rún. Candidates eligible for the scholarship had to reach the highest standard in their Production Design modules and were also required to have proficiency in the Irish language. The eligible candidates were then interviewed by representatives from Ros na Rún.

The successful candidate and first recipient of the award is Declan Loftus, who completed his BA in June 2009. Declan has already started work in Ros na

Rún which is in production since August.

The School of Humanities, and in particular the Film & Television programme, has many links with industry both locally and nationally.

The BA in Film & Television is run in association with the Galway Film Centre, whose offices are on the Cluain Mhuire campus. Students and graduates are annually placed with TG4, Telegael, Eo Teilifis, Ros na Rún and other production companies.

“This new scholarship confirms GMIT’s status as a provider of first-class media education within the region and the contribution to date of GMIT graduates to the very competitive media production industry” says Mary MacCague, Head of the School of Humanities.

Business School launches new master programme

The School of Business has introduced a new postgraduate offering - the Master of Business in Strategy and Innovation Management. The one-year full-time programme has taught modules in business strategy, international business, innovation management and project management, and will equip future graduates with the technical and theoretical skills required for employment or enterprise start-up in the knowledge economy. All students must undertake a one-day, ten-week placement in small indigenous enterprises in the GMIT Innovation Centre or Ballybane Enterprise Centre.

Dlíodóirí Cláraithe i Scoil na hÉigse

Gné suntasach agus tábhachtach d’obair na hInstitiúide an ceangal a dhéantar le heagraíochtaí seachtracha i dtaobh oideachais agus oiliúna, agus is sa Ghaeltacht a tharla méid áirithe den ghníomhaíocht seo le himeacht na mblianta.

Chuaigh an Institiúid i gcomhar le Europus Teo, cuideachta comhairleacha teanga bunaithe ar an gCeathrú Rua i gConamara, san fhiontar agus é mar sprioc acu cúrsaí a leagan amach agus a réachtáil chun deis a thabhairt do daoine leas a bhaint as na réimsí nua fostaíochta a bhí ar fáil de bharr achtú Acht na dTeangacha Oifigiúla agus an stádais a bhí bainte amach ag an nGaeilge san Aontas Eorpach. Ón mbliain 2001 tá ocht chohórt foghlaimeoirí tar éis an tArd-Diplóma i nGaeilge Fheidhmeach agus Aistriúchán a bhaint amach agus tá an ceathrú grúpa Máistreachta faoi oiliúint i láthair na huaire.

I mblianta bheartaigh Europus Teo agus Scoil na hÉigse forleathnú a dhéanamh ar na cúrsaí agus gradaim nua a mholadh, bunaithe ar mhóidúl de chuid an Ard-Diplóma. Chomh maith le cruinneas na Gaeilge agus ardscoilleana aistriúcháin a bhaint amach, bhí sé de mhian againn go bhfoghlaimeodh na mic léinn na scileanna sin i gcomhthéacs praiticiúil ina n-úsáidí iad, i.e. aistriúchán praiticiúil féin, an teanga sa dlí agus i gcáipéisí stáit. Dámhachtain Shainchuspóireach i bhfoirm teastais ag Leibhéal 8 atá á réachtáil againn agus an cúrsa seo chomh maith maoinithe ag Údarás na Gaeltachta. Soláthróidh an cúrsa daoine a bheidh oile lena bhfostú le haistriú a sholáthar ar cháipéisí dlí, go



háirithe Ionstraimí Reachtúla, cáipéisí stáit agus cáipéisí de chuid an Aontais Eorpaigh.

Tá an-éileamh ar an gcúrsa seo, go háirithe ó chéimithe dlí agus dlíodóirí. Chríochnaigh cúrsa amháin ag deireadh an tSamhraidh and tá an dara cúrsa faoi lán seol anois. Thapaigh an Institiúid an deis dul i gcomhar leis an Údarás agus Europus maidir le heagrú agus le riaradh an chúrsa seo, a chuirfidh le líon na ndaoine atá cáilithe le tabhairt faoi fhostaíocht a éilíonn an caighdeán is airde Gaeilge maraon le sainscileanna ar leith.



Computing students answer nuns’ prayers

First year Computing students came to the assistance of the Galway city-based nuns, the Poor Clares, earlier this year when they offered to revamp their website www.poorclares.ie

The religious order had been thinking about updating the Galway site for some time but never got round to it. “It was an amazing stroke of Divine Providence that one day three students just knocked on our door.” says Abbess Sr. Colette.

“They are studying Business Computing and Digital Media at GMIT and arrived with their ideas for a redesigned website for us as one of their college projects. We were stunned to say the least and of course we are delighted!”

Originally from Poland, the three students Marek Mazur, Agnieszka Wartalska and Justyna Malek added a Polish version to the site.

The Poor Clares recently launched a fundraising campaign to repair and refurbish the hundred-year-old monastery. Information is now available on the site www.poorclares.ie

The campaign coincides with the 800th anniversary of the foundation of the Franciscan Order.

Pictured, l-r: The GMIT Digital Media students with Sr. Myriam, Sr. Faustina, and Mother Abbess Sr. Colette.

Engineers produce replica Marconi transmitter



Pictured are the BBC team in Clifden with members of the Irish Navy, and GMIT engineers Tom Frawley and Frank McCurry (first and third left) and John Owen Jones, (6th left, back).

Staff from GMIT's Engineering School are to feature in an upcoming BBC2 Coast programme which will re-enact the first commercial transatlantic message transmission from Clifden in 1907 by the Italian Nobel prize winner Marconi.



GMIT's Tom Frawley was invited by the programme producers to produce a scaled replica of the Marconi Spark Transmitter used in the Clifden Station. He, along with GMIT colleagues and engineers Frank McCurry and John Owen Jones, accepted the challenge and the BBC shipped over vintage valuable equipment which they used as components in the replica transmitter. The first commercial transatlantic wireless telegraphy message effectively launched the concept of universal telecommunication accessibility.

The three GMIT engineers were filmed in Clifden earlier this year at the original Marconi site reconstructing the main capacitor. This consisted of a large very high voltage condenser comprising multiple steel sheets and weighing over 250kg. Assisted by a team from the Irish Naval Services, they operated the scaled transmitter (excluding antennae to prevent actual radiation) to "send" a copy of the first message that had been sent from Clifden in 1907. The demonstration produced very realistic high voltage sparks which were enthusiastically welcomed by the large group of onlookers.

The model was produced at no cost to the Institute. All three lecturers volunteered their services free of charge and were generously aided by staff from the Mechanical Engineering Dept in providing a laboratory and facilities. The BBC Coast programme, directed and produced by Chris Ruston and presented by Dick Strawbridge, is to be broadcast during 2010.

Pictured left Tom Frawley and Frank McCurry, GMIT School of Engineering.

New horizons for textile designers

Cluain Mhuire's textile graduates of 2009 received a welcome reception at this year's prestigious New Designers show in London, getting praise and considerable attention for their innovations and individuality.

Some notable successes are Orla O'Brien, who has been asked to exhibit at the London Design Festival, and Emma Doyle who was invited by the Embroiderers Guild to exhibit at Knit and Stitch shows in London and Dublin.

Sinead Mitchell won an associate award at New Designers and has also been approached by ICON magazine to feature in an issue about upcoming designers. Flora Feist has secured a weave internship on Clare Island for next year. Barbara Dunne was featured on the WSGN trend forecasting site for her innovative textile pieces, and Vivienne Martin was chosen to be published in the prestigious Craft & Design magazine. She was also selected for the RDS crafts competition and the IDI Awards.



Humanities lecturer awarded traditional music residency in Clare

John Tunney, Lecturer in the School of Humanities, and a traditional musician, singer, and songwriter of note, has been awarded a traditional music residency in Kilmaley, Co. Clare.



Pictured in the Kilmaley Daycare centre is John Tunney, lecturer in Heritage Studies, singing songs he co-wrote with the people of Kilmaley

Kilmaley Voluntary Housing Association developed the residency in close partnership with Clare County Council's Public Art Programme and Arts Office, as part of the Per Cent for Art Scheme.

The scheme focuses on commissioning new contemporary art projects in new buildings and gives the Irish public an opportunity to experience a vast range of contemporary art in their everyday lives.

John is one of the first traditional singers or musicians to have been awarded a commission under such a scheme. The project involved the composition of new work within the traditional genre.

Over a period of a year, John worked directly with the 90 clients in attendance at the Kilmaley Daycare Centre to develop three new songs written in and about the people of Kilmaley. The songs were in the traditional styles of Goltraí, Geantraí and Suantraí – a sad song or lament, a lively song and a soothing song, in this case a lullaby.

The project was completed and launched in May 2009 and received a great response from the staff and clients of the Daycare Centre, as well as the local people of Kilmaley and beyond. It is a prototype for other projects in the traditional music vein.

John Tunney is a former Head of School of Humanities. He lectures in Heritage Studies, History, Museology and in The Irish Musical Traditions. He is currently working on a biography of Paddy Tunney, a Man of Song.

Funding for the project was sourced through the Department of Environment, Heritage and Local Government.

Graduate wins top award at National Crafts Competition

A graduate of the B. Sc. (Hons) in Furniture Technology scooped four awards including the overall award of excellence at the RDS National Crafts Competition 2009.

Diarmuid Murphy from Wexford won the RDS New Entrants Prize, RDS Award of Excellence, The Duff Tisdall Furniture Design Award, and RDS Furniture Award (1st). He beat designers in all crafts including Textiles, Ceramics, Glass, Metals, Woodturning/ furniture and others.

Diarmuid started his studies in Letterfrack in 2004 on the Higher Certificate in Furniture Design and Manufacture programme. He went on to complete the honours degree in Furniture Technology, graduating in 2008.



Photo courtesy of RDS

Diarmuid Murphy pictured with his award winning Study Desk.

National awards for furniture designers



Letterfrack student Ian McDermott from Killina, Tullamore, scooped the top prize in Cabinetmaking at the Department of Education National Skills Final 2009.

The fourth year student competed against candidates from all over the country including five other GMIT students and a GMIT graduate, who were each awarded merits.

In a separate competition, student Jens Kosak (below), a second year student on the B.Sc. in Furniture Design and Manufacture, won the top design award in the final round of the Student Design Awards, in NCAD this year.

Pictured are award recipients Ian McDermott (top) and Jens Kosak (below).



Photo courtesy of House & Home

GMIT and AIT launch PAL initiative supporting first years



Pictured above: Students supporting students. Carina Ginty, (centre left) GMIT SIF2 Manager, and Nuala Harding, PASS Co-ordinator, AIT, with first year students and student leaders at the launch in GMIT of the new SIF-funded learning programme PAL (Peer Assisted Learning), which supports the first year experience.

GMIT and Athlone Institute of Technology (AIT) have jointly launched an important new educational programme, Peer Assisted Learning (PAL), which supports first year students in their transition from second to third-level education.

The PAL programme helps first year students develop their independent learning skills so that they can adjust more readily to the requirements of their third-level programme of study, and in the long term helps decrease drop out rates and increase grades.

“It is about getting to know classmates better, learning actively, discussing and practising, and working out problems together, planning how to go about studying and settling into college life.” explains Carina Ginty, GMIT SIF II Manager.

GMIT and AIT are the first institutes in Ireland to develop this pilot programme, which is expected to be implemented in all third-level colleges over the next academic year:

“GMIT was awarded Strategic Innovation Funding (SIF II) from the HEA to lead the project and we have collaborated with AIT for the past year on its development, rollout and evaluation,” explains Ms Ginty.

“In GMIT it is known as PAL (Peer Assisted Learning) and in AIT as PASS (Peer Assisted Student Support). It has been implemented in both colleges in the same format and both PAL/PASS sessions are on the first-year timetable for one hour per week, involving students working with other students.” says Ms Ginty.

There are currently 18 programmes across seven schools and disciplines running weekly one hour PAL/PASS sessions, supporting over 700 first year students. These figures are expected to double by next September 2010.

The weekly sessions are facilitated by 45 PAL/PASS trained student leaders, all of whom are second, third and fourth year students who have completed a leadership training programme.

“The leaders have a great idea of what first-years are experiencing and can offer advice and suggestions, help with how to study in college, how to tackle assessments and exams, guide discussions and help first-year students be successful” explains Nuala Harding, Learning and Teaching Co-ordinator, AIT.

“For the leaders themselves it is an opportunity to develop professional skills such as team working, organising, time management, facilitation and interpersonal communication skills. Ultimately it enhances their CVs and competitive position for future job opportunities.”

“In the long term PAL and PASS will help decrease drop out rates, increase grades and help students be successful during their time in third level education and in their future careers” adds Ms Harding.

In addition to supporting and enhancing the first year experience, GMIT has also developed a new module called ‘Learning to Learn (L2L)’ which is now delivered on every first year programme across the institute. It aims to empower students with the skills for dealing with the transition to third level education. It also identifies the first year students’ learning style and incorporates learning skills development, time management and personal development plans.

For further information on the GMIT PAL programme, visit www.gmit.ie/pal or contact Carina Ginty, GMIT SIF II Manager, Student Led Learning & Curriculum Reform Programmes, carina.ginty@gmit.ie, 091-742423.

Hi-tech laboratory offers training in new energy technologies



A new state of the art energy laboratory has opened in GMIT's Department of Mechanical and Industrial Engineering. This unique energy laboratory, certified by Sustainable Energy Ireland (SEI), is one of the most technically advanced energy laboratories in the country. Uniquely, the laboratory is fully accessible and operational on the internet and is designed to support energy training on and off site.

Currently installed in the laboratory are fully functional, renewable energy technologies such as solar thermal and solar PV panels, air source and geothermal heatpumps, biomass boilers and stoves, and a range of more traditional, high efficiency energy technologies such as gas boilers, etc. The laboratory also has access to a state of the art solar energy characterisation facility and a range of wind turbines currently being installed in the college as a result of research activity in the mechanical and industrial engineering department. All of these systems are linked to state of the art energy storage (e.g. multi energy tanks) and dissipation technologies (radiators and under floor heating) uniquely installed in a model building.

"These energy systems are monitored with hundreds of strategically embedded sensors and are fully integrated with a state of the art instrumentation and control system, allowing the students to monitor performance as well as to control, analyse and characterise the behaviour of any combination of these technologies operating in real life conditions", explains Engineering lecturer Dr Thomas Roche who, together with Engineering Technician Ray Clarke designed and managed the implementation of the new energy lab.

"The system can be controlled under various energy demand situations and data can be monitored and analysed using a specially designed web interface. This allows the students to fully interact and analyse the system on the internet. The energy lab also has a web cam installed that allows the students to view the technology remotely."

In addition Dr. Roche has been working with the facilities management of the college to enable the energy performance of a number of key areas to be monitored and analysed. "This enabled the college itself to become a real live working laboratory for undergraduate and postgraduate programmes. For example, the energy consumption profile and environmental conditions of a computing facility have been monitored over the last year and it is planned to do the same for the college canteen this academic year," says Dr Roche.

Also installed in the laboratory are a range of energy instruments for buildings including thermal imaging systems, blower door technologies and calorimeters for fuel analysis. The energy laboratory also has a wind tunnel installed which allows the simulation and analysis of air flows over objects. This allows the design and analysis of wind turbine blades and the natural cooling of electrical components.

"This unique laboratory meets the demand for sustainable energy training set out in the Government's White Paper 'Delivering a Sustainable Energy Future for Ireland'. It is designed to support courses in the department in the undergraduate B.Eng in Mechanical Engineering, and the new highly successful B.Eng. in Energy Engineering," explains Dr Roche.

"In addition the laboratory will be used extensively by students on the new Masters Degree in Environmental Systems just launched in the Mechanical and Industrial Engineering Department this year, and by part-time students on a range of Lifelong Learning evening courses and short CPD energy courses which have been designed and are currently being offered in the department. The energy lab will also be used to support research and development activities in the college."

Marine scientist explores Antarctica

GMIT Postgraduate research scientist Stephen Comerford had the trip of a lifetime when he travelled to Antarctica with Irish explorer Pat Falvey on the Beyond Endurance Expedition. Here, he shares some of his experiences.

The trip was part of the TYACT project to educate Irish schoolchildren about the fragility of ecosystems in the face of global warming and other pressures such as pollution and invasive species.

Eight secondary school students from Cavan, Cork, Dublin, Kerry and Limerick were chosen to take part in this unique educational project. Myself, Joanne (O'Brien, GMIT) and postgrad researcher Carol Meagher from LIT designed a series of scientific projects and surveys to allow the students learn about scientific techniques and methods. These were then put into practice in the challenging and fascinating environment of the Southern Ocean.

The expedition wasn't only a scientific one; Pat Falvey along with sixteen other adventurers traversed South Georgia in a re-enactment of Shackleton, Crean and Worsley's epic life-saving journey of 1916. The modern traverse was equally successful, with all team members arriving safe and well on the far side of the island, having spent three days battling jagged mountains, crevassed glaciers and very unpleasant conditions.

While the traverse team trudged off over the mountains of South Georgia, the GMIT science team and the students were busy with surveys of fur seals and elephant seals on the coastal beaches. Recent estimates by the British Antarctic Survey put the fur seal population on the island at seven million animals; an incredible recovery following decades of sealing that decimated their number.

Huge colonies of king penguins were also observed on the trip, as were large numbers of gentoo, adelic, chinstrap and macaroni penguins. Further south on the Antarctic Peninsula itself weddell seals were spotted and a rare glimpse was caught of a leopard seal killing and eating a gentoo penguin.

When not ashore working with animals on the shores of South Georgia and the Antarctic Peninsula the scientists and students were kept busy learning survey techniques for birds and cetaceans.



Stephen Comerford, GMIT Postgraduate Marine Scientist, on the Beyond Endurance expedition to Antarctica.

Several species of albatross and petrel followed the ship every day, along with sheathbills, prions and Antarctic terns. The highlight came when large numbers of fin whales were spotted while steaming towards Elephant Island. Fin whales are the second largest animals on earth, second only to blue whales, and were hunted almost to extinction in the Southern Ocean during the last century.

All of the work done on the expedition was worked up into scientific reports and the students also presented their findings to the ship's company. The students benefited greatly from working directly with experienced researchers and by learning at first hand practical scientific methods along with the theory and rationale behind them. They also gained a greater understanding of the ecosystem of the Southern Ocean and the Antarctic and an awareness of how vulnerable it is to the activities of man.

From Letterfrack to Zambia



Three graduates of GMIT Letterfrack spent several months in Zambia setting up a woodwork training facility for young people in a remote village. The project began in early 2009 when Dr Paddy Tobin, programme coordinator at GMIT Letterfrack, joined forces with Michael Collins, Tourlestrane Co. Sligo, and Sr. Mary Falon, an Irish Sister of Charity based in Maamba.

Pictured visiting the Letterfrack campus, l-r: Michael Collins, Sligo, Dermot O'Donovan, Acting Head of GMIT Letterfrack, Ann Foley, GMIT graduate, Sr Mary Falon, Sligo and Zambia, and Dr Paddy Tobin, GMIT.

Maamba students attending workshops and classes delivered by the GMIT Letterfrack graduates.

A group of people from Tourlestrane had built a woodworking training facility at Maamba. The facility was the latest addition to the Maamba Youth Projects collection of training activities. Sr Mary had already established training centres for dressmaking, typing and computer skills.

During March and April, GMIT students Fiachra McInerney from Limerick, and Dan Wright from Co. Sligo worked with Paddy Tobin on developing a training programme and organising equipment and materials for the centre. The two had just completed their B Sc in Furniture Design and Manufacture at the end of May. Prior to their departure, they received many generous donations of money, tools, and equipment. The project also received substantial support from GMIT.

"The volunteers were given a huge welcome when they arrived in Maamba, and have been overwhelmed by the friendliness and kindness of the people there. The lads started work by cleaning and painting the new building in early June and beginning the construction of benches and shelves and other storage for the centre," says Paddy Tobin.

KubuCrafts, one of Zambia's leading furniture manufacturers, provided some of the materials for the construction of benches and for use in class demonstrations and student projects. Other

materials were sourced locally and paid for with funds raised in Ireland.

"The lads were joined by another GMIT Letterfrack graduate, Ann Foley from Lisselton Co. Kerry, who has just completed her B Sc (Hons) in Furniture Technology. The trio set up the machines and equipment that had been donated, many from Trade Aid, a small charity organisation in the UK, and organised the tools for a class of eighteen students. They began classes in July and were immediately impressed with the interest and enthusiasm of the students. They instituted a schedule that went from 8am through to 5pm with a two-hour siesta during the hottest part of the day, and many students were so keen to learn that they could not get them to leave the workshop until well after 6 or 7pm. The Maamba students have improved dramatically during the last ten weeks and laid the foundation for future careers in woodworking and furniture making," explains Dr Tobin.

"While Fiachra, Dan and Ann encountered many challenges during the last three to four months, the project has been a runaway success to date, and they have made many friends for life in Maamba. In fact the GMIT graduates integrated so well with the community that Fiachra and Dan have decided to stay

on - they were supposed to return in September - to continue with further training for the students in Maamba. Ann has returned, reluctantly, to GMIT and is currently undertaking the H Dip in Design and Technology Education at Letterfrack. She plans to go back to Maamba at the first opportunity and will be involved in the project into the future."

Sr. Mary Falon returned to Ireland in early September and visited the GMIT Letterfrack campus. "Her account of the beneficial effects of the project in Maamba, and her praise for the graduates and their actions is very moving" recalls Paddy Tobin.

"In fact, just being in Sr Mary's presence and listening to her speak about Maamba and her work there is both inspiring and humbling. At a gathering in Letterfrack, Sr. Mary, Michael Collins and Ann Foley spoke about the Maamba project to a group of Letterfrack students and staff. It was clear from the discussion that the speed at which the woodworking project came together and its successful progress from building foundations to the conclusion of the pilot training programme has amazed everyone."

At the Letterfrack meeting, Paddy Tobin and colleague Dermot O'Donovan also spoke about the campus's volunteering plans for the future, which include

- setting up a formal volunteer structure to manage the project;
- further research work on developing a GMIT foundation certificate (a special purpose award) to be delivered at Maamba;
- developing local trainers to ensure sustainability;
- opportunities for GMIT staff, graduates, and students on work placement to assist with training and with enterprise development;
- working with the Tourlestrane group to extend the facility for accommodation and enterprise units;
- developing opportunities for Maamba students to study at GMIT;
- and, of course, fund-raising and support initiatives.

The future of the project is very exciting, and staff and students at GMIT are looking forward to further challenging, but very rewarding, experiences.

The “Born Global” Irish

by Dr Deirdre Garvey, GMIT Lifelong Learning Centre, Castlebar



In a recent Sunday Business Post article, economist David McWilliams described how in 2001 Argentina suffered a dreadful depression. During this time, unemployment skyrocketed and with no jobs around, young Argentinians were forced to set up their own small businesses to survive. These small businesses sprang up all over the place and because the local economy was in tatters, to succeed the companies had to export. McWilliams highlighted that “precisely the same will be the case in Ireland”.

Small businesses in Ireland are big business. According to the Small Business Forum, 51% of private enterprises in Ireland are small, i.e. employing fewer than 50 people. The importance of exports and exporting firms is much cited recently in relation to Ireland’s economic recovery. For many, a picture of exporting firms is that of medium or large firms, established in the domestic market, requiring significant investment to expand into international markets. So how can newly established and small or even micro businesses become export oriented?

Perhaps the first step in this transition is to stop thinking of firms as “export oriented”, a habit which comes from research in the 1980s. The assumption at that stage was that firms first establish a domestic market and then as they gain experience in international markets, their commitment to international markets increases. What if there is little or no domestic market for your product but there is potentially an international demand?



The “Born Global” Phenomenon

In the 1990s, research originating in Australia (Rennie, 1993) and New Zealand (Coviello & Munroe, 1997) described a new phenomenon in international business, where small firms expanded internationally at a much faster pace - “Born Global” firms. Further research in the US, Europe and particularly Scandinavia throughout the 1990s added to the growing body of research in this area. These firms were described as small, technology-oriented firms, targeting niche markets internationally early in their existence.

As part of my research into the internationalisation of the indigenous technology sector, I completed an in-depth case study into an Irish “Born Global” technology firm. This firm was formed in 1991, emerging from a European Commission-funded ESPRIT programme. By 1993, they had a complex product for a global niche market, but with no funding for international growth. However, they had a network of contacts in technology companies from their studies and research. They earned an income (IR£30,000) from software consultancy services but had no domestic market. They did not have a distributor or dealer, but they had the Internet. They went to a trade show, created an interest in and awareness of their product and used a Freephone number in the US. They continued to grow their product market in the US, Germany, Australia, Hong Kong, China and France. By 2001 the company had revenues of US\$180 million and they still had no domestic market.

In this case, the role of the government agency (IDA) at the time was limited to leading international growth. It followed investments in the Irish firm made by two US multinationals after it had achieved international success.

This “Born Global” Phenomenon was initially thought to be specific to “high technology” firms. However, research in New Zealand in 2004 (Chetty & Campbell Hunt) also found evidence of it in more traditional sectors. This was also evident in research done by Evers & O’Gorman (2008) into Irish “Born Global” firms in the Global Seafood industry. They completed in-depth research on the internationalisation of three firms in this sector - two of them have 99% of their sales from outside of the domestic market.

Both of these firms have entered foreign markets through participating in trade shows, enquiries through the Internet and most important-ly through informal business contacts. Interestingly, the third firm in the study, which was established in 1987, did not have initial success with international markets and refocused on the domestic market. However, the small size of the domestic market for a specialist niche product caused it to refocus on exports in 2000 and by 2004 it was generating 30% of its

sales internationally. In all of these cases the role of the government support agency Bord Iascaigh Mharaigh (BIM) was critical to their international success. This support was in the form of financial support for foreign travel/accommodation, trade fair participation and foreign market knowledge.

Finally, let me highlight another sector which is important in regional development and this region in particular. Tourism is different to other businesses in that the product is sold/booked in the customer market and consumed in the domestic market. Recent research into Swedish tourism firms (fishing, theme parks, skiing) has focused on how “Born Global” Tourism firms in a small economy can grow internationally. The importance of a specific type of network emerged - a Destination Management Organisation (DMO) and its role in developing these firms internationally. The way in which the Internet can be used strategically to develop direct sales was also a key factor. It is interesting to note from these firms ...

“We have learned that we do not know how new markets work. But we do know how to start. We have learned to find business partners and identify business opportunities. This also means that we say no to some offers.” (Agndal & Elbe, 2007).

The following are the common characteristics of these “Born Global” firms:

- Niche markets;
- Small size of the domestic market (Ireland) - smaller domestic markets drive specialised SMEs to internationalise earlier;
- Networks - the importance of industry and social networks;
- Use of the Internet - a more cost effective means of communication and means of creating product awareness;
- Role of government agencies - the provision of information on international trade and business, the building of networks, the participation of SMEs on international R&D networks, and the provision of direct financial support.

The role of government is critical also in reforming education systems - the inclusion of international content within curricula, the use of internships/ international exchanges and in the development of management capabilities.

Motivation to internationalise

A European Union study on SMEs found that only 18% of SMEs in the EU were exporters (Wright et al. 2007). A study in the UK found that only 44% of SMEs were motivated to internationalise. While revenue growth is perhaps the driving motivation to internationalise, exchange of knowledge and the enhancement of capabilities, thereby strengthening the competitiveness of the firm, are key benefits. Rather than the importance of exports, the importance of an international outlook may be more critical to the sustainable growth of SMEs. After all, “...You don’t have to go abroad to experience international competition. Sooner or later it will come to you” (Bartlett & Ghoshal, 2000)

Investing in indigenous industry

Back in 1992, the Culliton report highlighted that while attracting Foreign Direct Investment (FDI) to Ireland has been a successful policy for Ireland in the past, Ireland must focus in future on developing its indigenous sector. 2008 OECD statistics show Ireland is still the second highest recipient of inward FDI at 83% of GDP. We can contrast this with Finland, with inward FDI at just 28% of GDP, and which is much cited as a country that has successfully transitioned from investment-led growth to innovation-led growth.

In this era of “Is féidir linn” and the eagerly awaited sprouts of new growth in the global economy, it’s important for us to sow our own seeds, in our own soil. Relying on “transplanting” may only last a few seasons in the local environment. If it is rooted in our own environment, it may be more sustainable and we may even be able to take some cuttings.

This article by Dr Deirdre Garvey stems from her presentation to a national conference on “Ethics and the Irish Economy”, hosted by GMIT Castlebar.

The Fatima Project

lessons in ethics



GMIT lecturer Dr Pauline Logue was a resident and education worker in the Fatima Mansions social housing estate in Dublin between 1995 and 2002. She reflects on what “the spirit of Fatima” can teach us about community-centred ethics and the need for more inclusive models of ethics in Ireland.

I worked in ‘Fatima’ in the run up to the radical regeneration of the estate. It was a time of difficult political negotiations between the community and numerous social partners - the local community had palpable hopes for the ‘New Fatima’, but there was also insecurity, born of a longstanding communal mistrust of influential bodies in the regeneration process.

Significantly, at that time I was also lecturing in the field of Ethics. I became increasingly aware of the acute and radical gap between the daily values and moral life of communities on the margins of society and the general concerns of academic moral theology and/or ethics.

Using the creative arts as a means to access Fatima’s narratives, I gradually began to identify and document a distinctive morality and value system within the life of the community: one based upon a logic of survival.

At the time of the dominant value system associated with the “Celtic Tiger”, the moral imagination and practice of Fatima stood apart, since it pointed to a significantly more communitarian vision of human relationships. But it was notable that the moral voice of marginalised communities, such as Fatima, did not appear to be included in formal sources of moral theology in Ireland.

This observation raised questions: Whose moral voices count in Irish society, and who decides? Who benefits most from the dominant ethics, and how? Is it fair to say that the moral wisdom and insight of Irish sub-cultures are systematically excluded - even derided - and, if so, how and why? And, finally, what role might educative institutions have in either perpetuating or challenging the status quo of the dominant ethic?

I share here a flavour of my research findings and reflect on how it provides concrete indicators for curriculum development in the field of applied ethics, and how establishing an ethics committee in GMIT would bring many potential benefits to the Institute.

FATIMA’S COMMUNITARIAN ETHICS

Simply put, ethics is the study of moral practice. Typically it is concerned with values in society, such as telling the truth, the pursuit of justice and peace, protection of life, and the fostering of humanity and the earth. But it is a highly complex study since values are often unavoidably conflicting - for example, supporting free speech can also lead to incitement to hate. In most societies there is a predominant ethical system operative, and other moral worldviews tend to be sidelined or undervalued. Such, I suggest, is the case with the Fatima ethics.

So what was distinctive about Fatima? Recurring themes I uncovered included solidarity, resistance, conflict management, loyalty, family, co-operation, inter-dependence, care of the vulnerable in the community, and simplicity of lifestyle. Solidarity experiences were prevalent and they cultivated a resilient community spirit. Significantly, these also served to diminish any individualist ethic in the community, and to check divisive and/or competitive elements within the community itself.

In stark contrast to the competitive nature of the ethics of the former Celtic Tiger - which prioritised the individual rather than the community - numerous striking examples recurred in Fatima daily life of the inseparability of the individual and the community. In one such case, a group of Fatima mothers who sat the Junior Certificate examinations, made a pact that if any one of the group failed an examination the whole group would support them by sitting the repeat examination. In another case, a community member who had been robbed was gifted with the complete contents of a new kitchen after a local ‘whip around’ or collection was organised by neighbouring women in his block of flats. (He was later heard to exclaim that it was the best thing that ever happened to him!).

A further cultural value at the heart of this communitarian outlook was that of communal survival. This was evident in creative communal resistance behaviours, such as throwing hot or bleached water down the stairwells to discourage drug users from congregating there, or the physical blocking of entry points into the estate to keep perceived threats to the community outside of the community boundary. While there were no comparable Irish studies, an interesting discovery in my research was that directly similar cultural themes are evident in accounts in both Hispanic American and African American ethics.

Within their respective socio-marginalised communities, relationships with outsiders similarly tend to be characterised by watchfulness and resistance. Both of these ethical systems are built upon survivalist ethical frameworks. Resistance behaviours and survival strategies in these communities are, in essence, a struggle against oppression at all levels. Examples include intentional lying to outsiders, the art of cunning, a prohibition on ‘ratting’, and the transmission of moral rules and codes across generations - all of which were independently isolated in my Fatima-based research.

The foundational value at stake in these cases is the right to life in the context of drug cultures. Such inner-city survival strategies are rooted in a community’s practical moral wisdom and entail



a heightened awareness of potential threats. These strategies are rooted in a practical moral wisdom, in effect a ‘third sense’ often associated with being on the margins of society. It is the capacity to read indicators of threat, however subtle, by means of a heightened intuition or a ‘gut instinct’ and to bear suffering with endurance.

Despite, and perhaps because of, the very real threat to life on a daily basis, there is a central capacity to celebrate life in the moment, and hope underlies the communal acts. Experiences of celebration provide opportunities for mutual encouragement and solidarity, but they also have political importance. They illustrate local attempts at counter-cultural and co-operative relationships. For example, during one Hallowe’en “Burn the Demons” celebration, a pyrographic framework, which depicted two hands shaking, was set alight adjacent to the local St. James’ Walk bonfire as a gesture of outreach and reconciliation with adjacent local communities.

IMPLICATIONS FOR THIRD LEVEL EDUCATION

Ireland today is in need of an alternative dominant ethics - one that strikes a careful balance between excessively communitarian and/or excessively capitalist ethics, and incorporates the best from both.

Models of communitarian ethics from the margins of society can provide rich sources for reflection, since they contrast sharply with capitalist ethics and their dependence on competition and inequality. But moving forward is no easy task; it entails a fine balancing act that requires both moral imagination and courage. Forging a more inclusive ethic will demand change in both our personal and collective mindsets and lifestyles.

So what role might we as educators in the third level sector play? Undoubtedly, it is incumbent upon all centres of learning to engage in a profound reflection on ethics at all levels at this time. Sociological studies repeatedly demonstrate that educational centres are, in general, keepers of the status quo or of traditional and dominant value systems in society. The logical implication is that, as educators, we play - wittingly or otherwise - a collective part in bolstering the dominant ethics of society by following the dictates of influential bodies. Perhaps it is time to take stock and critically assess the ethics and value systems that we are currently promoting?

Within the third-level curriculum in applied ethics and theology, I suggest that a review of current methodology might be helpful (in GMIT and beyond). An ethics committee would build upon previous successful initiatives regarding ethics, such as

the ethics workshops on Codes of Practice. By means of such a committee’s activities, the notion of ‘reflective practice’ on the part of educators, which is already much in evidence within the Institute - might be more intentionally incorporated into our collective deliberations.

A small core group of staff, with expertise in the field of ethics and in other related areas, and ideally representing all three campuses, might intentionally take on this task on behalf of the wider GMIT community.

Various functional frameworks are possible. The committee might solely function as an ethics think-tank on behalf of the Institute. It might act as an advisory body in relation to specific questions of ethical practice as and when they arise. The committee might advise on the Institute’s Code of Conduct and review the various departmental codes of practice. It might also advise on procedural aspects of the life of the Institute, such as meeting with students one-to-one, interview processes and review processes. Alternatively, such a group might also explore the concept of ‘inclusiveness’ beyond mere legal requirements - highlighting good practice within the Institute and suggesting further endeavours. It might inspire and promote innovative methodological approaches and pilot projects in the field of applied ethics across all disciplines. It might contribute to the further articulation of the strategic aims of the Institute by, for example, facilitating an investigative research project into dominant values within the life of the Institute with a view to identifying how these unconsciously influence decision-making processes, and, in light of such analysis, offer alternatives. Importantly, it might facilitate a helpful discussion on the important question of our Institute’s value priorities, as it proceeds into the future. Whichever framework might ultimately be adopted, I suggest that the vision of such a committee ought not to be minimalistic or legalistic. Instead it should keep in line with the traditional (Aristotelian) meaning of ethics as human flourishing.

Dr Logue’s article stems from her presentation to the “Ethics and the Irish Economy” national conference hosted by GMIT Castlebar.



Sporting Success

Catherine Toolan BA in Hotel Management, 1997

Executive Director of International Sports Events for ARAMARK International.

Catherine Toolan never could have imagined when leaving GMIT in 1997 with a BA in Hotel Management that she'd head up the catering operation of the 2008 Olympic Games in Beijing, in charge of serving over 4 million meals and managing 7,500 staff.

Catherine is Executive Director of ARAMARK International, part of ARAMARK Corporation, a \$13B USD company headquartered in Philadelphia, employing 250,000 people with operations in 22 countries worldwide.

"We used a lot of food to feed the Olympians – one million apples, 200,000 loaves of bread and 100,000 kilos of seafood. At peak period on any one day in our five venues we served up to 100,000 people. It required lots of planning," explains the Sligo native.

After leaving GMIT, Catherine went on to complete a graduate management training programme with the Forte hotel group which was subsequently acquired by the Compass Group. As part of the graduate training programme she was based in London and covered projects in Edinburgh, Nottingham, Paris and Dublin. She then completed a Masters in Management and Organisation in UCD and a post graduate masters in Asian/Western Business culture in Tsinghua University, Beijing in 1999.

"I joined the Campbell Bewley Group in 2001, first working with Bewley Cafés and then with Campbell Catering Ltd., which was acquired by ARAMARK in 2004. As part of this acquisition I moved to China in 2005 to establish ARAMARK's food service business and start to build the infrastructure for the 2008 Beijing Olympic Games.

The Olympics is the largest sporting event in the world and has a very finite start date and I would compare our planning to a military operation in terms of project planning and project milestones. We started planning for the event about three years in advance. The senior project team all relocated to Beijing in January 2007 but had already been working on the project in their home countries. At this stage I had spent over a year preparing the groundwork in Beijing in terms of logistics, distribution, suppliers and management and staff accommodation. We decommissioned the sites and finally closed

the financial accounts in February 2009.

At the peak period of the Games - August 2008 - there were 7,400 people working on the ARAMARK Catering project. Our management team consisted of over 600 people including some ARAMARK team members from Ireland, Germany, the UK, Chile, Japan, the US and, of course, China.

Despite the fact that many people only see the Olympics on TV and in the media for a short period of time, our first meal was served on the 8th May 2008. From May until the end of September we served over four million meals with more than 70% of the meals served in the month of August alone.

For anyone who has had the opportunity to work in China you will realise the culture and way of doing business is very different from that of the Western environment. The Confucius culture and China's leadership during the middle of the 20th century (1940-1970) strongly influences the business world and decision making is always taken on a consensus based approach as opposed to the way decision making is undertaken in Western organisations.

In Western society we are used to clear lines of responsibility and an understanding of what our financial and organisational goals are. In China, in most cases, individuals are reluctant to make decisions without first ensuring that everybody with even a vague interest in the subject at hand has had an opportunity to provide feedback. This means that decision-making is a long, drawn out process and you need lots of time and patience to wait for a decision to be made.

There is also a strong Chinese culture of ensuring that you do not lose 'face' so starting off with strong non-negotiable positions in negotiating meetings or by being quite forceful in your opinion on certain points and backing the other party into a corner is a sure way of being unsuccessful in doing business in China. You must always allow some room for negotiation and 'give and take' on all points if you want to succeed in doing business and concluding deals in China. These points are even more critical when dealing with the government and this has been my experience on many occasions over the past number of years.

The biggest challenge was assuring the food safety of the food and beverage products, as we were dealing with elite athletes who have spent their entire life training to compete and win at the Olympic Games. Staff training was also a key issue, in particular, empowering our team to deal with athletes and media queries in a professional, efficient and friendly manner. Instilling a sense of discipline in terms of food safety and hygiene to the local team was also quite a challenge but thankfully through meticulous planning and motivation we overcame all these challenges successfully.

I am currently based in Beijing which is where our ARAMARK China head office is located. I travel very frequently within China. Although China is one country, some people underestimate the physical size of the country. For example my most regular flight from Beijing to Shanghai is the same as flying from Ireland to Frankfurt, Germany, and I might do this trip three to four times per month as well as taking other flights. The good thing about the Olympics was that I rarely had to travel, and for anyone who travels a lot, they will understand that there is nothing glamorous about spending half your life in an airport or a hotel! It was a luxury for me to spend so much time in Beijing. However, I would not trade my job for the world. I am very passionate about what I do and also very fortunate to have career opportunities such as working on the Olympics through my position with ARAMARK.

Looking back at my pre-college years, I'd advise students to think of their favourite secondary school subject and try to pick a course with some level of your favourite subject in it. It is much easier to be motivated and work hard at something you like. Nobody is standing over your shoulder asking you if you have done your homework when you start college - this is one of the first times that most 17 to 18 year olds have to take total responsibility for their own actions.

For me, a Golden Rule is to attend all lectures if possible - it makes passing exams much easier at the end of the semester, especially when you regularly review your readings and lecture notes.

Given the economic environment that we all live in now, a formal third level qualification is a vital step in securing a reasonable career. Unfortunately sometimes we are older and wiser when we realise this, so my advice is stick to college. It will be the fastest and best three or four years of your life. Graduating with a third level qualification will be one of the most worthwhile and valuable experiences of your life.

Work hard and play hard is my life's motto. I have many very happy memories of my time in GMIT. Going to college is the first time in most of our lives where we are in control of our own destiny and finally, hopefully, studying subjects that we really like. On my programme (BA in Hotel Management) we balanced academic studies with practical application. We undertook summer internships in Ireland and in Europe which I believe was a great stepping stone into preparing us for the real world of work.

I regularly remember my deceased GMIT friends and colleagues whose lives were tragically cut short during their college years and who never got the opportunity that I did to put their life's experience and college education to use in this world. Life is very short and you need to live every day as if it might be your last.

I recall with great fondness the huge amount of extra curricular activities we were involved in and the opportunity we created to bring some hope to people's lives through the Lions Club Fundraising Campaign, the Hotel and Catering Society and other events. These events allowed students and lecturers alike to work together to achieve one common goal. I am grateful to the lecturers for always encouraging new students to maintain and keep the flame burning brightly for these important traditions of GMIT. Being involved in extra curricular activities is a very important part of your development into a more holistic, balanced person. I personally always look for a balance of academic and social skills when I am choosing my management team for projects. To me, it demonstrates an individual's ability to empathise, see the bigger picture and multi-task, which are critical characteristics for project management and successful project execution."



Enda is Ramsay's man in the Big Apple

Galwayman runs three of TV chef's restaurants in New York

TELEVISION series such as Hell's Kitchen and Ramsay's Kitchen Nightmares have not only given us a sample of fine cuisine without having to dine out, but also a taster of what it really is like to work with award winning chef Gordon Ramsay. Running three of the well known chef's restaurants stateside, GRAÏNNE McMAHON meets one Galwayman who is making his mark in the Gordon Ramsay empire.

Enda Cunningham

BA in Hotel Management, 2001

Regional General Manager of Gordon Ramsay USA.

Working as a glass collector at Eyre Square bar The Skeff in his early teens, never did Enda Cunningham imagine that it was to be the start of a successful career in the catering industry which would see him as Regional General Manager of Gordon Ramsay USA before the age of thirty. However, the experience at the Galway pub was to give Enda a taste of the hospitality industry and led him to take up a BA in Hotel and Catering Management at Galway-Mayo Institute of Technology in 1997.

"I had spent three years in The Skeff and had a fair understanding about the industry but the course at GMIT gives you a background in finance and accounting that will stand to you," says Enda, explaining that his on the job experience prepared him for working in the hospitality industry.

The four year degree programme at the Dublin Road campus involves the study of food theory, financial accountancy, hospitality operations, organisational behaviour, strategic management and restaurant and bar service, among other subjects. Like Enda, many graduates have gone on to work in hotel and catering operations abroad in countries such as France, Germany, Switzerland, Australia and the US.

"One of the best things about GMIT is the opportunities you are given to work in great properties during your placement; the college gives you contacts you would struggle to get otherwise."

After a placement in the Park Hotel in Kenmare, Enda went on to spend a year at Jury's in Bristol and then upon graduation he returned to the fifty bedroom Park Hotel to take up the position of Resident Manager for three years, where he was heavily involved in opening the hotel's SAMAS Spa.

Following that he spent two and a half years as Deputy General Manager at the five star Westbury Hotel in Dublin.

It was in 2006 that the Galway native decided to leave Irish shores: "My wife Andrea had been accepted to do an MBA at Columbia in New York and I was going to find out what jobs were available," says Enda, explaining that at the same time Gordon Ramsay was opening his first restaurant in the Big Apple and so he decided to apply for a position with the company.

"I met the Director of Operations for the company and he had the same philosophy for looking after guests that I had been used to. We had been for dinner at his restaurant in London and it was outstanding with the dedication to service and quality. It was a fantastic opportunity."

The GMIT graduate took up the position of General Manager of Gordon Ramsay at The London in New York which incorporates Restaurant Gordon Ramsay, Maze by Gordon Ramsay, The London Bar, three private dining rooms and in-room dining for 562 hotel suites.

Enda couldn't believe his luck: "It was exciting. At the time in October 2006 it was the hottest thing in New York," says Enda explaining that although Gordon Ramsay was a big name brand, New York was a highly competitive market.

"We were trying to create something different in the city where trends change at such a rapid pace, which means life is never dull".

He recalls meeting the Michelin star award winning chef and astute businessman, who now also has restaurants in Cape Town, Tokyo and Dublin. "I remember when I met Gordon for

the first time; he was like a big ball of energy and super intense."

Within the first ten months of opening Gordon Ramsay at The London it was awarded two Michelin Stars and was voted Best Newcomer in the Zagat NYC guide. The restaurant has since been awarded four AAA Diamonds and four Mobil Stars.

However, the early days were not easy and as General Manager, Enda was responsible for overseeing all aspects of the restaurants at The London, from intense staff training to marketing and overseeing revenue.

"We have a huge focus on training which is focused on Gordon Ramsay standard; for two weeks before we opened we invited people in and tested our service out on them. The market is also very different by comparison to London where you expect your dining experience to last three hours, whereas in New York you do it within an hour and a half."

Then there was the challenge of keeping the product fresh in a market where food trends change quicker than the weather at times. "You get a honeymoon period of about six weeks when you open so it is after that that you must keep the restaurant current and get the marketing and the news out there, we do that continuously and we still do that," says Enda. Restaurant Gordon Ramsay at The London offers formal dining for forty five guests, with a lengthy waiting list. The Maze, situated also in the hotel, caters for informal dining for up to seventy guests; therefore it was important that Enda's staff could adapt between the two, particularly given both attract high profile clientele as well as the casual diner.

Attention to detail is all part of the mantra and that requires a large staff, explains Enda. "On a busy Saturday for a dinner service I have upwards of sixty people on duty; we could do 240 dinners in the restaurant and the same on room service at the hotel."

Room service accounts for a large part of the clientele at the upmarket hotel. "There are few hotels where you can have the same dining experience in your room but we regularly do eight, nine or ten tasting menus in the room," says Enda, explaining that the dining tables in the London's bedrooms can be raised and lowered to suit guests' needs, guests who regularly include Broadway stars and the likes of rapper and actor P Diddy.

Regularly serving celebrities such as Sex and The City star Sarah Jessica Parker, the cast of Slumdog Millionaire, MTV cast and crew and "a lot of the movers and shakers" from Broadway and the entertainment business is part and parcel of daily life at Gordon Ramsay in New York for the Galwayman.

"We're really blessed with the hotel in that a lot of people in the business stay there. MTV are fantastic clients while P Diddy is a regular to the suites in the hotel. We don't make a fuss about it," says Enda explaining that his staff are under strict instructions to remain discreet no matter how high profile the visiting celebrities. "In New York it's very different to other places in that the stars want to come in and enjoy their free time. If they want to talk to you they'll let you know." That same discreet approach applies to the treatment of every customer at Gordon Ramsay. "Guests are coming for an amazing experience; we have lots of birthdays so they need to be made to feel special. We try to put staff in the guest's shoes; would they want to be talked to or be discreet? At the same time, you never want to take away

people's personalities when you're training them".

Since 2006, Enda, whose parents live in Salthill, has been promoted to Regional General Manager of Gordon Ramsay in the USA, overseeing Gordon Ramsay at The London West Hollywood, Los Angeles and Cielo by Angela Hartnett at Boca Raton in Florida.

He oversees 230 staff and eighteen managers between the three locations; all of which offer a completely unique dining experience. "There is a huge difference in people between New York and LA and their attitudes to life. Our LA restaurant is slightly larger than New York; it's situated in West Hollywood where we also have a fantastic banquet space. The restaurant in Boca Raton is a very different operation altogether in that it is only open to hotel guests and club members."

Enda spends his time focusing on the constant reinvention of the Gordon Ramsay product, which involves close attention to detail when it comes to meeting and greeting guests, man management and marketing. "We have redeveloped the concept of Gordon Ramsay and we are really happy with where it is now. The beauty of what we have in New York is a two star Michelin restaurant offering a fine dining experience where you can relax and enjoy the atmosphere or try some market specials at The Maze where you can have a beer and a steak and get out of there quickly - it's a broad spectrum for diners."

The broad spectrum ensures that Gordon Ramsay at The London attracts all types of clientele, from America, the UK and Ireland, even if some diners are just hoping for a glimpse of Gordon himself. As his right hand man for the American market, Enda has a close working relationship with the hotheaded chef and is quick to speak of his admiration for him. "You hear stories and you see Gordon on TV but he is one of the most guest focussed people I've ever worked with and is always keen to ensure that guests get the best experience. He is an inspirational guy to work with," says Enda. Although Gordon visits the restaurants every few weeks (he is filming in India at the moment), he calls Enda every second week and speaks to the head chef at the restaurant in New York "most days". His father is law is also heavily involved in the business.

Enda admits that he has seen the chef's bad temper: "You can't work for Gordon and not be on the receiving end of it at some time!" He adds: "Gordon never claims to be in any of his restaurants all the time. Josh Emmet, our head chef, has worked with Gordon for ten years; he tastes and checks every element of food before it is served to guests." As for Enda's favourite dish, he tries to avoid eating in the restaurant except for special occasions; "I don't eat a whole lot when I'm working but I love the ravioli with tiger prawns!"

Enda comes home to Galway from time to time but is happily settled in New York with his wife Andrea and fifteen month old daughter Avina. "Every so often I do miss Ireland but there are fantastic opportunities in America and it is great place to raise a child."

This article was reproduced courtesy of the Galway City Tribune.



*Hotel School Graduate 1989
Vincent Joyner, CEO Hospitality
Investment Partners Africa,
with Nelson Mandela,
Elder Statesman and former
President of South Africa.*

Into Africa

Vincent Joyner

BA in Hotel Management, 1989

Philanthropist and CEO of Hospitality Investment Partners Africa, Johannesburg, South Africa

“I grew up outside of Dunmore in north Galway. In 1985 I completed my secondary education at the Dunmore Vocational School and started my four-year Honours BA Degree in Hotel Management at RTC Galway, never having worked a day of my life in a hotel. However I knew it was what I wanted to do.

Life was lean back then but always fun and full of things to do. Dennis Murphy was the dynamic new Head of the Hotel Management School and the lecturers were passionate and concerned for their students. My class mates were a mixed bunch of characters, adding so much to the overall learning experience, most of which happened outside of the classroom. And the lecturers were to lay much of the foundations for the rest of my professional career.

College was more than just studying. I vividly remember dressing up as Superman to sell pancakes before Christmas in 1988 on Shop Street while it was chillingly cold and wet. If I remember correctly we managed to raise around £2,000 that year for the Lions Club in Galway. Times were tough, so much so that getting a chair with four straight legs for each class was an everyday challenge. Those were the days.

At the beginning of 1989 a few months before graduation, I started looking for a job in Ireland, which at that time was deep in recession. Then an alumnus, Padraig Berry, came to visit the school and told his story of attending IMHI, a joint programme in International Hospitality Management by Cornell University (USA) and ESSEC (France). I instinctively knew I was meant to go there so I applied for their post-graduate course in Paris and started searching for ways to finance my studies if I got accepted. IMHI invited me for their entry test and interview so I flew to Paris for the interview but could not afford to come back to

Ireland. They found me a job for the summer and I starting learning French the hard way. I was accepted into a class of just 35 people from over 27 nationalities. It was an amazing experience. I went to Cornell in the US and studied at their Master’s programme in Hospitality Management and their Johnson MBA School. I met amazing people from industry and academia and suddenly everything seemed possible.

I joined Formula 1 budget hotels of the Accor group in 1991 having met the CEO of the chain several times at IMHI. It was the least well-paid and least prestigious job offer I received upon graduation, however I was passionate about low cost and standardised businesses so I took it on enthusiastically. That was the start of a marvellous and exciting journey and lots of hard work.

I started out as manager of the Formula 1 Hotel in St Die and quickly moved to the UK as Regional Operations and Sales Manager. I then moved back to France to become Regional Manager for the chain in the East of France for three years. After that I headed up Quality Management for almost 300 budget hotels. It was a great learning experience, as I conducted countless quality improvement meetings with over 500 hotel managers.

In 1997 I headed to South Africa to become Managing Director of Accor budget hotels in that country. In 2000 I added the role of CEO for Accor activities in Southern Africa. About the same time we bought into the Rainbow Tourism Group listed on the Harare Stock Exchange, where I served as a Director of the Board (Rainbow Group). This was just before all the political troubles started in Zimbabwe. It was a learning curve I will never forget. I also travelled to just about every country in Africa and met many prominent business and political leaders, including Nelson Mandela. It was an incredible time in my life.

During that period, the seeds for the next phase in my life were sown. I started working more and more on “Sustainable Development” projects, ranging from reducing water and energy usage, launching HIV/AIDS awareness campaigns, to having the first urban hotel in the world to achieve “Fair Trade” accreditation. I developed training programmes, such as the Formula 1 designed “National Diploma in Accommodation Services” which is the highest educational qualification to be awarded by any hotel company in the country, and co-launched the Prevention of Child Sex Tourism campaign in South Africa.

All of them were strategically aligned with our core business and, to the surprise of many, contributed to our division being the most profitable division worldwide in the group for several years.

In April 2008, while delivering a talk on “Investing in Emerging Markets” at the Cornell University’s annual hotel conference, I realised it was time for a change and a new journey. I knew I needed to leave the jet set life of Accor and participate in developing Africa and helping it achieve its true potential. The bad news flows out of Africa daily; unfortunately the good news isn’t promoted. There are many remarkable things happening that gives hope for a brighter future for the continent.

My new journey would have several paths. One would be conceptualising and developing a fully modern, profitable and yet “sustainable/green” hotel chain in Africa

(www.HIPinAfrica.com). Another path, actually more like a six-lane highway, is education. With some great friends who have experience setting up Africa’s first virtually free university, CIDA City Campus, we have created a revolution in education, a self-sustaining higher education model. We take virtually any student with the equivalent of Leaving Cert, regardless of their ability to pay, into our school. Mid 2009, we have over 250 students, 100% of whom are totally funded by the school. They are all studying in our Foundation School and many will go on to enrol at our internationally accredited BA Degree course in Entrepreneurship and Sustainable Business Management next year.

Students will be able to major in five different areas: Responsible Tourism, Renewable Energy, Sustainable Agriculture, Local and Sustainable Construction and Health and Wellbeing. An MBA programme will be launched in 2013. Our ultimate aim is to educate 100,000 students every year across Africa from 2019.

As we do not receive any government funding and donor funding is not truly sustainable, we have addressed this and several other challenges with an incredibly innovative solution; “experiential learning”. Students often leave university with great knowledge but sorely lack the practical ability to apply this in the workplace. Interns often complain that all they do is make coffee for the boss or do menial jobs that do little to advance their learning. So we decided to set up our own activities that would allow students to truly learn essential life and business skills, in a structured way, during their internships while at the same time generating cash for the school’s operating expenses and for the students’ living expenses.

We are now fine-tuning a new social enterprise model for self-sustaining education where the student puts no money on the table, nor does the government, and the school actually gives the student money to live. We will grow our Johannesburg campus to 750 students in 2010 and are busy planning our second campus outside of Pretoria.

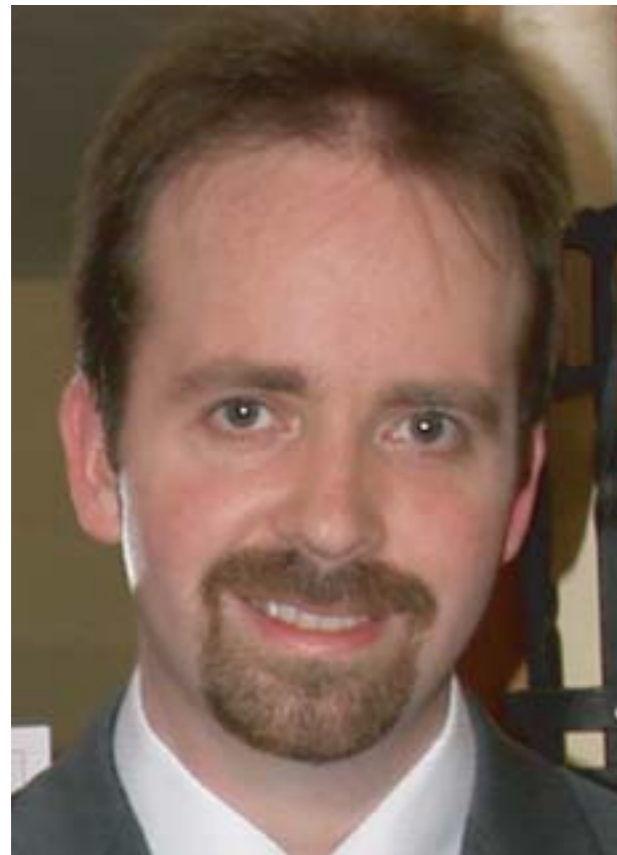
The “experiential learning” activities we have set up are “Invincible Outsourcing”, an outsourced contact centre, www.InvincibleOutsourcing.org and “Invincible Insights” (market research). I am also CEO of “Invincible Education Empowerment Trust” as well as the “Community and Individual Development Trust”, both are Broad Based Black Economic Empowerment funds with the mission of eradicating poverty and developing entrepreneurship and prosperity in Africa. It is a truly rewarding mission.

I was asked if I had any advice for undergraduates or people unsure what to study in third level. For me the simple answer is to follow your passion and intuition. They are your best guides for a good and fulfilling life. I remember someone once telling me to write my obituary as I would like other people to write it when I die and then to live my life accordingly. Wise words.

Please feel free to contact me on Vincent.Joyner@HIPinAfrica.com.”

From Onions to Ions

Anthony Carolan National Diploma in Instrumentation Physics, 1997
 Entrepreneur, Teacher, Scientist and Director of Restored Hearing Ltd.



Anthony Carolan, award-winning teacher, scientist, entrepreneur and founder of Restored Hearing Ltd which has found a cure for Tinnitus, took the scenic route on his career path, starting out as a butcher and a chef.

“When I first started out on the path of gastronomy, little did I think that I would end up where I am today. As I try to trace my steps back to where I first started thinking about my current career, it’s a little complicated. I always wanted to be a teacher but initially, I lacked the confidence. I had my father for maths for virtually all of my secondary education and this definitely played a part but it was also a little overwhelming as I felt I could never match the calibre of teaching I had enjoyed from him. He made it seem so effortless and whether you wanted to or not, you realised you had learned.

I began my third level education applying to Cathal Brugha Street, to train as a chef. I had worked as a butcher before this and I enjoyed cooking but I soon realised that although cooking was and still is a great hobby, I was not destined for a culinary career. I just didn’t have the dedication and talent to allow me to excel. It was not a waste by any means, though. During my course I realised that I had a certain flair for the science end of the course and decided to apply for a science degree and maybe go on to work in the health inspectorate.

I applied to GMIT in 1994 (then the Regional Technical College, Galway), and started a General Certificate in Science programme. At the end of the first year, you could then pick your specialty: Physics, Chemistry or Biology. I was certain that it would be Biology, due to my interest in microbiology in Cathal Brugha street. Just before the end of this year, my flatmate was trying to indoctrinate me into the chemistry arena, as he was finishing a degree in this. But I also had found Biology very easy and my dissections were the stuff of legends, due mainly to my previous butchery and chef experience - have you ever seen a perfectly boned rat ready for stuffing with accompanying pelt?

But the real turning point came just before the end of this year, when one of my lecturers, Nancy Roe, convinced me to take the physics option as she felt I had a talent. I had never really been told that I was good at something since starting college, until this time, and because of this I trusted her opinion and confidently chose physics for my next number of years.

It was the turning point because I then realised I had found my area of study and work, something finally that was enjoyable to work at. I received a merit in both my Certificate and Diploma in Instrumentation Physics and I would like to state that I received an unbelievable introduction to this area with the help and guidance of exceptional lecturers. I can’t name them all but I would like to single out Tim and Nancy Roe and Jim Mc Comb who inspired me so many times that all of my present and past students know of them almost as much as I do. I would also like to say that if anyone is to achieve their best in college, get to know the technician. They ‘run’ the department and can always help you. The late Sam Clarke had always been a great friend and was there whenever I needed help. There were countless times that I received assistance and advice well above and beyond the call of duty and I count myself and all those that they taught as being extremely lucky to have experienced their enthusiasm and knowledge. I also felt that the layout of the physics course was far superior to many available in other colleges and universities as it exposed you to the practical work of physics and allowed you to confidently enter a work or research environment straight away.

I chose at this point to go further and gain an Honours Degree in Physics. At that time I had heard of a very good course in Kingston University in Surrey, where you got a chance to work in the area of nuclear physics. As there was not an add-on degree option in GMIT at that time, I applied and together with ten other students from Galway, we went to London. Again I was very lucky to encounter extremely talented lecturers such as Dr Montgomery and Dr Flowers and after a year had graduated with my honours degree in applied physics and microelectronics.

Still lacking confidence for teaching, I entered the Telecoms field and for the next few years worked as a network control and radio engineer for Esat Digifone (now O2). I also worked as a senior radio engineer in a small start up telecoms company called Ingenium Systems. This was an extremely worthwhile experience as it later gave me much material for transition year modules in physics.

Eventually I decided enough was enough and I applied for the H Dip In Education to pursue a career in teaching. I was accepted to UCD where, under the tutelage of Dr. McElwee and Dr Galvin, I graduated with a first class honours diploma and won the TUI award for the best male result in the H.Dip - third place overall, but then girls are always right as I now realise!!

I applied for one job and was successful. The Ursuline College in Sligo town is an all-girls secondary school of some 700 students with an impressive record for achievement and an amazing school spirit and ethos. I instantly fell for the school and the work and have never regretted the decisions that have brought me here.

In the last six years in the Ursuline, I have seen the numbers in 6th Year Physics increase from four to 23. A large number of my former students have gone on to study a wide-ranging selection of physics and science-related courses, varying from geophysics to medical physics to psychology and physics. All have reported back that they were delighted with their choices and wouldn’t have chosen them had it not been for the enthusiasm I seem to bring to the classroom. All I can say is this has stemmed from the original enthusiasm I first received in GMIT. The popularity for transition year physics has also increased inestimably. I have made many friends and enjoy each and every day doing a job that I love.

I got involved with the Young Scientist Exhibition about three years ago. My first group to enter worked on a project which used mobile phones to test the safety of microwave ovens. They won second place in the Senior Physics section.

The following year, we had two groups in the competition. One group won first place in the Senior Physics section with a project based on the localisation of pure tones in teenagers versus

adults. The other received first place in Senior Physics in Scifest later in the year.

In January of this year (2009), we had three entries. The first individual won first place in Scifest Senior Physics, the other group won second place in the Senior Physics section in the Young Scientists and the last group excelled themselves. These were the same group who had achieved first place in the Senior Physics section the year before. This time the three students, Eimear O’Carroll, Rhona Togher and Niamh Chapman won overall runner-up in the competition and also won the medical innovation award from the Health Research Board. They had come up with a cure for temporary tinnitus in 99% of all candidates they had tested. For nearly three years, they tested 250 candidates, did over 1000 surveys and compiled nearly 5000 pages of graphs and appendices and quite rightly achieved the commendation they deserved.

One of the group wished to leave the work there and enjoy her summer after the Leaving Certificate. But the other two members asked me to join them in further research into permanent tinnitus and at that point we three incorporated ourselves as a company Restored Hearing Ltd and began to develop a test scenario to investigate whether we had a method to alleviate permanent tinnitus.

As soon as the Leaving Cert was over, we kicked into action and with the help of the County Enterprise Board and the Business Innovation Centre Network in Sligo IT, we set about initialising a trial to investigate the accumulative effects of our therapy on permanent tinnitus. We recently launched our new company Restored Hearing Ltd., with our dedicated website www.restoredhearing.ie, which provides a 99% effective therapy into temporary tinnitus. (i.e. ringing in your ears).

When I look back on my choices and different jobs, I have no regrets and see that everything I did led me to where I am and undoubtedly has given me the breadth of experience to offer more than just curricula examples in my class. The Young Scientist entries have been made successful because of my background, as has been the type of transition year modules I deliver, from “How mobiles work” to “Building your own Nuclear Power Station”. What has been most influential though, has been the enthusiasm with which I was instilled in GMIT. I made a lot of friends, I learned the basics and beyond in physics, and I learned how to learn, something which is lacking in many places. I urge anyone with a thirst for knowledge and an inquisitive nature to consider going into this field. It doesn’t disappoint.

I have heard it said that everyone goes through eight career changes in life. At this point I am confident that I have made mine and have finally found my niche.”

A chip off the old block

by Michael McHale

Michael Gillen National Diploma in Science (Chemistry)

Director of the Irish BioIndustry Association and Senior Executive of Pharmachemical Ireland, IBEC



RARELY has the apple fallen so far from the tree. The son of Mervue's most famous resident, retired barber and boxing trainer Chick Gillen, it was never thought that Michael Gillen would set about a career path that could be further away from his father's. Today, as a leading figure in Ireland's biotechnology sector, Michael is as successful in his field as his father was in his.

These days Michael Gillen works with employers' group IBEC where he has two roles - Director of the Irish BioIndustry Association

and Senior Executive of Pharmachemical Ireland, the pharmaceutical and chemical manufacturers section of Ireland. However, the path to his current position has been less than straightforward for the Mervue native now living in Dublin.

"I wouldn't have been what you call a straight-A student," says Mr Gillen, when reminiscing about his time in St Joseph's College in the 1970s. Despite this though. It was here that his love for science began, thanks to the enthusiasm of his science teacher Leabhras Ó Murchú.

When he first completed his Leaving Certificate, however, Michael's future career path was as yet unknown, and at the time going on to third level education seemed an unattractive option. After some encouragement from his mother, Gillen decided to repeat his Leaving.

With the help of a supportive family, he eventually decided to pursue a science course in what was then known as the Regional Technical College (RTC) in Galway, now the local Institute of Technology (GIT).

"My family were hugely supportive of getting me to college," recalls Gillen. "My Dad in particular would ask 'would I do any course in any college?'. There was a drive in our family that education would open up a range of possibilities that my parents never had."

After passing his course at the RTC, he transferred to Trinity College where he completed a science course and a PhD, in total spending nine years in third level education. "I remember later Dad asked me 'would you not ever leave college,'" he says.

When he finished his PhD, Michael was the first out of his class to get a job, and he credits this to the education he received at the Galway RTC. "To say the RTC totally changed my world is an understatement," he says. "I had superb lecturers - they made what we did fun and relevant. The grounding I got made me a much more attractive option for getting work."

While Michael was in college, Ireland's economy was in a similar state to what it's in now. This time, however, he is in a strong position to offer advice on the best steps to take to get us out of the recession.

Earlier this year he wrote an article in the Life Sciences Review entitled A Bioeconomy is a Smart Economy, which highlighted the importance of the biotechnology sector to future economic growth.

And the figures seem to back up this theory. Export figures from the Central Statistics Office released in April showed the pharmaceutical sector up by 6% on the previous year while all other exports fell by 14%. In 2008 the sector exported more than €44 billion worth of products, which was more than half the value of products exported from the country that year.

For Gillen, continuing to invest in science education is critical in order to attract the large pharmaceutical companies to locate and stay in Ireland. He uses the setting up of medical technology companies Bard and Medtronic in Galway in the late '70s and '80s as examples of the benefit of a highly educated workforce.

"Galway has become one of the world centres for medical device technology," says Gillen. "When other larger companies saw Bard and Medtronic, they said, 'we want a piece of the action'."

While the past 10 years has seen third level education become more accessible to students, Michael Gillen notes that maintaining standards of education is now the next task that needs to be undertaken.

"The only time you'll see standards dropping is when you see a force to get more through," he adds. "If you have to take in more you're going to have to spread your net wider, and you're going to have to drop your standards."

"One of the critical things that made Ireland an attractive base for employers is our ability to problem-solve. These days the education system has changed to where its sole objective is to pass exams."

As well as working to maintain standards in education, Michael Gillen also cites Europe as a major factor in Ireland's future success. "We need to stay a key player in Europe because it has been so good for our industry. To turn our back on Europe would be catastrophic," he says.

"I'm not a politician, but the first thing we need to do is get the Lisbon treaty passed. We also need to stop putting ourselves down - let's start focussing on the positives."

Despite making it big in Dublin, Michael has never forgotten his Galway roots, and is complimentary of the area's development into a hub for the biotechnology industry.

"Whenever I go home to Galway I still meet friends from school and college. I'll always be a Galway man." No doubt his father would be proud to hear that.

This article was reproduced courtesy of the Galway City Tribune.



Tom Treacy

Diploma in Fine Chemicals and Pharmaceuticals, 1987

Director of Operations, Allergan Botox

Chemical balance

"I work in a management role in the Biologics/Pharmaceutical Industry. I began college life in UCG (NUIG) with the view to doing something in the area of Zoology. After first year I decided a) I didn't have the passion and b) job opportunities were few, so I focused on Chemistry instead. Towards the end of my time in UCG I had a good theoretical grounding but felt I lacked sufficient hands-on instrumentation experience to make my way across the job threshold. On that basis I enrolled in the Diploma course in the then RTC (GMIT).

My initial employment roles were as a bench analyst, after which I worked my way to supervisory positions. For the first 16 years I worked in Quality roles in laboratories, Quality Control, Compliance and Quality Assurance. In 2006 I moved from Director of Quality Assurance in Allergan's Pharmaceutical facility to Operations in my current role. I am responsible for operational oversight which includes Manufacturing, Filling, Inspection, and Packaging of product for global markets. I'm also over Associated Facility and Utilities Maintenance. Lastly, a little diverse, but the Site IS/IT team also comes under my remit.

The best part of the job is the ever changing environment and the challenges this brings, including working on and introducing new products and ever advancing technologies. The industry is highly regulated which necessitates continued advancements in order to not just meet Regulatory Body expectations but in maintaining a leadership position.

There are significant challenges: Ireland Inc. is no longer a low economy market and companies need to move up the value chain. The days of labour intensive operations are in the past and as we have seen, such industries have been unfortunately moved to countries with low labour bases. The Pharmaceutical/ Biotech industry has flourished in this country as principally a manufacturing location but the industry is in the process of shifting to a Development and Manufacturing model. Historically, Research and Development would in general have

been owned by Corporate headquarters. Irish subsidiaries are looking to move back into these earlier stages of product lifecycle. This increases their value through intellectual understanding and better facilitates product introduction to the commercial environment. Having Corporate buy into participation in this earlier work can be challenging. Achieving the objective introduces a differing range of job opportunities within a site operation.

My time in RTC provided me with the technical understanding and, importantly in my initial years, the practical hands-on experiences which facilitated employment.

Coming into the college from UCG at the time, I found the pace faster and the more continual assessment took getting used to. The smaller classes meant you got to know lecturers better and, as I said earlier, facilitated good exposure to instrumentation. I remember undertaking my Diploma project under the guiding eye of Imelda Devilly. It was on the microbiological profile of commercially available fish cakes - didn't completely put me off them but haven't eaten many since!

A lot of businesses have been affected by the Irish economic situation. While the Pharmaceutical/ Biotech industries need to focus on competitiveness, there are tremendous opportunities for science graduates. As undergraduates come towards completing their chosen course, my advice would be to research the jobs market using recruitment agencies. Many students proceed on to further studies without researching, in the belief that a better, higher paid job will result. In certain instances this may have a detrimental effect in excluding certain jobs, on the basis of being overly qualified. I am very much of the opinion that academic understanding will get you so far, but attitude, work ethic, and personal interactive skills will progress the individual beyond this in most organisations."

Planning for a disaster

John Galligan

B Sc (Hons) in Computer Services Management, 2007

IT Technician/Project Manager, EIRE Systems, Tokyo

John Galligan from Co. Cavan was managing a hotel in Galway when he decided to return to college to study computing at GMIT Castlebar. He started off on the Higher Certificate in Science in IT Support, and progressed onto the B Sc (L7) in Computing in IT Support, and the B Sc (Honours) in Computer Services Management in 2007. He now resides in Tokyo, Japan, where he works as a Project Manager and IT Technician for Eire Systems, an IT Services company.



“Before my return to college, I was qualified in the Hospitality industry and managing a hotel in Galway. I always had an interest in IT and was attracted to the 18 month IT course in computing at GMIT Castlebar. My initial intention was to complete the 18-month course and pursue a career in IT. However, the add on courses were recommended to me by my lectures and I continued my studies.

During my final year, I researched many positions and careers both nationally and internationally and came across the post graduate “Overseas Graduate Programme” offered by FAS. I applied for positions in both Japan and China and after completing my interview in Dublin, I was offered a two-year contract with EIRE Systems in Tokyo Japan.

Before I began my studies in GMIT Castlebar I had never considered working overseas but GMIT and the lectures provided me with the opportunities and encouragement to reach out and pursue those opportunities.

The company is an IT Services company located in the financial district in Tokyo. It offers IT solutions ranging from IT support and infrastructure upgrades to office relocation and new office setup.

Business Continuity Planning and Disaster Recovery is a major factor for businesses in Tokyo. Japan has a high amount of seismic activity and businesses must be prepared in the event of a disaster occurring. This is a law requirement for all financial

companies in Japan. The company, EIRE, provides business continuity planning and disaster recovery solutions for financial companies in the Tokyo district.

Areas of work that I have been involved with include; BCP / Disaster Recovery planning and implementation, office cabling design, network roll-out and upgrades, hardware and software upgrades and roll-outs, office relocation and new office setup, IT support and troubleshooting.

Work ethics in Japan are different to any place I have worked previously. There are work procedures for all tasks and high volumes of documentation for each procedure.

At first, I was concerned about living in a city of 30 million people and how I would adapt to the food. To sum it up, Japanese people are courteous and friendly and the food is delicious.

A major challenge is the Japanese language barrier. Although I have a good understanding of the language, speaking, reading and writing, the Japanese language is made up of three alphabets, Hiragana, Katakana and Kanji. There are approximately 50,000 Kanji in the Japanese language and I know only a few hundred. With weekly Japanese lessons, my aim is to improve my language skills for better work relations. The Japanese proficiency ‘level 2’ is preferred for most bilingual work. My current language skill would be rated at level 3 (1 being the highest).

The programmes I completed in GMIT Castlebar provided a firm structure for my current career in Tokyo. They provided me with technical and managerial skills that I use daily in my current position.

Documentation and projects in college are the real thing. When completing documentation for work related matters, I often reference material gained through my studies at Castlebar.

Areas of my work include office setup and network builds and upgrades. This work was made possible from the networking training and facilities in Castlebar. Other areas of my work include Disaster Recovery Planning. This work entails high levels of communication and planning between the business departments and the technical departments. GMIT Castlebar provided ITIL studies, researching techniques, document writing skills and project management knowledge.

During my time in Japan, I have been part of the in-house support team to provide technical support for multiple off-site clients. The team provides IT support and assistance with any technical issues that may arise on a daily basis. All this was made possible through my studies in GMIT Castlebar.

I have many good memories - academic and social - from my time in Castlebar. Classes were varied, with a lot of different technologies available such as database design and administration, Networking, Linux, ITIL, and Service management. Lab classes were always a joy and a great time for

testing and knowledge gathering. Classes were interactive between lecturers and students, and debates in class were frequent with topics thrashed out in a positive manner. Some fellow students were appreciative of the fire alarm going off during my third year presentation, as I had taken up so much time and it was one way of finishing. Best of all was winning the highest academic award for each year.

If I was to offer any advice to current undergraduate students on business and IT programmes, it would be this: research all available options including post grad jobs. A lot of companies offer post grad positions and they are a solid foundation for the start of your career.”

EIRE Systems is an Irish company that was set up in Tokyo over ten years ago by two Irishmen, Matthew Connolly and Paul Timmons, who went to Japan on the FAS Overseas Graduate programme. They now have offices in Hong Kong, Singapore, Shanghai and Dublin. There are over 120 employees at the Tokyo branch, from many different nationalities.

Nursing Ambitions

Mike Healy B Sc (Hons) in Psychiatric Nursing
Staff Nurse, Adolescent Service, St Patrick's University Hospital, Dublin



"My job is challenging. I work as a staff nurse within the Adolescent Service in St Patrick's University Hospital, Dublin. My role involves liaising with Out Patients, Day Patients and In Patients to the service. Duties include multidisciplinary initial assessment, care plan management, key working of service users and service/policy development.

St Patrick's University Hospital is developing a 14-bed adolescent unit which aims to become a centre of excellence for people with eating disorders and general psychiatric difficulties. The aim is to bring them back to the highest attainable mental health. The job is very challenging but also rewarding when you see patients making progress.

I studied the four year B. Sc. in Psychiatric Nursing and was lucky to win both the Student of the Year award and the Jonathan Swift Award for Nursing, receiving a cash sum and the opportunity of full-time employment in a

large teaching hospital in Dublin. The award gave me the opportunity to study the M.Sc. in Mental Health (Child, Adolescent and Family) at TCD, allowing me to further my professional development in this area.

I always had a clear career path in my head during college to specialise in child and adolescent mental health and this was nurtured throughout my undergraduate programme. The B.Sc. in Psychiatric Nursing at GMIT Castlebar gave me a comprehensive education and a professional qualification and therefore made the transition from college life to the hospital floor much easier. It gave me the skills, exposure and resources to effectively take on my new role as staff nurse with ease and confidence. The facilities, support and lecturers at the Castlebar campus were excellent."

The Future of Furniture

Richard Moyles B Sc (Hons) in Furniture Technology, 2000
Director, Furntech Ltd. and recipient of Internet Entrepreneur of the Year 2006



After undertaking an Enterprise Ireland Platform programme six years ago, Richard Moyles set up the award-winning Furniture.ie, a consumer website for the home allowing people to shop for and compare thousands of products from a single location. The site currently attracts over 65,000 visitors every month.

In 2006, Richard won the Irish Internet Association (IIA) Internet Entrepreneur of the Year award and this year Furniture.ie was voted Best Commercial Website by Digital Media Awards and Best Interior Website UK and Ireland by Cabinet Maker, the industry 'bible'.

"The work I have done to date originally stemmed from my final year college research project back in 2000, titled "The e in Furniture" he explains.

I was always interested in furniture, so it was natural for me to study Fine Woodworking and Design, followed by a B.Sc. in Furniture

Technology at the Letterfrack campus. During my final year I founded the company Furntech Ltd in order to launch Furniture.ie, after realising that my niche should be marketing and retailing furniture on-line."

We have a small dedicated team of five people employed at our offices in Galway. The company is young in years and staff age. This small team gives us the flexibility to try things out and adapt and react to opportunities and circumstances as they arise.

GMIT Letterfrack offered a number of things: small classes, unique setting, hard work and great craic. The course was competitive but we all remain lifelong friends. Making and designing furniture was a great skill as it teaches you a lot about design, planning, patience and detail, all very useful when it comes to running a business." he adds.



Taming the Dragons

Michael O'Donnell and Donall O'Connor
 BB in Rural Enterprise and Agri-Business, 2005
Directors, pedigreecattle.ie

Two GMIT Business graduates were the first entrepreneurs to secure an investment in this year's popular new Irish TV show Dragons Den. **Donall O'Connor** from Co. Clare and **Michael O'Donnell** from Co. Limerick secured €50,000 from Dragons Sean Gallagher and Gavin Duffy, in return for 30 per cent of their online farming website, www.pedigreecattle.ie.

The two friends met in 2001 in Mountbellew Agricultural College, which offers joint programmes with GMIT. They both completed a Higher Certificate in Business (Agri Business) and progressed onto GMIT, graduating from the School of Business with a Bachelor of Business degree in 2005.

Up to May of last year, the two young GMIT graduates were one of eleven businesses in the LEAP Programme in LIT, a year-long programme designed for start-up businesses. "It has been a roller-coaster since we appeared on Dragons Den in February. It gave us the massive exposure we could never have afforded on our own," says Micheal.

"In college, we often talked about the frustration of spending so much time scouting the country for the perfect animal. Eventually, we decided to establish a site ourselves. It just took off from there, and now farmers with pedigree cattle are using the site for exactly the purpose we had in mind. It is saving them so much time travelling all over Ireland to check out herds. The response we have been getting is incredible – farmers are really finding it a useful service."

In May of this year the two young entrepreneurs won Best Business Plan Award for 2009 for their online business, PedigreeCattle.ie, based in the Enterprise Acceleration Centre in LIT. The site receives over 10,000 unique visitors each month."

"Our business provides farmers with a website to advertise, promote and source cattle online" explains Donall.

"We have expanded the business over the last year and in August of this year we launched an online store with over 100 products on offer. The project itself was an accumulation of six months work. One of the biggest challenges was sourcing suitable products at a price that we could be competitive with. Unfortunately these products are not produced in Ireland so it involved importing and sourcing them in the US and Europe."

"Like any business in a recession, maintaining and forecasting our cash flow is crucial and it's something we are constantly aware of."

"In my final year in GMIT, our class had up to ten presentations to make and I remember thinking 'when will I do one again'? Over the last twelve months we have made over fifty presentations to different bodies. That final year provided us with the structure and confidence to present in the following years.

"Agri business was a small class and having spent a year in Mountbellew we got to know everyone very well. Five years on, we still would be in contact with a lot of our year. Having lived on campus in Mountbellew, we came to know the lecturers very well and it's great to meet these people from time to time.

"There are opportunities out there for graduates, especially in start-up companies. I'd advise anyone to gain as much experience as possible for the first two years after leaving college.

"We were working on our business for seven months and only trading six weeks before we stood in front of the Dragons. We were grilled for an hour and a half before we secured the investment."

Liam Hynes B Eng in Manufacturing Technology (B Tech), 1986
 Plant Manager, Covidien Healthcare, Athlone



Designing healthcare

“I work as the plant manager of a healthcare company, Covidien Athlone, which currently employs over six hundred people at its Westmeath facility. Covidien Athlone, formerly Tyco Healthcare, is involved in the design and manufacture of airway products. These are medical devices that are used to maintain a patient’s airway when they are being mechanically ventilated as a result of a trauma or in a post operative situation.

I studied Manufacturing Technology (known as the B-Tech) from 1982 to 1986. At the time it was a combined degree course run jointly between the then RTC and UCG. It involved two and a half days each week in each institution. I subsequently completed a Masters in Business Administration at the University of Limerick from 1998 to 1999.

The Manufacturing Technology degree was a particularly good engineering course in my view as it provided a strong technical engineering understanding and coupled this with a practical grounding in engineering principles. The B-Tech at the time was the only engineering course in NUIG or GMIT with an Industrial placement module. This was invaluable in getting my first job in manufacturing, as employers appreciated the significance of having had at least some level of industrial experience.

Because of the dual location of the course at the time, I recall we spent a lot of time and money on CIE transportation. Indeed we had a cross city dash each week, finishing a lecture in UCG at one o'clock and starting a lecture in the RTC at two. As a result of the travel between the two colleges members of the class spent a lot of time in each other’s company, which resulted in strong friendships being formed, many of which still endure today. The lecturers that I remember from my time in GMIT were Gerry McMichael (Theory of Machines), Michael Reen (Head of Mechanical Engineering), Workshop Theory and Practice, and Spiro Heat Energy Utilization.

I believe strongly that students should look on college as a life learning experience and not just an academic challenge to be “got through”. The most successful people I have met in business are always the most rounded individuals who have an ability to communicate openly with people in order to influence them positively. If I was to highlight the most important personal skill for anyone to develop for future career, it is good communication.”

Selma Makela BA (Hons) in Art and Design, 2007
 Artist

Picture this



Two years out of art college and already Selma Makela is a successful exhibiting artist, in demand on the national and international circuit. With nine group exhibitions and two solo shows under her belt, two upcoming exhibitions - in Canada next March (2010) and in Dublin in December (2009)- her work has been snapped up by private collectors in Ireland and London.

She is a recipient of the coveted Fleck Fellowship-Banff International Artists Residency, which takes her to Canada in the new year, and numerous individual artist awards and distinctions since graduating with a First Class Honours BA in Art & Design from GMIT Cluain Mhuire in 2007.

Based in Headford, Co Galway, Selma was born in the UK of Finnish, Cypriot and Ukrainian heritage. She moved to Ireland

twenty years ago. Her background may go some way to explaining her talents and inspiration. “It’s a gift to have such a gene pool to dip into.” she says.

“I use oil paints and small bits of animation and I love to look at other paintings, paying regular visits to the National Gallery and different art galleries.”

Isn’t a career as an artist challenging? “You are on your own but like anything you have to work at it. I’ve been really lucky.”

Did college prepare for the challenges? “It taught me about the importance of discipline. My painting tutors and lecturers in Cluain Mhuire were really fantastic and so supportive. I’ve great memories of my peers and all the help we got. There is also great support from friends and other artists in Galway but essentially it’s down to you to persevere.”

Selma Makela can be contacted at [selmakela2@gmail.com](mailto:selmamakela2@gmail.com). She is based in Ower, Headford, Co Galway.

Handbags

Geraldine Fox BA in Design in Textiles, 2005
Freelance Designer, New York



“After finishing college I won the RDS Award of Excellence with my final pieces from my GMIT degree show. I then started my own line of small accessories and belts, mostly in exotic leathers with elements of embroidery. From that I was able to make good connections in the Irish fashion industry and then took a position with an Irish-based Handbag company as an associate handbag designer. I quickly realised I had a love for accessories and knew it was the industry I wanted to stay in. I worked as a Senior Handbag Designer with the company for a number of years until I moved to the US in 2008.

As a Freelance designer I am expected to work with a company’s own aesthetics and branding, while my own style and design ethic will always shine through. It is important for me to work with a company that fits my own design principles.

I mostly use leathers and fabrics which are soft to the touch and sit comfortably against the body, while also are hard wearing. I feel a handbag should be simple yet functional in shape, letting the leather and hardware add a touch of luxury. I sketch most of my designs and then work through Adobe Illustrator.

I take a lot of my inspiration from design and fashion of the past. At present I am looking at Arms and Armour from the 14th century and pushing it into something very contemporary, for a collection of handbags. I also take inspiration from costumes around the world.

Living in New York I have so many avenues of inspiration, from museums and galleries to just watching everyday life happen around me. Walking down the street and seeing someone carrying my handbag design gives me a great sense of fulfilment.

The recession has been my biggest challenge to date. Having come from the Celtic Tiger to a crumbling US economy has tested me as a person and as a designer. Other challenges have been learning to ‘talk the talk’ American style, learning how to do business and interact here compared to Europe.

My studies in GMIT Cluain Mhuire taught me the importance of design preparation. At the beginning of a season I still treat it as a project in college. Starting not just with an idea but also a theme and pushing it into a series of mood boards. Only at the end do I begin to create actual handbag designs.

My advice to undergraduate design students is to listen and take advice from tutors who are there to guide and help you. But remember you are the one graduating, so it is important to look inside and make your own final decisions. If you are not in control of your work and feel unsure of yourself then that will show in your final pieces. Be confident in your work, and when challenged you’ll be able to back it up to the end. This will stand to you in your final grading and your future career as a designer or artist.”

High drama

Muirinn Lane Kelly
Postgrad in Film & Television, 1995
Freelance writer for TV Drama

“I have been based in London for the last 12 years and mostly write TV drama such as *Mistresses* on BBC 1 and *Raw* on RTE. My career started when I studied film and TV production in GMIT when the course was first running as a one year post-grad offering.

After graduating in 1995 I went to work for Roger Corman in Connemara along with pretty much half the class, and worked as Location Manager and also as a Camera Assistant. It was a time when I wasn’t so clear on what I wanted to do so I worked there for two years and in that time we made nine feature films of very high quality.

After that I moved to London and got a job temping in the BBC. This led to a full time job as Launch Manager of BBC Three. During this time I took night classes in script editing and once the channel was launched I moved into BBC Drama in 2002 where I script edited *Grease Monkeys* for two years, and then script edited *Waking the Dead* for two years.

I left the BBC three years ago to work for Ecosse Films as a script editor on the first series of *Mistresses*, a drama about infidelity and female friendship. I was the Story Producer on the second series and Ecosse offered me the chance to write my own episode, which I jumped at. I really got interested in writing myself once I started script editing, which is a brilliant training ground for the job.

I would have to say there was an excellent module on screenwriting on the GMIT course led by Patsy Murphy who has since retired. She introduced us to Syd Field (not in person) and Eoghan Harris (in person) and I think that was a bit of a revelation for me. So, although I always knew I wanted to work in film and TV, the plan to become a writer evolved over time.

As a writer on a TV show like *Mistresses*, you’re part of the storylining team, along with the producer, executive producer, script editor and other writers. The first thing we do is get together for days on end to map out where we want the characters to go. In *Mistresses*, this means who do we want to sleep together. It’s great fun.

I write it all up in a ‘bible’, and the script editor decides who writes which episode. And then you’re on your own to write up your first draft outline. Depending on what kind of writer you are, this can be anything from a four page prose treatment of what you’re going to do, to a detailed twenty page scene by scene. I do the latter. Storylining to shooting script can take around six months. Once the shoot begins, you’re on stand-by for revisions (pink pages) or cuts. You’re released from duty once the whole thing is in the can. Then you get paid. Then you go shopping.



The best thing about being a writer is working from home. No more commuting on the tube, no more office hours. You can structure your own day more freely, as long as you hit your deadline.

Writers are paranoid that they’re not very good writers. I was surprised by how quickly that set in. As a freelancer, you’re never sure where your next job is coming from. And it can be a feast or a famine. You have to do a lot of spec work, and it’s very competitive. There are a lot of excellent and experienced writers pitching for very few slots.

The GMIT course was a great preparation. It was my first exposure to all kinds of specialised information, both technical and creative, about how to make films and TV shows. In fact it was the course’s first year. Patsy Murphy was a fantastic teacher. Passionate, creative and encouraging. We were really privileged to have so much access to her. She brought in great guest lecturers from the industry and set us up on great work experiences. From the very first day we were taken seriously as young film-makers, provided with professional equipment and given freedom to experiment with what kind of story-tellers we wanted to be.

I’d advise current students on the Film & TV course to look around you at your classmates. One of you will win an Oscar or an Emmy. It could be you. But try not to waste too much time day dreaming about it, fun as it is. Use every spare second productively, reading scripts, books about writing, directing, producing, watching every film you can get your hands on, and using the course equipment to make as many films as possible. You’ll never have this time again. Once you start working, you’ll find it hard to catch up on that stuff.”

David Ahern BA in Film & Television
Art Director, TG4 soap-opera *Ros na Rún*

Life in a soap



"I'm from Limerick originally and moved to Galway to study. I always had a keen interest in film and wanted to study it with a view to actually working in the industry after I graduated. The Film & TV programme offered the balance of theoretical and practical that I was looking for. I didn't quite know what area of film I wanted to pursue but the course offered the chance to try a wide range of disciplines, including camera, editing and script-writing along with other more theoretical aspects such as film history and theory.

I gravitated towards Production Design, which refers to the visual look of a film through the design of the sets and props. This appealed to me the most as it combined a lot of different elements. On the course we explored areas of design such as model-making, drafting floor-plans, set building, graphics and prop-making. Our lecturer Declan Sheridan also made sure we all had the best possible portfolios put together by the time we left college, which has proved very valuable.

The Film & TV course really puts emphasis on finding employment in the industry. Before we left, we had a series of talks from people who were working in the industry. It was through this that I got my first job working on a kids show for TG4. During my time on that job I was encouraged to apply for an Art Director position in *Ros na Rún* and eventually, much to my surprise, was offered the position.

From there I've been lucky enough to find work pretty regularly, with never more than a few weeks between jobs.

I started back into my second season of *Ros na Rún* in August. As one of three art directors, I am responsible for making sure we have all the necessary props for each episode, including vehicles and graphics. We also have to maintain and update all the sets, along with dressing any locations we film in.

The best thing about my job is that I can be creative and try my hand at a lot of different things. Working as part of a crew can be great fun and I've made a lot of good friends through work.

The most challenging aspect of working in art departments is the long and often irregular hours. The system of finding the next job can also be quite frustrating: it doesn't work like most other professions as almost all jobs are offered purely on word-of-mouth basis, so you really have to keep your ear to the ground and try and make a good impression on everyone you work with.

My time in GMIT prepared me for the working world by teaching me the basics of the industry and, most importantly, how to work as part of a crew. From working on our student films and college projects, I was able to make a lot of mistakes at that stage and learn from them before moving into a professional environment.

The course also instills a strong work ethic in the students and by the time we graduated I think most of us saw the commitment and drive needed to work in film and television. The lecturers, particularly Celine Curtin, really aimed to have us ready for work once we finished college and there was a real sense that there was always help there for us. Having a lecturing staff with so much industry experience really helped me get a feel for what working in film and television would be like and I think that was a real benefit to me when I was starting out."

GMIT launches EU initiative to help SMEs

An EU initiative aimed at helping small to medium size enterprises (SMEs) to be competitive in the global market was launched in GMIT this year. A free seminar, workshops and a conference have already taken place in recent months, with local SMEs invited to attend.

The €8m project, titled "FutureSME, Framework 7 European Research Project", aims to deliver a set of practical tools and methodologies that will assist European SMEs to reach and maintain worldwide competitiveness. It will provide a strategic and operational framework to help companies involved in complex supply chains to optimise their business processes in terms of time, cost, quality and sustainability.

The EU project has 26 partners from Ireland, Scotland, Italy, Turkey, Poland, Sweden, the Czech Republic and Slovakia. Over 50% of the partners are SMEs, with the remainder carrying out research and development. The University of Strathclyde is the overall coordinator, while GMIT is responsible for developing environmental and regulatory models and tools.



Pictured, l-r, at the GMIT launch: Denis Kearney, Tsunami Training and author of the original FutureSME proposal, Dr Paul Nolan, NUI, Galway and Astech, Dr Paul O'Dowd, GMIT, Willie Cahill, University of Strathclyde, and FutureSME Project Manager, Pat O'Meara, Supply Network Shannon, Sean Ryan, Supply Network Shannon, Ardawan Lalui, Pat Donoghue, Eirebloc, and Dr Noel Harvey, GMIT.

€1.2m for GMIT research schemes

€1.2 million has been awarded to the Institute under the Research Capital Grant Scheme funded by Enterprise Ireland. €352,000 was awarded for the purchase of a digital fluoroscope, which will give GMIT a distinct edge in the development and assessment of implantable medical devices, €384,000 for the development of small-scale wind turbine facilities, and €507,000 for an Agilent 6520 Q-TOF Accurate Mass Spectrometer. These machines will be made available to research groups from external entities that are engaged in industry-focused projects.

Colleges collaborate to promote research & innovation in the region

GMIT has signed a major collaborative agreement, to boost research and innovation in the BMW region, with NUI Galway, the ITs in Athlone, Dundalk, Letterkenny and Sligo, and St Angela's College, Sligo.

Under the auspices of Lónra, the colleges will work together in core areas: biomedical science and engineering; environment, marine and energy; software development and applications; health services research; social entrepreneurship; socioeconomic sciences and humanities; and food and agriculture.

The agreement envisages research policy reflecting the socioeconomic needs of the region. It is also expected to strengthen the ability of the sector to attract funding.



Pictured (front): Dr James Browne, President, NUI Galway; Prof Ciarán Ó Catháin, President, AIT; Denis Cummins, President, DkIT. Back, l-r: Prof Terry Smith, VP for Research, NUI Galway; Paul Hannigan, President, LyIT; and Dr Patrick Delassus, Head of Research, GMIT.

€1.4m for research enhancement projects

GMIT was awarded €1.4 million under the HEA Research Enhancement Scheme for the establishment of three large laboratories, new equipment and a suite of offices in which to consolidate and further develop research across all disciplines. The centre will have the capacity to house 28 postgraduate and postdoctoral scientists, and will have its own entrance to facilitate 24 hour access. The new centre is expected to be fully operational by December 2009.

Five new agreements with Chinese universities

GMIT has signed five new collaborative research agreements with Chinese universities this past academic year: the University of Shanghai for Science and Technology (USST) and its Centre for Micro Invasive Medical Devices; Shanghai Ocean University (SHOU) and its platform "China Fisheries Network"; Guizhou University; Beijing University of Civil Engineering and Architecture (BUCEA); and Nanchang University (NCU). The agreements are expected to foster co-operation and information exchange between the colleges.



Innovation in Business

by Gordon Smith

GMIT has two Innovation in Business Centres, located on its campuses in Galway city and Castlebar, County Mayo. Supported by Enterprise Ireland, these facilities provide early-stage companies with incubation space as well as offering a range of support services designed to help these companies grow their business. The centres also look to promote entrepreneurship in the region, foster innovative ideas and assist in the commercialisation of research generated within GMIT.

Galway IiBC Management is a results business and on those terms, George McCourt, manager of the Galway Innovation in Business Centre (IiBC), says the startup incubation facility punches above its weight. “For me, the results and economic benefit to the region are hugely important. If you look at other incubators now, I would say we’re ahead of the average,” he claims.

Over the past four years the businesses based there have created 82 new jobs. To date, seven companies have successfully transitioned from the incubation facility into their own offices, creating 32 jobs in the process.

Since the centre was established, companies based there have collectively received €533,000 in research grants and raised a total of €8 million in investment funding. Eight businesses based there have been designated as HPSU (high potential startup) companies by Enterprise Ireland. Last year the companies earned combined revenue of €2.5 million.

The centre was set up in mid 2005 but according to McCourt it took 18 months to establish the facility in the area. “From then on we’ve been quite successful,” he reports. There are 27 companies currently resident in the Galway centre on

GMIT’s campus, which translates to an occupancy rate of 90 per cent. The startups are working in a range of sectors including software and services, medical devices, environmental systems and information and communications technology.

The Galway centre is located on GMIT’s campus on the main Galway-Dublin road. It occupies 1,125 square metres of space over three stories, divided into 19 incubation units ranging in size from 18 to 60 square metres. These are suitable for one or two-person startups to larger companies with greater need for space.

The IiBC has also set aside space for what it calls a ‘concept desk’ facility to foster good ideas and projects that are not ready for full incubation. Entrepreneurs can take space at the centre to

test the viability of their business concept, conduct market research and market validation and then potentially move into an incubation unit after a screening process.

Enterprise Ireland provided 95 per cent of the funding for the IiBC building and the agency lends its support to client companies in several ways, such as equity funding, research support, feasibility studies, consultancy and export development.

Encouragingly, despite the downturn a number of resident companies have moved from smaller incubation units into larger spaces. “The reason in most cases is that the companies are expanding, taking on extra staff or they need more space for development,” McCourt explains. Five new companies have taken additional space at the Galway facility and only one of the resident companies has downsized in the past 12 months.

Among the companies currently based at the IiBC are Chipright, which is an innovative engineering organisation and industry leader in the provision of electronic design and verification. Another company, Tradecert, uses its technology to automate the process of applying for export compliance documents. Nortev, a medical device company, is working on a system for localised drug delivery while ATFM Solutions provides electronic document technology to small firms and multinationals.

Beyond giving early-stage companies the space to grow by themselves, an additional benefit of being based at a campus incubation facility is the clustering effect – the ability for startup owners and staff to compare notes with peers working in other sectors. George McCourt believes that’s definitely true of the Galway centre. “I think the most effective service we provide is good coffee!” he quips.

This has already reaped results, whether as client companies exchanging ideas by chatting in the corridors, or more formal business collaboration on projects. When IiBC company Marvao

Medical Devices needed a 3D animation movie to demonstrate its technology at a conference in Europe recently, it found the developer in the design company eMedia located in the same building.

Further collaboration opportunities present themselves, with the host institute GMIT right alongside, in addition to the GMedTech Applied Research Enhancement facility also located on campus. George McCourt points to students in disciplines such as engineering, science and marketing, who have been on work experience placement with some of the IiBC companies while doing their final year student projects. In some cases this has led to full employment.

In the future, McCourt is optimistic that students completing courses at GMIT will choose to become entrepreneurs and base their startups in the IiBC on campus.

In addition, the GMedTech centre is a further resource for startups based in the IiBC and some have already availed of its services. GMedTech offers in vitro simulation test facilities that closely mimic human anatomical systems to serve the needs of medical device companies.

The IiBC is also involved in the Midlands and West Enterprise Programme (MWEP), a one-year programme aimed at helping entrepreneurs along the path from concept to commercialisation. “A significant percentage of HPSUs in the incubation centre have come through the MWEP so it is a strong platform for building technology companies,” says McCourt.

George McCourt’s own background includes senior management positions at multinational technology companies as well as startups. He says he spends much of his time in the screening process to ensure the right quality of company coming into the centre. It’s not just about filling the space, he insists. “Intervention is where we make the difference,” he says.

McCourt sees his role as part mentor to the startups that come

through the doors, and many are quick to point to the guidance he has given them as they take their first steps in business. “Even when people come in to us at the concept stage, we would do a lot of mentoring and coaching, and we review the companies on a formal basis. The incubator won’t be successful unless these things are happening,” McCourt believes.

That success was validated recently when an international consultancy group conducted reviews of campus incubation facilities in Ireland and gave the Galway and Castlebar IiBCs a favourable appraisal. That extra credibility, says McCourt, puts the centre firmly on course to fulfil its vision of becoming a hub for entrepreneurship in the West of Ireland.



George McCourt, manager of the Galway Innovation in Business Centre

Regional & Economic Results – IiBC’s
 100+ new jobs created
 10 High Potential Start-Up Companies
 11 Successful companies transitioned to the regions
 €9,000,000 funding raised by IiBC clients
 Total Revenue from Client Companies in 2008 €2.5m

Castlebar IiBC



Maria Staunton,
Innovation in
Business Centre
(IiBC) Mayo.

The idea of going into business for oneself is exciting and daunting in equal measure – after all, it’s a step into the unknown for anyone doing so for the first time. That’s why being able to call on support services to help get a fledgling firm established is crucial, as is having people nearby who are having similar experiences. Factors like these make a strong case for startup incubation facilities, says Maria Staunton, manager of the GMIT Innovation in Business Centre, Castlebar.

As part of her role, Staunton organises many events, all aimed at giving startups the opportunity to meet informally and discuss areas of common interest. Every second Tuesday at the centre, all clients meet and a nominated tenant company in the IiBC pitches a business problem to his / her peers. “We try to help them solve it collectively,” explains Staunton. This is a way of helping business owners feel part of a larger group, she adds. “A big part of the innovation centre is internal networking and sharing expertise. That’s invaluable.”

Variety comes from the range of experience among entrepreneurs based at the centre. “You get a lot of people who are technically capable but maybe not as good at sales and marketing, or just standing up in a room and making presentations, so the Tuesday event is a good way to get people up and start to sell themselves,” Staunton explains.

There are currently twenty start-ups (both companies and individuals) based at the centre. Located at the heart of the GMIT Castlebar campus, the IiBC occupies 485 square metres of space comprising 10 available offices, as well as a board room, reception area, a training room and kitchen area.

The centre was established in mid-2006. Tenant companies have created 38 jobs over that time and are availing of other support services through the GMIT and Enterprise Ireland, such as participating in the innovation partnership scheme and availing of innovation vouchers to tap into third-level research.

There have been four spinouts to date: Cara International, EBSS, Whitethorn Media and Inspire Learning, all working in the software and services sector.

Construction Management Software recently became the first Castlebar IiBC tenant to be designated as a high potential startup (HPSU) by Enterprise Ireland. According to Staunton, there are other companies located in the centre which have the potential

to become HPSUs in the next few months

The Castlebar IiBC also offers virtual space for business owners who are located elsewhere in Mayo, such as Achill or Belmullet. “Once your business aligns with the types of businesses the IiBC is looking to create, then you can use the centre’s postal address and the boardroom facilities for meetings and to meet with the clients and manager of the centre to help to develop and grow your business. This is also a good opportunity for those who are already employed but who are looking to dip their toe into water to see if their idea has good potential. This enables them to do some research and then build up good confidence before making the leap of faith.”

Other new initiatives include the Mayo Open Coffee Club. This encourages entrepreneurs, developers and investors to organise real-world informal meetups to chat, network and grow. The Castlebar IiBC hosts its version on the first Wednesday of every month, aimed not just at its tenants but at everyone in the county – and beyond – who may be interested in starting their own business.

With this event, the intention is to invite potential investors and other industry people to visit and network in an informal setting for a chat and a coffee. This way, companies can sound out potential investors, mentors or simply to make new contacts who could help the business in other ways. “We link you in,” says Staunton. “If you’re looking for information around intellectual property or patents, we have contacts. And from the other side, you have solicitors or accountants who might be looking for ways to meet new clients so we facilitate those meetings in an informal way.”

For over three years, the facility has hosted the Spirit of Entrepreneurship evening talks at the Castlebar campus, where established and successful businesspeople make guest presentations and answer questions from the audience. John Quinn from Surface Power Technology in Tourmakeady was the most recent speaker and previous guests have included Frank Salmon, founder of the technology distributor CMS Peripherals based in Kiltimagh, Co. Mayo, Jerry Kennelly, the man behind the Stockbyte photo website that was sold to Getty Images for \$135 million in 2006 and John Concannon, founder of JFC Manufacturing in Tuam, Co. Galway. “They’re very high calibre people – all of them have been finalists in the Ernst & Young entrepreneur of the year awards,” says Staunton. “We’re trying to drive people to get interested and have them thinking about making the next step.”

This drive extends to working with GMIT students on campus as well as initiatives in primary and secondary schools. Part of the IiBC’s remit is to establish strategic links between GMIT and the world of industry and commerce. With that in mind, a number of students were working voluntarily with IiBC companies over the summer. If a company was looking for a student from a certain discipline and there were none fitting the profile in Castlebar, Staunton points out that she can also liaise with the Galway GMIT campus. “This is a huge advantage to both centres as we have access to graduates in all of the GMIT both in Galway and Castlebar,” she says

Also in an educational vein, the student awards, now in their third year, are designed to encourage students to be creative and come up with new ideas, or innovative business concepts. On behalf of the centre, Maria Staunton is also involved in the Mayo science and technology festival. “We’re trying to initiate that sense of entrepreneurialism at primary and secondary level. It’s about trying to get people to think about it more.”

It is a significant cultural shift, she agrees. “In the US when

you’re in school the idea to work for yourself is planted in your mind. We’re trying to get the mindset changed here – to get people thinking ‘how can I do this for myself’ and to be master of your own destiny in a way that you’re not when you work for someone else. All of the events we hold and the work we do is to say to people ‘you can do this yourself’. There is a strong base of indigenous small companies in Mayo and we’re trying to build on that, with a focus on innovation and on selling products and services overseas,” she concludes.

imeeGOLF



John McGuire,
Chief Executive,
Active Mind
Technology

With science and technology playing an increasing part in sport at all levels, the door is open for new business ideas that feed into this trend.

John McGuire, chief executive of Active Mind Technology, has spotted a niche in sports coaching. McGuire originally worked as a software developer with Nortel Networks and while there he trained in sports psychology.

He founded a clinic in Galway in 2004 and had been working with sportspeople including hurlers, footballers and athletes. “It got to a stage where the clinic got so busy I thought it would be easier to have a number of products out there,” he says.

Keen to explore his idea further, McGuire took a place at the concept desk facility in GMIT’s Innovation in Business Centre in 2006. “I conducted market research and validation in Ireland, the UK and the US. The system has come about from talking to a range of coaches, not just in golf,” he says. “Since going into the incubation centre I’ve had George [McCourt, IiBC manager] mentoring me and been involved with Enterprise Ireland. The concept fleshed out into initially a business plan and now we’re at the stage where Enterprise Ireland has taken an equity stake.”

Working from the principle of ‘improvement made even easier’, the company now has two products, imeeCOACH and imeeGOLF. imeeCOACH is an online coaching system that allows coaches to teach players remotely via video sharing and web-based training.

“imeeGOLF.com will be a Web 2.0 social networking marketplace where golfers’ data will reside and it will match your profile with the most suitable coach,” McGuire adds. “The intelligence in the system will recommend the right kind of coach depending on the part of the golfer’s game that needs work, such as putting, chipping or driving.” The company recently signed a deal with the prestigious Cranfield Golf Academy and has held discussions with the Jack Nicklaus coaching school and Golf.com, a website with six million members.

Coaching plays a significant role in golf at all levels, and

McGuire doesn’t have to look far to find a good example. “If you look at Padraig Harrington, he is an ambassador for promoting how the mental side of the game affects your performance,” he says.

The concept for the products is that golfers will have access to best-practice coaches, while coaches will be able to manage their clients more easily and increase their profits by being linked with golfers in need of assistance.

McGuire actively seeks feedback from potential customers and the products are constantly being updated as a result. “The idea was in my head but it was nourished by the marketplace. If you’re a startup business in Ireland, you’ve got to get talking to your marketplace. You’re got to say ‘this is my idea, but how do you think it could be improved?’”

Being based at the IiBC allows him to share ideas with peers, he adds. “Some of the businesses are a year or two ahead of me and have more experience. There’s a lot of experience in that building. Hopefully I have something to offer them – everyone is in that startup or early growth phase, so everyone is hungry to learn, and to be in an environment like that is fantastic.”

Marvao Medical Devices



Chris Davey,
Managing Director,
Marvao Medical Devices

The nature of medicine is that sometimes, fixing one problem can unintentionally cause another. An example of this is the insertion of a central catheter – a tube that goes into the body to provide treatment for various kinds of illness. It’s a very common medical procedure and a catheter often remains in place for weeks or even months at a time. However, since it must go through the skin it leaves an open wound which is prone to infection. This is the first problem Marvao Medical Devices has set out to solve.

“We’ve slightly modified the standard design, by adding another component that enables the skin to heal into the device,” explains Chris Davey, managing director of Marvao. This component is known in bioengineering as a tissue ingrowth scaffold. “Ease of placement and removal of these devices are critical customer requirements. Providing these features has been as much a focus of our design efforts as ensuring that the skin grows properly into the scaffold,” adds Davey. Crucially, nurses who use the device to provide therapy will not notice a difference and will not need any additional training.

Davey, whose father hails from Sligo, has spent a lot of time in Ireland for family as well as business reasons. He is a 23-year veteran of the medical devices sector and spent a portion of his career at Boston Scientific working on similar initiatives. He had been taking an MBA in Boston when a chance introduction to



Enterprise Ireland was the catalyst to bring the business to the west of Ireland. "All of the infrastructure I needed for medical device development is here. Enterprise Ireland made an investment to match what we were putting in. The only 'catch' was, I had to relocate to Ireland," he jokes. "I was ready to move either way, but the EI investment was crucial to success."

Marvao officially started in late 2005 and has since received follow-on funding from Harmac Medical, a US company with manufacturing operations in Castlereagh. Harmac will produce the products under contract while Marvao will concentrate on product development, marketing, clinical trials and dealing with the necessary regulatory bodies.

Total investment in Marvao from a variety of sources, including EI and the WDC, now stands at €1.5million. The company currently employs three people and Davey is optimistic about increasing that number to 10 over the next 18 months, not including the additional jobs created at Harmac. He estimates the market potential for the device as being more than \$800 million annually. "We're still 12 to 18 months away from being able to sell products to third-party distributors," he says.

The company expects to perform its first clinical study next Spring at Galway University Hospital. This is another sign, according to Davey, that the west of Ireland has the necessary resources to foster companies in the medical devices sector.

Being based in the iIBC facility in Galway has reaped several dividends for Marvao. When Davey needed to produce a video for a conference presentation, he found eMedia, a neighbouring incubation firm which developed a two and a half minute animation. Davey also appreciates the ability to network with other start-ups at the facility. "We're in the same boat, even if in totally different industries. Many companies are at the same stage of evolution and we can compare notes on funding strategies and other issues. It's critical, and it's very encouraging to see other people succeeding in the same situation."

Construction Management Software

Accounts software is widely used in most companies but by its nature it has to work regardless of the industry the customer is in. That presents an opportunity for companies that can provide the sector-specific knowhow to help a business really derive benefit from it. Construction Management Software, in the words of managing director Michael McCormack, "it gives construction firms the ability to deal with all aspects of a contract, from estimating through cost management of materials and subcontractor procurement to valuations and sales."

"We have taken a best-of-breed approach. Accounts software products like Sage, Access and Exchequer are generic; they don't



Michael McCormack, Managing Director, Construction Management Software

suit the needs of the construction industry," says McCormack. The company has developed a set of XML middleware, which is software code that allows different programs to communicate with one another. This can take information out of Construction Management Software and feed the data into a company's existing financial software or its project planning software.

"By taking this approach, companies don't have to throw out their existing package. That's very powerful for a sale and it was one of many things I thought of when setting up the business," McCormack explains. "Our product gives control – you know facts before you spend money. A lot of banks, I believe, will not lead to construction firms unless they have controls like that. There is definitely an increasing requirement for IT systems in the building industry."

McCormack previously ran his own construction company so he is familiar with many of the issues facing business owners in the sector. "I spent most of my working life in construction and if you don't understand the requirements of the business, you're wasting your time," he says. The company's sales force come from a similar background, he adds. "I wouldn't want to have anybody going out to clients who don't understand their requirements, or the terminology in the industry."

The company employs 12 people, split evenly between the UK and Ireland. Most of the staff in the UK are in sales and marketing roles, while the software development work takes place in Castlebar at the Innovation in Business Centre on the GMIT campus. "Finding this place was an absolute gem and the staff here are superb," says McCormack. "Clients come down to see you and you can bring them into the boardroom, we can demo the software to them. It casts a good image. It's got a lot of plus points."

The company expects to be profitable by 2011 and has already benefited from Enterprise Ireland investment of €300,000, which was matched by McCormack. "This brings the total investment to date to €1.1 million." EI has also designated the company as a HPSU [high potential startup].

McCormack foresees a tough couple of years before things improve, with the recession having hit the building sector especially hard. "From a revenue point of view it's going to be slow this year and slow next year and I see things moving again in 2011," he says. With that in mind, the company has embarked on an intensive marketing effort. "There is not a single person in this country in construction who doesn't know who we are," McCormack says. "The sales pipeline is potentially really good, and I know every single minute the product is improving."

InTime Media



Julian Ellison, Managing Director, InTime Media

As TV watching becomes a more fragmented pastime thanks to digital video recorders such as Sky plus, programme makers are looking for more ways to make their shows compelling viewing as a live experience. Interactivity is one of the ways to do this, through competitions and viewer feedback.

Enter InTime Media. Working out of the Castlebar iIBC, it develops software to make the mobile phone work in time with the programme on screen. The applications could include anything from responding to a soap opera plotline, choosing the right answer in a game show or voting for a contestant in a reality dancing contest.

"It's transforming the phone and the TV screen into one and the same medium," says Julian Ellison, InTime Media's

managing director. The software is compatible with most makes of mobile phone, and a version is in development for the Apple iPhone as well as Google's Android operating system.

For example, a demo of the quiz "Who Wants To Be A Millionaire" lets the user answer the same question as the contestant on the screen. The graphics shown on the phone are the same as the TV programme, but the player with the phone isn't allowed to answer the question after the real contestant has.

But how does the phone work in time with the programme? "It's quite cheeky but quite brilliant – it uses the sound coming out of the TV," Ellison explains. The interactive feature also uses the phone's internet connection. "It's still able to be simultaneous with the programme because it's sending very small amounts of data."

Before relocating to Ireland, Ellison worked extensively in this area in the UK. InTime was founded in 2006 and through Ellison's contacts in the industry the company has been able to work on its core technology through trials with the BBC, ITV and Channel 4 in the UK.

The company is a lean team, with four staff including Ellison operating out of the Castlebar incubation centre, and an additional partner based in London. "We're at a point now where we're bubbling along," says Ellison. "We need funding to expand the team to work on more than two projects simultaneously." InTime hopes to raise €600,000 through a combination of Enterprise Ireland as well as private investors.

A tenant at the Castlebar facility for more than two years, Ellison is full of praise for the centre and its manager. "Maria Staunton has been extremely helpful, she's been doing everything she can," he says. Nurturing a startup in Castlebar is much more cost-effective than in London, he adds. The proximity to Knock airport is another bonus for doing business in the UK. "There's a good vibe here – a feeling of trying to do something here, to get a cluster going and create jobs. We're having a go."

InTime is already earning revenue and Ellison believes the company is now at a tipping point. The patent is protected in Ireland and will be in other countries soon. "We've established the model, it's developed and the technology works," he says.

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Maria Staunton 094-9043198
Website: www/gmit.ie/iibc

Dr Patrick Delassus: Driving Research

Dr Patrick Delassus is tasked with implementing a new Research Strategy to increase GMIT's outputs and visibility. He talks to journalist Gordon Smith about the Institute's current activities and future goals.



PHOTO: JOE O'SHAUGHNESSY.

GMIT has developed a strategic vision to create a research and innovation hub that bridges the academic and business communities. Part of the strategy involves encouraging more researchers to contribute to spinning out ideas and research into start-up companies. It recalls the original mission of the Regional Technical Colleges, prior to being designated as Institutes of Technology, to work closely with industry, for industry.

"Over the past few years, we drifted away from what I thought was a successful model where academics engaged directly with industry," Dr Delassus explains. "We are now correcting this with greater focus, and proactive promotion and selling of our competencies to industry."

GMIT's traditional research strengths have been in Marine and Freshwater, Biomedical Engineering, and Energy and the Built Environment. The Institute has also identified other areas with potential – Digital Multimedia, and Tourism, Heritage and Arts.

For over ten years, the Marine and Freshwater Group has made a name for itself in contributing to policy development for commercial fisheries and is presently involved in the mapping of marine mammals and megafauna distribution off the coast of Ireland. This project is undertaken in collaboration with the Irish Whale and Dolphin Group (IWDG).

Galway's position makes it an ideal place to act as a location for medical devices research. "We have taken advantage of being in the middle of one of the biggest medical device clusters in the world, and continue to engage in research within this cluster through our GMedTech Medical Technologies Centre," he points out.

"Furthermore, there are also a large number of companies in the Galway and Connemara region involved in digital media, an

area that Enterprise Ireland has identified of strategic importance, so this too is a key focus for the Institute. "We want our department of Film & Television to become more involved with industry and producing research in the Digital Media area," says Dr Delassus.

The incubation facilities within GMIT are central to the success of the strategic vision, Delassus adds. GMIT has two such centres at its Galway and Castlebar campuses and they offer a place where ideas that originated in a lab can be fostered and encouraged in an environment that is tailor-made for knowledge-intensive businesses in early growth stage. "We want to build on that success and increase the interaction between the academic/research world and the incubators," says Delassus.

There are some positive examples of this in action. eMedia is a client company located on campus at GMIT's Innovation in Business Centre. The digital media design company has just launched a new 3D animation for the iPhone that shows the workings of the human heart. Two GMIT Computer Science graduates have worked on this project with eMedia.

In a similar fashion, the applied research facility for medical devices, the GMedTech Centre, is another asset supporting GMIT's strategy. Part of our Biomedical Engineering research is developing research platforms which mimic body functions such as the vascular system using hi-tech equipment. GMedTech is currently applying to Enterprise Ireland for a further four-year grant extension. Delassus says it must secure this funding as it is a vital component in the 'innovation hub' vision. "If GMedTech were to lose the EI funding, it would affect its structure and therefore its mission," he says, adding that there is already a "positive" synergy between GMedTech and the incubation centres.

"The Institutes of Technology have traditionally been outwards looking, having very strong links with industry," says Dr Delassus. "The unfavourable economic conditions are squeezing traditional funding sources, which means there is now an even greater imperative to work further with industry, Delassus argues. "We need to collaborate more with industry and with universities to secure more funding, and to open up opportunities in securing European funding," he says. Last year, GMIT successfully secured European funding with the University of Strathclyde on a research project which looks at managing innovation for SMEs. The Scottish university is the overall coordinator, while GMIT is responsible for developing environmental and regulatory models and tools. This part of the project is led by Dr Paul O'Dowd and Dr Noel Harvey of GMIT's Engineering and Business Schools.

"The structure and size of our Institute make the communication between schools and departments more efficient. This facilitates the development of convergent or multidisciplinary research. For example we have been successful in developing an environmentally friendly aquaculture system (TESSA), funded by the Department of Education. Multi-disciplinary research should be our strength and to that end we need to engage in converging research areas – why not mix people from catering and science, from engineering and business?" he suggests.

Our research vision is not without its challenges. One of the biggest is cultural.

For example, an academic's goal is to publish research for peer review, while business wants to protect ideas with patents so that the intellectual property can be the basis of a product or licensed to a third party. As someone who has worked in both environments, Delassus is acutely aware of this potentially

polarising effect. However he observes that the staff who are focused on applied research in the college tend to be more predisposed to thinking commercially and having their ideas exploited by industry.

"Any successful transfer of intellectual property from the institute to industry will help in securing non-exchequer funding, which is critical to the sustainability of the Institute, and also for the support of new activities. We have an agreement in place whereby members of staff involved in successful IP generation can share benefits from royalties and licensing."

"We have recognised the need to formulate a staff development plan that will enhance the competencies of our academic staff in dealing with both the academic and commercial worlds," Delassus says. He acknowledges that people who understand both 'languages' are rare. Such a breadth of understanding won't always be found in the same person "but there is scope for these two types to work side by side," he adds.

Delassus says he will gauge the strategy's success not purely in terms of funding received but in the quality and quantity of work carried out with industry. "We have to earn industry's trust and do work for them and make sure it will generate new products, new ideas and ultimately create jobs – that's the bottom line," he says.

"Everyone with a research interest should be able to come and meet us to see how we can help them. We are prioritising certain areas because the funding is limited but the door is open. We need to be able to nurture individuals and new groups."

"While I'm an executive manager, I want to be seen as a facilitator. The researchers have the ideas, I'm only there to facilitate the outcomes, to make sure they can move forward.

Sustainable management of commercial fisheries: an ecosystem approach

by Dr Deirdre Brophy, Fisheries Ecologist, GMIT



Over one quarter of the world's fish and shellfish stocks are over-exploited or significantly depleted. In Ireland this presents a challenge to the commercial fishing industry which generates significant income for the economy, through the fishing, processing, aquaculture, and angling industries and is particularly important for the survival of coastal communities.

It is now widely accepted that fishing activities impact not just on targeted fish species, but on other ecosystem components. Fishing leads to mortality of non-target by-catch species and damage to habitats and benthic (bottom dwelling) communities. The removal of large quantities of fish from marine ecosystems affects food chains by altering the balance between predators, prey and competitors, leading to changes in their abundance and productivity. These ecosystem effects have consequences for all sectors that utilise marine resources. Fish communities are also impacted by habitat degradation and pollution from non-fishing activities such as coastal development, shipping and dredging.

In light of this, international policy is moving away from traditional single-species based fisheries management and towards a more integrated ecosystem approach which considers the interactions between all marine ecosystem components and the cumulative impacts of multiple uses of marine resources.

If the ecosystem approach to fisheries management is to succeed a greater

understanding of how fish interact with other ecosystem components, and how fishing affects these interactions is needed. The Commercial Research Fisheries Centre, part of the Marine and Freshwater Group at GMIT, is addressing such knowledge gaps using funding secured from the Department of Education Ireland, Technological Sector Research: Strand III Core Research Strengths Enhancement Programme.

By combining the analysis of long-term datasets with targeted field studies, the project investigates how habitat requirements and feeding interactions influence the distribution and abundance of a range of commercial and non-target fish species. The project also examines how fishing affects condition, size structure and feeding behaviour in fish communities.

The project is conducted in close collaboration with the Marine Institute's Fisheries Sciences Services and Dr David Reid of the Beaufort Ecosystem Approach to Fisheries Management Consortium. The project outputs will inform the development of ecosystem models and will help Ireland to respond to impending European legislation on the ecosystem approach to management. By supporting the sustainable management of fisheries and the ecosystems within which they exist, this research is of particular value to the coastal communities which rely heavily on marine resources.

Postgrad wins first prize at US Bioengineering Conference

GMIT postgraduate student Ronan Finn won first prize at The American Society of Mechanical Engineers (ASME) Bioengineering Conference (Masters student paper competition) in California in June.

The conference drew over 700 researchers, educators, students, bioengineers, biologists and clinicians. It involved a combination of podium and poster presentations and advanced workshops by leading experts in the field.

Two postgraduate students from GMIT, Ronan Finn and Florentina Ene, presented their work at MS and PhD level respectively. Ronan Finn won first place in the MS student paper competition for his study entitled



"Deformation During and Post Stenting of a Diseased Coronary Artery Phantom: an In Vitro Study". His work was done under the Dept of Education (Ioti) Strand 1 project. Ronan (above) is based in the GMedTec Centre.

Cardiovascular research at GMIT

GMIT's Mechanical Engineering Department is conducting biomedical research into cardiovascular diseases, focusing on Abdominal Aortic Aneurysms, Coronary Artery Disease and Intracranial aneurysms.

Cardiovascular diseases are one of the leading causes of death in the western world. Haemodynamic or blood flow factors are believed to be the main causes for the initiation and growth of these diseases which can ultimately lead to death.

Experimental and numerical modeling based on medical images obtained from local and national hospitals are applied in creating physiological flow conditions in which these diseases and their treatments can be monitored.

Recently, this biomedical research group lead by Dr. Liam Morris, Dr. PJ McAllen and Dr. Oliver Mulryan secured Strand III, Department of Education funding for the IOT sector titled "Surgical Evaluation for the Treatment of Intracranial Aneurysms (SETIA)" which was ranked in first place.

At present, intracranial aneurysms are treated either by an invasive surgical clipping or by a minimally invasive endovascular procedure. For a specific aneurysm case, clinicians have little or no guidance in selecting the required treatment method.

The major aim of this research is to address clinicians' needs on the optimum intervention time and preferred surgical procedure for a given patient. In order to determine this, a detailed determination of the predominant influencing factors which govern the initiation, growth and rupture of intracranial aneurysms, as well as the effects of the endovascular treatment procedure on the blood flow in the cranial area will be conducted.

The research carried out to date on intracranial aneurysms is unique in Ireland in which compliant models of intracranial aneurysms and the full circle of Willis (the main arterial region in the brain where these aneurysms occur) are currently being developed.

Other cardiovascular models currently being developed by the GMIT research group include the development of experimental models which mimic coronary arteries with varying degrees of plaque morphology. This testing can be used as a predictive tool for preclinical stent testing, providing guidelines for future coronary stent designs and improving its performance. Abdominal Aortic Aneurysm models are also being developed with the aim of analysing the various influencing factors associated with aneurysmal development/rupture and providing guidelines to clinicians on the optimum time to intervene.

Funding for this research has been obtained from Enterprise Ireland and the Department of Education.

The potential of developing new themed festivals for Galway's off-peak tourism season



The West of Ireland is heavily reliant on the tourism industry's critical mass of activities and attractions, but the challenge ahead is to enhance their appeal and create additional events that will grow holiday visitors and increase revenue from tourism. GMIT Heritage Studies lecturer Dr Mark McCarthy is leading a research project to this end, with postgraduate student Charlene Bloe.

During the peak season months of May-September, the economy of Galway city and county benefits from music and comedy festivals, an international airshow, film and literary festivals, the Galway Arts Festival, the Galway Races, and the International Oyster Festival.

This GMIT project seeks to enhance Galway's status as a premier festival provider by exploring untapped aspects of its rich heritage and cultural potential, and by developing innovative ideas for new festivals during the underdeveloped off-peak months of October-April.

"In addition to generating ideas from laborious historical research, feedback is currently being gathered from tourism providers and agencies, festival organisers and practitioners, as well as community groups and visitors," explains Dr McCarthy.

"From a policy perspective, the project seeks to support Fáilte Ireland's quest to encourage new festivals outside the peak season. The project is also aligned with the national goal of nurturing Ireland's cultural and economic vibrancy."

In May 2009, a paper based on the research conducted to date was delivered at the ATLAS/Association for Tourism and Leisure Education Annual Conference in Denmark. For further information on this project, please contact Charlene Bloe, tel. 091-742495 and/or email mark.mccarthy@gmit.ie

This research project is funded by the Technological Sector Research (Strand I Postgraduate R&D Skills Programme)

Support for successful partnership establishment between Irish & Chinese companies

Help is at hand for Irish companies looking to form collaborative partnerships with manufacturers in developing countries such as China. Global pressures have meant that Irish manufacturers have to consider establishing such partnerships to give them an advantage over their competitors. GMIT Lecturer Dr Kate Dunne, has conducted research in this area and come up with a solution to help companies find the right partners.

“Collaborations have many advantages, including a ready supply of cheap labour and materials, along with access to a marketplace made up of 1.3 billion people. To date, however, the success rate of such partnerships has been very low. A major reason for this failure is incompatible companies forming partnerships. I found that available support during the partnership establishment process is very poor with very few formal partnership establishment processes in existence, and those that are available are not sufficiently supportive.

As part of my PhD research work, I developed an easy to use solution that allows companies separated geographically to engage in the partnership establishment process, leading to an increased chance of the optimum partner being selected and therefore, to a successful partnership. Through the use of an Internet based solution, called the ePartner Manager, the process can be conducted efficiently and effectively from the comfort of your office chair.

To use ePartner Manager, the Irish manufacturer simply registers their contact details and creates a request. Creating a request involves selecting a set of requirements that best represents what they are looking for from a company based in China from the ePartner Manager database. For example, they may be looking for a manufacturer to make and ship a particular range of furniture to Ireland. The requirements may include skills, location, and quality standards/awards achieved by the company.

Companies in China also register on ePartner Manager and create an offer. Creating an offer involves selecting a set of attributes from the ePartner database that best represents what they have to offer another company. Using the above example they may have certain furniture technology skills and have achieved certain quality standards/awards.

When the Irish manufacturer initiates a search for a potential partner to match their request, ePartner Manager automatically searches for a match among the offers stored in its database. Mathematical formulae are embedded within the tool to compare a request with an offer to determine a score for how closely they match (e.g. 87% match). A list of potential partners ranked according to score is presented to the Irish manufacturer. The Irish manufacturer has access to the detailed offer of each potential partner and can make a decision to visit and/or communicate with a number of them with a view to forming a partnership.

The ePartner Manager saves an Irish manufacturer wasting time travelling to visit potential partners and discovering they are unsuitable. A further benefit of ePartner Manager is that it forces the manufacturer in both Ireland and China to define the request and offer using a commonly understood language that is in a machine readable format.

Support for carrying out the entire partnership establishment process is provided in the form of a model made up of six stages and detailed instructions called an implementation methodology. Along with the ePartner Manager tool and the implementation methodology, the initial decision about what request requirements and offer attributes will best suit the company is supported by a set of questions that help a company analyse how they are performing now and where they want to get to in terms of five headings (e.g. technology and communication).

My research assists manufacturing companies during the partner establishment process and guides them in selecting the right partner. It also offers invaluable knowledge that will benefit the future development of the furniture industry. Furthermore, graduates of GMIT Letterfrack will have an appreciation of the complexities of engaging in collaborative projects across continents.

Funding for this research was contributed to by GMIT staff development. For further details please contact kate.dunne@gmit.ie.

Dr Kate Dunne is a lecturer in Automation, Control and Operations Management, at GMIT Letterfrack.

Investigating pharmaceuticals in our waters



Dr Brian Quinn, environmental toxicologist, joined the Marine Applied Research Centre in GMIT in March 2008 and has recently established and is director of the Irish Centre for Environmental Toxicology (ICET), a collaborative research centre between GMIT, NUI Galway and AIT.

He and his team are currently focusing on the area of environmental toxicology, the study of the toxic effects of pollutants found in the environment on animals unintentionally exposed in the environment. As Principal Investigator, he specialises in developing methods for the identification of exposure to more novel pollutants. His team are currently investigating the potential of human pharmaceuticals to act as pollutants.

“When you think about it we all use some form of pharmaceutical for medicinal purposes, be it for a headache, to lower cholesterol, to ease the pain of a bad back... most of the population are taking some form of drugs at one stage or another. So you take a pill, but what happens then? The pill will have its desired effect (hopefully), but you end up excreting the majority of the active ingredient out, and where does it end up? In the local sewage treatment plant...” explains Brian.

“Even the most efficient treatment plant in the country won’t treat or break down these drugs so they ultimately end up being released into the environment. Our job is to investigate if, when released into the environment with the treated effluent from sewage treatment plants, these drugs can have a negative impact on animals living in this environment, be it freshwater - rivers or lakes - or marine, along the coast. And ultimately if they have the potential to affect human populations.”

“In order to do this, we use mussels - both the common marine mussel (*Mytilus edulis*) and the freshwater zebra mussel (*Dreissena polymorpha*) - as sentinel or indicator species. We identify and quantify numerous pharmaceutical compounds in treated effluent and receiving waters (freshwater and marine) and measure their negative effects on the mussels and their ability to concentrate in the tissue of the mussels that may ultimately lead to the unintentional exposure to humans.

“To do this we are using a suite of proteomic equipment housed in the new research facilities in GMIT, including a top of the range high-accurate mass spectrometer (Agilent 6520 Accurate-Mass Q-TOF LC/MS). We are one and a half years into a five-year project, but already are producing interesting results that will be published soon.”

This research project is funded through a substantial EPA Developing Environmental Research Potential (DERP) grant which was awarded to Dr Quinn. The grant gives ‘young’ researchers the opportunity to develop as scientists, to undertake their own research and to build their own research team. At present this team consists of Dr Quinn, Principle Investigator (PI) and two PhD students - chemistry student Emma Power and biology student Weibke Schmidt, and several undergraduates/recent graduates working in the lab.

GMIT Letterfrack

Innovation Projects with the Furniture and Wood Products Industry

GMIT Letterfrack has a 20-year history of working very closely with industry to produce highly skilled and talented graduates for the furniture and wood products sector. Part of this relationship involves placing third year students every year on professional placements within Irish furniture companies and also abroad in countries such as the United Kingdom, United States, Australia, Finland, Germany, Thailand and Zambia.



The relationship also involves many students working on projects with industry, both under-grad and post-grad. Funded projects with industry are also becoming more common, with circa €700k funded in recent years. The relationship with industry has recently been further strengthened by the development of a new innovation service in GMIT Letterfrack, led by Dr. Patrick Tobin, a lecturer at GMIT Letterfrack and coordinator/supervisor of student projects and placements, and Pamela Browne, a graduate of the B.Sc. (Hons) in Furniture Technology, who worked as a project manager in the USA before returning to GMIT to work on the new initiative.

Through new initiatives, GMIT Letterfrack has begun undertaking projects that are funded through the Innovation Vouchers scheme operated by Enterprise Ireland. Each innovation voucher is worth €5,000 and a company can avail of skills and research expertise in third-level institutions up to this value, to work on business opportunities or challenges.

GMIT Letterfrack has successfully completed five of these Innovation Vouchers projects and has several others in the pipeline. Each project presents different challenges but projects mainly involve some sort of technical knowledge question or business problem that a company needs help with. The solution can take the shape of a new product design/development, and/or manufacturing or business process design and implementation. One of the features of the innovation service at Letterfrack is that the vouchers projects can feed into student projects which extend the value of the project to the company and provide excellent learning opportunities for the students.

One example of this work was for McEvoy Veneers, a specialist veneering company in Co. Laois using cutting edge (no pun intended) laser technology to produce high-end intricately veneered furniture products. GMIT Letterfrack undertook a very successful product development project for McEvoy Veneers involving the design of a decorative veneered 'door within a door' range of furniture. This involved the development of a range of new products, namely a child's door within a full sized regular door that can be installed in any home, incorporating decorative veneer inlay panels that could be easily tailored to a required design. As part of the project a full physical prototype (pictured) was designed, made and tested by Ann Foley, a final year B.Sc. (Hons) Furniture Technology student at GMIT Letterfrack. These door products have successfully reached first prototype stage and the design won a Wood Marketing Federation Award in June.

The door prototype

After the success of the first voucher project, a second Innovation Voucher was awarded to McEvoy Veneers for the development of efficient processes to manufacture the door products. This included the configuration of a manufacturing cell to produce the new products, and some minor redesign after initial prototype feedback. While the products were designed for manufacture in the McEvoy Veneers workshop, GMIT Letterfrack specified an appropriate production process designed to fit into McEvoy Veneers current manufacturing capabilities to streamline and speed up the manufacture and to reduce set up and manufacturing time and material wastage. There was some parallel tweaking of the product design to match process configuration. There was also some minor engineering work done to reduce the weight of the door.

Other innovation voucher projects completed by GMIT Letterfrack include product development work with a steel fabrication service company and a joinery company who wanted to gain competitive advantage by combining their expertise to launch a range of furniture products; and designing, specifying and testing a thermoforming process suitable for bending synthetic solid surface material. Pending projects include assisting companies with the development of new services or business models to support new products, as well as product and process development projects.



Marine tourism vital to region's economy

Carina Ginty from GMIT presented a paper at the 3rd International Critical Tourism Studies conference in Croatia in June on findings from her PhD study 'An Examination of the Marine Tourism Business Operators in the West of Ireland'.

In 2006, the marine tourism business sector in the West region was made up of 61 operators. The operators are defined as businesses selling marine tourism activities or adventure packages to domestic and international marine tourists. The study found that the sector is typically family owner operated, generally small-scale, highly seasonal and undercapitalised. Based on 2006 business figures, the total income generated by this group is estimated to be €24.27m, with total economic impact equating to €35.919m. This demonstrates that for every €1 spent directly by 'marine tourists' in the region approximately €0.48 was generated by secondary effects in the region. In 2006, it is estimated that the marine tourism businesses employed approximately 394 people full-time and 295 people part-time. For every €1m spent, four jobs are created in the sector.

The study also found marine tourists to the West are specialist to casual users/general holiday visitors. They range from a dabbler, an enthusiast, an expert to a fanatic and marine tourists visiting the West of Ireland spend approximately €116.74 per day. Over 45% of marine tourism operator customers in the region range from 36 to 55 years of age. Teenagers have a 16% share and the 19 to 25 age bracket is lower at just 12%.

On the policy aspect this study found that there is no lead agency in Ireland responsible for both marketing and product development of the marine

tourism sector. Other business development barrier findings included bureaucratic funding procedures, out of date planning and development laws (i.e. Foreshore Act 1933) and a lack of knowledge, networking and information sharing among the marine tourism sector. On the funding aspect, this study found that the Irish government in 2006 invested only €1.124m (.7% of the total all Ireland tourism investment and development funds) in water-based tourism enterprises or activities, where Mayo received 81% share of the funds, Galway 15% and Roscommon just 4%.

Virtually all of Ireland's trade is by sea and around 80% of the population live in coastal counties. However, Ireland's ocean economy only contributes approximately 1% to Ireland's GNP (Gross National Product) which is a much lower proportion of national output compared to other maritime countries.

The marine/water-based tourism and leisure sector has the potential to be one of Ireland's major indigenous industries, which is based on key natural resources consisting of 4,000 miles of high quality coastal waters, 4,000 lakes, 75 major river catchments and over 450 miles of navigable inland waterways.

This PhD study was supported by the GMIT Hotel School and funded by Fáilte Ireland and the Ireland Newfoundland Partnership. For further information on Carina Ginty's PhD findings email carina.ginty@gmit.ie

Suicide is a significant public health issue in Ireland. For over four years artist and GMIT textiles lecturer Seamus Mc Guinness has engaged with bereaved families as part of a major national research survey. He talks to Claire O'Connell about this important project.

Suicide in Ireland and the Lives Lived project



An image of the "21 Grams" exhibition by artist Seamus McGuinness, inspired by the high number of suicides in Ireland - 21 grams is the perceived weight of the human soul. The exhibition depicted in excess of 90 suspended men's white shirt collars, each shirt weighing 21 grams, symbolising the aftermath of suicide, the reverence of life and living, the life lost, and the void left behind. It became the starting point of McGuinness' research project "a social probe that interrogates the reliability of official statistics and the gender difference in death by suicide in Ireland".

What is the title of your project on suicides in Ireland?
Lived Lives, Materialising Stories of Suicide In Ireland - A Visual Arts Autopsy.

Can you tell us about the motivation behind the project?
Suicide is a major public issue of global concern. It is the leading cause of death in young Irish males and we have a statutory obligation from the HSE-commissioned "Reach Out" document to "systematically plan research into suicidal behavior to address deficits in our knowledge." (p. 50)

I work as part of an interdisciplinary team that aims to develop an "alternative" language concerning suicide in Ireland. We are asking whether a discursive collaboration between art and science can achieve this.

The approach we are taking aims to get behind the cold clinical statistics and as a group we have engaged with 104 bereaved families who have lost a family member.

Does it fit into a national initiative?
The Lived Lives Project runs parallel to a larger study, the Suicide In Ireland Survey, but is governed by its own ethical guidelines.

These specifically include the permission from the participating families, after informed consent, to use the belongings, image, name and stories of their deceased relative in the making of art works.

How did you get involved with the project?
In 2004 I made and exhibited a piece of work called 21g. This consisted of a sculptural work consisting of in excess of 92 fragments of cloth, mainly male white collars, one for each young male (aged 15-23) who died by suicide.

This work came to the attention of Kevin Malone, Professor of Psychiatry at St.Vincent's University Hospital, who offered me a four-year Ad Astra scholarship in Suicide Studies to pursue a PhD in the School of Medicine at University College Dublin.

Working with Janis Jefferies, Professor of Visual Arts at Goldsmith's College London as co-supervisor, this collaboration formed the ideal conditions for a practice-led PhD and provided a structure for this four-year project to evolve.

How important was the Lived Lives Galway 2009 Event you coordinated at GMIT, Cluain Mhuire in June (2009)?

This was an integral part of the research. When the families were donating belonging of their deceased, part of the process was the condition that, before any works were publicly exhibited, they would be invited to a private viewing. At this stage, they have the right to withdraw any work before it enters the public domain.

During four days in June 2009, this private viewing of the artwork emerging from the Lives Lived project took place at Cluain Mhuire, Galway.² The primary audience was the families who engaged with the project, who effectively became co-producers and co-curators.

Over 100 people continued the journey they initiated three years ago when they picked up the phone to contact the researcher, and they eventually got into their car, got on a train or bus and made their way to Galway from various parts of the country to attend the private viewing.

The families engaged and contributed to works in progress twice, over a four-day period. However, the event was organised primarily as a private moment to bear witness to the suffering and sadness of those who have lived through the experience of losing a loved one to suicide. It tried to visualise the indescribable. It was produced in the form of a journey in two viewings.

The first time the families encountered the works in progress, the artist and the research team mediated every step. Each family had an agreed time scheduled over the three-day period. Each viewing lasted approximately one hour. The families were privately guided around individually, introduced to each work, the experience slowly unfolding. It was an intensely private individual experience, with the families only engaging with their own works that emerged from their own donations.

As per protocols of the Lived Life project, qualified bereavement counsellors were on the premises and each engagement ended with a visit to these counsellors.

All the families were present at a second, collective viewing, which was held on the last day. In this viewing there was no mediation, apart from a short introductory talk. The families had access to all the works, so they could engage with donations from other families.

At this viewing the families met for the first time. There were no strangers there. They knew each other by the shared experience of losing a loved one to suicide - a collective platform to mourn.

At the end of the viewing a discussion took place about whether this work should go forward and enter the public domain. The families, without exception decided that yes, this work should go into the public domain.

Who funds the project?
The Ireland Funds, Community Funds Ireland and the 3T's- Turning The Tide of Suicide Charity have provided funding.

The main findings of the study are confidential until mid-2010

¹ HSE, National Suicide Review Group, Dept.of Health and Children. Reach Out: National Strategy for action on Suicide Prevention 2005-2014.9

² As per protocols Lived Lives Project.



Apple launches first 3D heart app developed by GMIT Innovation Company

The first 3D heart app developed by a client company in GMIT's Innovation in Business Centre (IIBC) has been launched by Apple and has already hit number one on the top paid Irish iTunes Medical Apps chart.

The company is called eMedia and their first product called Pocket Heart (the first 3D Medical App for iPhone/iTouch) went up on the iTunes store in late September.

Pocket Heart is the first product in a suite of 3D medical applications that company director Mark Campbell and his team are developing for Apple's iPhones/iTouch mobile technology.

"Pocket Heart is a fun and novel way to study and discover how the human heart works. Our unique interface gives you the opportunity of viewing the heart in 3D, enabling you to rotate, zoom and navigate through all of the important areas of the heart. So whether you're at study, at work, or on-the-move, Pocket Heart is your portable 3D biology text book, allowing you to see the inner workings of the heart in a much more realistic and engaging way than

traditional 2D illustration-based media," explains Mark.

The novel 3D game-like environment will appeal to a wide range of users, but is particularly focused on the medical and educational markets. Junior Cert Science students, Leaving Cert Biology students, and Pre Med University students are finding this a useful study aid when preparing for exams. Also GPs and Clinicians see it as a great visualisation tool when communicating their diagnoses to their patients.

eMedia is based on GMIT's Dublin Road campus and is an Enterprise Ireland client. The company currently employs four people, two of whom are GMIT graduates, David Maher and Brian Geaney. The company specialises in developing 3D Medical Animations for Medical Device companies and Medical Training Institutes in Ireland, the UK and the USA. These services assist companies in marketing their new medical products and assist training institutes in helping their medical students visualise the human anatomy in 3D.

Innovation Skillnets

GMIT leads training for local companies

GMIT has been managing a Skillnet project that offers training to local companies in areas such as new product development, creating flexible organisations, developing plans to export products, and advanced engineering software.

The Innovation Skillnet project is 70% funded by the Department of Enterprise Trade and Employment with the remaining 30% from contributions by companies who receive the training. Over the past four years over 750 days of training have been provided to West of Ireland companies by a team of external training companies who are managed and supported by GMIT.

Training opportunities arising from Research activities are also to be offered in GMIT from next year (2010). The Skillnet training is delivered through a panel of local consultancy companies who GMIT support by providing access to course materials and programme modules as required.

For further details about the GMIT Innovation Skillnet, contact Peter Butler in the Research Department peter.butler@gmit.ie



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