The School of Medicine

The School of Medicine is located within the College of Medicine, Nursing, and Health Sciences. The School is adjacent to University College Hospital, which is a major teaching hospital in the West of Ireland. The school also enjoys close research and academic affiliations with other hospitals, community-based and healthcare providers on a national and international scale.

This network of research and clinical interests provides our graduate students with a unique opportunity to develop and grow as researchers and to contribute across the continuum of ‘bench to bedside to community to policy development’. Equally, the school offer a suite of taught graduate programmes which are innovative and constantly renewed in light of the demands of healthcare professionals, managers and scientists for specialist education and professional development. Postgraduate programmes include the Doctor of Medicine M.D., the Master of Surgery M.Ch., the Master of Obstetrics M.A.O., the Master of Medical Science, the Master of Medical Science in Medicine/Physiotherapy and the Masters of Medical Science in Sport and Exercise Medicine/Physiotherapy.

In addition, the school has introduced a new Structured PhD programme. This four-year full-time programme, involving close mentoring, formation and support, is designed to enhance, improve and directly engage the student in specialist research skills, whilst also providing highly marketable generic and transferable skills. This approach responds to the growing needs of the research and healthcare sectors for highly skilled employees at post-doctoral level.

For further information on the School of Medicine log onto www.nuigalway.ie/medicine

“The world needs caring, competent, and compassionate healthcare professionals. These are careers where you will work hard. You will never stop learning. You will take pride in your work. You will touch the lives of many people. You will make a difference for people every day. You will have more fun than you can imagine.”

Professor Gerry Loftus,
Dean of the College of Medicine, Nursing, and Health Sciences
Chronic illnesses cause early death, increased morbidity and a reduction in quality of life. Do you want to make a difference? This new multidisciplinary programme crosses the traditional boundaries between healthcare disciplines. The programme aims to prepare health professionals to: (1) work collaboratively with clients and each other to deliver the HSEs Transformation programme (2) deliver care in line with the "shared care model" for chronic illness and (3) effectively contribute to the delivery of self-management enhancing programmes.

Course Facts

Course level: Level 9
Duration: 1 calendar year, full-time / 2 calendar years, part-time
PAC code(s): GYMS8 (full-time) / GYMS9 (part-time)

Entry Requirements:
Candidates must:

1. Hold an honours primary degree (Level 8 [or an equivalent international qualification]) in medicine or nursing or midwifery or physiotherapy or occupational therapy or speech and language therapy and have secured a final grade of at least Second Class Honours (or an equivalent international qualification).
   Or

2. Hold a postgraduate diploma (Level 9) or a professional qualification deemed suitable by the College of Medicine, Nursing, and Health Sciences.

Nurse candidates must meet the following additional criteria:

1. A registered general nurse or registered psychiatric nurse or registered sick children’s nurse or registered nurse intellectual disability or registered midwife.
2. Hold an active nursing registration.

Applying: www.pac.ie/nuigalway

Fee: Please contact natalie.walsh@nuigalway.ie for further information.

Closing date: Further details on closing dates can be found on www.nuigalway.ie/postgrad/assessmentdates

This is a new multidisciplinary programme offered by the College of Medicine, Nursing, and Health Sciences.

http://www.nuigalway.ie/courses/taught-postgraduate-courses/chronic-illness-management.html
Why study this programme?

This new and innovative programme is aimed at preparing students to effectively contribute to chronic illness prevention and management. The Master of Health Sciences (Managing Chronic Illness) programme is multidisciplinary and welcomes applications from healthcare professionals from the wider multidisciplinary team (including medical doctors, nurses, midwives, physiotherapists, occupational therapists and speech and language therapists). The programme is offered through blended learning, a combination of on-line and face-to-face learning and teaching. Blended learning is a flexible approach to learning making it possible to combine working full-time with studying.

Programme outline (Subject to change)

The Master of Health Sciences (Managing Chronic Illness) programme is a full-time programme running over a calendar year. The year is divided into two teaching semesters (September to December and January to April). During the summer period (May to August) students’ focus on completing a minor dissertation based on original research. Students complete four core modules and two option modules during the taught element of the programme (Semesters 1 & 2) (see Figure 1). Option modules are selected from a menu of choices. Examples of option modules include:

- Collaborative and Interagency Working
- Clinical Teaching Methodologies
- Ethics in Health Research
- Concepts and Principles of Primary Care
- Diabetes in Primary Care
- Translational Medicine

Students must complete the taught element of the programme to second class honours standard (i.e. 60%) before proceeding to complete the dissertation element. Students who fail to progress to the dissertation element of the programme will exit the programme with a Postgraduate Diploma in Health Sciences (Managing Chronic Illness). Students may opt to take the programme at a slower pace i.e. part-time over two calendar years.

Employment and career opportunities

Graduates will have an opportunity to lead and contribute to chronic illness prevention and management services in community and hospital settings. Graduates may also opt to progress to PhD studentships in Ireland and abroad.

Find out more/ Enquiries to:

Full programme description on the following web-site: www.nuigalway.ie/courses/taught-postgraduate-courses/chronic-illness-management.html

Ms. Natalie Walsh
College Administrator
T +353 91 495 960
E natalie.walsh@nuigalway.ie

Figure 1:
Diagrammatic representation of programme content

<table>
<thead>
<tr>
<th>Semester 1</th>
<th>Semester 2</th>
<th>Semester 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Critical issues in Chronic illness</td>
<td>Effective Chronic illness Management Strategies for Healthcare professionals</td>
<td>Research dissertation (Original research on a relevant topic)</td>
</tr>
<tr>
<td>Literature based research skills</td>
<td>Health Research</td>
<td>Option</td>
</tr>
<tr>
<td>Option</td>
<td>Option</td>
<td>Option</td>
</tr>
</tbody>
</table>

http://www.nuigalway.ie/courses/taught-postgraduate-courses/chronic-illness-management.html
Introduction
As the only course of its kind in Ireland, the Postgraduate Diploma in Primary Care represents a unique opportunity for a wide range of primary care professionals to learn with and from each other in an interdisciplinary structured educational environment. The central importance of primary care has been repeatedly endorsed by government policy in recent years, and effective team working is now an essential requirement for those working in the sector. This course is designed to meet the evolving educational needs of primary care based health and social care professionals working at the forefront of this rapidly changing healthcare environment.

Why study this programme?
This is an exciting time for professionals working in the rapidly changing healthcare policy context. The opportunities presented by the HSE Transformation process pose challenges to traditional ways of working. This course will help you to develop the knowledge, skills and attitudes for effective multi-disciplinary working in primary care, as well as fostering a critical approach to evidence-based practice and research and a deeper understanding of the role of primary care in the health service. Achieving at least 60% in the Postgraduate Diploma qualifies you to apply for the one-year Masters in Health Sciences (Primary Care).

Programme outline
Format
The course is delivered via a mix of online distance learning and face-to-face teaching workshops. These workshops require attendance in Galway for two consecutive weekdays each month (four days in September and February).

Content
- Concepts and Principles of Primary Care
- Evidence Based Primary Care
- Health Research Methods
- Teambuilding and Communication Skills
- Health Promotion
- Health Economics
- Healthcare Ethics
- Psychology for Primary Care
- Sociology of Health and Illness

Assessment
Modules are assessed by a combination of practice-based assignments, participation in online discussions, a reflective practice journal, and a multi-disciplinary group project.

Employment and career opportunities
Primary care and the development of Primary Care Teams are now central to the Irish Government’s healthcare transformation strategy. If primary care professionals want to be influential in the development and reconfiguration of community-based healthcare, they need to understand the determinants of effective primary care. This course will improve participants’ contributions as leaders within their own primary care contexts as well as increasing their ability to work and learn with other health professions. CME accredited by ICGP. Achieving at least 60% in the Postgraduate Diploma qualifies you to apply for the one-year Masters in Health Sciences (Primary Care).

Find out more/ Enquiries to:
Dr. Mary Byrne
T +353 91 495 205
E mary.byrne@nuigalway.ie

Course Facts
Course level: Level 9
Duration: 8 months (September to April)
Entry Requirements:
1. This is an inter-disciplinary course designed to accommodate the wide range of professionals working in the primary health care setting. If you are working full time in primary care (particularly if you are part of a Primary Care Team), and you want to study at the same time, then this course is for you.
2. To be eligible you need a professional (health or social care) qualification, and a primary degree or equivalent experience. You should be working in a primary health care setting. Primary health care administrators are also welcome. Selection is based on ability/opportunity to apply learning to your daily work, relevant professional experience and academic record. General computer literacy is essential as parts of the programme are delivered via distance learning.
Fees:
- €4,915 (full-time, EU)
- €13,500 (full-time, non-EU)
Applying: www.pac.ie/nuigalway
PAC Code: GYM33
Closing Date: Further details on closing dates can be found on www.nuigalway.ie/postgrad/assessmentdates

Why study this programme?
This is an exciting time for professionals working in the rapidly changing healthcare policy context. The opportunities presented by the HSE Transformation process pose challenges to traditional ways of working. This course will help you to develop the knowledge, skills and attitudes for effective multi-disciplinary working in primary care, as well as fostering a critical approach to evidence-based practice and research and a deeper understanding of the role of primary care in the health service. Achieving at least 60% in the Postgraduate Diploma qualifies you to apply for the one-year Masters in Health Sciences (Primary Care).

Find out more/ Enquiries to:
Dr. Mary Byrne
T +353 91 495 205
E mary.byrne@nuigalway.ie

http://www.nuigalway.ie/courses/taught-postgraduate-courses/primary-care.html
Masters, Postgraduate Diploma and Postgraduate Certificate in Health Sciences (Clinical Education) 1MCT1, 1MCT2, 1MCT9

Introduction
Although much of the teaching of health professionals takes place in clinical settings, few clinicians receive formal training in educational techniques or principles of adult learning. This is the first multi-professional clinical teaching course in Ireland. It has been designed to equip a wide range of health professionals with the knowledge and skills required for effective clinical education and to become successful clinical supervisors and motivators of student learning.

Why study this programme?
This course will help you to design, implement and evaluate effective learning tools for your clinical setting. You will learn how to teach small and large groups, give constructive feedback, use questions appropriately, design and implement assessments, supervise individuals and groups, design and oversee effective continuing professional development, and evaluate your own teaching. Your learning will be based on an understanding of sound educational theory and the principles of adult learning. This programme is suitable for those who may teach mostly in classroom settings, as well as others who find themselves almost exclusively in clinical settings.

Programme outline
The courses are delivered mostly by distance learning, with some face-to-face workshops in Galway as follows:
- Postgraduate Certificate: 6 days (2 consecutive weekdays in September and 4 Saturdays between October and March).
- Postgraduate Diploma: 7 days (2 consecutive weekdays in September and 5 Saturdays between October and May).
- Masters: In addition to the Diploma days, 10 days (2 consecutive weekdays in each of September, October, November, February and April).

Module 3 is also available as a 6-week stand-alone option.

Assessment: Modules 1-7 are assessed using problem based assignments, online e-tivities, personal reflections and peer observation. Modules 8 and 9 are assessed by a literature review and research methodology respectively, linked to the production of a 4,000-word ready-for-publication Masters research dissertation.
Employment and career opportunities
Our clinical education focus leads to major changes in how participants facilitate the learning and development of their students in clinical settings. The course will position you as a leader in clinical education who can help to develop your fellow teachers, create new pedagogical approaches, and improve the clinical education experience for learners. The course is accredited for CME by the Irish College of General Practitioners.

The Masters represents an opportunity to develop an area of specialist expertise as well as answer research questions of importance to Irish healthcare education. Our unique 4,000-word ‘ready-for-publication’ thesis design increases the likelihood of publication in a peer-reviewed journal.

Find out more/ Enquiries to:
Dr. Mary Byrne
T +353 91 495 205
E mary.byrne@nuigalway.ie
http://www.nuigalway.ie/courses/taught-postgraduate-courses/clinical-teaching.html

Graduate profile
Pauline May

Pauline May works as a Clinical Nurse Manager in the Intensive Care Unit in Galway University Hospital. Pauline completed a Higher Diploma in Health Sciences (Clinical Education) in 2006 and a Masters in Health Sciences (Clinical Education) in 2010 at NUI Galway.

“I chose to undertake postgraduate study at NUI Galway for a number of reasons. As a distance learning programme, I valued the flexibility of working from home and having access to the library online, as well as all my course material being provided by CD-Rom. Submitting course work via blackboard allowed timely feedback and support from my peers and tutors. Days spent in college were focused on skills workshops and discussion forums with other students. All assignments related directly to my current work environment and every effort was made to link theory to practice. I thoroughly enjoyed that I was the only nurse on this course and found it thought-provoking and inspiring working with other professions (GP’s, speech and language therapists, orthoptists, radiologists) - our common link was clinical education. I have been able to professionally develop as a clinical teacher in such a variety of ways as a result of these programmes; the relevance, high standards of tuition and supports have facilitated a vast improvement in my teaching ability and personal growth.”

http://www.nuigalway.ie/courses/taught-postgraduate-courses/clinical-teaching.html
Introduction
This course is open to doctors and nurses working in the primary care setting. It offers a suite of modules on clinical (and related non-clinical) topics, which can be studied at your own pace. The central importance of primary care has been repeatedly endorsed by government policy in recent years. This course has been designed to meet the evolving educational needs of primary care based health professionals working at the forefront of the rapidly changing healthcare environment.

Why study this programme?
This course will help to update your knowledge and skills regarding the latest approaches to disease management, while fostering a critical approach to evidence-based practice, research and multi-disciplinary ways of working. This is particularly important now as the management of chronic disease shifts ever more towards the primary care team.

The course has been designed with maximum flexibility in mind, allowing you to engage in learning at a time and place that suit your lifestyle. You can take a single module in a subject of your choice, or work towards a Postgraduate Certificate/Diploma.

Programme outline
All the modules listed below are available on a stand-alone basis, or can be accumulated towards an award of Postgraduate Certificate (any 3 modules, at least 2 clinical) or Postgraduate Diploma (any 6 modules, at least 3 clinical). Modules can be accumulated over up to five years (or one year) as you wish.

Each module is delivered via a mix of online distance learning and face-to-face workshops in Galway (usually two non-consecutive days per module). Assessment is by a combination of practice-based assignments and participation in online discussions.

Module When
CLINICAL MODULES
Infectious Diseases in Primary Care September-December
Minor Surgery and Related Dermatology in General Practice September-December
Cardiovascular Disease in Primary Care January-March
Diabetes in Primary Care January-March
Respiratory Disease in Primary Care March-June
Women’s Health in Primary Care March-June

NON-CLINICAL MODULES
Concepts and Principles of Primary Care September-December
Evidence Based Primary Care September-December
Clinical Teaching Methods January-March
Health Research Methods January-March

One-page descriptions of each module are available on the course website: http://www.nuigalway.ie/courses/taught-postgraduate-courses/clinical-primary-care.html
Employment and career opportunities

There is an increasing expectation for community-based health professionals to demonstrate their continuing competence in primary care (e.g. the competence assurance programme in general practice). The inter-disciplinary learning environment reflects many of the new and interesting challenges for primary care professionals that occur in the context of primary care teams. The course is accredited for CME by the Irish College of General Practitioners. Achieving at least 60% in the Postgraduate Diploma qualifies you to apply for the one-year Masters in Health Sciences (Primary Care).

Find out more / Enquiries to:
Dr. Mary Byrne
T +353 91 495 205
E mary.byrne@nuigalway.ie

Graduate profile

Karen Canning, PDip in Health Sciences (Clinical Primary Care):

I chose to pursue the Postgraduate Diploma in Health Sciences (Clinical Primary Care) at NUI Galway as I saw it as a great opportunity to enhance my knowledge of Primary Care while at the same time continuing in my current employment.

The academic support shown to my classmates and I was excellent, with staff and lecturers always available to offer advice or a helping hand. I thoroughly enjoyed the time I spent at NUI Galway, so much so that I decided to further my education again, taking on the Masters in Health Sciences (Primary Care) the following year.

My time spent at NUI Galway was an unforgettable experience. The knowledge I gained will stand to me for years to come.

http://www.nuigalway.ie/courses/taught-postgraduate-courses/clinical-primary-care.html
M.Sc. in Regenerative Medicine

Introduction
Regenerative Medicine is an exciting emerging discipline developing novel therapeutics for repair and regeneration of damaged and diseased organs. These therapeutics utilise stem cells, gene therapy, biomaterials, engineered tissue and biologically active compounds.

Why study this programme?
The M.Sc. in Regenerative Medicine at NUI Galway is one of only a few such programmes worldwide and is the only course in Regenerative Medicine in Ireland. This course equips students with the skills required to make meaningful contributions to this discipline. The taught modules will address the science behind Regenerative Medicine, its application to human disease and its importance to modern society. The laboratory-based research project gives students first-hand experience of research related to regenerative medicine.

This programme was developed by Regenerative Medicine Institute (REMEDI) which has an internationally recognised leadership position in the area of stem cell and gene therapeutics. We are continuously developing our facilities to enhance our student’s learning environment. Work is commencing on a new state-of-the-art Translational Research Faculty which will house basic, translational and clinical research teams on the site of Galway University Hospital. Such developments will further enhance Galway and the West of Ireland as the hub for medical device technology and will also benefit research in regenerative medicine in Ireland.

Programme outline
The first two semesters will consist of taught modules covering the scientific principles of stem cells, gene therapy, tissue engineering, immunology and pharmacology. Training in scientific concepts and techniques important to biomedical research will occur via a series of laboratory-based practical sessions. During the Summer semester students will embark on individual laboratory-based research projects.

Course Facts

| Course level | Level 9 |
| Duration | 1 year full time |
| Entry Requirements | Successful applicants will have at least a Second Class Honours degree in an appropriate biological science, life science, medicine or nursing. Students who have a degree without Honours in a related area and have three or more years of practical experience in the subject area will also be eligible to apply. |
| Fees | Current year fees are: €6,815 (full-time, EU) €13,500 (full-time, non-EU) |
| Applying | www.pac.ie/nuigalway |
| PAC Code | GYM00 |
| Closing Date | Applications are considered mid-February, late-March, mid-May and late August |

Compulsory modules (80 ECTs)

<table>
<thead>
<tr>
<th>Module</th>
<th>ECTs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regenerative Medicine</td>
<td>10</td>
</tr>
<tr>
<td>Translational Medicine</td>
<td>5</td>
</tr>
<tr>
<td>Immunology</td>
<td>5</td>
</tr>
<tr>
<td>Advanced Research Techniques</td>
<td>10</td>
</tr>
<tr>
<td>Tissue Engineering</td>
<td>10</td>
</tr>
<tr>
<td>Introduction to Biomedical Research</td>
<td>5</td>
</tr>
<tr>
<td>Pharmacology</td>
<td>5</td>
</tr>
<tr>
<td>Research Project and Thesis</td>
<td>30</td>
</tr>
</tbody>
</table>

Optional modules (Total 10 ECTS)

<table>
<thead>
<tr>
<th>Module</th>
<th>ECTs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physiology-Human Body Function</td>
<td>10</td>
</tr>
<tr>
<td>Introduction to Business</td>
<td>10</td>
</tr>
<tr>
<td>Anatomy</td>
<td>5</td>
</tr>
<tr>
<td>Economic Evaluation in Healthcare</td>
<td>5</td>
</tr>
<tr>
<td>Introduction to Biomedical Systems</td>
<td>5</td>
</tr>
</tbody>
</table>

Employment and career opportunities
About 60% of the graduates from this M.Sc. course have gone on to Ph.D. studentships at institutions in Ireland and abroad (including UK, Spain, Germany and Canada). Graduates of this course are also employed in research and development in academic and industrial settings. These positions are in pharmaceutical, medical device and cell banking companies. 10% of the course graduates have gone to medical school. The clinicians who participated in the course have progressed into their chosen, specialties.

Find out more / Enquiries to:
Dr. Linda Howard
T +353 91 495268
E linda.howard@nuigalway.ie

http://www.remedi.ie/training/taught-msc-regenerative-medicine-0
http://www.nuigalway.ie/courses/taught-postgraduate-courses/regenerative-medicine.html
MSc. in Clinical Research

Introduction
The objective of this course is to provide training for the next generation of healthcare workers in the clinical research arena, providing a platform for more enhanced efficiencies in the translation of medical discoveries into clinical practice. Course contributors include senior academics and medical professionals from NUI Galway, Galway University Hospitals and McMaster University, Canada, who are actively engaged in clinical research. This programme is closely linked with the HRB Clinical Research Facility, Galway.

Why study this programme?
Aimed at individuals employed in the healthcare sector, this course has been developed to meet the needs of working graduates who wish to up-skill, specialise or change career direction. The MSc program provides training for qualified individuals who wish to become independent clinical investigators or those who wish to seek employment in leadership positions in clinical research teams. The programme structure is such that those in full-time employment will be able to undertake this on a part-time basis. For further details of the course, see www.crfg.ie.

Programme outline
Each on-site module includes a structured curriculum of weekly lectures and tutorials (problem-based learning). For modules provided by distance-learning, there will also be monthly sessions to monitor module progression and review any challenging content areas. Classes may also take place outside of office hours to accommodate those in full time employment.

COMPULSORY MODULES:

<table>
<thead>
<tr>
<th>Course Name</th>
<th>ECTS</th>
<th>Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fundamentals of Health Research &amp; Evaluation Methods</td>
<td>10</td>
<td>1</td>
</tr>
<tr>
<td>Introduction to Biostatistics I</td>
<td>10</td>
<td>1</td>
</tr>
<tr>
<td>Ethics of Health Research</td>
<td>10</td>
<td>1</td>
</tr>
</tbody>
</table>

CHOICE OF ADDITIONAL MODULES*:

<table>
<thead>
<tr>
<th>Course Name</th>
<th>ECTS</th>
<th>Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction to Biostatistics II</td>
<td>10</td>
<td>2</td>
</tr>
<tr>
<td>Observational and Analytical Research Methods</td>
<td>10</td>
<td>2</td>
</tr>
<tr>
<td>Research Methods for Randomized Controlled Trials</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>Systematic Reviews</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>Health Technology Assessment</td>
<td>10</td>
<td>2</td>
</tr>
<tr>
<td>Health Systems and Policy Analysis</td>
<td>10</td>
<td>1</td>
</tr>
<tr>
<td>Translational Medicine</td>
<td>10</td>
<td>2</td>
</tr>
<tr>
<td>Clinical Research Administration</td>
<td>10</td>
<td>1</td>
</tr>
<tr>
<td>Database Development</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Project Management</td>
<td>5</td>
<td>1</td>
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</tbody>
</table>

COMPULSORY COURSEWORK:

<table>
<thead>
<tr>
<th>Course Name</th>
<th>ECTS</th>
<th>Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>Independent Study Module; paper publication OR</td>
<td>10</td>
<td>1 or 2</td>
</tr>
<tr>
<td>Original Research and Thesis</td>
<td>30</td>
<td>Year long</td>
</tr>
</tbody>
</table>

TOTAL 90

* Minimum threshold of students per module will apply

Employment and career opportunities
Students of the MSc. in Clinical Research will be expected to progress to become principal investigators or administrators in the conduct, managing and monitoring of clinical research. The conduct and oversight of clinical research has become a prominent source of jobs in a variety of settings, including university and colleges, pharmaceutical industry, non-academic clinical research organizations, hospitals, independent funding agencies and government agencies. Additional opportunities include employment in teaching and consultation.

Employment and career opportunities
Graduates have found employment in health services.

Course Facts

Course level: Level 9
Duration: 1 Year Full Time; 2 Years Part Time
Entry Requirements:
Students must have completed either; 1) Undergraduate degree in medicine or; 2) Other healthcare-related undergraduate degree with a minimum of 2nd Class honours degree, Grade 1 or; 3) Biomedical sciences with a minimum of 2nd Class honours degree, Grade 1. Applications from graduates of non-healthcare related degrees are also considered (minimum requirement of 2nd Class honours, Grade 1) on a case-by-case basis. Applicants with significant relevant experience will also be considered for this programme.

Fees: Current year fees are:
€6,820 per year FT, €4,500 per year PT;
Non-EU: €13,000 per year FT, €8,500 per year PT

Applying: www.pac.ie/nuigalway
PAC Code: GYMS6/57
Closing Date: Further details on closing dates can be found on www.nuigalway.ie/postgrad/assessmentdates

www.crfg.ie
John O’Dea, CEO Crospon

“With the increasing level of translational research and novel medical device design taking place in Ireland, there is a strong need to increase number of trained clinical researchers both within academia and industry.

This course has been of great benefit to me in building skills in terms of RCT design and biostatistics in a formal structured manner. The various modes of learning and lecture scheduling have made this a course capable of being managed in the context of a heavy work schedule. A particular plus is the strong linkages with McMaster University, a universally recognised authority in clinical trial design methodologies.”

Find out more/ Enquiries to:

**Director**
Prof. Martin O’Donnell  
Professor of Translational Medicine  
Clinical Research Facility,  
NUI Galway and UCHG,  
Galway, Ireland  
☎ odonnm@mcmaster.ca

**Coordinator**
Dr. Aideen O Doherty  
MMI Programme Coordinator  
NCBES,  
NUI Galway,  
Galway, Ireland  
✉ aideen.odoherty@nuigalway.ie
M.Sc in Medical Physics (GYS10)

Introduction

The programme is primarily geared towards training for physicists in the application of radiation physics in medicine but maintains a reasonable exposure to key aspects of clinical engineering.

The programme is designed to meet the demand for qualified medical physicists in Ireland. It is primarily geared towards training for physicists in the application of radiation physics in medicine but maintains a reasonable exposure to key aspects of clinical engineering so that students receive a comprehensive knowledge of the application of physical sciences and engineering to medicine.

Note: Garda vetting/police clearance required.

Programme outline

The MSc consists of a fairly intense programme of lectures, workshops, laboratory sessions, tutorials, and self-directed learning, followed by a short (three-month) project and dissertation. The syllabus contains modules covering the traditional topics associated with medical physics (Radiation Fundamentals, Hospital & Radiation Safety) and those more associated with clinical engineering (Clinical Instrumentation). The emphasis is on radiotherapy, radiation protection, and diagnostic imaging. Courses in anatomy, physiology, hospital safety and risk management are also provided. The course is accredited by the Institute of Physics and Engineering in Medicine (IPEM) and is therefore recognized as a component of PEM professional training.

Employment and career opportunities

Graduates have found employment in a medical physics based career (a recent survey of graduates from the MSc showed that approximately 75% of those found employment in such a career). This includes several individuals who have pursued or are pursuing a PhD. About 20% are employed abroad (U.K., USA, Australia, and New Zealand). Opportunities also exist in specialist medical device industries and in academic research.

Why study this programme?

This course is accredited by the Institute of Physics and Engineering in Medicine (IPEM) and is recognised at a component of PEM professional training. The programme is designed to meet the demand for qualified medical physicists in Ireland and provide them with a comprehensive knowledge of the application of physical sciences and engineering in Medicine.

Find out more / Enquiries to:
Prof. Wil van der Putten | Dr. Christoph Kleefeld
T +353 91 544 311 | +353 91 542 870
E wil.vanderputten@hse.ie | christoph.kleefeld@hse.ie

www.nuigalway.ie/courses/medical-physics
Postgraduate Diploma and Masters in Sports and Exercise Medicine

Introduction

The Postgraduate Programmes in Sport and Exercise Physiotherapy and Sports and Exercise Medicine which have been offered for many years at NUI Galway have been revised and updated in collaboration between the NUI Galway Medical School, the University of Limerick and the Physiotherapy and Medical professions. The recently formed Strategic Alliance between NUI Galway and the University of Limerick means that students of these programme will now be able to enjoy the best educational and technical/laboratory resources both Universities. The programmes will continue to be delivered via part time blended learning delivered over two years in a varied format of lectures, tutorial and practical laboratory-based learning. This programme is offered in collaboration with University of Limerick, and certain modules are provided by UL where students may be required to attend laboratory and classroom components. The opportunity for supervision or co-supervision on the dissertation is an option which students may explore within this framework also.

Why study this programme?

The programmes intention is to provide students with a wide breadth of knowledge across sports and exercise medicine and to enable students to develop skills to put theory into practice, the career opportunities available to student following completion of the programme are growing as is recognition for such graduates internationally.

Programme outline

Format

The course is delivered via a mix of online distance learning and face-to-face teaching workshops. These workshops will require attendance in Galway and Limerick. All candidates complete the same 12 modules over the two years (60 ECTS) for the award of the Postgraduate Diploma; candidates enrolled on the Masters Programme complete an additional research thesis component (30 ECTS) during year 1 and year 2.

Year 1  30 ECTS
Module 1: Musculoskeletal Anatomy
Module 2: Sports Injury I
Module 3: Biomechanics
Module 4: Exercise Physiology
Module 5: Sports Injury II
Module 6: Bioinformatics and Bioethics

Year 2  30 ECTS
Module 7: Pre Existing Medical Conditions and Exercise
Module 8: Clinical Exercise Rehabilitation
Module 9: Biostatistics
Module 10: Population Health and Exercise Programming
Module 11: Medical Emergencies
Module 12: Sport, Exercise, and Performance
Thesis 30 ECTS

Assessment

Modules are assessed by a combination of practice-based assignments, clinical assessments, written examinations, and clinical placements.

Employment and career opportunities

Graduates have found employment in governing bodies of sport and the Irish Sports Council, and working as Team Doctors for amateur and professional teams.

Find out more/ Enquiries to:

Ms Natalie Walsh
College of Medicine, Nursing, and Health Sciences
T +353 91 495960
E natalie.walsh@nuigalway.ie

Course Facts

Course level: Level 9
Duration: 24 Months
Programme Code: GYM05
Entry Requirements:
Applicants must be medical graduates of the National University of Ireland or hold a qualification deemed equivalent as a medical doctor from another university, and have a minimum of one year’s experience after registration with the Irish Medical Council.
Fees:
€4,745 (full-time, EU)
€13,500 (full-time, non-EU)
Applying: www.pac.ie/nuigalway
Closing Date: Further details on closing dates can be found on www.nuigalway.ie/postgrad/assessmentdates

http://www.nuigalway.ie/courses/taught-postgraduate-courses/sports-exercise-medicine.html
Postgraduate Diploma and Masters in Sports and Exercise Physiotherapy

Introduction
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The recently formed Strategic Alliance between NUI Galway and the University of Limerick means that students of these programme will now be able to enjoy the best educational and technical/laboratory resources both Universities. These programmes will continue to be delivered via part time blended learning delivered over two years in a varied format of lectures, tutorial and practical laboratory-based learning. Some modules are provided by University of Limerick where students may be required to attend laboratory and classroom components. The opportunity for supervision or co-supervision on the dissertation is an option which students may explore within this framework also.

Why study this programme?
The programme intention is to provide students with a wide breath of knowledge across sports and exercise physiotherapy and to enable students to develop skills to put theory into practice, the career opportunities available to student following completion of the programme are growing as is recognition for such graduates internationally.

Programme outline

Format
The course is delivered via a mix of online distance learning and face-to-face teaching workshops. These workshops will require attendance in Galway and Limerick. All candidates complete the same 12 modules over the two years (60 ECTS) for the award of the Postgraduate Diploma; candidates enrolled on the Masters Programme complete an additional research thesis component (30 ECTS) during year 1 and year 2.

Year 1 30 ECTS
Module 1: Musculoskeletal Anatomy
Module 2: Sports Injury I
Module 3: Biomechanics
Module 5: Sports Injury II
Module 6: Bioinformatics and Bioethics

Year 2 30 ECTS
Module 7: Pre Existing Medical Conditions and Exercise
Module 8: Clinical Exercise Rehabilitation
Module 9: Biostatistics
Module 10: Population Health and Exercise Programming
Module 11: Medical Emergencies
Module 12: Sport, Exercise, and Performance
Thesis 30 ECTS

Course Facts
Course level: Level 9
Duration: 24 Months
Programme Code: GYM06
Entry Requirements:
Applicants must be chartered physiotherapy graduates (BSc Physiotherapy NUI) of National University of Ireland or from another university or graduates of a professionally accredited Honours Podiatry degree, and have a minimum of two year's experience post qualification.
Fees:
€4,745 (full-time, EU)
€13,500 (full-time, non-EU)
Applying: www.pac.ie/nuigalway
Closing Date: Further details on closing dates can be found on www.nuigalway.ie/postgrad/assessmentdates

http://www.nuigalway.ie/courses/taught-postgraduate-courses/sports-exercise-medicine.html
Assessment
Modules are assessed by a combination of practice-based assignments, clinical assessments, written examinations, and clinical placements.

Employment and career opportunities
Graduates have found employment in governing bodies of sport and the Irish Sports Council, and working as Team Doctors for amateur and professional teams.

Find out more/ Enquiries to:
Ms Natalie Walsh
College of Medicine, Nursing, and Health Sciences
T +353 91 495 960
E natalie.walsh@nuigalway.ie

http://www.nuigalway.ie/courses/taught-postgraduate-courses/sports-exercise-medicine.html
Introduction
This programme combines specialist endovascular surgical training with evidence-based medical research skills. Specialist endovascular training is provided under the guidance of vascular surgeons from the Western Vascular Institute. The curriculum is taught through hands-on, supervised training, and supervised sessions in the endovascular surgery teaching lab, and weekly scheduled educational meetings. Candidates will apply knowledge and skills to search for and critically appraise scientific evidence to answer researchable clinical questions, to submit a research proposal and to complete this proposal through a research thesis in endovascular surgery.

An approved research protocol is the outcome of the first year (Diploma) and leads to a final research thesis about a scientific topic of your own interest during the second year (Masters).

Why study this programme?
This new programme combines practical endovascular surgical training with evidence-based medical research skills. The programme offers a unique blend of hands-on interact training and supervision session in the Endovascular Surgery Teaching Lab.

Programme outline
Specialist surgical training combined with six research modules - one year.
Informatics modules are offered in block released courses of one week duration, delivered via a blend of face-to-face teaching and enquiry based learning. Distance learning is encouraged through online course materials available via the University’s Blackboard website.

Modules, Year 1, Semester 1
Finding the Needle in the I-stack (E-resources)
Lies, Damned Lies, and Statistics
From Popper to Proposal (research methods)

Modules, Year 1, Semester 2
Searching the Internet (Advanced Level)
Research Methods (Advanced Level)
Advanced Statistics
Deadline for Final Research Proposal

Employment and career opportunities
Graduates have found employment in (we envisage) a diverse range of fields of health and medical research including MDs and PhDs and improved professional knowledge, skills, and attitudes in daily practice (evidence-based healthcare).

Find out more/ Enquiries to:
Dr. Thomas Kropmans
T  +353 91 495 478
E graduatehealth@nuigalway.ie
W www.nuigalway.ie/medical_informatics

http://www.nuigalway.ie/courses/taught-postgraduate-courses/endovascular-surgery.html
Introduction

The Health Informatics programmes introduces students techniques and frameworks to enable them to critically appraise scientific evidence to answer researchable clinical questions and conduct dedicated research in their own speciality or field. Our programme is designed for health care providers with an interest in evidence based medicine, and health and medical research.

Programme outline

Postgraduate Diploma completed over 2 semesters - 1 year
Informatics modules are offered in block released courses of one week duration, delivered via a blend of face-to-face teaching and enquiry based learning. Distance learning is encouraged through online course materials available via the University’s Blackboard website.

Programme outline

Modules, Year 1, Semester 1
Finding the Needle in the I-stack (E-resources)
Lies, Damned Lies, and Statistics
From Popper to Proposal (research methods)

Modules, Year 1, Semester 2
Searching the Internet (Advanced Level)
Research Methods (Advanced Level)
Advanced Statistics
Deadline for Final Research Proposal

Masters, Modules completed over one year, Semesters 1 & 2
Scientific Writing and Publication

Employment and career opportunities

Careers in a diverse range of fields of health and medical research including MDs and PhDs and improved professional knowledge, skills and attitudes in daily practice (Evidence-Based Healthcare).

Find out more/ Enquiries to:
Dr. Thomas Kropmans
T +353 91 495 478
E graduatehealth@nuigalway.ie
W www.nuigalway.ie/medical_informatics

Course Facts

Course level: Level 9 (PG Dip), Level 9 (Masters)
Duration: 1 Year Part Time (PG Dip) / 1 Year Part Time (Masters).
Completion of the PG Dip is required to advance to Masters.

Entry Requirements:
Successful applicants will normally hold a primary degree in healthcare, medicine, or equivalent qualification, at Second Class Honours, Grade 1 level or above, in a relevant subject area. Competence in English language equivalent to IELTS 6.5. Masters applicants must in addition to these requirements have successfully completed the Postgraduate Diploma in Medical Science (Health Informatics) or a comparable award deemed by the School of Medicine to satisfy these requirements.

Fees:
€4,850 EU (PG Dip/Masters)
€13,500 non-EU (PG Dip/Masters)

Applying: www.pac.ie/nuigalway

Programme Code: GYM47/45

Closing Date: Further details on closing dates can be found on www.nuigalway.ie/postgrad/assessmentdates

http://www.nuigalway.ie/courses/taught-postgraduate-courses/health-informatics.html
Introduction

An exciting new study programme in integrated musculoskeletal practice, aimed at establishing a method of musculoskeletal assessment, clinical reasoning and choice of appropriate treatment of the spectrum of musculoskeletal conditions presenting at the frontline. The programme incorporates, critical evaluation of the existing tenets of musculoskeletal medicine practice, and includes mastery of the skills required to undertake advanced research and develop innovative skills in practice.

Course Facts

<table>
<thead>
<tr>
<th>Course level</th>
<th>Level 9 (PG Dip), Level 9 (Masters)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Duration</td>
<td>1 year part-time (PG Dip), 1 year Part Time (Masters). Completion of the PG Dip is required to advance to Masters.</td>
</tr>
<tr>
<td>Entry Requirements:</td>
<td>This programme is open to Registered Medical Practitioners, Chartered Physiotherapists, Podiatrists and Advanced Nurse Practitioners, or equivalent. All students must produce evidence of immunity to Hepatitis B, and indicate how supervision of injection practice will be conducted in the inter-unit periods. English language equivalent to IELTS 6.5 is also a requirement.</td>
</tr>
<tr>
<td>Fees:</td>
<td>€4,850 EU (PG Dip/Masters) €13,500 non-EU (PG Dip/Masters)</td>
</tr>
<tr>
<td>Applying</td>
<td><a href="http://www.pac.ie/nuigalway">www.pac.ie/nuigalway</a></td>
</tr>
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</tr>
</tbody>
</table>

Why study this programme?

The future models of Care delivery in the field of Musculoskeletal Medicine will require up-skilling of Doctors and Physiotherapists, and Advanced Nurse Practitioners, to meet the challenges of their new role. This course will focus on evidence based medicine/translational medicine and learners will be required to conduct clinical research.

Programme outline

The Postgraduate Diploma in Medical Science (Musculoskeletal Medicine) is a 1 year part-time programme (60 ECTS). It consists of two semesters with three modules per semester.

The Musculoskeletal Medicine components of the programme will deal with connective tissue injury/repair; pain theory; fundamentals of examination and treatment; choice of appropriate imaging, and introduction to injection treatment. In the informatics and biostatistics modules, candidates will learn how to search, retrieve and critically appraise scientific information, how to formulate researchable questions, and interpret evidence based guidelines & protocols related to patient information systems. There will be a balance between clinical and classroom based learning.

The Masters in Medical Science (Musculoskeletal Medicine) is a 1 year part time programme (60 ECTS) consisting of modules in scientific writing and publication, and research thesis conducted over Semesters 1 and 2. Entry to the Masters programme requires successful completion of the Postgraduate Diploma in Medical Science (Musculoskeletal Medicine).

Employment and career opportunities

This programme is designed to enhance the academic and professional development of professional health care practitioners. The future models of Care delivery in the field of Musculoskeletal Medicine will require up-skilling of Doctors and Physiotherapists, Podiatrist and Advanced Nurse Practitioners, to meet the challenges of their new role. This course will improve professional knowledge, skills, and attitudes in daily practice (Evidence-Based Healthcare).

Find out more/ Enquiries to:

Dr. Thomas Kropmans / Dr. Micheal Newell
T: +353 91 495 478 / +353 91 495 940
E: Thomas.kropmans@nuigalway.ie
Introduction
An exciting new study programme, the Masters Degree in Surgery (MCh) is designed to enhance the academic and professional development of surgical trainees by improving the level of scientific appreciation for evidence-based clinical practice. Running parallel to the basic surgical training scheme (BST) this programme will provide surgical trainees with the academic and scientific research skills needed for progression to higher surgical training schemes and academic surgery.

Why study this programme?
The combination of professional surgical training and research output will appeal to graduates intending to apply for higher surgical training (HST) schemes in Surgery or similar medical specialities. Surgeons require recognised postgraduate research and academic qualifications for progression to higher surgical training schemes. This programme will serve as a stepping stone to an MD or PhD.

Programme outline
The Masters in Surgery (MCh) programme will run over three calendar years. Candidates will complete four modules in year one, three modules in year two, and two modules in year three. In addition, the learner will be expected to publish a scientific literature review in year one, a research paper in year two, and a final thesis in year three based on original research in their chosen surgical sub-specialty (see attached table of programme). The topic of the thesis will be chosen by the professor of Surgery after liaising with the individual learner and their surgical/course director/tutor(s). There will be an option to exit the programme at Postgraduate Diploma level (60 ECTS) after year 2.

Employment and career opportunities
This programme is designed to enhance the academic and professional development of surgeons. The future models of care delivery will require up-skilling of surgeons to meet the challenges of their new role. This course will improve professional knowledge, skills, and attitudes in daily practice (Evidence-Based Healthcare). Graduates will provide Evidence Based practice & research in the field of Surgery. Upgraded knowledge, skills and attitudes provide new dimension to day to day care of patients in need for surgical procedures.

Course Facts
Course level: Level 9 (PG Dip), Level 9 (Masters)  
Duration: 2 year part-time (PG Dip), 3 years part-time (Masters). Completion of the PG Dip is required to advance to Masters.  
Enter Requirements:  
Successful applicants will hold a primary degree in Medicine and are conferred with the degrees of Bachelor of Medicine, Bachelor of Surgery and Bachelor of Obstetrics (M.B., B.Ch., B.A.O.). The applicants should be selected for the Basic Surgical Training Programme (BST) national programme but will be required to demonstrate an equivalent clinical and academic competence and have appropriate interview and clinical skills. Candidates not on the BST programme may be eligible and interviews will apply. Competence in English language equivalent to IELTS 6.5.  
Fees: €4,850 EU (PG Dip/Masters)  
€13,500 non-EU (PG Dip/Masters)  
Applying: The programme will be advertised by the National Recruitment Agency of the HSE in October/ November 2011 on their website.  
Closing Date: Further details on closing dates can be found on: www.nuigalway.ie/postgrad/assessmentdates

Find out more/ Enquiries to:  
Dr. Thomas Kropmans / Dr. Micheal Newell  
T +353 91 495 478 / +353 91 495 940  
E Thomas.kropmans@nuigalway.ie

www.nuigalway.ie/medicine
Research Programmes

The School of Medicine aims to deliver outstanding medical research, to educate the next generation of academics, clinicians and practitioners in medicine, and to apply the benefits of discovery to improve community and public health. The School offers a dynamic suite of research based postgraduate programmes through our large base of highly experienced and internationally renowned research staff and is focused on a strong commitment of delivering research which translates into new therapies and treatments for society.

Postgraduate Research areas

**Anatomy**

Research areas
1. Integrative reproduction: structure/function of human endometrium, environmental endocrine disruption, fetomaternal interface
2. In vivo and in vitro study of human diseases: normal and pathological development: role of ECM and receptors in vivo, phenotypic analysis of models
3. In vitro model systems—cell micropatterning and microfluidics
4. Biomaterials tissue interactions
5. Neuroscience: spinal cord development and injury
6. Specific contribution to national biophotonics and imaging platform, molecular and cellular imaging, imaging technology cores
7. Education

**Entry requirements**
Candidates should have a primary degree in Medicine to pursue an MD and, in addition, an Honours degree (or equivalent international qualification) for a PhD.

**Apply online:** [www.pac.ie/nuigalway](http://www.pac.ie/nuigalway)

**PAC code(s):**
- Structured PhD, full-time GYP01
- PhD (part-time) GYN02
- MSc GYN05 | GYN06

**Fee:** Current year fees are:
- PhD €5,605 (full-time, EU)
- PhD and MD €13,500 (full-time, non-EU)
- PhD €2,915 (part-time, EU)
- MD €5,345 (full-time, EU)
- €2,785 (part-time, EU)

**Bacteriology**

Research areas
1. Salmonella campylobacter
2. Antimicrobial resistance in human and animal pathogens

To pursue any research degree in this Discipline, potential candidates should discuss the matter with Prof. Martin Cormican or Dr. Dearbháile Morris.

Admission to a research degree is at the discretion of the potential supervisor, the Head of Discipline, and the College of Medicine, Nursing and Health Sciences and is based on a proposal by the applicant following discussion with the appropriate member of academic staff.

**Anaesthesia**

Research areas
1. Therapeutic hypercapnia and acute lung injury
2. Somatic gene transfer in acute lung injury
3. Effects of anaesthesia on the foeto-placental Vasculature
4. Postoperative analgesia
5. Evaluation of medical devices
6. Critical care utilisation and requirement/courses

www.nuigalway.ie/medicine
Entry requirements
Candidates should have a primary degree in Medicine to pursue an MD, and an honours degree (Second Class Honours, Grade 1 minimum [or equivalent international qualification]) to pursue a PhD.

Apply online: www.pac.ie/nuigalway

PAC code(s):
- Structured PhD, full-time: GYP03
- PhD (part-time): GYN12
- MD: GYN13 | GYN14

Fee: Current year fees are:
- PhD €5,605 (full-time and part-time, EU)
- PhD and MSc €13,500 (full-time, non-EU)
- MD €5,345 (full-time, EU)
- €2,785 (part-time, EU)

General Practice

Research areas
Proposals for MD or PhD research projects are welcomed in any area of research related to general practice. Applicants’ attention is drawn in particular to the key research themes within the Discipline of General Practice at NUI Galway, which can be viewed here: www.nuigalway.ie/general_practice/research.html

Applications are welcome for a PhD or MD in General Practice.

Entry requirements
Candidates should have a primary degree in Medicine to pursue an MD and, in addition, an Honours degree (or equivalent international qualification) for a PhD.

Selection is based on academic record and congruence of the applicant’s proposal with expertise and capacity for supervision within the Discipline of General Practice. All applicants should contact the Programme Director in advance.

Apply online: www.pac.ie/nuigalway

PAC code(s):
- Structured PhD, full-time: GYP04
- PhD (part-time): GYN16
- MD: GYN17 | GYN18

Fee: Current year fees are:
- PhD €5,605 (full-time, EU)
- PhD and MD €13,500 (full-time, non-EU)
- PhD €2,915 (part-time, EU)
- MD €5,345 (full-time, EU)
- MD €2,785 (part-time, EU)

Obstetrics and Gynaecology

Research areas
1. Preterm labour
2. Myometrial physiology
3. Placental biology
4. Fetal disorders
5. Molecular aspects of parturition
6. Obstetrics and cerebral palsy

Supervision is offered in a wide area of medical interest.

To pursue either degree, potential candidates should discuss the matter with the Head of Discipline.

Entry requirements
Candidates should have a primary degree in Medicine to pursue an MD and, in addition, an Honours degree (or equivalent international qualification) for a PhD.

Apply online: www.pac.ie/nuigalway

PAC code(s):
- Structured PhD, full-time: GYP07
- PhD (part-time): GYN24
- MD: GYN25 | GYN26
- MAO: GYN27 | GYN28

Fee: Current year fees are:
- PhD €5,605 (full-time, EU)
- PhD and MD €13,500 (full-time, non-EU)
- PhD €2,915 (part-time, EU)
- MD €5,345 (full-time, EU)
- MD €2,785 (part-time, EU)

Medicine

Research areas
1. Aetiology and Pathogenesis
2. Developmental therapeutics
3. Regenerative Medicine
4. Clinical trials
5. Health service research

Supervision is offered in a wide area of medical interest. To pursue either degree, potential candidates should discuss the matter with the Head of Discipline.

www.nuigalway.ie/medicine
Paediatrics

Research areas
Paediatric immunisation
1. Community acquired MRSA
2. Paediatric allergy
3. Respiratory disease
4. Diabetes
5. Disability

Supervision is offered in a wide area of medical interest. To pursue either degree, potential candidates should discuss the matter with the Head of Discipline.

Entry requirements
Candidates should have a primary degree in Medicine to pursue an MD and, in addition, an Honours Degree for a PhD.

Apply online: www.pac.ie/nuigalway

PAC code(s):
Structured PhD, full-time GYP09
PhD (part-time) GYN30
MD GYN31 | GYN32

Fee: Current year fees are:
PhD €5,605 (full-time, EU)
PhD and MD €13,500 (full-time, non-EU)
PhD €2,915 (part-time, EU)
MD €5,435 (full-time, EU)
MD €2,785 (part-time, EU)

Pathology

Research areas
Molecular classification of breast cancer
1. Determinants of progression of breast cancer
2. Characterisation of precursor lesions of breast cancer
3. Classifications of minimal lymph node involvement

Supervision is offered in a wide area of medical interest. To pursue either degree, potential candidates should discuss the matter with the Head of Discipline.

Entry requirements
Candidates should have a primary degree in Medicine to pursue an MD and, in addition, an Honours degree (or equivalent international qualification) for a PhD.

Apply online: www.pac.ie/nuigalway

PAC code(s):
Structured PhD, full-time GYP10
PhD (part-time) GYN34
MD GYN35 | GYN36

Fee: Current year fees are:
PhD €5,605 (full-time, EU)
PhD and MSc €13,500 (full-time, non-EU)
PhD €2,915 (part-time, EU)
MSc €6,815 (full-time, EU)
MSc €3,520 (part-time, EU)

Pharmacology and Therapeutics

Research areas
Molecular and cellular biology of vertebrate embryo development
1. Nicotinic and histaminergic targets for the treatment of Alzheimer’s disease
2. Antidepressants; novel targets; modulating immune responses
3. Non-animal alternatives for toxicological assessment of drugs
4. Novel cell and gene therapies for Parkinson’s disease
5. Molecular mechanisms of intestinal injury, repair and carcinogenesis; inflammatory bowel disease, colon cancer and radiation injury to the intestinal tract
6. Caspases and differentiation: implications for stem cells; putative serine proteases and apoptosis; MicroRNAs, apoptosis and cancer
7. Neurochemical, neuroendocrine and molecular mechanisms underlying pain, anxiety and depression; neuropharmacology of cannabinoid and opioid receptors; monoamines and the stress response; neuroimmune mechanisms

The Discipline is actively engaged in a vigorous research programme centred around the areas of neuropharmacology (the study of the effects of drugs on the central nervous system), immunopharmacology (the study of the effects of drugs on the immune system), and signalling in vertebrate development.

The Discipline has research links with other national and international centres, including the Departments of Biochemistry and Physiology, the NCRES (NUI Galway), the Institute of Neuroscience, Trinity College, Dublin, the University of Pennsylvania, and H/S Lundbeck, Denmark.

Entry requirements
Candidates should have a primary degree in Medicine to pursue an MD and, in addition, an Honours degree (or equivalent international qualification) for a PhD.

Apply online: www.pac.ie/nuigalway

PAC code(s):
Structured PhD, full-time GYP11
PhD (part-time) GYN38
MSc GYN39 | GYN40

Fee: Current year fees are:
PhD €5,605 (full-time, EU)
PhD and MSc €13,500 (full-time, non-EU)
PhD €2,915 (part-time, EU)
MSc €6,815 (full-time, EU)
MSc €3,520 (part-time, EU)
Physiology

Research areas
1. Control of preimplantation embryo growth and development
2. Mechanisms regulating ovulation
3. Signalling systems involved in the control of cell differentiation
4. Neuropharmacology and neurotoxicology of the polyamines
5. Pathophysiology of stroke and Parkinson’s disease
6. Neurodevelopment in vitro models

The discipline carries out research in a number of areas including the central nervous system, stem cells, ovarian physiology, preimplantation embryo development, and has particular interests in electrophysiology and signal transduction mechanisms. Admission to a research degree is at the discretion of the potential supervisor and the Head of the Discipline and is based on a proposal from the applicant following discussion with the member of staff whose academic area is most appropriate.

Entry requirements
Candidates should have a primary degree in Medicine to pursue an MD and, in addition, an Honours degree (or equivalent international qualification) for a PhD.

Apply online: www.pac.ie/nuigalway

PAC code(s):
Structured PhD, full-time GYP12
PhD (part-time) GYN42
MSc GYN43 | GYN44

Fee: Current year fees are:
PhD €5,605 (full-time, EU)
PhD and MSc €13,500 (full-time, non-EU)
PhD €2,915 (part-time, EU)
MSc €6,815 (full-time, EU)
MSc €3,520 (part-time, EU)

Psychiatry

Research areas
1. Neuroimaging abnormalities in schizophrenia
2. Neuroimaging abnormalities in bipolar disorder
3. Impact of genetics and environmental risk factors on the neurobiology of psychosis
4. Variation of neurobiological abnormalities with illness progression and with pharmacological treatment in psychotic and affective disorders
5. Mental Health Services research — including evaluation of operation and effects of Mental Health Act 2001 on service users and professionals

Supervision is offered in a wide area of medical interest. To pursue either degree, potential candidates should discuss the matter with the Head of Discipline.

Entry requirements
Candidates should have a primary degree in Medicine to pursue an MD and, in addition, an Honours degree (or equivalent international qualification) for a PhD.

Apply online: www.pac.ie/nuigalway

PAC code(s):
Structured PhD, full-time GYP14
MHSc GYN93

Fee: Current year fees are:
PhD €5,605 (full-time, EU)
PhD €13,500 (full-time, non-EU)

MHSc email: fees@nuigalway.ie

Primary Care

Research areas
Proposals for Masters or PhD research projects are welcomed in any area of community-based health care. Applicants’ attention is drawn in particular to the key research themes within the Discipline of General Practice at NUI Galway, which can be viewed here: www.nuigalway.ie/general_practice/research.html

Applications are welcome for a PhD or Masters in Health Sciences (Primary Care). The one-year Masters equips students to develop and carry out a piece of research within the primary care setting. Individual research is supported by ten workshop days (two consecutive weekdays in each of September, October, November, February, April). Workshop topics include:

- Qualitative research methods
- Statistics and epidemiology
- SPSS, Nvivo, Endnote
- Evidence Based Primary Care
- Writing a research paper

Entry requirements
Students are drawn from a wide range of health/social care professions. Entry usually follows successful completion of the Postgraduate Diploma in Primary Care or Clinical Primary Care. Applications may also be considered from others with relevant background/experience. Selection is based on academic record and congruence of the applicant’s proposal with expertise and capacity for supervision within the Discipline of General Practice. All applicants should contact the Programme Director in advance.

Apply online: www.pac.ie/nuigalway

PAC code(s):
Structured PhD, full-time GYP14
MHSc GYN93

Fee: Current year fees are:
PhD €5,605 (full-time, EU)
PhD €13,500 (full-time, non-EU)

MHSc email: fees@nuigalway.ie
Radiology

Research areas
1. Barium imaging of colon cancer
2. Orally administered negative contrasting agents in abdominal C.T. scanning
3. Computer tomography of pulmonary sarcoid
4. Extracorporeal Shock Wave Lithotripsy
5. Ultrasound—guided biopsy
6. Investigation of blunt renal trauma

Supervision is offered in a wide area of medical interest. To pursue either degree, potential candidates should discuss the matter with the Head of Discipline.

Entry requirements
Candidates should have a primary degree in Medicine to pursue an MD and, in addition, an Honours degree (or equivalent international qualification) for a PhD.

Apply online: www.pac.ie/nuigalway

PAC code(s):
Structured PhD, full-time GYP16
PhD (part-time) GYN50
MD GYN51 | GYN52
M.Sc GYS9S

Fee: Current year fees are:
PhD €5,605 (full-time, EU)
PhD and MD €13,500 (full-time, non-EU)
PhD €2,915 (part-time, EU)
MD €2,785 (part-time, EU)
M.Sc CTBC

Surgery

Research areas
- Breast cancer
- Population genetics
- Molecular profiling
- Role of stem cells in metastasis
- Metastasis prevention
- Early detection
- Colorectal cancer
- Hyperbaric oxygen

The Discipline offers supervision in a wide area of medical interest. To pursue either degree, potential candidates should discuss the matter with the Head of Discipline.

Entry requirements
Candidates should have a primary degree in Medicine to pursue an MD and, in addition, an Honours degree for a PhD.

Apply online: www.pac.ie/nuigalway

PAC code(s):
Structured PhD, full-time GYP19
PhD (part-time) GYN57
MD GYN5S | GYN56
MCh GYN57 | GYN58

Fee: Current year fees are:
PhD €5,605 (full-time, EU)
PhD and MD and MCh €13,500 (full-time, non-EU)
PhD €4,915 (part-time, EU)
MD and MCh €2,785 (part-time, EU)
MD and MCh €2,785 (part-time, EU)

Find out more/ Enquiries to:
Ms. Therese Dixon
T +353 91 544475
E therese.dixon@nuigalway.ie

There are two areas of primary importance at NUI Galway and University College Hospital Galway (UCHG): Cancer Research and Regenerative Medicine.
The Regenerative Medicine Institute (REMedI), directed by Professor Tim O’Brien, is a world-class biomedical research institute with a central focus on conducting basic and applied research in regenerative medicine, an emerging field that combines the technologies of gene therapy, adult stem cell therapy, biomaterials science and clinical medicine.

REMedI specialise in basic and applied research in regenerative medicine to develop new therapies for human diseases. Our main aim is to conduct basic research and translate findings to new clinical treatments at REMEDI. The emphasis is on the delivery of therapeutic products to patients through complimentary biomaterials and medical device development programmes. REMEDI’s goal is to use minimally invasive approaches to deliver these therapeutic agents.

REMedI’s main focus is to train the next generation of physician and PhD scientists and our learning environment provides our students with an opportunity to see research translated into real life applications. Students wanting to study in the area of regenerative medicine will not only benefit from REMEDI cross-disciplinary and interactive environment but they will mentored by internationally recognised academic staff, all of whom bring their experience of real knowledge of research in action to the lecture hall.

REMedI currently has 11 principal investigators but also works closely with scientists in other NUI Galway research centres. In addition, REMEDI’s associated Institutes and Centres including the National Centre for Biomedical Engineering Science, the Network of Excellence in Functional Biomaterials and the Glycosciences Research Cluster provides students with excellent training opportunities. On an international level, students will have an opportunity to interact with academic partners listed above.

For more information log onto www.nuigalway.ie/remedi.

The National Centre for Biomedical Engineering Science (NCBES), directed by Prof. Frank Barry, is an interdisciplinary research centre which brings together scientists, engineers, information technologists and clinicians in a team based, problem centred approach to research. The mission of the NCBES is to develop innovative diagnostic and therapeutic solutions to biomedical challenges through interdisciplinary and strategic research activities. Centre researchers are engaged in interdisciplinary programmes focused on innovative therapeutic solutions to current medical challenges including cardiovascular disease, cancer, orthopaedics, reproductive medicine, and neurodegenerative diseases. The NCBES provides an environment where expertise in molecular and cell biology, imaging technology, clinical sciences and engineering sciences merge. The Centre brings together scientists, engineers, information technologists and clinicians in a team based, problem centred approach to research. The mission of the NCBES is to develop innovative diagnostic and therapeutic solutions to biomedical challenges through interdisciplinary and strategic research activities. Centre researchers are engaged in interdisciplinary programmes focused on innovative therapeutic solutions to current medical challenges including cardiovascular disease, cancer, orthopaedics, reproductive medicine, and neurodegenerative diseases. The NCBES provides an environment where expertise in molecular and cell biology, imaging technology, clinical sciences and engineering sciences merge. The Centre also has a strong translational and clinical research programme with the objective of translating our research discoveries into improved patient care. A particular strength of the NCBES lies in the combined skills and creativity of a wide range of scientific, engineering and clinical disciplines working side by side on challenging research programmes and interdisciplinary education and training programmes.

The NCBES and its strong focus on research provides an ideal platform for learning. Our research staff who contribute to teaching across disciplines bring their expertise from the lab into the classroom to share real knowledge of research in action. Students interested in biomedical engineering and science could do no better than to immerse themselves in the unique environment of the NCBES in order to learn from some of the best researchers in the field and to gain hands-on experience that will be invaluable. Also, we are continuously developing our college to enhance our student’s learning environment. Work has begun on our new Biosciences Research Building which will provide top class facilities for research students in the Biological and Medical Sciences and Engineering fields. In 2011 the NCBES launched the Prostate Cancer Institute at NUI Galway. Cancer Biology and Therapeutics is a strategic research priority at NUI Galway and over the last number of years, NUI Galway and University Hospital Galway have built a strong team of internationally recognised basic and translational cancer researchers and clinicians. NUI Galway’s research programmes in this area are focussed on the discovery of molecular mechanisms involved in chromosome dynamics and apoptosis and in the development of novel anti-cancer agents. University Hospital Galway, is the major academic-medical centre in the west of Ireland, and is now one of the very few hospitals in the country with the capability of providing a full comprehensive cancer service (medical, surgical and radiation oncology) on a single site.

For more information log on to www.nuigalway.ie/ncbes or http://ncbess.eurhost.net/prostate-cancer.aspx
Research Centres affiliated with the College of Medicine, Nursing, and Health Sciences include:

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<td><strong>The National Breast Cancer Research Institute:</strong></td>
<td><a href="http://www.nbcri.ie">www.nbcri.ie</a></td>
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