



Report on request by Dundalk Institute of Technology for approval to submit, on a case-by-case basis, applications for registration of PhD programmes in the areas of

- **Smooth Muscle Research**
- **Freshwater Studies**
- **Social Networks, Environments and Technologies for Wellness and Ageing-in-place (Netwell Centre)**

By the School of Nursing, Midwifery, Health Studies and Applied Sciences

25th August 2008

1 Introduction

In June 2008 HETAC received an application by Dundalk Institute of Technology for approval to submit, on a case-by-case basis, applications for registration of PhD programmes in the areas of Smooth Muscle Research, Social Networks, Environments and Technologies for Wellness and Ageing-in-place and Freshwater Studies in the School of Nursing, Midwifery, Health Studies and Applied Sciences.

The application included the following documents:

- “Self Evaluation Report for an Application to HETAC for Approval to submit research degree programmes for registration on a case-by-case basis in the *School of Nursing, Midwifery, Health Studies and Applied Sciences*
- DKIT PhD Regulations.

The following additional documentation was provided during the course of the visits:

- DkIT Strategic plan 2006-11
- Postgraduate research policy and procedures at DkIT
- Code of good practice in research at DkIT (draft document)
- Specimen form to apply for a research degree at DkIT

A panel of expert assessors was assembled by HETAC to evaluate the case for approval by perusing the documentation submitted and visiting the College. Details of the panel are provided in the final section of the report.

Two site visits occurred due to the availability of staff members on various days. They took place between 08:30 and approximately 14:15 on July 8th and between 09:00 and 14:30 on July 29th each at the DkIT campus. Each panel also held a private meeting during the previous evening.

Assessors met and had discussions with the senior management team; research active academic staff; and any current postgraduate research students; perused research outputs; and viewed relevant facilities.

2 Summary of findings

The panel recommends that HETAC approve Dundalk Institute of Technology to submit, on a case-by-case basis, applications for registration of PhD programmes in the areas of

- Smooth Muscle Research
- Freshwater Studies
- Social Networks, Environments and Technologies for Wellness and Ageing-in-place (Netwell Centre)

in the School of Nursing, Midwifery, Health Studies and Applied Sciences and subject to the standard conditions that

1. The Institute produce a response detailing how it will address the issues raised by the assessors and which is considered satisfactory by HETAC.
2. Approval be granted for a period of *five years*.

The panel is confident that Master's and Doctoral graduates attain a standard that is equivalent to the standard typical of universities in Ireland and the United Kingdom.

3 General comments and summary of specific recommendations

The panel proposes one condition across all three fields of research and a number of general Institute recommendations. A number of field specific recommendations are also made in the subsequent sections.

3.1 Approval to submit candidates is recommended based on a suitable Institute response to the following condition:

That a Head of Research will be appointed as intended, with responsibility for implementing the objectives relating to research and postgraduate studies institute-wide which are set out in the Institutional strategic plan.

AND

3.2 To the following recommendations:

3.2.1 That the Institute complete and approve all policy and procedures documents pertaining to research students and the supports required, and make these available on the Institute website, and in as far as possible for the commencement of the next academic year. In particular appropriate policies should be put in place in respect of:

- Health and Safety practices in laboratories and on field trips.
- Risk Assessment procedures for field events and laboratory work.
- Safe storage of vehicles and equipment on campus or in Institute owned locations.
- Standard ongoing access to laboratories outside of 9-5 office hours.
- Code of Good Conduct in Research.
- Intellectual Property.
- The Institute has good student problem solving procedures in place, but should augment these by preparing procedures to support and guide supervisory staff who may be the subject of any student complaint.

3.2.2 That the Institute develop a clear policy and plan in respect of both research development and staff development, whereby fixed term contract posts be converted to permanent posts as and when resources allow to ensure the long-term sustainability and excellence of research groups and centres.

3.2.2 That the structure, responsibilities and reporting arrangements between directors of programmes, directors of centres, heads of department and head of school be more clearly delineated and documented.

3.2.3 That policies and procedures for the remission of teaching to support scholarship and research, and conversely remission of research duties for fixed term research

contract staff who engage in delivering a postgraduate programme, be developed and clearly documented.

- 3.2.4** That greater online access to journals be addressed as a matter of priority so that students can access the relevant knowledge resources which are essential to their studies and the sustainability of the respective centres.
- 3.2.5** That the enrolment times and processes be clearly documented to ensure students are clear on when opportunities are available and what their registration responsibilities are.
- 3.2.6** That a schedule of fees for postgraduate programmes be agreed and published.
- 3.2.7** That an online location to deposit research publications be developed to increase knowledge sharing amongst the students, staff, and research community in general.

4 Specific Field comments and summary of specific recommendations

4.1 Smooth Muscle Research

The panel was of the view that research being conducted in this area is of an international standing and of an extremely high quality. It was recognised that the Smooth Muscle Research Centre could be the lead research unit for the Institute and provide example and a model for future developments.

The panel has made the following recommendations to assist the centre in its development towards seeking Accreditation and to promote its institutional sustainability:

4.1.1 The Centre and the Senior Management of the Institute should continue to work together, through regular meetings, on the integration of the research strategies of the Centre, the School and the Institute.

4.1.2 A comprehensive and Institute integrated plan should be put in place to address future space requirements, taking into account that not all grant applications may be successful and acknowledging that future sustainability is predicated on appropriate facilities being made available. Perhaps infrastructure requirements might be a standing item on the agendas of Institute research committee meetings.

4.1.3 Every effort should be made by the Institute to secure full online access to the relevant academic journals. The absence of this access may seriously hamper student progress.

4.1.4 To continue to secure good postgraduate candidates the SMR Centre might consider additional linkages with established research centres within the region.

4.1.5 The Institute should review its procedures for the assessment of candidates progressing in their studies and should consider matters such as membership of programme boards involved in these decisions and the holding of a viva as part of the process.

4.2 Social Networks, Environments and Technologies for Wellness and Ageing-in-place (Netwell Centre)

The panel noted the strategic objectives of the Institute in identifying specific research themes for development and support. It was acknowledged that the work and interests of the Netwell Centre fit well with the wider aims of DkIT and the School of Nursing, Midwifery, Health Studies and Applied Sciences and there is a cohort of well qualified and enthusiastic researchers working in this Centre.

In addition the following recommendations are made:

- 4.2.1** The Institute should consider the permanent appointment of a programme director to ensure the long-term sustainability of the Centre, and indicate the commitment of the organisation to the work of the Centre.
- 4.2.2** That supervisory capacity in the Centre be grown through the encouragement of existing staff to complete their doctoral studies and gain supervisory experience through a supporting supervisor role.
- 4.2.3** That the Institute prioritise the allocation of additional space for the work of the Centre to enable it to grow as planned.
- 4.2.4** That library space for postgraduate students be allocated and a research room or space be allocated where students and supervisors can work together.

4.3 Freshwater Studies

The panel noted the strategic objectives of the Institute in identifying specific research themes for development and support. It was acknowledged that the National Centre for Freshwater Studies has developed rapidly through the hard work and dedication of core staff and its Director. In a short period of time the Centre has achieved a good reputation in its field and has been successful in gaining additional research funding.

The following recommendations are made to promote the development and sustainability of the Centre and its work:

- 4.3.1** A booking system for use of equipment should be implemented.
- 4.3.2** Risk assessments should be carried out in respect of every protocol carried out in the laboratory in the field.
- 4.3.3** Given the shortage of staff qualified to supervise, consideration be given to the appointment of a second external supervisor routinely.
- 4.3.4** Additional training be provided to students in a systematic way in respect of equipment and laboratory protocols.
- 4.3.5** Clear guidelines be documented on Research Performance Indicators.
- 4.3.6** Greater encouragement be given to student to publish their work in peer-reviewed journals.

5 Detailed Reports & Recommendations

5.1 Smooth Muscle Research Centre

5.1.1 Is there a clear and realistic research strategy?

Yes

Areas for improvement

It would be important the Centre is completely incorporated into Institute plans and that an integrated development plan be developed.

Whilst not necessarily within the specific scope of this exercise it is suggested that in a future consideration of the overall Institute research strategy, DkIT might look at the creation of a School of Research, or some alternative model, which could 'house' the various individual research centres. Such an action may provide greater support and structure for research activities and also provide an outward facing entity promoting research activity in DkIT.

5.1.2 Is there a suitable research environment including facilities (i.e. library, access to research journals, computer facilities, laboratories etc.)?

Yes, but access to online journals needs significant improvement.

Areas for improvement

Access to online journals should be sought as a matter of priority.

All space available to the Centre is fully utilised. Whilst the laboratories are excellently equipped, there is no room to expand. Plans and strategies for expansion must be made to ensure capacity to develop and the long-term sustainability of the Centre. These plans should take into account possible lacks in grant funding.

5.1.3 Is there adequate research leadership?

Yes. The Institute has recently appointed a Director of Research who is due to commence his duties in September 2008. The Institute strategy has clearly identified distinct research themes for development.

Areas for improvement

Regular meetings between Institute management and SMR Centre management may enhance opportunities for growth and development.

5.1.4 Are there research-active staff who can supervise research students?

Yes. The principal investigators have excellent experience in supervision and in their areas of research.

5.1.5 Is there capacity for research success?

Yes. See 5.1.2

5.1.6 Has the institution established agreed institutional regulations and procedures, code of good research practice and administrative support?

Yes, but some improvements could be made.

Areas for improvement

Some of these regulations and procedures are still in draft form. They should be approved by the relevant committees and councils, and amended as necessary. There should be consideration given to amending procedures relating to the assessment of students when transferring register or progression between years to ensure fairness for students. (See comments below). Staff procedures should be enhanced to provide supportive processes for those staff members with supervisory responsibilities.

Documentation states that students can engage in study at a site distant from DkIT. This could clearly be of benefit for particular collaborative ventures but perhaps some time limit should be given to this. Should a project be undertaken largely elsewhere, it may be useful to set a defined period to ensure that students do not undertake their research completely *in absentia* from the Institute.

5.1.7 On the compliance with the general requirements set out in Appendix C.

There is general compliance with these requirements.

5.1.7.1 Research performance indicators

Some consideration should be given to issues pertaining to patent/copyright registration.

This is mentioned as a research output measure. Caution needs to be exercised that there are no potential conflicts for student development. It was stated during the site visit that no post-graduate students would work on projects with a remit to develop commercial potential. It would be helpful to state this in the programme guidelines. This is distinct from a project whereby identifiable commercial potential may evolve in the course of the work.

5.1.7.2 Research Administration and Quality Assurance

See 5.1.6

5.1.7.3 Access to research degree programmes

5.1.7.4 Transfer between the Master's and Doctoral Registers

See 5.1.6

5.1.7.5 Other Appendix C criteria

5.1.8 On the assessment procedures for candidates for research degrees which are fair and consistent and for the purpose of compliance with standards determined by HETAC.

The use of the School Programme Board to assess progress of students appeared cumbersome. The identity of participants in the Programme Board could be construed as disadvantageous to the student. Neither within the School of Nursing, Midwifery, Health Studies & Applied Sciences, nor DkIT in general is there a majority of research-intensive staff. In addition, the Smooth Muscle Centre Principal Investigators' stated their intent to have up to three students registered per Principal Investigator. These two factors would make it difficult for a student to then have a second supervisor with research experience and who is not intimately associated with the Smooth Muscle Research Centre. It is thought that the process should enable the student to have a mentor/advisor/second supervisor with research experience but with a little distance from the topic to enable balance and limit the possibility of complaints about procedure. A system of each student having an external research-active advisor/mentor, who could sit on the Programme Board when that student's case comes under scrutiny, may be helpful.

The opportunity of a viva examination as part of the assessment of progression to the second year of study may also benefit the student. At this, one external and one internal examiner (not the supervisor(s)) could participate.

5.1.9 On the implementation of procedures for access transfer and progression as determined by the Qualifications Authority under Section 8(2)(d) of the Act.

See 5.1.6 and 5.1.8

5.2 Social Networks, Environments and Technologies for Wellness and Ageing-in-place (Netwell Centre)

5.2.1 Is there a clear and realistic research strategy?

Yes

Strengths

DkIT has chosen to concentrate on four research and development themes, rather than dissipating research effort over a broad research agenda. This strategy is reasonable and realistic, and if it is implemented in a positive and constructive way it should allow interdisciplinary links to be built between the different schools at DkIT over a period of time, thus developing a shared research culture.

The research being undertaken in this area is multidisciplinary. The Centre has some good instances of internal partnerships on various projects and this should provide a good model for external partnerships, and enhance opportunities for funding.

5.2.2 Is there a suitable research environment including facilities (i.e. library, access to research journals, computer facilities, laboratories etc.)?

Yes, but the implementation of plans for development of new research facilities will greatly improve the environment.

Areas for improvement

Greater access to online journals is required.

Additional office space is required to accommodate projected growth in student and staff numbers.

5.2.3 Is there adequate research leadership?

Yes. The institutional appointment of a head of research will strengthen the Institute's approach and practices in research.

Areas for improvement

The appointment of a programme director within the Netwell Centre on a permanent basis would provide greater coherence of Centre strategy. It would also enhance the leadership of the Centre and its future sustainability.

5.2.4 Are there research-active staff who can supervise research students?

Yes.

Areas for improvement

Given the nature of the employment contracts of some of the supervisory staff, it is important to grow the supervisory capacity of the Centre as a whole. This can be facilitated by assisting current Centre staff members to complete their PhD studies and also through the expansion of the Centre team whereby additional supervisors may become available in related fields.

5.2.5 Is there capacity for research success?

Yes. There is a strong interdisciplinary team with considerable teaching experience in areas where there is growing research interest. There are a wide range of Centre projects which provide ample opportunity for investigation in the area of age-related research.

5.2.6 Has the institution established agreed institutional regulations and procedures, code of good research practice and administrative support?

Yes.

Areas for improvement

The draft document, Code of Good Practice in Research in DkIT should be finalised and distributed to all research students of the Institute as part of their induction/registration process. The responsibilities of the student to the Institute, School, Centre, Department, Supervisor, Registrar, etc, should be clearly described in this document.

5.2.7 On the compliance with the general requirements set out in Appendix C.

Yes, there is general compliance. There is an explicit ethical framework for the work conducted by the Netwell Centre.

5.2.7.1 Research performance indicators

5.2.7.2 Research Administration and Quality Assurance

Generally these regulations and procedures are good.

5.2.7.3 Access to research degree programmes

5.2.7.4 Transfer between the Master's and Doctoral Registers;

5.2.7.5 Other Appendix C criteria

Areas for improvement

The Supervisor training that is provided is supportive, but informal. It may be helpful to offer a more structured programme of peer-assisted learning to refresh the skills and knowledge of more experienced supervisors and to support less experienced supervisors of postgraduate students in developing this essential role through reflective practice.

5.2.8 Are there assessment procedures for candidates for research degrees which are fair and consistent and comply with standards determined by HETAC?

Yes.

Areas for improvement

Procedures around Programme Boards need to be reviewed, and where appropriate written guidelines need to be prepared.

5.2.9 Are the procedures for access transfer and progression as determined by the Qualifications Authority under Section 8(2)(d) of the Act being implemented?

Yes.

Areas for improvement

Timescales for application to postgraduate programmes should be realistically laid out and implemented, e.g. currently candidates applying for places in July 2008 will not be advised of outcomes until October 2008. A model which gives students greater flexibility and choice in pursuing their studies should be considered and implemented.

Written guidelines to assist applicants in the completion of application forms for postgraduate study should be provided. These should include normal word length and also information on the issues to be addressed by the candidates which will be considered by the Programme Board in their decision making process.

5.3 Freshwater Studies

5.3.1 Is there a clear and realistic research strategy?

Yes.

Strengths

The Centre benefits from an enthusiastic, committed and competent director. The Centre has been fortunate to expand its area of expertise and anticipate strong growth.

Areas for improvement

Notwithstanding the growth of the Centre and the relative success in securing research funding and projects, the Centre's particular strategy has not been clearly stated. This should be addressed in a coherent and focussed plan.

5.3.2 Is there a suitable research environment including facilities (i.e. library, access to research journals, computer facilities, laboratories etc.)?

Somewhat.

Strengths

The NCFS is very well equipped, and compares favourably with many other research units of a similar nature within the higher education sector in Ireland.

Areas for improvement

As stated in the general recommendations there needs to be a significant improvement in the policy and procedural framework for the Institute as a whole. In the context of the NCFS issues such as risk assessments, health and safety, equipment management are not well managed. Also as stated previously, better access to scientific journals should be a high priority for the Institute.

Additionally, there is no recognition of research studies or postgraduate students on the website of the NCFS. It would be helpful to redress this.

5.3.3 Is there adequate research leadership?

Yes.

At the Institute level with the proposed new head of Research and at Centre level with a dedicated Director there are combined strengths.

Areas for improvement

As the majority of staff are either new to research or recently appointed, the mentoring programme in place to develop supervision skills is particularly important. Whilst capacity is being developed across a wider group of researchers there is a danger of an over-reliance on the Director. Care needs to be taken that work of the Centre would not be jeopardised should the Director leave the Centre in the short-term.

5.3.4 Are there research-active staff who can supervise research students?

Yes.

Areas for improvement

See 5.3.3.

5.3.5 Is there capacity for research success?

Yes.

Area for improvement

The acquisition of a dedicated technician in Autumn 2008 will assist the Centre in its development and future success.

Given the fact that current PhD students will have left the laboratory before new MSc students commence, there is no overlap of experience which would have been beneficial for the new students. In future plans for student recruitment it may be helpful to structure enrolment to enable greater mentoring opportunities.

5.3.6 Has the institution established agreed institutional regulations and procedures, code of good research practice and administrative support?

Somewhat.

Area for improvement

It is important that the areas identified in the general section of this report be addressed. It is acknowledged that the Institute is primarily a teaching Institute. However research activities cannot be developed to an international and sustainable standard without greater integration of research students and the associated processes and procedures into the organisation as a whole. Issues such as times of registration for postgraduate students and associated administrative supports be addressed.

5.3.7 On the compliance with the general requirements set out in Appendix C.

There is general compliance with these regulations.

5.3.8 Research performance indicators

Greater clarity and documentation on these is required.

5.3.9 Research Administration and Quality Assurance

See comments in Section 4.

Additionally clearer documentation on supervision and joint supervision arrangements should be put in place.

5.3.10 Access to research degree programmes

No issues.

5.3.11 Transfer between the Master's and Doctoral Registers;

No issues, though clearer documentation on student requirements and the processes associated with progressing from a Master's to a Doctoral register would be helpful.

5.3.12 Other Appendix C criteria

No issues

Areas for improvement

5.3.13 On the assessment procedures for candidates for research degrees which are fair and consistent and for the purpose of compliance with standards determined by HETAC.

Greater clarity in the documentation of all postgraduate procedures, including those pertaining to assessment, would be of help.

5.3.14 On the implementation of procedures for access transfer and progression as determined by the Qualifications Authority under Section 8(2)(d) of the Act.

There are no concerns in this area.

6 Conclusion

The three research fields presented for approval each have their own areas of strength and there are clearly identified opportunities for growth. It is important that the Institute support these strategically identified areas in the production and implementation of good policy and procedure which takes cognisance of the research environment, the needs of research students and research staff; and also in integrated resource planning and the collegiate management of the respective research centres. These issues pertaining to good governance are key, and it is essential that the Institute senior management continue to lead the development of research and the provision of research programmes in a coherent and strategic manner.

7 The Panel

Smooth Muscle Research

Professor Roderick Kernan, MRIA, and formerly University College, Dublin

Professor Michael Taggart, Institute of Cellular Medicine, University of Newcastle on Tyne

Freshwater Studies

Dr. Debbie Chapman, Environmental Science, University College, Cork

Dr. Maria Fernanda Aller, Hydrogeology Research, Earth Sciences, University of Birmingham

Social Networks, Environments & Technologies for Wellness

Professor Julienne Hanson, House Form and Culture, Bartlett School of Graduate Studies, University College, London

Dr. Steve Benton, Business Psychology Centre, University of Westminster

Chairperson

Dr Maeve Martin, Education Department, NUI Maynooth

In attendance

On July 8th

Dr Peter Cullen and Tara Ryan of the Higher Education and Training Awards Council.

And on July 29th Tara Ryan of the Higher Education and Training Awards Council.

8. Declarations of Interest

Dr Stephen Benton