

CENTRE FOR BIOANALYTICAL SCIENCES

Dublin City University (DCU) and the National University of Ireland, Galway (NUI Galway) are creating a Centre for Bioanalytical Sciences in collaboration with Bristol-Myers Squibb Company (BMS). Research Chairs are being established at the host Universities in Bioanalytical Sciences (DCU) and Glycoprotein Science (NUI Galway). The initial phase of the initiative has commenced with the recruitment of over 30 personnel and significant funding committed by the industry partner. Applications are now invited for the following positions:

CHAIR IN BIOANALYTICAL SCIENCES

Dublin City University

Applications are invited from internationally recognised scientists for a new Chair in Bioanalytical Sciences within the Faculty of Science and Health at Dublin City University (DCU). The particular focus for this position is on analytical methods for rapid screening of a wide variety of biomaterials associated with biofermentation processes, ranging through amino acids, peptides, carbohydrates and cellular matter, but with particular emphasis on large molecules, such as glycoproteins. Applicants with a strong background in fast separation techniques coupled with information rich detection schemes (e.g. FT-MS, tandem MS-MS, MALDI-TOF, and optical spectroscopic methods) applied to the analysis of macro-biomolecules of pharmaceutical interest are particularly encouraged to apply.

Candidates will be evaluated on the basis of their proven excellence in research and education, their international impact, high-level interactions with the biopharma industry and their ability to attract significant external funding. Applications will be reviewed by an International Search Committee. An attractive salary, commensurate with experience, will be offered for this post.

Candidates for the Chair will be expected to be successful in their application to SFI for an SFI Research Professor Award. (www.sfi.ie).

Applicants are encouraged to contact Professor Dermot Diamond (Tel: +353 (0) 1 700 5404; dermot.diamond@dcu.ie), for informal discussions before submitting an application.

Application forms are available from:

Human Resources Department,
Dublin City University, Dublin 9, Ireland.
Tel: +353 (0) 1 700 5149; Fax: +353 (0) 1 700 5500.
Email: hr.applications@dcu.ie

Full job description is available at: <http://www.dcu.ie/vacancies/current.shtml>

Closing date for receipt of completed application forms together with a Curriculum Vitae and a five page summary of research interests and future plans: Wednesday 31st August, 2005.

CHAIR IN GLYCOPROTEIN SCIENCE

National University of Ireland, Galway

Applications are invited from internationally recognised scientists for a new Chair in Glycoprotein Science within the Faculty of Science at the National University of Ireland, Galway (NUI Galway). The particular focus for this position is on structure/function analysis of glycoproteins of biopharmaceutical interest, and the identification of glycosylation profiles for optimal biological activity and efficacy. The successful candidate will have an internationally recognised research profile in glycoprotein science, and will be appointable at Professorial level. Since this position will be based in the Department of Chemistry, he/she will have an expertise in biological chemistry and will be expected to contribute to the Department's programmes at undergraduate and postgraduate level in line with the strong research and teaching ethos of the Science Faculty.

Applicants with a strong background in glycoprotein chemistry, including structure/function analysis of glycoproteins, and characterisation of recombinant glycoprotein function and *in vivo* efficacy, applied to the analysis of macro-biomolecules of pharmaceutical interest, are particularly encouraged to apply.

Candidates will be evaluated on the basis of their proven excellence in research and education, their international impact, high-level interactions with the biopharma industry and their ability to attract significant external funding. Applications will be reviewed by an International Search Committee. An attractive salary, commensurate with experience, will be offered for this post.

Candidates for the Chair will be expected to be successful in their application to SFI for an SFI Research Professor Award. (www.sfi.ie).

Applicants are encouraged to contact Professor Terry Smith (Tel: +353 (0) 91 492 022; terry.smith@nuigalway.ie), for informal discussions before submitting an application.

Candidates should submit six hard copies of their application (i.e. a completed application form, a Curriculum Vitae and a five page summary of interests and future plans) to: The Human Resources Office, National University of Ireland Galway, Galway, Ireland.
Tel: + 353 (0) 91 493 683; Fax: +353 (0) 91 494 523. Email: hr@nuigalway.ie

Further information and full job descriptions are available at: <http://www.nuigalway.ie/news>
Please note that applications for this position by email or fax will be rejected.

Closing date for receipt of applications for the above position is Friday 30th September, 2005.

CENTRE MANAGER Dublin City University *Ref: DCU-BMS-Man.*

Based in DCU, but working closely with the NUI Galway team and BMS researchers in Ireland and the US, the Centre Manager will report directly to the Centre Director. The Manager's role will be to:

- Facilitate rapid project start-ups through close cooperation with the various project leaders and support units at both campuses (HR, finance, buildings, IP/tech. transfer, computer services, PR etc.)
- Implement and supervise effective tracking procedures for ordering, storing, distribution of materials and samples

- Oversee the installation and maintenance of key capital equipment items
- Implement efficient procedures for reporting of management meetings, project progress, and tracking of potential IP
- Prepare consolidated technical and financial reports
- Oversee the development and maintenance of a comprehensive centre website

Applicants must possess a primary degree in a science related subject and should ideally have a postgraduate qualification with at least 3 years postgraduate experience in management within a research intensive environment.

An attractive salary, commensurate with experience, will be offered for this post.

Applicants are encouraged to contact Professor Dermot Diamond (dermot.diamond@dcu.ie), for informal discussions before submitting an application.

Application forms are available from:
Human Resources Department, Dublin City University, Dublin 9, Ireland.
Tel: +353 (0) 1 700 5149; Fax: + 353 (0) 1 700 5500. Email: hr.applications@dcu.ie
Full job description is available at: <http://www.dcu.ie/vacancies/current.shtml>

Closing date for receipt of applications for the above position is 5th August 2005.

POSTDOCTORAL RESEARCHERS

Applications are invited for the following postdoctoral positions at Dublin City University and NUI Galway. Please note that fully funded postgraduate positions are also available in association with each of these research areas. Potential applicants are encouraged to contact the appropriate project supervisor for informal discussions.

GLYCOPROTEIN STRUCTURE DETERMINATION (3 POSITIONS)

Supervisor: Dr. Angela Savage (angela.savage@nuigalway.ie)
Ref: NUIG-BMS-1

The ideal candidate will hold a Ph.D. and have extensive experience of the structure determination of glycoproteins containing both N- and O-linked sialylated oligosaccharides, using modern analytical techniques including mass spectrometry and NMR spectroscopy. Experience in the use of lectins would be an advantage.

XRF ANALYSIS AND COMPLEX BIOLOGICAL MIXTURES

Supervisor: Dr. Alan G. Ryder (alan.ryder@nuigalway.ie)
Ref: NUIG-BMS-2

A postdoctoral position is available in the use of X-Ray Fluorescence for the analysis of complex biological mixtures. Candidates must have a Ph.D. in chemistry or a related discipline with experience in XRF and/or other spectroscopic techniques. Knowledge in chemometrics and validation methods is also desirable.

CHEMOMETRICS OF COMPLEX MIXTURES

Supervisor: Dr. Alan G. Ryder (alan.ryder@nuigalway.ie)
Ref: NUIG-BMS-3

A postdoctoral position is available in the use of chemometrics with spectroscopic data for the analysis and validation of complex biologically derived mixtures. Candidates must have a Ph.D. in chemistry or a related discipline with a strong background in chemometrics. Experience of spectroscopic techniques and analytical chemistry would be of benefit.

VIBRATIONAL SPECTROSCOPY AND CHEMOMETRICS

Supervisor: Dr. Alan G. Ryder (alan.ryder@nuigalway.ie)
Ref: NUIG-BMS-4

A postdoctoral position is available in the use of vibrational spectroscopy (Raman, NIR, and FT-IR) for the development of novel analytical methods for the biopharmaceutical industry. Candidates must have a Ph.D. in chemistry or a related discipline with experience of both vibrational spectroscopy and chemometrics.

PRODUCTION TECHNOLOGIST

Supervisors: Dr. Brendan O'Connor/Dr. Michael O'Connell
(brendan.oconnor@dcu.ie / michael.oconnell@dcu.ie)
Ref: DCU-BMS-1

The candidate should have a background in biotechnology, must hold a Ph.D. and have experience in the production of recombinant proteins. He/she should have a track record that reflects the ability to integrate the techniques of molecular biology, cell biology and bioprocess technology for the production of recombinant proteins.

MOLECULAR BIOLOGIST

Supervisor: Dr. Michael O'Connell (michael.oconnell@dcu.ie)
Ref: DCU-BMS-2

The appointed candidate will be responsible for the application of molecular biology in the investigation and characterisation of carbohydrate binding proteins. Candidates must have a Ph.D., have a strong background in molecular genetics and a track record in the application of recombinant DNA techniques.

PROTEIN BIOCHEMIST

Supervisor: Dr. Brendan O'Connor (brendan.oconnor@dcu.ie)
Ref: DCU-BMS-3

A protein biochemist is required to undertake purification of natural and recombinant proteins that have carbohydrate binding properties. Candidates must hold a Ph.D. and have experience in protein separation and analytical techniques. Additional experience in carbohydrate biochemistry and/or affinity chromatography would be an advantage.

LAB ON A CHIP FABRICATION AND CHARACTERISATION

Supervisor: Professor Dermot Diamond (dermot.diamond@dcu.ie)
Ref: DCU-BMS-4

This project will address the application of microfluidic manifolds for generating rapid analytical information from samples obtained from biofermentation reactor feedstock and product. Candidates must possess a primary degree in analytical science, or a cognate subject and a Ph.D. in which microfluidics or flow analysis is a significant component.

RAPID BIOANALYTICAL PROFILING OF FERMENTATION COMPONENTS

Supervisor: Professor Dermot Diamond (dermot.diamond@dcu.ie)
Ref: DCU-BMS-5

This project is focused on the development of rapid methods for generating bioanalytical information from complex fermentation samples. The ideal candidate will have a primary degree in biotechnology, analytical science or a cognate subject, and a Ph.D. in which bioanalysis (imaging, separations, spectroscopy) was a significant component.

MULTI-DIMENSIONAL LC-MS OF COMPLEX SAMPLES

Supervisor: Dr. Brett Paull (brett.paull@dcu.ie)
Ref: DCU-BMS-6

This project will investigate potential solutions to the comprehensive analysis of highly complex biological mixtures using multi-dimensional liquid chromatography coupled with ESI-MS and MALDI-TOF MS. The successful candidate will be expected to develop analytical methodologies involving nano-LC separations in the first phase coupled with rapid separations based upon modified monolith materials in phase two. A Ph.D. in an analytical science based subject with a strong track record in separation science and/or mass spectrometry is essential.

OPTICAL BIOCHIP PLATFORMS

Supervisor: Professor Brian MacCraith (brian.maccraith@dcu.ie)
Ref: DCU-BMS-7

This project involves the design and implementation of novel, polymer-based biochip platforms that incorporate a range of features (structural, plasmonic nanoparticles etc) to produce a substantial enhancement of the fluorescence signal detected. Development of appropriate readout instrumentation and associated software will also be required. A Ph.D. in physics or chemistry is required and expertise in applied optics and optoelectronic engineering would be an advantage.

IMMOBILISATION OF BIORECOGNITION ELEMENTS ON BIOCHIPS

Supervisor: Professor Brian MacCraith (brian.maccraith@dcu.ie)
Ref: DCU-BMS-8

This project involves the development of techniques for the enhanced immobilisation of biorecognition elements (primarily antibodies and antibody fragments) on polymer biochip substrates. The emphasis will be on minimisation of non-specific binding and enhancement of sensitivity via appropriate orientation of the biorecognition elements. A Ph.D. in a relevant science subject is required and experience in surface modification and immobilisation chemistries would be an advantage.

GENETIC ENGINEERING OF ANTIBODIES

Supervisor: Professor Richard O'Kennedy (richard.okennedy@dcu.ie)
Ref: DCU-BMS-9

This project requires the generation of antibodies and antibody fragments to carbohydrate-related antigens, genetic engineering of the selected antibodies to achieve high affinity and specificity and incorporation into biochips. Candidates must have a Ph.D. in a relevant science subject together with experience in immunogen production and conjugation chemistries, antibody and immunoassay development, protein isolation, molecular biology and protein engineering/modelling.

RESEARCH ENGINEER – Microfluidic Platform Fabrication

Supervisor: Professor Brian MacCraith (brian.maccraith@dcu.ie)
Ref: DCU-BMS-10

This programme requires the design and fabrication of a range of microfluidic platforms. The microfabrication engineer will provide support to the overall programme with a particular focus on must-have access to the full NCSR microfabrication suite (Hot embossing, microinjection moulding, laser ablation etc). Expertise in the application of these techniques would be an advantage. Applicants must have a B.Eng. or a B.Sc. in a related discipline.

POSTGRADUATE RESEARCHERS

Fully-funded postgraduate research positions are available for each of the research areas listed above. Potential candidates should contact the appropriate supervisor indicated.

APPLICATION PROCEDURES

Applications (completed application form and Curriculum Vitae) should be submitted to the relevant University's Human Resources Department.
Closing date for receipt of applications for postdoctoral and postgraduate positions: 5pm on Friday 5th August, 2005.

For all NUI Galway positions: Application forms are available from: The Human Resources Office, National University of Ireland Galway, Galway, Ireland.
Tel: +353 (0) 91 493 683; Fax: +353 (0) 91 494 523. Email: hr@nuigalway.ie Further information available at: <http://www.nuigalway.ie/news>
Please note that applications for positions in NUI Galway by email or fax will be rejected.

For all DCU positions: Application forms are available from: Human Resources Department, Dublin City University, Dublin 9, Ireland.
Tel: +353 (0) 1 700 5149; Fax: +353 (0) 1 700 5500. Email: hr.applications@dcu.ie Full job descriptions are available from: <http://www.dcu.ie/vacancies/current.shtml>

DCU and NUI Galway are equal opportunities employers.