

EMPLOYER: Technological University of the Shannon: Midlands Midwest (formerly Limerick Institute of Technology), Limerick, Ireland (2000 to present).

ACADEMIC QUALIFICATIONS:

Title	Awarding Institution	Year	Major Subjects
B.Sc. (Hons)	Dublin City University	1993	Analytical Science
Ph.D.	Dublin City University	1997	Analytical Chemistry
Certificate	Irish Management Institute	2000	Supervisory Management
Diploma	HSI Limerick Business School	2005	Popular Forensic Psychology

PROFESSIONAL EXPERIENCE:

CURRENT ROLE:

- **Chief Operations Officer (COO) and Project Manager of the Regional University Network European University (RUN-EU) (Erasmus+ Project number 10112474), January 2024 to date.**

RUN-EU ([RUN-EU](#)) is an alliance of eight like-minded higher education institutions drawn from all regions of Europe. This European University was established in 2020 under the European Universities Initiative.

RUN-EU is a 4 year, €14 million project which develops and delivers joint academic programmes, joint research activities and mobilities across the alliance.

The Chief Operations Officer & Project Manager (COO) has the responsibility to secure the everyday operation management and communication activities, and its effective implementation following the proposed RUN-EU work plan, objectives, and resources. The main activities and responsibilities of the COO include:

- Coordination of the overall activities associated with the RUN-EU 2.0 work plan between all the Alliance members.
- Monitoring, with the assistance of the Work package Leaders and Work package co-Leaders, the milestones and delivery of results at the Work

Package (WP) level, to identify potential delays or risks to the execution of the project on time.

- Ensuring the proper financial management and reporting, guaranteeing the distribution of the financial resources to all the partners following the agreed budgets, member responsibilities and execution.
- Ensuring effective communication with the European Commission services.
- Preparation of the official interim and final reports, collecting inputs from all members and Work Package Leaders, for submission to the European Commission services.

- **RUN-EU PLUS Project Manager and Co-ordinator, October 2021 to October 2024.**

This 3 year Horizon 2020-CSA (SwafS) project developed an integrated long-term strategy for research and innovation within the RUN-EU European University and will develop a framework and programmes at masters and PhD levels with and for regional business and society. The RUN-EU consortium included the Technological University of the Shannon: Midlands Midwest, Politechnic Institute of Leiria (Portugal), Polytechnic Institute of Cavado and Ave (Portugal), NHL Stenden (Netherlands), HAMK (Finland), Szechenyi Istvan University (Hungary) and FHV (Austria).

- **Academic Member of the Department of Applied Science, September 2015 to 2021.**

1. Lecturer in Bio-analytical Techniques and programme board member of the BSc. in Applied Biology and BSc. (hons) in Bioanalysis and Biotechnology and BSc. (hons) in Biotechnology with Biopharmaceutical Science.
2. Work placement co-ordinator for BSc. (hons) in Biotechnology with Biopharmaceutical Science.
3. Lecturer in Applied Environmental Science and programme board member of the BSc. (hons) in Environmental Science and Climate, BSc. (Hons) in Environmental Management in Agriculture.
4. Lecturer in Professional Development on the BSc. (hons) in Environmental Science and Climate, BSc. (Hons) in Environmental Management in Agriculture.
5. PhD and MSc supervisor in the area of the production and application of natural compounds with health benefits.
6. Scientific contributor and project manager of a variety of collaborative industrial research projects funded through contract research and Enterprise Ireland's innovation voucher scheme.
7. Scifest judge.
8. Organiser of annual Science Week community outreach programmes – gardening workshops for primary school children at the Southill Resource Centre community garden and The Science of Wellness meditation workshops facilitated by Be Your True Self Limerick.
9. Member of LIT's Academic Council and AC sub-committee on Postgraduate Matters.

- **Proposer and leader of the Faculty of Applied Sciences and Technology Research Supervisor Mentoring Programme.** Reporting directly to the Dean of Faculty, the initiative involves supporting new faculty masters and PhD supervisors in their supervisory roles across the faculty of ASET.
- **Quality Assurance lead, steering group and programme board member for the Structured Research Masters of Engineering in Digitalisation of Manufacturing.**
- **Founder and contributor to the scientific and project management of LIT's Technology Gateway Centre Shannon Applied Biotechnology Centre, and research groups which include the Controlled Environmental Laboratory for Life Sciences (CELLS) and Food@LIT.** Currently providing advice to the Dept of IT's new Computing and Informatics Research group (CaIR) and to the Dept of Sport, Leisure and Tourism on the set-up of a new Sports research group.
- **LIT Senior Female Leader in the Aurora Women's Leadership Development programme** providing mentoring support to female managers of LIT.
- **External evaluator of the Postgraduate Research Scholarship Programmes 2020 for Athlone Institute of Technology and Munster Technological University.**
- **Member of the Technological University Academic Steering Group and member of the working group concerned with the AIT-LIT TU's approach to research.**
- **Proposer and founder of LIT's Health and Wellness Community of Practice –** to facilitate LIT's engagement with our local community.



A cross-disciplinary Community of Practice which facilitates knowledge, idea sharing and collaboration amongst 70 LIT staff members across departments, functions and campuses facilitated by the social enterprise networking tool of Yammer. The community offers academic excellence in themes associated with health and wellness which draws on LIT's expertise in the practice of Social Care, Food, Sports, IT, Engineering, Applied Science and Art. The community has delivered a pilot 'STEM in Sport' programme, community gardening workshops for primary school children, mindfulness classes for care-workers, has brought IT toys (robots and ocular rifts) to a nursing home and liaised with Agewell Global and ISAX on supporting independent living initiatives for our elderly.

PREVIOUS PROFESSIONAL EXPERIENCE:

Head of Research and Technology Transfer (incorporating Graduate Studies), 2011-2015

Metrics delivered as Head of Research and Technology Transfer at LIT:

	2008 (start)	2015 (end)
Postgraduate students (by research)	30	105
Research active departments	5	11
Research active staff	30	209
Research centres and groups	2	16
Contract research staff	3	14
Number of research projects	4	150
Research income (cumulative)	€4 million	€32 million

This **Head of Department** post held responsibility for the duties listed in the **Head of Research and Technology Transfer Senior Lecturer 1** post (below) with the incorporation of Graduate Studies management into the role along with a strong emphasis on the following strategic developments:

1. The expansion of LIT's Graduate Studies and Research Office (GRO) through self-financing activities to include a Graduate Studies Technical Officer and Research Projects Technical Officer to support all supervisors, researchers and postgraduate students in their research activities;
2. The self-financing of 8 postdoctoral fellows and 6 Research Assistants through funded industrial research projects with a further 9 positions financed;
3. Endorsement of the EU Charter and Code for Researchers and participation in the EU's 4th cohort working towards the development of a HR strategy for Researchers for award of the "HR Excellence in Research" logo;
4. Launch and nurturing of LIT's Research Centres – Shannon ABC, ACORN, ACADEmy, BEST, Centre for Rural and Sustainable Development, Centre of Games and Interactive Systems, Centre for Enterprise Innovation, Design and Engagement (CEIDE) and Research Groups – CELLS, Food@LIT, Analytical Method Development, Healer, Loss and Grief, Genders and Sexualities and BETER;



5. Re-organisation of LIT's R+D Subcommittee of Academic Council to include the following working groups – Research Steering Group, Postgraduate Matters, Delegated Authority and Large Grants Applications to drive the strategic development of research activity across LIT;
6. Design and implementation of LIT's first research postgraduate progression board;
7. Development of LIT's Graduate School Plan;
8. Delivery of LIT's 2015 research metrics as dictated by the HEA in the HEA-LIT Compact;
9. Development of an MOU to progress the transfer of an LIT Master's student to a PhD programme to achieve a University of Limerick (UL) PhD award;
10. Development of a framework with the Deans of Graduate Studies of UL and Mary Immaculate College around a Federated Limerick Graduate School;
11. Delivery of LIT's Technology Transfer Strengthening Initiative (TTSI) metrics of invention disclosure forms, licencing agreements and patent applications.

Limerick Institute of Technology, Head of Research and Technology Transfer, Senior Lecturer grade, 2008-2011

- **LIT Research Development** – involved in the development of LIT's Research Strategy 2006-2025 and responsible for its implementation across LIT's faculties. Responsible for the day-to-day management of LIT's Graduate Studies and Research Office (GRO) to support all supervisors, researchers and postgraduate students in their research activities. Significant contributor to the development of LIT's research centres and groups across all discipline areas.
- **Research Quality Assurance** – I was chairperson of LIT's Academic Council Sub-committee on Research and Development since 2008 responsible for ensuring that all academic regulations and procedures relating to Research and Development were adhered to as laid out in the LIT Research Degree Programmes Regulations. Also responsible in all aspects of postgraduate recruitment, supervision and examination. Chair of LIT's Standing Committee on Research Ethics. Co-author and person responsible for the implementation of LIT's Research and Development Strategy 2006-2025, Research Good Conduct Policy, Research Publication Policy, Ethics Policy for Researchers, Research Centre Group Designation Policy.

Organiser of postgraduate and supervisor induction and annual skills training programmes. I lead LIT's HETAC application in 2011 for re-validation of level 9 and level 10 programmes under the 'Grandfather Clause' in Art & design, Engineering, Applied Science, IT, Business & Humanities and Social Care. I procured and implemented a CRM system to manage all postgraduate records.

- **Research Funding** – responsible for the management of LIT's Graduate and Research Office budget, liaison with funding bodies to identify funding opportunities for LIT's strategic research areas and encouraging/supporting LIT staff to prepare and submit research proposals to appropriate calls,

responsible for the co-ordination of all large strategic grant proposals including LIT's application to Enterprise Ireland for Shannon Applied Biotechnology Centre ARE funding, LIT's application to FP7 to co-ordinate the BAMMBO project and LIT's application to the Marie Curie fund International Incoming Fellow call. Review of all proposals to external funding bodies prior to submission for assessment of call eligibility, personnel requirements, budgets, IP issues and quality of proposed research and support of all of the above funding applications through the contribution to the application of information on the support provided by LIT on project management, financial management, IP protection, Technology Transfer and dissemination.

- **Research Management** - responsible for the management and delivery of all LIT's funded research projects to ensure all agreed objectives and deliverables were met within the agreed budget. These included national schemes such as IRCSET, EPA, IRCHSS, TSR Strand III, Enterprise Ireland's Innovation Voucher, Innovation Partnership, Proof of Concept, Commercialisation Grant and Applied Research Enhancement schemes in addition to European Union Framework 7 and Marie Curie Projects.

I held responsibility for both the strategic development and day-to-day management of LIT's research centres and groups with all personnel reporting to me.

I liaised with LIT's Human Resources Department on research personnel recruitment including the provision of job specs, interviews and probationary reviews, I liaised with LIT's Finance Department on all aspects of project budgets and LIT's Procurement Office on tendering for equipment and services.

- **Research Dissemination** – I encouraged all LIT researchers to disseminate research outcomes as quickly as possible after commercially sensitive IP had been protected. I was Dissemination Work-package Leader for LIT's FP7 BAMMBO project. I liaised with LIT's Marketing function on the design of all research promotional material including websites, flyers, stands etc.

My duties also included the compilation of statistics and reports for inclusion in LIT's Annual Reports, the LIT prospectus and other such publications and conference organisation including the Environmental Sciences Association of Ireland (ESAI) Environ 2010 (February 2010) and Bord Bia's National Organic Food Conference (June 2011), the Shannon ABC annual Open Innovation Conference and the annual TEMPO (Energy Management) Conference.

- **Technology Transfer** – I held responsibility for the implementation and adherence by all researchers to LIT's Intellectual Property Policy for Research, the provision of guidance on all aspects of technology transfer to LIT's researchers and industrial partners. I organised Technology Transfer training for supervisors, postdoctoral researchers and postgraduate students and the identified commercial potential of research project outcomes. Relevant maintenance of confidentiality through the implementation of non-disclosure

agreements between LIT research personnel and collaborators including industry, other third level institutions or research centres. Relevant protection of foreground IP generated by research projects via Invention Disclosure Forms and the development of IP agreements and consortium agreements in collaborative research projects. The main duty of the role is to ensure the exploitation of LIT's protected IP to ensure maximum commercial potential was reached.

I was Enterprise Ireland's Technology Transfer Officer at LIT as part of their Technology Transfer Strengthening Initiative (TTSI).

- **Industrial Collaboration** – I supported the development of collaborative research relationships between industry and LIT through Innovation Voucher and Innovation Partnership projects, consultancy and contract research. I involved SMEs in FP7 project proposals.

I initiated knowledge transfer of research through nested Master's and PhD programmes via postgraduate placements as part of their research degree programmes. I provided advice to industry on funding options available for industry/third level research collaborations. I undertook match-making between industry and relevant LIT researchers and provided assistance in the writing of collaborative research proposals.

Protection of IP was ensured through confidentiality agreements and drawing up Consortium Agreements to allow for joint ownership of IP in the case of collaborative projects such as FP7 projects.

I supported the commercialisation of LIT research through the formation of spin-out companies and participation on LIT's LEAP (now New Frontiers) programme.

Finally, I promoted LIT research activity to industry.

Lecturer – Academic role based in the Department of Applied Science, Faculty of Applied Science, Engineering and IT. Below lists the subjects and the relevant courses:

- a. "Special Topics" - BSc (Hons) in Drug and Medicinal Analysis, BSc (Hons) in Chemical Instrumentation and Analysis and BSc (Hons) in Bioanalysis and Biotechnology.
- b. "Bio-analytical Techniques" - BSc (Hons) in Bioanalysis and Biotechnology.
- c. "Analytical Techniques" - BSc in Applied Biology.
- d. Supervisor of third and final year projects.
- e. Co-author of taught Masters in Analytical Science, Research and Quality Management.
- f. External Examiner at Carlow Institute of Technology for the following courses - BSc (Hons) in Biosciences with Bioforensics or Biopharmaceuticals, BSc in Analytical and Forensic Science and BSc in Biosciences.

g. External examiner of MSc and PhD theses for Dublin City University, Waterford Institute of Technology and Carlow Institute of Technology (on-going).

- **MSc and PhD Supervisor** of research degree programmes.

Previous Professional Experience (Continued):

Department of Applied Science, Faculty of Applied Science, Engineering and IT, 2000-2008

1. Lecturer – Responsible for the design, delivery, assessment and review of the following subjects and the relevant courses:

- “Forensic Drug Analysis” – 3rd year BSc. Pharmaceutical and Forensic Analysis.
- “Analytical Techniques” – 2nd year Higher Certificate in Science in Applied Biology.
- “Analytical Techniques” – Bachelor of Science in Applied Biosciences.
- “Bio-analytical Techniques” - Bachelor of Science in Bio-analysis and Biotechnology.
- “Special Topics” – Bachelor of Science in Bio-analysis and Biotechnology and Bachelor of Science in Chemical Instrumentation and Analysis.

2. Research Co-ordinator - Co-ordination of research activities within the Department of Applied Science including the co-ordination of grant applications, chairperson of Research Course Board, liaison with Development Office, support of supervisors and postgraduate students, liaison with local industry with a view to research collaboration, chairperson of the Academic Council Sub-committee on Research and Development (from September 2008).

Previous Professional Experience (Continued):

Medical Bureau of Road Safety, Dublin 1998-2000

Biochemist - Research, development and introduction of drug screening for the detection of driving under the influence of drugs in Ireland. This system is still being used today. ELISA immunoassay kits were validated and used for the analysis of amphetamine, benzodiazepine, opiate, cocaine, methadone and cannabis drugs in blood and urine samples taken under Road Traffic Act, 1994. Co-ordination of survey of 2000 samples submitted for alcohol testing for the presence of drugs of abuse. Liaison with the Garda Síochána with respect to drug analysis. Analysis of blood and urine samples taken under R.T.A. for alcohol content. Expert witness in the prosecution of driving under the influence of alcohol and/or drugs of abuse.

Toxicology Section, The State Laboratory, Dept. of Physics, Trinity College Dublin. 1997-1998 Research Fellow - Automation of SPE sample preparation procedures for the confirmatory GC/MS analysis of drugs of abuse in coroner's cases and Road Traffic Act offence.

Laboratory Technician as Intra Placement in the School of Chemical Sciences, Dublin City University. 1992

Responsibilities included (among others): Chemical and Gas Stock Control, Organic Waste Disposal, Analytical Instrument Maintenance and Repair.

Quality Control Chemist at Mercury Analytical Ltd. Raheen Industrial Estate, Limerick. 1990. Responsibilities included: Analysis of Animal Foodstuff for Protein, Fat, Water and Ash, analysis of Bacon for Protein and Fat and analysis of River Water for Metals.

RESEARCH EXPERIENCE:

Ph.D. Research – D.C.U., University of Oviedo, Spain (Jan-Sept 1994), and University of Kansas, Lawrence: Projects included the development of an electrochemical technique for the detection of Clenbuterol in bovine urine (project funded by Spanish Government and carried out in University of Oviedo), the use of capillary electrophoresis with electrochemical detection to detect phenolic acids in beer and wine (carried out at University of Kansas) and a study of peroxides in anaerobic adhesive formulations (funded by Loctite (Ireland) Ltd.).

Research Fellow – Toxicology Dept., State Laboratory/Trinity College (April 1997-Oct 1998): Automation of Solid Phase Extraction sample preparation methods for analysis of drugs of abuse (amphetamines, opiates, cannabinoids, methadone and cocaine) in blood and urine samples. These automated methods are now routinely used in the confirmatory analysis of biological samples (blood/urine) for coroner's cases and samples taken under the Road Traffic Act. Project funded under the Irish Government's Science and Technology against Drugs. Project also included analysis of samples by ELISA and detection of controlled substances in veterinary samples by HPLC.

Biochemist, Medical Bureau of Road Safety (Oct 1998-Sept 2000): Research, development, validation and implementation of an ELISA immunoassay screening programme for the analysis of blood and urine samples taken under the Irish Road Traffic Act, 1994. Protocols set up for the ELISA testing for the presence of amphetamines, benzodiazepines, cannabis, opiates, cocaine and methadone and results have been presented in court during the prosecution for driving under the influence of drugs. 2000 samples were screened using this programme to investigate the prevalence of drugs on Irish roads. This screening procedure is now being used routinely by the Medical Bureau.

LIT Research (from Sept 2000): Design, production and application of molecularly imprinted polymers to the analysis of drugs of abuse in biological specimens for forensic analysis. Methods developed include Molecularly Imprinted Solid Phase

Extraction (MISPE) and binding assays for the detection of benzodiazepine drugs of abuse. This led to the graduation of a PhD student in Nov 2007. Research also carried out into the development of novel multi-template MIPs which allow for the simultaneous extraction of more than one drug from a sample.

Also involved in development of novel analytical methods (HPLC, GC/MS) for the detection of drugs of abuse in addition to the detection of date-rape drug GHB in alcoholic beverages.

Research collaborators include Ireland's State Laboratory and The Forensic Laboratory (Garda Headquarters).

Recent research (2007 - 2010) involved the application of extraction (SPE, SPME, MISPE) and detection methods (GC/MS, HPLC) to the analysis of low concentrations of bio-active compounds from natural materials for application to nutraceuticals.

Current research (2010-present) involves the culturing of micro-organisms (microalgae and cyanobacteria) and plants for the production of high value compounds and their application in health, cosmetics and food. Also the biological production of nanoparticles and their applications.

PUBLICATIONS:

1. **"In silico identification of potential PvFKBP35 inhibitors from Entadrophragma angolense Limonoids extracts as antimalarial agents,"** Latif Adams , Abdul Rashid Issahaku, Clement Agoni, Michael Afiadenyo, Kwadwo Asamoah Kusi, Siobhan Moane, Dorcas Obiri -Yeboah, Michelle McKeon-Bennett, Informatics in Medicine Unlocked, 41 (2023) 101319.
2. **"In silico screening of phytochemicals from Dissotis rotundifolia against Plasmodium falciparum Dihydrofolate Reductase,"** Latif Adams, Michael Afiadenyo, Samuel Kojo Kwofie, Michael D. Wilson, Kwadow Asamoah Kusi, Dorcas Obiri-Yeboah, Siobhan Moane, Michelle McKeon-Bennett, Phytomedicine Plus, 3 (2023)100447.
3. **"Analysis of volatile organic compounds in Irish rapeseed oils,"** Current Research in Food Science, Rebecca Coughlan, Kieran Kilcawley, Iwona Skibinska, Siobhan ´ Moane, Tracey Larkin, 6 (2023) 100417.
4. **"Training Load Monitoring Practices Used by Strength and Conditioning Coaches in Hurling, Gaelic Football, Camogie, and Ladies Gaelic Football,"** Declan O'Rahilly, Niamh Whelan and Siobhan Moane, Sports Health A Multidisciplinary Approach, [Training Load Monitoring Practices Used by Strength and Conditioning Coaches in Hurling, Gaelic Football, Camogie, and Ladies Gaelic Football - Declan O Rahilly, Niamh Whelan, Siobhan Moane, 2022 \(sagepub.com\)](#).
5. **"Variability of Essential and Nonessential Fatty Acids of Irish Rapeseed Oils as an Indicator of Nutritional Quality",** Coughlan R, Moane S, Larkin T. Int J Food Sci. 2022 Jan 12;2022:7934565. doi: 10.1155/2022/7934565.
6. **"Older Adult Insights for age friendly Environments, Products and Service Systems."** Linda Shore, Louise Kiernan, Adam de Eyto, Deirbhile Nic a Bhaird, Anne Connolly, PJ White, Tracy Fahey and Siobhan Moane. International Journal of Design and Technology Education. 23(2) (2018) 40-58.

7. **"Mycofabrication of common plasmonic colloids, theoretical considerations, mechanism and potential applications."** Olena Madden, Michael Daragh Naughton, Siobhan Moane, Patrick G. Murray. *Advances in Colloid and Interface Science*. 225 (2015) 37-52.
8. **"Improved method for rapid detection of phthalates in bottled water by gas chromatography–mass spectrometry."** Paz Otero, Sushanta Kumar Saha, Siobhan Moane, John Barron, Gerard Clancy, Patrick Murray. *Journal of Chromatography B*. 9971 (2015) 229-235.
9. **"The effect of simulated gastro-intestinal conditions on the antioxidant activity of herbal preparations made from native Irish hawthorn."** Laura Keating, Jeremiah Hayes, Siobhan Moane, Mary Lehane, Sinead O'Doherty, Rosari Kingston, Ambrose Furey. *Journal of Herbal Medicine*. 4 (2014) 127-133.
10. **"Life cycle assessment of the production of the red antioxidant carotenoid astaxanthin by microalgae: from lab to pilot scale."** Paula Pérez-López, Sara González-García, Clayton Jeffryes, Spiros N. Agathos, Edward Mchugh, Daniel Walsh, Patrick Murray, Siobhan Moane, Gumersindo Feijoo, M^a Teresa Moreira. *Journal of Cleaner Production* 641 (2014) 332-344.
11. **"Sustainable production of biologically active molecules of marine based origin."** Patrick M. Murray, Siobhan Moane, Catherine Collins, Tanya Beletskaya ... Daniel J. Walsh. *New Biotechnology*. Volume 30 (2013) 839-850.
12. **"Effect of macro- and micro-nutrient limitation on superoxide dismutase activities and carotenoid levels in microalga *Dunaliella salina* CCAP 19/18."** Saha, S.K., Moane, S. and Murray, P.M. 2013. *Bioresource Technology*. 147, 23-28 (JIF: 4.98).
13. **"Tagging of biomolecules with deuterated water (D2O) in commercially important microalgae."** Saha, S.K., Hayes, J., Moane, S. and Murray, P.M. 2013. *Biotechnology Letters*. 35: 1067-1072. (JIF: 1.683).
14. **"Effect of various stress-regulatory factors on growth and lipids biosynthesis in microalga *Haematococcus pluvialis*."** Saha, S.K., McHugh, E., Hayes, J., Moane, S., Walsh, D. and Murray, P.M. 2013. *Bioresource Technology*. 128: 118-124. (Citation: 2, JIF: 4.98).
15. **"Effect of Hypergravity and Phytohormones on Isoflavonoid Accumulation in Soybean (*Glycine max. L*) Callus."** Peter J. Downey, Langfang H. Levine, Mary E. Musgrave, Michelle McKeon-Bennett and Siobhan Moane, *Microgravity Sci. Technology*, 25 (2013) accepted for 9-15.
16. **"The Irish organic food market: shortfalls, opportunities and the need for research"**, Rachel Tobin, Tracey Larkin, Siobhan Moane, *Journal of the Science of Food and Agriculture*, 91 (2011) 2126–2131.
17. **"Composition-structure-property (Zn²⁺ and Cu²⁺ ion release) evaluation of Si-Na-CaZn-Ce glasses: potential components for nerve guidance conduits"**, X.F. Zhang, S. Kehoe, S.K. Adhi, T.G. Ajithkumar, S. Moane, H. O'Shea, D. Boyd, *Materials Science and Engineering: C*, 31 (3) (2011) 669-676.
18. **"The Reactivity of GHB and GBL in Alcoholic Solutions,"** S. Hennessy, S. Moane and S. McDermott, *J. Forensic Science*, 49 (6) (2004) 1220-1229.
19. **"Drugs Driving in Ireland – A Preliminary Study of the Prevalence of Driving under the Influence of Drugs on Irish Roads,"** S. Moane, C.P. Leavy and D.A. Cusack, *Medico-Legal Journal of Ireland*, 7(2001) 21-23.

20. **"Automated Analysis of Controlled Drugs in Biological Samples,"** S. Moane, B.Brady, S.Corish and L. Regan, TIAFT/SOFT Meeting Proceedings 1998.
21. **"Speeding up the Analysis of Drugs of Abuse,"** S. Moane, B.Brady and S.Corish, The Irish Scientist Year Book, 1998.
22. **"Decomposition of Peroxides by Transition Metal Ions in Anaerobic Adhesive Cure Chemistry,"** S.Moane, D.Rafoery, M.R.Smyth and R.Leonard, *Int. J. Adhesives and Adhesions*, **19** (1999) 49-57.
23. **"Differential-pulse Voltammetric Determination of Clenbuterol in Bovine Urine using a Nafion-modified Carbon Paste Electrode,"** S.Moane, M.R.Smyth and M.O'Keefe, *Analyst*, **121** (1996) 779-784.
24. **"Electrochemical Behaviour of Clenbuterol at Nafion-modified Carbon Paste Electrodes,"** S.Moane, J.R.Barreira Rodriguez, A.J.Miranda Ordieres, P.Tunon Blanco and M.R.Smyth, *J. Pharm. Biomed. Anal.*, **14** (1995) 57-63.

RESEARCH SUPERVISION:

1. 1 PhD student **graduated**, thesis title "The Development of Novel Analytical Techniques for the Detection of Drugs of Abuse."
2. 1 PhD student **graduated**, thesis title "Development of Novel Molecularly Imprinted Solid-Phase Micro-extraction Fibres for the Detection of Drugs of Abuse in Biological Samples."
3. 1 PhD student (in collaboration with Dynamac Corporation, Florida), **graduated**, thesis title "The Effects of Changing Phyto-hormone Levels as a Consequence of Adverse Environmental Stresses on the Germination Rate of Different Crop Species."
4. 1 PhD student (in collaboration with Tralee Institute of Technology), **graduated**, project title "Characterisation of Pharmaceutical Grade Products from Horse Chestnut Waste."
5. 1 PhD student **graduated**, "Developing an Interactive Engagement Technique for Enhancing the Teaching and Learning of First Year Practical Physics using a Range of Technologies including a Classroom Response System."
6. 1 PhD student **graduated**, "Organic versus Conventional Foods, a Bio-fingerprint."
7. 1 PhD student **graduated**, "The Identification and Extraction of Bio-Active Compounds from Wheatgrass."
8. 1 Master's student **graduated**, thesis title "Investigation of Bio-active Compounds from Native Hawthorn."
9. 1 PhD student **registered**, research entitled "Physiochemical, Biochemical and Sensory Analysis of Irish Rapeseed oil batches."
10. 1 MSc student **registered**, research entitled "Microbead Encapsulation of proteins and select nutrients of relevance to Sport Nutrition."
11. 1 MSc student **registered**, research entitled "Microbead Encapsulation of Plant-derived Bioactive Compounds."

12. 1 MSc student **registered**, research entitled "Bioavailability of Supplementary Mineral Nutrients in various Crop Species for health Promoting Applications."
13. 1 MSc student **registered**, research entitled "The Production of Plant Bio-active Compounds using Controlled Environment Systems."
14. 1 MSc student **registered**, research entitled "Determination of Glucosinolate Compounds found in Plants."
15. 1 PhD student **registered**, research entitled "An investigation into the relationship between training load, selected internal and external markers of fatigue and the readiness to train in Gaelic Games Athletes."
16. 1 MEng student **graduated**, research entitled "The Optimisation of a Production File Management System in an Additive Manufacturing Facility."
17. 1 MEng student **graduated**, research entitled "Affordable & Scalable Factory 4.0 Technology."

RESEARCH FUNDING:

1. LIT-Industry Collaborative Research Projects funded through the Enterprise Ireland Innovation Partnerships and Innovation Vouchers schemes. Total funding secured approximately €3 million.
2. LIT Intellectual Property Development Research Projects funded through the Enterprise Ireland Commercialisation Fund. Total funding secured approximately €1 million.
3. European Commission Horizon 2020 Research Innovation Programme. Project manager of "Ground Demonstration of Plant Cultivation Technologies for Safe Food Production in Space (EDEN-ISS)." Amount awarded to LIT €127,000.
4. European Commission 7th Framework Programme (FP7), Marie Curie International Incoming Fellowships, 2011, Proposer PI of CELLS (Controlled Environment Laboratory for Life Sciences) to fund relocation of Professor Gary Stutte, senior scientist with Dynamac Corporation Florida to LIT. Amount awarded €327,000.
5. European Commission 7th Framework Programme (FP7), Knowledge-Based Bio-Economy Call, Proposer PI of "Sustainable Production of Biologically Active Molecules of Marine Based Origin (BAMMBO)," 2010. Amount awarded €2.9 million.
6. Enterprise Ireland Co-ordination Support Grant, €24,700
7. Institutes of Technology Ireland (IOTI) Technological Sector Research -Strand 1, 2008. Amount awarded €34,000.

8. Enterprise Ireland Research Equipment Grant 2008, Proposer PI. Amount awarded €378,023.
9. Higher Education Authority Research Facilities Enhancement Scheme 2008, Proposer PI. Amount awarded €500,000.
10. Institutes of Technology Ireland (IOTI) Technological Sector Research -Strand 1, 2007. In collaboration with Tralee Institute of Technology. Amount awarded €34,000.
11. Enterprise Ireland Applied Research Enhancement Grant 2007, Proposer PI of Shannon Applied Biotechnology Centre. Amount awarded €3.2 million (in collaboration with Tralee Institute of Technology).
12. Science Foundation Ireland, Institute Planning Grant, 2005, complete. Amount awarded €2,000.
13. Limerick Institute of Technology, Internal Research Funding Programme, 2005.
14. Enterprise Ireland Innovation Partnership Feasibility Study 2004, in collaboration with Olympus Life and Material Science Europa (GmbH). Amount awarded €9,000.
15. Institutes of Technology Ireland (IOTI) Technological Sector Research -Strand 1, 2003. Amount awarded €34,000.
16. Institutes of Technology Ireland (IOTI) Technological Sector Research -Strand 1, 2001. Amount awarded €34,000.