



2016

**Training & Employment
Opportunities in the
Biopharma Industry**

Employment Opportunities

What are the Job Opportunities in the Biopharma Industry?

The biopharmaceutical and related lifesciences industries are a critical component of the Irish economy generating exports of €50 Billion in 2013 (27% of national total), €3 billion in taxes and with a total employment of 60,000. The industry provides a wide range of excellent employment opportunities across all levels for

operators, technicians, engineers, analysts, graduates, administration, management and support staff.

In addition, graduates from Nibrt's Springboard courses are well positioned for opportunities in the related pharma, medical devices and food science industries.

The biopharma industry and related sectors have seen significant recent job announcements including:

April 16	Shire plc expands its global biotechnology manufacturing capacity by investing US\$400 million in Ireland.	400 Jobs	Meath
April 16	OPKO Health Inc. expands the EirGen Pharma facility in Westside Business Park in Waterford.	200 Jobs	Waterford
April 16	Eli Lilly invest €35 million in delivering a new high-tech manufacturing facility at its Kinsale campus.	350 Jobs	Cork
Mar 16	Grifols invest an additional \$85m in it's biologics plant at Grangecastle, Co Dublin.	140 Jobs	Dublin
Dec 15	GE Healthcare announce a \$40 million investment in it's manufacturing facility in Carrigtwohill, Cork.	140 Jobs	Cork
Oct 15	Pfizer announces jobs across three manufacturing sites in Ireland including Grange Castle in Dublin, Little Island and Ringaskiddy in Cork.	130 Jobs	Dublin & Cork
Oct 15	Regeneron Pharmaceuticals announce that it is investing an additional \$350 million in it's Limerick Industrial Operations and Product Supply (IOPS) bioprocessing campus.	200 Jobs	Limerick
Sep 15	Nexvet Biopharma secure a dedicated biologics manufacturing facility in Tullamore.	30 Jobs	Offaly
Aug 15	Leading biotech company Amgen open a \$300 million facility in Dun Laoghaire, Co. Dublin.	340 Jobs	Dublin
Jul 15	PAREXEL International Corporation open a new global decision-making hub for the company in Kilmainham, Dublin 8.	130 Jobs	Dublin
May 15	Alexion Pharmaceuticals announces €450 Million Expansion in Dublin.	200 Jobs	Dublin
Feb 15	Horizon Pharma opens new global headquarters in Dublin.	60 Jobs	Dublin
Jan 15	Life sciences company ICON brings 200 jobs to Dublin and Limerick.	200 Jobs	Dublin & Limerick
Jan 15	ABEC Inc. establishes European HQ and Manufacturing Centre in Fermoy.	100 Jobs	Cork
Jan 15	Specialty pharmaceuticals company Mallinckrodt create 45 highly-skilled jobs as part of a €45 million investment.	44 Jobs	Dublin
Nov 14	Bristol-Myers Squibb to construct biologics manufacturing facility in Cruiserath.	400 Jobs	Dublin
nov 14	ClearStream Technologies Limited expand its Enniscorthy facility.	200 Jobs	Wexford

Which course should I choose?

NIBRT offer classroom-based and online courses. Courses feature a practical placement in the NIBRT facility to provide the GMP and specific manufacturing skills required by employers.

Classroom based courses with practicals in NIBRT:

Level	Course Name	Awarding Body	Course Duration
L7	Cert in Biopharmaceutical Operations	IT Tallaght	5 months
L9	Cert in Quality Analytics for Biopharma	IT Sligo	5 months
L9	Grad Cert in Biopharmaceutical Engineering	UCD	9 months

Online Courses with practicals in NIBRT:

Level	Course Name	Awarding Body	Course Duration
L6	Cert in Biopharma Processing	IT Sligo	9 months
L6	Cert in Cleanroom Manufacturing	IT Sligo	9 months
L7	Cert in Biopharma Processing	IT Sligo	9 months
L8	Cert in Biopharma Science	IT Sligo	9 months

Additional courses which include practical days in NIBRT are provided by:

- CIT Level 7 Diploma in Biopharmaceutical Manufacturing Operations
- Tralee IT Level 8 Cert in Biopharmaceutical Processes
- LIT L8 Cert in Biopharmaceuticals

Course Level Guidelines:

- Level 6 courses are suitable for candidates with Leaving Cert or equivalent qualifications
- Level 7 courses are suitable for candidates with a Level 6 in science, engineering or related discipline
- Level 8 courses are suitable for candidates with an ordinary degree in science, engineering or related discipline
- Level 9 courses are suitable for candidates with an honours degree in science, engineering or related discipline

“The launch of manufacturing operations here in Cork is an exciting development for BioMarin. Ireland is the ideal place to grow our business. It has great infrastructure, routes to market, expansion opportunities and the availability of highly skilled personnel along with a strong scientific community and access to the National Institute of Bioprocessing Research and Training (NIBRT) capabilities.”

B:OMARIN

Mr. Jean-Jacques Bienaime, Chief Executive Officer, BioMarin Pharmaceutical Inc

Why study at NIBRT?

NIBRT is a world-class institute responsible for delivering training solutions for the biopharmaceutical industry in Ireland. We are located in an award-winning, world class facility in Dublin. This facility is purpose built to closely replicate a modern biopharmaceutical plant with state of the art equipment. We work in partnership with industry to identify, develop and manage the core skills and competencies required to operate in a biologics facility.

Our training facility features a state-of-the-art manufacturing pilot plant, consisting of extensive upstream, downstream, fill-finish, and associated analytical facilities. These facilities are all operated in a realistic GMP manufacturing environment.

NIBRT offers a quality training and research experience not previously possible anywhere in the world.

NIBRT programmes are specifically designed to meet the requirements of the biopharmaceutical industry and the job seeking candidate including:

- A strong track record of NIBRT candidates obtaining employment in the pharma / biopharma sector.
- Hands-on practical placements in NIBRT's award winning facilities to provide candidates with the practical skills and experience required by Industry.
- Modules in career support and development.
- Instructors with extensive experience in training the biopharmaceutical industry.
- NIBRT organises job fairs such as Careers in Biopharma (May) and the Biocluster zone at CareerZoo (Feb and Sept) where Springboard graduates meet blue-chip biopharma employers.

60+%

of NIBRT Springboard students now in employment

88%

of NIBRT Springboard students successfully completed the course

646

NIBRT Springboard graduates in 2015



Hands-on practicals in NIBRT

NIBRT Springboard students are provided with a unique opportunity to undertake practical labs in NIBRT's award winning biopharmaceutical plant. These practical labs provide hands-on experience in a GMP environment to develop the specific skills required by this industry. As

part of their time, NIBRT Springboard students can gain hands-on experience with upstream processing (including cell culture), downstream processing (including protein purification), bioanalytics, aseptic processing (including fill finish) and facilities/utilities.

NIBRT Awards

- ISPE/Interphex Facility of the Year Awards 2012
- 2012 BioProcess International Awards — Winner of Manufacturing Collaboration of the Decade Award
- 2012 Waters Corporation Centre of Innovation Award
- IITD Outstanding Achievement Award for MSD Training Programme with NIBRT and IT Sligo
- Online Courses win Taoiseach's Public Service Excellence Award
- 2015 Research Innovation Award American Chamber of Commerce and Royal Irish Academy
- LifeScience 50 Awards, Business and Finance magazine: Dr Reg Shaw (outgoing CEO NIBRT)
- American Chamber of Commerce Ireland US-Ireland Research Innovation Awards 2015, shortlist: Prof Pauline Rudd NIBRT-Waters collaboration
- Silicon Republic's list of the 10 Irish breakthrough innovations of 2015: NIBRT's PATsule partnership with Tyndall
- Dr Jonathan Bones, NIBRT, named on Medicine Maker Power List 2016



- Pharma Education and Training Award
- Partnership Alliance of the Year
- Pharma Leader of the Year

“We have recently employed graduates of the NIBRT biopharma Springboard programme. A key challenge to MSD as we started up our site in Carlow was to recruit candidates with the required skillsets to work in a highly regulated biopharmaceutical environment. This course offered a range of modules to give candidates a broad knowledge of the biopharmaceutical industry and the processes involved in a cleanroom environment. The extensive sessions in NIBRT's impressive training facility reinforced the theory and gave the candidates the practical skills we required.”



David McGrath, Training Lead, MSD Ireland (Carlow)

Graduate Testimonials

Mark McGrath (Process Scientist at BioNua Ltd, Tullamore)

“After completing a BSc in Biomedical Sciences from Queen’s University, and a MSc in Immunology at Trinity College, I decided that I wanted to pursue a career in biopharmaceuticals. While I had a lot of lab-based experience, I did not possess the essential knowledge and skills necessary to work within industry, particularly within a GMP environment. Having discovered NIBRT through the Grad Ireland Careers fair, I learned of their state-of-the-art facilities and courses, establishing themselves as Ireland’s foremost provider of staff training to the biopharmaceutical industry. I knew that any opportunity to train there would immediately make me stand out from the crowd. And so, I enrolled in NIBRT’s Level 7 Biopharmaceutical Operations Springboard course.

In conjunction with lectures at Tallaght IT, I was exposed to several key industry skills, including GMP regulations, Upstream and Downstream bioprocessing. Programmes in career development and interview coaching improved my confidence and greatly boosted my visibility to potential employers. Practical modules at NIBRT facility allowed me to build on my previous academic experiences, enhancing them so as to be more industry relevant. Soon after I began the course, I started to gain more traction with my job applications. Companies knew that the training I was receiving was world class.

Having completed the course in the summer of 2015, I am now working as an Upstream Process Scientist in BioNua Ltd, an innovative start-up biopharmaceuticals company in Tullamore. The training with NIBRT has equipped me with the crucial skills and knowhow to be successful in my new job. I have to say that enrolling with NIBRT really was the making of my career.”

Edel Tierney (Abbott)

“I graduated with a BSc in Pharmacology from UCD but had difficulty gaining employment due to my lack of GMP experience. After attending a Grad Ireland fair I found out about the range of courses NIBRT offered. I enrolled in the level 8 Certificate in Biopharmaceutical Operations so as to bridge the gap between my knowledge from my degree with skills needed for the biopharma industry.

After four months on the course I had a choice between two job offers. I currently work as a laboratory technician for Abbott. I believe all aspects of the course helped me in securing my current role. The practical training, lectures, CV and interview workshops were all excellent and gave me the confidence to do well in my interviews. I would 100% recommend this course to all, especially recent graduates who find they lack the required industry experience.”

THE RISE OF IRISH PHARMA



9 OF THE WORLD'S TOP 10
pharmaceutical companies



7TH LARGEST EXPORTER
of medicinal and pharmaceutical
products in the world in 2014



€39BN IN ANNUAL EXPORTS
of pharma, bio and chemistry products



75+ PHARMACEUTICAL COMPANIES
operate in Ireland



33 FDA APPROVED
pharma & biopharma plants

Sarah O'Connor (now with Pfizer - Grangcastle)

“At the age of 28 I decided to give up my career as a hairdresser I realised I had lost my passion for the job so it was time to go back to the drawing board. I went to a career guidance councillor through the local social welfare office and we went through my skills, interests, what aspects I enjoyed most out of my previous education and employment and we narrowed it down that the pharmaceutical industry was what was most suitable to me. He recommended the Springboard Level 6 course in Bioprocessing and Cleanroom Management which I went on to complete, leading straight into Level 7 in Pharmaceutical Technology, Bioprocessing and Healthcare. I was offered a job in Pfizer as a manufacturing operator technician the month I finished my exams and started soon after. The experience NIBRT gave me a great insight on what to expect and the confidence that I was capable of the job although I didn't have previous experience in the industry. There was a great diversity of people in the course but each person was there for the same reason and all willing to help each other out and good friendships were formed. I love my job now and am delighted I found out about this course as it has turned my life around for the better.”



Sarah O'Connor
Manufacturing Operator Technician
Pfizer

How do I apply?

- Candidates should register their interest via www.springboardcourses.ie (use “NIBRT” as keyword to search for the course of interest).
- Candidates are encouraged to apply as soon as possible to confirm their place. Courses start in August-September 2016.
- Contact springboard@nibrt.ie for further information or see www.nibrt.ie/springboard

Frequently asked questions

What is Springboard?

Springboard is a Government funded initiative to provide free, part-time, accredited training programmes for those who are currently seeking work.

How much does the programme cost?

All Springboard programmes are free of charge to job seekers.

Will the programme affect my social welfare benefits?

The programme has no effect on a candidate's social welfare benefits.

What are the eligibility criteria for Springboard?

Please refer to www.springboardcourses.ie



In association with



www.nibrt.ie/springboard