

BRIC doctoral programme: Training projects

This programme aims to improve the supply of skills to industry and academia in the bioprocessing sector, by providing a PhD programme that includes structured training that exposes students to industrial practices and needs. Our vision is to provide PhD students with a first-rate, challenging research training experience within the context of a mutually beneficial research collaboration, between academic and partner organisations.

At the heart of the programme is a research training project which provides the student with the opportunity to:

- make a novel contribution to industrially relevant research in bioprocessing
- gain exposure to the challenges facing industrial companies in this sector

Below is a summary of the BRIC funded studentships that have currently been awarded:

COHORT	GRANT REF	LEAD INSTITUTION	LEAD DEPARTMENT	LEAD PI	STUDENT
2011	BB/J003816/1	UCL	Biochemical Engineering	Dr Suzanne Farid	Alma Mona Antemie

Project Title: Linking high throughput cell culture multivariate analysis and economics for more effective process integration

COHORT	GRANT REF	LEAD INSTITUTION	LEAD DEPARTMENT	LEAD PI	STUDENT
2011	BB/J003824/1	UCL	Biochemical Engineering	Dr Paul Dalby	Mather Robinson

Project Title: Microscale freeze-dried and liquid formulations of therapeutics to investigate the relationship between forced degradation and long-term shelf life

COHORT	GRANT REF	LEAD INSTITUTION	LEAD DEPARTMENT	LEAD PI	STUDENT
2011	BB/J003832/1	UCL	Biochemical Engineering	Dr Daniel Bracewell	Alice Mazzer

Project Title: Understanding on-column protein aggregation and its impact on bioprocessing

COHORT	GRANT REF	LEAD INSTITUTION	LEAD DEPARTMENT	LEAD PI	STUDENT
2011	BB/J003859/1	Manchester	Life Sciences	Dr James Warwicker	Rose Keeling

Project Title: Controlling liquid-liquid phase separation in antibody formulations

COHORT	GRANT REF	LEAD INSTITUTION	LEAD DEPARTMENT	LEAD PI	STUDENT
2011	BB/J003883/1	Manchester	Chem Eng and Analytical Science	Professor Hans Westerhoff	Joseph French

Project Title: Protein burden in protein overproduction

COHORT	GRANT REF	LEAD INSTITUTION	LEAD DEPARTMENT	LEAD PI	STUDENT
2011	BB/J003808/1	Imperial	Chemical Eng and Chemical Technology	Dr Cleo Kontoravdi	Si Sou

Project Title: Development of a computational tool for predicting the impact of bioprocess conditions on protein glycosylation

COHORT	GRANT REF	LEAD INSTITUTION	LEAD DEPARTMENT	LEAD PI	STUDENT
2011	BB/J003840/1	Nottingham	Sch of Pharmacy	Dr Stephanie Allen	Ayobola Oyefeso

Project Title: Development of single molecule assays for the detection of aggregation within high concentration protein therapeutics

COHORT	GRANT REF	LEAD INSTITUTION	LEAD DEPARTMENT	LEAD PI	STUDENT
2011	BB/J003867/1	UCL	Biochemical Engineering	Professor Eli Keshavarz -Moore	Stefan Woodhouse

Project Title: An upstream platform for the production of high grade heterologous proteins in Pichia pastoris

COHORT	GRANT REF	LEAD INSTITUTION	LEAD DEPARTMENT	LEAD PI	STUDENT
2012	BB/K00445X/1	Newcastle	Cell and Molecular Biosciences	Professor Jeremy Lakey	to be confirmed

Project Title: Simplified in-process detection of protein higher order structure and aggregation

COHORT	GRANT REF	LEAD INSTITUTION	LEAD DEPARTMENT	LEAD PI	STUDENT
2012	BB/K004433/1	Bath	Biology and Biochemistry	Professor David Leak	to be confirmed

Project Title: Analysis of protein secretion bottlenecks in Pichia pastoris

COHORT	GRANT REF	LEAD INSTITUTION	LEAD DEPARTMENT	LEAD PI	STUDENT
2012	BB/K004409/1	Kent	Biosciences	Professor Christopher Smales	to be confirmed

Project Title: Unraveling the relationship between IgG yield, recovered/observed clonal numbers and specific integration site on the yield of IgG in CHO cells

COHORT	GRANT REF	LEAD INSTITUTION	LEAD DEPARTMENT	LEAD PI	STUDENT
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2012	BB/K004425/1	Manchester	Chemistry	Professor Royston Goodacre	to be confirmed
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Project Title: The development of Raman spectroscopy for online monitoring of industrial bioprocesses

COHORT	GRANT REF	LEAD INSTITUTION	LEAD DEPARTMENT	LEAD PI	STUDENT
2012	BB/K004379/1	Manchester	Life Sciences	Dr Alexander Golovanov	to be confirmed

Project Title: Application of arginine glutamate in protein bioprocessing and formulation

COHORT	GRANT REF	LEAD INSTITUTION	LEAD DEPARTMENT	LEAD PI	STUDENT
2012	BB/K004360/1	Manchester	Life Sciences	Dr Anna Lawless	to be confirmed

Project Title: Development and optimisation of a high-throughput profiling platform for assessment of recombinant protein structural variants

COHORT	GRANT REF	LEAD INSTITUTION	LEAD DEPARTMENT	LEAD PI	STUDENT
2012	BB/K004417/1	Kent	Biosciences	Professor Martin Warren	to be confirmed

Project Title: Development of novel bacterial 'bioreactor' organelles for authentic synthesis and PTMs of mammalian recombinant proteins

COHORT	GRANT REF	LEAD INSTITUTION	LEAD DEPARTMENT	LEAD PI	STUDENT
2012	BB/K004387/1	Manchester	Life Sciences	Professor Jeremy Derrick	to be confirmed

Project Title: An investigation into the immunogenicity of human therapeutic proteins

COHORT	GRANT REF	LEAD INSTITUTION	LEAD DEPARTMENT	LEAD PI	STUDENT
2012	BB/K004441/1	Birmingham	Biosciences	Dr Tim Dafforn	to be confirmed

Project Title: Development of novel methods for periplasmic release of biotherapeutic products

COHORT	GRANT REF	LEAD INSTITUTION	LEAD DEPARTMENT	LEAD PI	STUDENT
2012	BB/K004395/1	Glasgow	Medical, Veterinary and Life Sciences	Professor Neil Bulleid	to be confirmed

Project Title: Engineering cells for antibody production