Creating and Sustaining Centres for Doctoral Training and Funding Information Session





Tuesday 15th September 2015, 09:45-12:45



Strathclyde-based CDTs

Concept and Opportunity Dr Craig Young





Emergence of CDTS

Significant developments

- EPSRC introduce EngD centres (1992)
- EPSRC trial various centres (2000-2007)
- Roberts' skills review (2002)
- EPSRC large CDT roll-out (2009)
- RCUK funding shifts towards CDTs (2010-present)





Benefits of CDTs

- Wider research themes
- Enhanced Training
- Industrial/external input
 - Financial leverage
 - Lasting links with external partners



University of Strathclyde Glasgow

CDT successes

- I6 EPSRC CDT awards since 2009
- 11 active EPSRC awards (6 leads)
- 4 other RCUK CDTs (ESRC, AHRC, BBSRC, NERC)

Most recent (2013) EPSRC round

- Coordinated approach from the University
- 10 bids submitted, 5 awarded
- Discussions began about growing our own





Strathclyde CDTs

- Round 1 launched late 2013
- Support CDTs in new emerging areas
 - Seed funds to initiate growth
 - > Evidence of external need for skills
 - Platform for growth
- Research & training excellence
- Clear strategy & ambition





Building training within your CDT: Strathclyde's not so secret USP!

Claire Jackson, Researcher Development Manager, Research and Knowledge Exchange Services



UK Entrepreneurial University of the Year 2013/14 UK University of the Year 2012/13

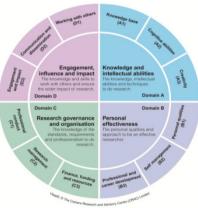
Session overview

Transferable skills training at Strathclyde:

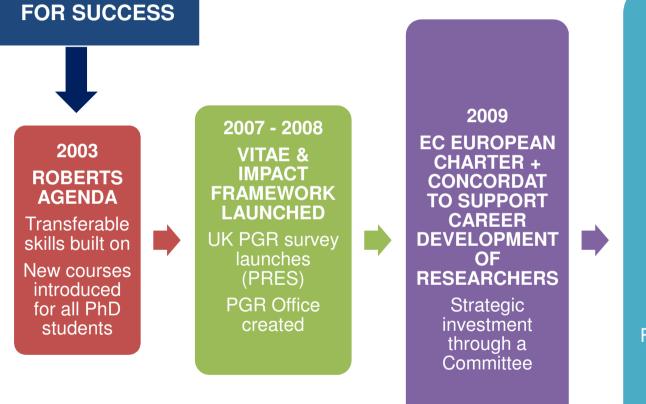
- Brief history of researcher development in the UK
- Integrating the PG Certificate in Researcher Professional Development into your CDT
- Utilising the Researcher Development Programme (RDP)
- Support available to you from the RDP team







Strathclyde's RD journey in a UK context (2003 – 2013)



2002

ROBERTS'

REPORT SET

University of Strathclyde Glasgow

2010 - 2013 ROBERTS REVIEW, RCUK STATEMENT OF EXPECTATIONS, EC HR EXCELLENCE, PRES/CROS/PIRLS & RDF LAUNCHED

PGRO disbanded, RDP team created

Development of strategy & operation plan

Revised funding arrangements

Researcher development a core function from 2012

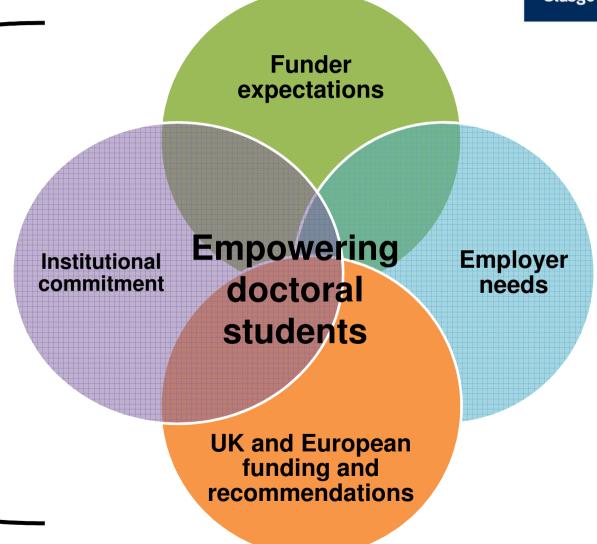
Flagship programmes developed, delivered and rolled out (e.g. BER, Enterprise Academy)

Formalisation and recognition of all skills training within the UK's first PG Cert in Researcher Professional Development

Drivers for enhancement



Strathclyde's differentiator in doctoral recruitment and experience



Ensuring that students in appropriate subjects gain industrial experience and receive basic skills training in topics of relevance to business and entrepreneurial activity at the outset of their career should make a long-term contribution to improving mutual understanding between the business and academic communities, and the ease with which people can move between these.

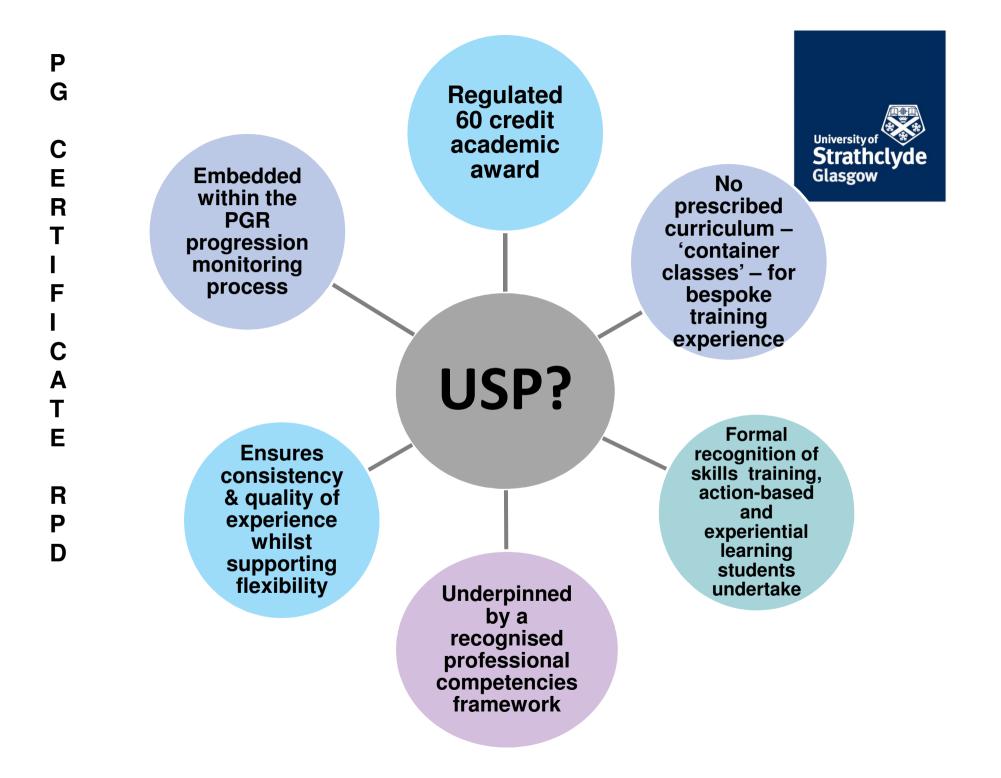
> *The Dowling Review of Business-University Research Collaborations, 2015*

Strathclyde's USP....



PG Certificate in Researcher Professional Development

https://www.youtube.com/watch?v=X3Hh6igHgsY



The second secon

Stand out from the crowd in the career you

Opportunities the award has created...

- Streamlined provision
- Embedded professional development
- Promotes innovative thinking, critical reflection, clear identification of career development needs
- Research into impact on employability
- External recognition and interest from HEIs
- Self-sustaining model?
- Branding...
- Potential attractor of talent in recruitment of PhDs

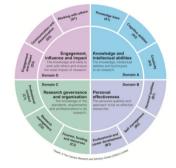
How was the PG Certificate developed?



Dec 2011 Taskforce formed comprised of Vice Deans, PS staff and researchers



Winter 2012 Implementation group of Vice Deans, academics, PS staff and researchers and an action plan is developed



2011-12 Mapping of provision across the University at all levels to the Researcher Development Framework/Statement



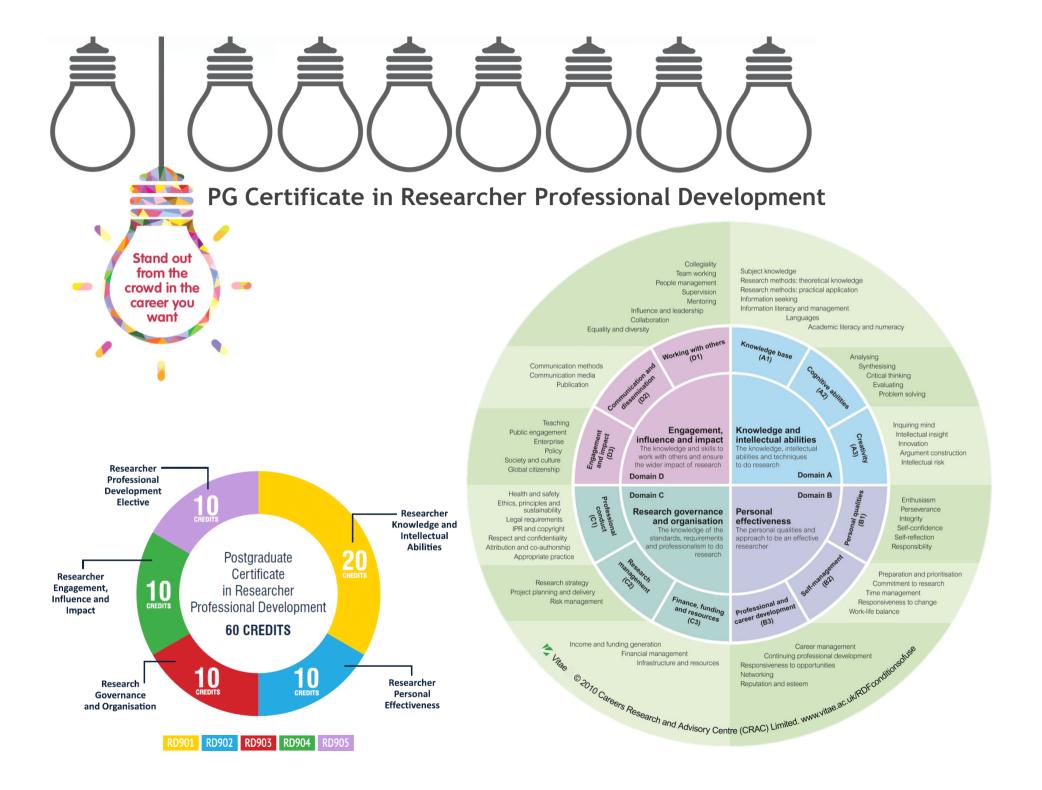
Spring 2013 Senate approve PG Certificate in RPD and the embedding of processes within PGR monitoring processes

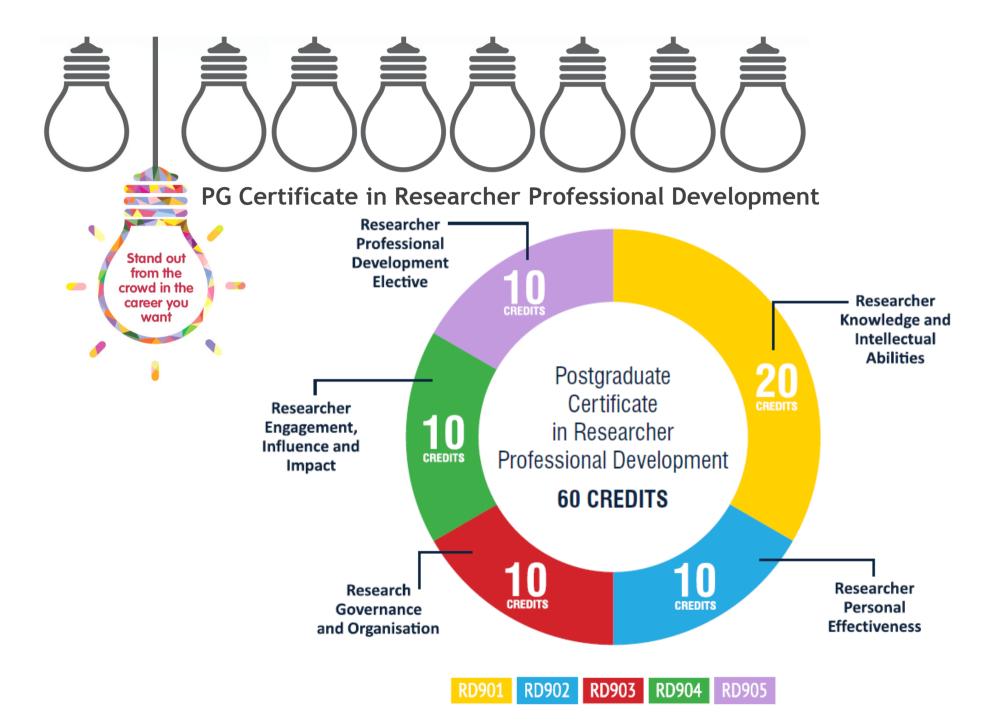


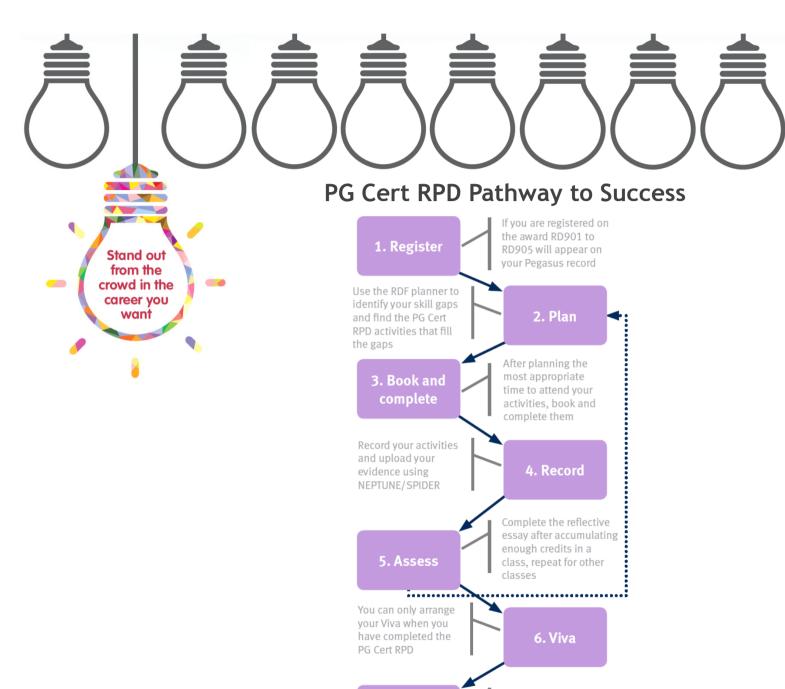
2012 Proposal to Senate recommending formalisation of researcher development arrangements across all Faculties



Autumn 2013 PG Cert is officially launched 1 October following robust rollout over summer







7. Post-award

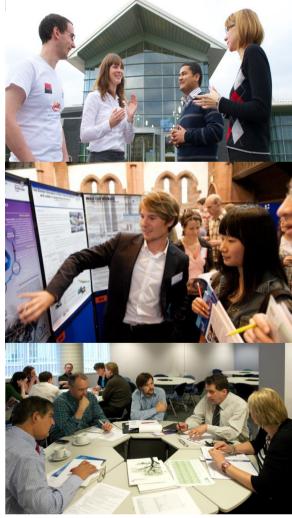
Use the PG Cert RPD and the portfolio of evidence to demonstrate your skills to employers

PG Certificate: Example for a CDT



	RD901	RD902	RD903	RD904	RD905	
Year 1	Discipline specific training (10)	PG Essentials (5)	Project Management (3)	Industry placement/KE activity (10)	PGR Induction (1) Discipline specific training (3)	33 Credits
Year 2	Discipline specific training (5)		Risk Management (2)		PGRs who Teach (1) Teaching (2)	8 Credits
Year 3	Oral Presentation: UK conference (5)	Organisation of Industry Engagement Event (5)	Preparation and exam (5)		3MT (3)	15 Credits
	20 Credits	10 Credits	10 Credits	10 Credits	10 Credits	





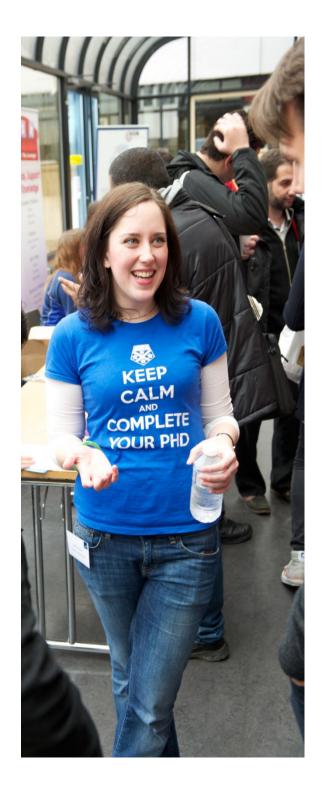
RDP provides over 100 transferable skills-related training opportunities each year including:

- > workshops
- ➤ seminars
- ➤ challenges
- residential & collaborative programmes
- ➤ e-learning
- > 1:1 training sessions
- resources, including publications and videos
- career management tools

Programme shortlisted in 2011, 2012 & 2014 for 'Outstanding Support for Early Career Researchers'

Shortlisted and 'Highly Commended' in 2015 as 'Outstanding Student Services Team'





The Researcher Development Programme (RDP) as a whole helps researchers develop skills that promote enterprising and entrepreneurial behaviours

Recommended RDP activities to consider as part of your CDT programme:

- Becoming an Engaging Researcher
- Strathclyde Enterprise Pathway
- Images of Research
- PGRs Who Teach
- ≻ 3MT

Application checklist



- ✓ Structured, detailed and integrated training programme incorporating transferable skills in the 42-month programme
- Programme developed with non-academic partners to meet sector needs
- Embed the RDF skills and attributes (including enterprise, outreach, ethics, impact, IP, communication)
- ✓ Cohort-centric, student-centred
- \checkmark Mobility included where relevant
- ✓ Rigorous induction process
- Personal Development Planning embedded
- ✓ Exposure to non-academic sectors evident





Further sources of support

- RDP website <u>www.strath.ac.uk/rdp</u>
- RKES portal <u>http://www.strath.ac.uk/rkesportal/</u>
- Vitae website <u>www.vitae.ac.uk</u>
- 1:1 support from RDP team <u>claire.jackson@strath.ac.uk</u>, ext. 5922



Advanced Manufacturing Industrial Doctorate Centre (AMIDC)

Professor Bill Ion & Dr Dorothy Evans





Background



- Approved as Industrial Doctorate Centre in Advanced Forming and Manufacture
- Marketed as Advanced Manufacturing Industrial Doctorate Centre (AMIDC)
- Funding Received from EPSRC £1.2m, contributing to
 - Fees
 - Stipends
 - Coordination
 - Course Delivery
- Value of IDC as bid £3.2m
- Commenced in October 2011
- EPSRC funding ends September 2018
- EPSRC target 32 Engineering Doctorate students
 - 4 intakes





Funding Sources



- Funding Model: 'EPSRC light touch IDC'
- Target 32 EngDs with one third fully funded by EPSRC
- Where does the remaining 2 thirds come from?
 - University (Tranche 1, 2 & 3)
 - Faculty (ETF)
 - Department (varies)
 - AFRC (varies)
 - Industry (100%, or 60%, 40%)



Funders





AUBERT&DUVAL

















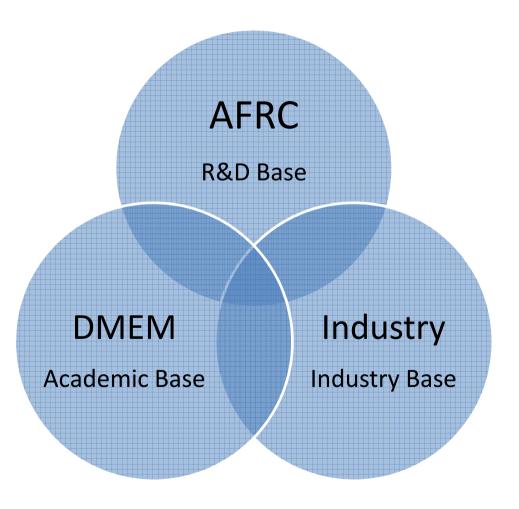






EngD Environment









EngD Programme



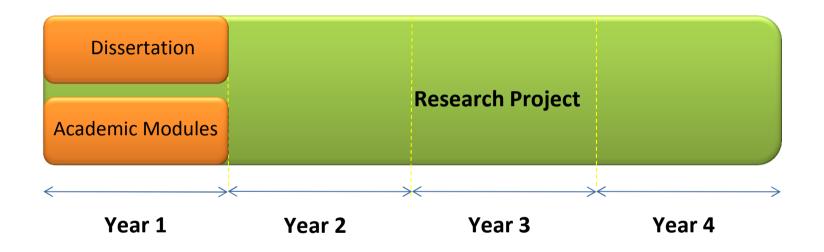




DMEM Design, Manufacture and Engineering Management

AMIDC EngD Structure





1 + 3 Year Model





EngD Structure – Taught element

Compulsory Modules (60 credits)

- Strategic Technology Management
- Manufacturing Automation
- Micro- and Nano-Manufacturing
- Advanced Forming Technology and Systems
- Advanced Materials and Production Technology
- Research Methodology
- Optional Modules (60 Credits)
 - Allows choice of subjects to support EngD topic
- Project Dissertation (60 credits)
 - Topic related to research project







Research Topics

- Residual Stress
- Die Life
- Process Characterisation
- Material Characterisation
- Heating/Thermal Processes
- Superplastic Forming, Sheet Forming
- Metrology
- Metallurgy
- Lean Six Sigma
- Process Management
- Design
- Others







Design, Manufacture and Engineering Management

The AMIDC Team

Prof. Bill Ion Programme Director

Prof. Jonathan Corney Programme Manager

Dr. Dorothy Evans Programme Coordinator

Caroline McGuire Administration support











University of

Engineering

Strathclyde



Benefits







DMEM Design, Manufacture and Engineering Management

Academic Benefits



- Strengthens Industry links
 - EngD interaction leads to further collaborative research opportunities
 - Research with direct links to impact routes
- Opportunities to open up new research avenues often in collaboration with industrial partners
- EngDs underpin many facets of the AFRC membership research programme and accommodate lower TRL exploration
- Strengthens interaction between academic community and AFRC/HVM Catapult based research/KE staff and related industrial partners.
- Contributes to increasing PGR student numbers and as a consequence enhances paper publication
- Develops PGR graduates with an excellent balance of research and subject knowhow as well and industrial acumen and understanding
 - Future posts docs or company employees
- Raises profile of UoS research through visibility of the IDC



Challenges









Challenges

- Student Recruitment
 - EPSRC restrictions home/EU students
 - EngD students used in promotions to students/applicants (and to industrial partners)
- Scholarship Funding
 - Securing matched funding from non EPSRC sources
 - Industry partnership
 - AFRC membership
 - Industrial doctorates
- Project Funding
 - Materials, travel, equipment access etc.
 - Ensure industrial funders agree to cover project funding either directly or as a part of the scholarship funding package.
- Sustainability
 - Broadening mode of study in centre -PhD, Industrial Doctorate, EngD (full and part time)
 - Marketing where appropriate in conjunction with wider departmental PGR programmes (EPSRC wish to see AMIDC as a separately identifiable centre)



EngD Operational Considerations



- Recruitment
 - Joint advertising and interviewing
 - Joint understanding of both academic and industrial partners needs
- Research Project Definition
 - Ensuring project meets academic and industrial requirements dialogue!
 - Student must have scope to be involved in defining project direction..
- Programme start date
 - Need for multiple entry points to address industry and student aspirations.
- Supervisory team
 - Appropriate Industry and Academic supervisors
 - Clarity over supervisory approach, roles, and meeting arrangements
- Collaboration agreement
 - Intellectual Property and Confidentiality







Thank you





Delivering Total Engineering



Experiences as a CDT Partner

Prof Dora Scholarios Strathclyde Business School

1. ChangingEmployment

Marie Curie Initial Training Network under EU FP7 (4 M€) www.changingemployment.eu

2. Scottish Graduate School of Social Science (SGSSS)

ESRC Doctoral Training Centre in Scotland www.socsciscotland.ac.uk











etu

ChangingEmployment





THE

GROUP

Programme Coordinator: Strathclyde Prof Paul Stewart, Claire Scott 17 Partners from 8 EU countries; 9 full partners: 9 academic 8 associate partners: 3 public sector, 4 private sector, 1 third sector 12 ESRs (PhDs) + 3 Ers (postdocs) 3 sub-programmes of research Universidad de Oviedo EDRINGTON Uniwersytet Wrocławski UNISON





International Labour Organization

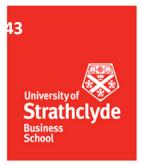






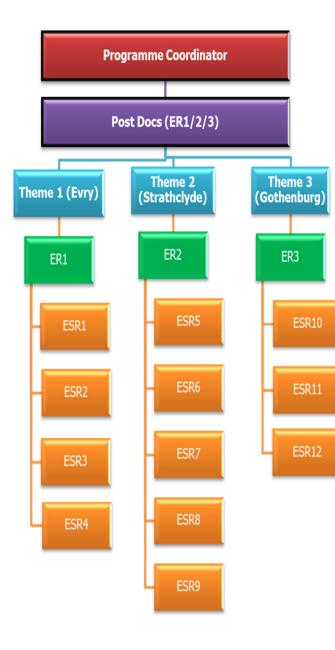
Changing Employment Overall training objective:

To train European and interdisciplinary network of policy-focused social scientists to be highly skilled in understanding, analysing, and responding to social and institutional employment changes.



Changing Employment Specific training objectives:

- 1. Explore how societal differences explain national variations in employees' experiences of working life.
- 2. Examine the changing relations between management and employees and how these might explain differing forms of 'employee voice' and impact upon social dialogue.
- 3. Develop a comparative understanding of the changing quality of work, organisation and employment in the context of the (above) changes.
- 4. Consider the patterns and consequences of workplace inclusion and exclusion in relation to migration, employment and unemployment, of shifting inequalities in terms of gender and ethnicity and the implications for older employees of new patterns of work and retirement.
- 5. Assess the variable impact of the current economic retrenchment on these forms of employment relations across Europe.



Theme 1: Management and Employees

Theme Leader: Prof. Stephen Bouquin Five researchers (UEVE, ULB, CEU, UNIOVI)

Specific objectives:

- to examine Multi-National Corporation (MNC) HR strategies in the context of the current economic crisis;
- to understand the form and character of worker representation with a view to disseminating best practice.

Theme 2: Inclusion and Exclusion

Theme Leader: Prof. Paul Stewart Six researchers (Strath, UWR, Londonmet, K.U.Leuven)

Specific objective:

to explore new developments, including those emerging from the economic crisis, with regard to inclusion/exclusion at work, particularly the consequences of unemployment, migration and precarious work and, increasingly, inequalities arising from age (both young and older workers), ethnicity and gender.

Theme 3: Employee Wellbeing and Work Life Quality

Theme Leader: Dr Tommy Isirdorsson Four researchers (UGOT, Strath, UEVE)

Specific objective:

 to examine the impact of contemporary forms of work and employment flexibility ('flexicurity' or 'precariousness') on the quality of working life.



Planning The consortium

- Fit consortium around research topic
- Work with partners you can trust who will engage
- Ensure plenty of time
- Have a face-to-face planning session with key members



Planning Training

- Demonstrate that you are responding to a training need. Not a research project.
- Plan the PhD projects and the training programme in precise detail.

Planning Linking projects to WPs/partners



	Individual Research project	Link with WPs	FP	Fellow months
ESR1	Social partners as managers of organizational change	1,4,5,6,7,8,9	ULB	36
ESR2	Employment relations as multi-level bargaining arenas in transformation	1,4,5,6,7,8,9	UNIOVI	36
ESR3	The nature of new management paradigms and the process of adoption-adaptation	1,4,5,6,7,8,9	CEU	36
ESR4	Impact of new management practices upon representations of work and social behaviour of employees	1,4,5,6,7,8,9	UEVE	36
ESR5	Migration aspirations & realities - the experiences of Polish migrants in the UK and the role of trade unions	2,4,5,6,7,8,9	LondonMet	36
ESR6	Pathways to citizenship (inclusion) and conflict (exclusion): employment relations in migrant workers' workplaces in Belfast, Edinburgh and Wroclaw	2,4,5,6,7,8,9	STRATH	36
ESR7	Varieties of capitalism and trade union inclusion of migrant workers: the cases of the UK, France and Belgium	2,4,5,6,7,8,9	KULeuven	36
ESR8	Return migrants inclusion and employment: the case of return migration from the UK to Poland	2,4,5,6,7,8,9	UWR	36
ESR9	Life on the margins - the social implications of precarious work specifically in relation to young minority ethnic workers	2,4,5,6,7,8,9	LondonMet	36
ESR10	Flexicurity and temporary agency work: an international comparative study on organisational practices and consequences on employee well-being	3,4,5,6,7,8,9	UGOT	36
ESR11	Examination of the changing nature of employment regimes on employees in the supply chain in the services sector	3,4,5,6,7,8,9	STRATH	36
ESR12	Work rationalisation and intellectual work of engineers in high performance work organisations	3,4,5,6,7,8,9	UEVE	36
ER1	Social dialogue as multi-level governance in times of change: employer and employee experiences	1,4,5,6,8,9	UEVE	20
ER2	Inclusion, exclusion and precarious employment in Europe: the story so far from the UK, Belgium, France and Poland	2,4,6,7,8,9	STRATH	24
ER3	Work-life quality and the flexicurity of employment in multinational companies: a comparative company-based approach in Europe	3,4,7,8,9	UGOT	21

Planning Work Packages



- WP1: Theme 1 Management & Employees
- WP2: Theme 2 Inclusion & Exclusion
- WP3: Theme 3 Employee wellbeing & work life quality
- WP4: Network events
- WP5: Annual Colloquium Year 1
- WP6: Annual Colloquium Year 2
- WP7: Annual Colloquium Year 3
- WP8: Annual Colloquium Year 4
- WP9: Public engagement
- WP10: Meetings
- WP11: Network coordination



Planning

Pedagogic areas provided training structure

- 1. Basic research methods training
- 2. Language
- 3. Adv. Meth/Comparative Epistemologies
- 4. Comparative European Social Models
- 5. Writing & Presenting Research
- 6. Applied Training role for non-academic partners

Planning Training events

4 Annual Colloquia

- Theoretical background of ESRs projects
- Comparative methodology & paradigms
- Research findings
- Policy/social impact of changing employment

4 Winter/Summer Schools (core)

- Disciplines in work sciences
- Controversies in labour studies
- Labour markets, flexicurity & social dialogue
- Comparative European social models & industrial relations

Applied Training

• internships, secondments, workshops, seminars

Optional Courses/Workshops

- Range of workshops at Network Schools
- Location-based courses offered by partners



Training eg

- Individual PhD-specific training programme for ESRs
- Mentoring progressed by supervison of ESRs under close guidance of Theme leaders
- Local training &network organized training eg Film School, Project Mgt
- ChangingEmployment specific training - Network Schools
- Annual Colloquium (PhD projects)
- External courses/schools
- Complementary training (eg language)
- Secondments / Study visits to partners e.g. ILO, ETUI
- International conferences
- Outreach activities eg Exhibition in Wroclaw's Market Square; Strathclyde Images of Research competition

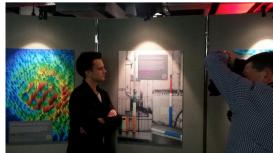














Planning Network-wide events (WP4,5,6,7,8)

Project kick-off meeting, Glasgow, 11 December 2012

Network School 1, Gothenburg, 24-29 May 2013 (M6)

Training on multi-disciplinary perspectives of working lives

Network School 2 and Annual Colloquium 1, Paris, November 2013 (M12)

Training on methodological and theoretical tools to conduct comparative labour studies.

Open day at Central and Eastern Europe: Work, Employment and Society, between transition and change – International Conference, University of Evry

Network School 3, Leuven, 2-6 June 2014 (M19)

Training on flexibility and security within labour markets in Europe.

Public Roundtable - What are the prospects for labour markets and employment in Europe? External Doctoral student participants.

ILO Two Day Study Visit, Geneva, 5-6 November 2014 (M24)

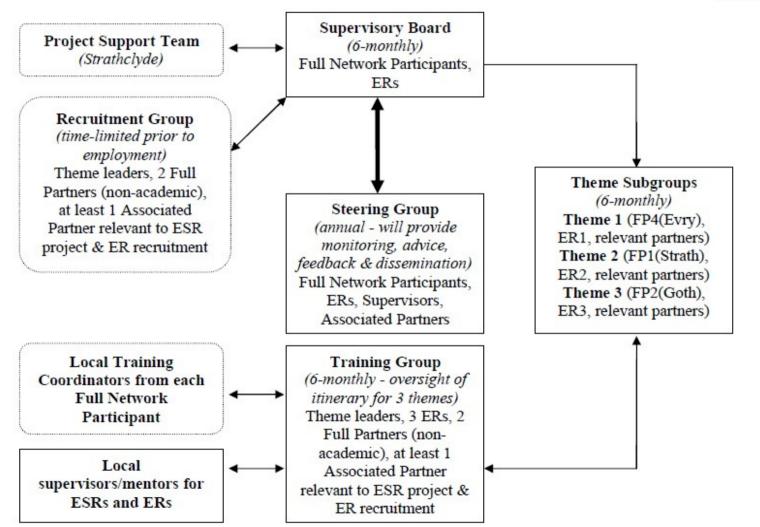
Network School 4, Annual Colloquium 2 and Mid-term Review, Wroclaw, November 2014 (M24)

Training on theoretical and empirical exploration of European models of capitalism.

Open day at Social Boundaries of Work - International Conference in University of Wroclaw

ChangingEmployment management structure (WP10)







Benefits

- Commitment to capacity building of young scholars in a cutting-edge area of research
- Resources with which to achieve this capacity building
- Network schools and theme activities provide valuable arena for intense uninterrupted discussion, opportunity to engage with theory and data



Benefits for own research

- International networks and Internationalisation
- Engagement and Impact activities of the Associate partners
- Outputs research, REF
- Future funding bids



Challenges

- Recruitment / early attrition
- Immigration of non-EU fellows (difficulties due to country specific arrangements)
- Balancing mobility with the PhD programme requirements and network demands
- Coordination of partners key role for Programme Administrator

Scottish Graduate School of Social Science (SGSSS)



ESRC Doctoral Training Centre in Scotland

www.socsciscotland.ac.uk

Collaboration between all 16 HEIs in Scotland (10 in DTC) DTC offers ESRC-accredited training in 24 training pathways

12 pathways recognised at Strathclyde/eligible for studentships

HaSS

Economic & Social History Education Families, Relationships & Social Change Health Social Work Social Care Socio-legal Studies & Criminology

Business

Accounting and Finance Business and Management Economics Environment, Climate Change & Energy

Science Information Science



SGSSS/ESRC DTC in Scotland

Governance

The SGSSS Board - strategic direction, one representative from each HIE in Scotland. Scottish Funding Council and Scottish Government are ex officio members.

Advisory Group - stakeholders who discuss Scottish, UK and international research training policy and practice and can make recommendations to the Board.

The Secretariat – Director of DTC, admin support, main point of contact. Based at Edinburgh University. admin@socsciscotland.ac.uk.



SGSSS/ESRC DTC in Scotland Operations

Pathway Convenors – coordinating role across HEIs in DTC

Pathway Representatives in each DTC HEI – manage studentship applications and collaborate on training development and provision across Scotland

Advanced Training – identify value added in training, div of labour, economies of scale

Summer School – cross-disciplinary social science training. Open to all students, including international



Benefits

- Capacity building (through training & studentships)
- Pooling of resources, access to expertise, including for students at non-DTC institutions who are part of the SGSSS
- Cross-institutional collaboration/networking
- Growing PGR population through collaborative ESRC studentships eg Scottish Government, Skills Development Scotland



Challenges

- Resources available if can demonstrate collaboration and accessibility for doctoral students across Scottish HEIs
- Rely on good will of colleagues
- Geography
- Ensuring sufficient training supply for demand
- Current DTP call aiming for fewer pathways, greater coordination issues, more HEI contribution

Strathclyde Centres for Doctoral Training (SCDTs)





The SCDT scheme offers seed funds to support and catalyse the development of CDTs in emerging areas of research, leading to the formation of recognised centres of research & training excellence.

More info contact Jo Pitt, PGR Officer, RKES jo.pitt@strath.ac.uk

SCDTs: Round 2 Call: Key details



- Open September 15th 2015 9th December 2015, 5pm
- Applications welcomed and encouraged from across the University
- Anticipated that 5 new SCDTs will be funded
- A maximum of £100k may be requested per centre. Additional funding (minimum match value to central contribution) is expected to be in place.
- Additional funds may be secured from internal (department/school/Faculty) or external (private/public/third sector) sources.
- Funded SCDTs are expected to start October 2016 with a minimum student cohort of 3 students. Studentships are typically 42 months duration.

SCDTs: Round 2 Call: Application details



- Applications can be made anytime using the application form, available on the RKES Portal/funding
- Application forms should be completed in line with the SCDT Guidance available to download from the RKES Portal/Funding
- Return completed applications forms to jo.pitt@strath.ac.uk

SCDTs: Round 2 Call: Application details



Strathclyde Centres for Doctoral Training

2015 Application Form

1. Applicant					
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2. Title of Proposed Centre

Strathclyde Centre for Doctoral Training in...

3. Partners					
Name	Organisation	Division or Department			

4. Summary: Please provide a summary detailing the focus of the centre and why there is a demand from business/government/third sector for PhD research training in this area. Provide a brief description of the key research areas, as well as the aims and objectives of the centre (indicative maximum of 500 words).

University of Strathclyde Glasgow

4. Summary

Centre focus, and summary of external demand for PhDs description of research areas, centre objectives

5. Evidence of Strategic Alignment

How does centre align with strategic aims of the university?

6. Funding & Students Numbers

How will funds be used, partner contributions, anticipated student numbers

7. Centre Sustainability & Plans for Growth Sustaining & growing SCDT over next 5 years, plans for sourcing additional & future funds – e.g. RCUK proposals

8. Student Experience & Training Any subject specific training & cohort building activities

9. Financial Summary10. HoD Comments11. Faculty Comments

Strathclyde Centres for Doctoral Training (SCDTs)



Download the SCDT Guidance & Application form at: https://moss.strath.ac.uk/rkesportal/Research/funding Deadline 9th December 2015, 5pm.

Further information, and application submission contact jo.pitt@strath.ac.uk