





Commission

WIMB

Kick-off meeting

Barcelona, 3-5 March 2014



| 08.04.2014 | 1



UCL

UCL- overview

- Known as 'London's Global University', University College London employs 4,078 academic research staff in over 50 departments and institutes. UCL also has 11 associated teaching hospitals, which include Great Ormond Street Hospital, Moorfields Eye Hospital and Royal Free Hospital.
- UCL was established in 1826 to open up education in England for the first time to students of any race, class or religion. UCL was also the first university to welcome female students on equal terms with men.
- UCL is ranked fourth in the world's top ten universities by the QS World University Rankings (2013).
- Total number of student: 29,000 (Undergraduate number: 15,660;
 UNB Postgraduate number: 13,340
 Total annual income £872M (vear 2012)

UCL education

- UCL is one of the top two universities in the UK for the number of professors, which means that our students are taught by the most highly qualified experts in their field (Higher Education Statistics Agency 2011).
- UCL provides an environment that encourages students to be ambitious yet idealistic. In 2013 alone, UCL students participated in 41,500 hours of voluntary work and set up 80 social enterprises and 25 student businesses.
- World-leading research feeds directly into our degree programmes. Students study with experts in their field and benefit from a programme of distinguished visitors and guest speakers.
- Interdisciplinary learning -Many of UCL's degree programmes allow students to build a customised study programme.
- Global citizenship –UCL is committed to providing the academic foundation and personal development opportunities that will equip our graduates to rise to the challenges of life after university.
- London's Global University- UCL attracts students from 150 countries and has active exchange and research links with nearly 300 overseas universities. 25% of undergraduate students spend time studying abroad as part of their degree.

Universitat Autònoma de Barcelona

UCL Research and global impact

- UCL is one of the most successful UK universities at attracting funding, with an income of nearly £900 million in 2012, when we received:
- 3rd highest allocation of Research Council UK funding
- 3rd highest allocation of European Research Council starting grants
- UCL also has the greatest number of UK's prestigious <u>Doctoral Training Centres</u>.
- UCL attracts the 3rd highest number of academic citations per faculty member in the UK showing the high esteem & relevance of the institution's research. (QS2013).
- In 2011–2012, UCL ran more than 40 schemes to support start-ups and growing businesses, and helped strengthen more than 300 small businesses in London. UCL us helping to drive the global economy forward.

CENTRE for MATERIALS DISCOVERY

UCL

UCL team led by Prof. Kwang-Leong Choy

Director of the UCL Centre of Materials Discovery and
Professor of Materials Discovery at UCL from 1st February 2014.

Universitat Autònoma de Barcelona

The Centre:

- established within The Faculty of Mathematical and Physical Sciences
- with advanced facilities and expertise in both theoretical modelling and experimental areas
- Aim to
- a) integrate fundamental chemistry, physics, engineering and biological principles across the disciplines,
- b) to create new opportunities in materials creation, discovery and exploitation for the development in clean energy, nanotechnology, engineering and biomedicine technologies

[•]UCL

Research areas and expertise

The Centre is at the forefront of designing, discover, developing novel and high performance materials as well as low cost non vacuum methods for the processing of ceramics, polymers, and organic-inorganic materials in the form of (i) nanostructured superthin/ thin/ thick coatings; (ii) nanopowder, nanotubes and nanowires; and (iii) nanocomposite coatings for structural, functional and biomedical applications.

- •Novel nanostructured films and coatings, and nanocomposite coatings incorporating nanotubes or nanoparticles and surface coating and deposition technologies
- •Nanoscale surface engineering, interface control, coating durability and reliability

•Analysis, characterisation, testing and manipulation nanopowder, nanotubes and nanowires production and functionalisation.

^AUCL

Role in Tempus project

- Manual review.
- Identification of education gaps, key players for spin-off creation and increase of innovation application in WBC region.
- Provide advice for spin-off creation and sustainability.
- Provide advice on vocational courses related to: commercialization in nanotechnologies; from nano and biomaterials to innovative products and IP rights in research projects.
- Plan and Initiate new joint project with other partners.

