

## Further Particulars

# Chair of Medicinal Chemistry

This document sets out the following information for appointment to the **Chair of Medicinal Chemistry at the UCL School of Pharmacy.**

### **NOTE - The School of Pharmacy and UCL**

On 1 January 2012, the School of Pharmacy, University of London, will join UCL, becoming the UCL School of Pharmacy within the Faculty of Life Sciences. This is a UCL appointment.

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### **Application Procedure**

Applications should include:

a curriculum vitae (including a complete list of publications)  
a statement of research interests and plans  
the names and addresses of three referees who are leading figures in the relevant subject (including at least one referee based outside the candidate's country of residence)  
details of current salary

The closing date for applications is **17 February 2012**. It is hoped to hold interviews in early March and we expect the successful candidate to be in post by no later than 1 August 2012.

Applications should be sent to: **recruitment@pharmacy.ac.uk**

We would strongly encourage interested candidates to discuss the post informally: please contact the Dean of the School of Pharmacy, Professor Anthony Smith T: (+44) 020 7753 5819 HYPERLINK "mailto:Deansoffice@pharmacy.ac.uk" ~~Deansoffice@pharmacy.ac.uk~~ or Professor Stephen Neidle, CRUK Professorial Fellow

and Professor of Chemical Biology (+44) 0207 753 5969 HYPERLINK "mailto:stephen.neidle@pharmacy.ac.uk" ~~stephen.neidle@pharmacy.ac.uk~~

## About UCL

UCL is one of the UK's premier universities and is ranked in the world's top 10. It is a world-class research and teaching institution based in London whose staff and former students have included 20 Nobel Prize winners. Founded in 1826, it was the only university in England at that time which admitted students regardless of race or religion. UCL was also the first to admit women on equal terms with men. Today, UCL is an inspiring university in which to work and study and it continues to thrive on the diversity and creativity of its community.

UCL is in practice a university in its own right, although constitutionally a college within the federal University of London. With an annual turnover exceeding £700 million, it is financially and managerially independent of the University of London.

## The School of Pharmacy

The UCL School of Pharmacy (the new name takes effect from 1 January 2012) is based, with Biosciences within the Faculty of Life Sciences, itself part of the School of Life and Medical Sciences. Together the medical and life sciences disciplines account for around 60% of UCL's activity.

The School was founded in 1842 by the Royal Pharmaceutical Society as the training arm of the newly formed professional society. It became part of the University of London in 1926 and has been based at its main premises in Brunswick Square since the early 1950s. As the UK's only specialist provider in pharmaceutical sciences it initiated many of the educational developments that now characterise the training of professional pharmacists, and developed research strengths that range from medicinal chemistry to global health policy making. The School offers a large MPharm programme, four MSc programmes, MRes and PhD degrees. Of the School's approximately 900 fte students, about 730 are registered for the MPharm, 70 for masters' degrees and 100 for PhDs. In addition the School supports a large distance learning programme for senior hospital pharmacists, and CPD for pharmacy technicians.

The School was ranked 3<sup>rd</sup> in the 2008 UK Research Assessment Exercise, and first in the power rankings with 90% of its work judged internationally significant and 25% world leading. The School's broad research themes cover Drug Discovery, Neurosciences, Formulations Sciences, and medicines use and Health. HYPERLINK "http://www.pharmacy.ac.uk/research.html?&no\_cache=1" ~~http://www.pharmacy.ac.uk/research.html~~

In 2011, after nearly 170 years as an independent institution, the School decided to merge with UCL. The initiative for the merger discussion had come from the School and reflected its determination to thrive, despite the challenging financial environment, and to extend its activities – something that would not have been possible as an independent organisation. The academic connections between the School and UCL were already powerful especially in drug discovery, formulation, cancer and neuroscience. The potential for developing collaborations in undergraduate and postgraduate teaching and for inter-professional education with medical students and other life scientists are also exciting. The Schools' students are also merger enthusiasts, looking to the excellence of the overall UCL student experience.

In addition to this post, the School is also aiming to recruit up to six outstanding scholars at Chair/Reader level over the next 12-18 months. These will be across all areas of the School's work and will include the opportunities to strengthen areas relevant to drug discovery.

### **The UCL Community**

UCL currently employs approximately 8,000 staff and includes academic units as diverse as the Slade School of Fine Art, the Mullard Space Science Laboratory and the Institute of Child Health, which is associated with Great Ormond Street Hospital. In total, there are 54 Academic Departments and Institutes whose activities span the following: arts and humanities, social and historical sciences, law, architecture and the built environment, engineering sciences, mathematical and physical sciences, life and clinical sciences, and medicine. UCL's academic and research staff are a truly international community with more than a quarter coming from 84 countries outside the UK.

The UCL student community comprises 12,600 undergraduates and 8,500 graduate students, of whom over 30% come from 130 countries outside the UK. UCL currently offers 270 undergraduate programmes and more than 210 taught postgraduate programmes as well as the opportunity to carry out postgraduate research in all of its subjects. Approximately 40% of the student community is engaged in graduate studies, with about 37% of these graduate students pursuing research degrees.

### **Quality of UCL's Teaching and Research**

Two measures of the current quality of UCL's teaching and research are the results of the external teaching quality assessment reviews and the periodic Research Assessment Exercise (RAE).

The results of the UK's latest research assessment exercise (RAE 2008) confirm the international excellence of UCL's research. The numbers of our researchers shown in RAE 2008 to be carrying out world-leading research place UCL among the top three universities in the UK. Of the 1800 researchers submitted by UCL for RAE 2008, 95% were deemed to have an international level of esteem. The range of UCL's research excellence was demonstrated by outstanding results in RAE 2008 in academic disciplines as diverse as biomedical sciences, architecture and the built environment, economics, law, philosophy and history.

Another measure of UCL's research excellence has been its success in bidding for external competitive funds from the Joint Infrastructure Fund (JIF) and the Science Research Investment Fund (SRIF). With the addition of required matching funds, JIF and SRIF are allowing UCL to invest more than £350 million into state-of-the-art infrastructure for cutting-edge research and teaching programmes.

### **Equality**

UCL is proud of its longstanding commitment to equality and to providing a learning, working and social environment in which the rights and dignity of its diverse members are respected. [HYPERLINK "http://www.ucl.ac.uk/hr/equalities/" \t "\\_blank" The Equalities website](http://www.ucl.ac.uk/hr/equalities/) has everything you need to know about Equalities at UCL and some initiatives are highlighted below:

**Sabbatical Leave following maternity** - UCL provides one term of sabbatical leave without teaching commitments for research-active academics returning from maternity, adoption or long-term carer's leave. This support for returners enables staff to more quickly re-establish their research activity.

**Achievement of five Athena SWAN awards** - for good employment practice for women working in science, engineering and technology (SET) in higher education and research.

**Tackling underrepresentation** - UCL has two workforce equality targets. These targets are to increase the employment of black and minority ethnic (BME) support staff in grades 1-8 to 31% in line with the economically active BME population of Greater London; and to incrementally equalise the representation of men and women in senior grades (9 and 10) with the ultimate aim of a 50:50 split of women and men at this level.

**Encouraging flexibility** - 82% of respondents to the 2009 UCL staff survey felt that their working time could be flexible. [HYPERLINK "http://www.ucl.ac.uk/hr/docs/work\\_life\\_balance.php"](http://www.ucl.ac.uk/hr/docs/work_life_balance.php) ~~UCL's Work Life Balance policy~~ gives employees the right to request a flexible working pattern.

### **Location and Working Environment**

Based in Bloomsbury, UCL is a welcoming, inclusive university situated at the heart of one of the world's greatest cities.

UCL's central campus is within easy reach of Euston, Kings Cross and Marylebone mainline stations, the new Eurostar terminal at St.Pancras and the following Underground stations - Euston Square, Warren Street, Goodge Street and Russell Square. Road connections to the M1 and M40 motorways give easy access to the north and west road networks. There are also good public transport links to Heathrow airport.

### **The Department of Pharmaceutical and Biological Chemistry**

This vacancy has arisen on the departure of Professor David Thurston to become head of the School of Pharmacy at King's College, University of London.

*The post may also be associated with the Headship of the Department, subject to discussion with the successful candidate.*

Significant resources will be associated with the Chair, which is seen as a key appointment for the School. A lectureship in medicinal chemistry is also currently vacancy and the new holder of the Chair will take a leading role in recruitment to this post.

The academic members of staff at November 2011 are:

#### **Professors**

Simon Gibbons (phytochemistry and natural products)  
Michael Heinrich (phytochemistry and herbal medicines)  
Stephen Neidle (cancer drug discovery and chemical biology)  
Anne Stephenson (molecular neurobiology)

#### **Visiting Professors**

Professor S Arnott CBE, FRS  
Professor J Mann

#### **Emeritus Professors**

Emeritus Professor Tony Moffat  
Emeritus Professor David Phillipson

## Readers

HYPERLINK "[http://www.pharmacy.ac.uk/a\\_schatzlein.html](http://www.pharmacy.ac.uk/a_schatzlein.html)" \t "\_self" ~~Dr Andreas Schatzlein~~ (cancer pharmacology)

## Senior Lecturers

HYPERLINK "[http://www.pharmacy.ac.uk/john\\_malkinson.html](http://www.pharmacy.ac.uk/john_malkinson.html)" \t "\_self" ~~Dr John Malkinson~~ (synthetic chemistry)

HYPERLINK "[http://www.pharmacy.ac.uk/michael\\_munday.html](http://www.pharmacy.ac.uk/michael_munday.html)" \t "\_self" ~~Dr Michael Munday~~ (molecular enzymology)

HYPERLINK "[http://www.pharmacy.ac.uk/andy\\_wilderspin.html](http://www.pharmacy.ac.uk/andy_wilderspin.html)" \t "\_self" ~~Dr Andy Wilderspin~~ (protein engineering)

HYPERLINK "[http://www.pharmacy.ac.uk/mire\\_zloh.html](http://www.pharmacy.ac.uk/mire_zloh.html)" \t "\_self" ~~Dr Mire Zloh~~ (NMR and structural chemistry)

## Lecturers

HYPERLINK "[http://www.pharmacy.ac.uk/stephen\\_hilton.html](http://www.pharmacy.ac.uk/stephen_hilton.html)" \t "\_self" ~~Dr Stephen Hilton~~ (medicinal chemistry)

HYPERLINK "<http://www.pharmacy.ac.uk/gparkinson.html>" \t "\_self" ~~Dr Gary Parkinson~~ (structural biology)

HYPERLINK "[http://www.pharmacy.ac.uk/jose\\_prieto-garcia.html](http://www.pharmacy.ac.uk/jose_prieto-garcia.html)" \t "\_self" ~~Dr Jose Prieto Garcia~~ (phytochemistry)

HYPERLINK "<http://www.pharmacy.ac.uk/gwells.html>" \t "\_self" ~~Dr Geoff Wells~~ (medicinal chemistry)

HYPERLINK "[http://www.pharmacy.ac.uk/min\\_yang.html](http://www.pharmacy.ac.uk/min_yang.html)" \t "\_self" ~~Dr Min Yang~~ (mass spectroscopy)

## RCUK Academic Fellow

HYPERLINK "[http://www.pharmacy.ac.uk/paul\\_stapleton.html](http://www.pharmacy.ac.uk/paul_stapleton.html)" \t "\_self" ~~Dr Paul Stapleton~~ (microbiology)

## Research

Current research in medicinal chemistry and drug discovery is focussed in three principal therapeutic areas: cancer, neurodegenerative diseases and anti-infectives, although we welcome applications from outstanding scientists who work outside these fields. Synthetic chemistry, structure-based drug design, chemical biology and natural product identification and evaluation are particular strengths. Several drug discovery programmes in cancer and anti-infective agents are progressing through to clinical and pre-clinical evaluation. Staff currently hold several CRUK project and programme grants. Other support has come from the Wellcome Trust, BBSRC, EPSRC, MRC, the EU and the pharmaceutical industry.

Multi-disciplinary drug discovery at the School is strongly encouraged, with a number of staff members employing both medicinal chemistry and chemical biology approaches to particular problems. The School also has a number of highly successful and well-funded programmes in drug formulation and nanoparticle drug delivery, with significant chemical components.

Infrastructure for chemical research at the School is excellent, with an extensive range of

modern instrumentation including 500 and 400 MHz NMR and in-house macro- and small-molecule crystallographic facilities. There are extensive associated facilities for cell culture, protein chemistry and molecular biology.

## Centres and Groups

### Drug Discovery - Cancer Research

HYPERLINK "<http://www.pharmacy.ac.uk/ccm.html>" \t "\_self" ~~Centre for Cancer Medicines~~ - fosters multi- disciplinary collaborations between those members of the School involved in various aspects of cancer studies, and enhances links with external organisations and cancer research groups, especially with clinical colleagues. It is also the focus for encouraging collaborations in cancer therapeutics within the School.

HYPERLINK "<http://www.pharmacy.ac.uk/bmsg.html>" \t "\_self" ~~Cancer Research UK Biomolecular Structure Group~~ works on the structure nucleic acids and their interaction with small molecules and proteins. Its approach is to analyse the molecular structures of nucleic acids and their complexes by means of X-ray crystallography and molecular modelling/simulation methods. This knowledge is applied to the rational design of novel small-molecule inhibitors for potential use as selective anticancer agents. The group is particularly well-known for its work on quadruplex nucleic acids.

### Natural Products Research

Research in **Pharmacognosy and Phytotherapy** focuses on the discovery of new therapeutic natural products with possible uses as antimicrobials, antimalarial, anticancer and anti-inflammatory agents and on the benefits and risks of food supplements. Studies also focus on how and why people use herbal medicines and food supplements.

### Neurosciences

The HYPERLINK "[http://www.pharmacy.ac.uk/molec\\_neuroscience.html](http://www.pharmacy.ac.uk/molec_neuroscience.html)" \t "\_self" ~~Molecular Neuroscience Research Group~~ aims to establish the molecular compositions, pharmacological properties, regulation, assembly and trafficking of pivotal brain proteins using a combination of molecular biological and immunochemical techniques, yielding potential novel targets for the development of new, receptor subtype-selective, therapeutic compounds for the treatment of stroke (NMDA receptors) and anxiety (GABA<sub>A</sub> receptors).

### Teaching

All academic members of staff are expected to undertake teaching responsibilities. Staff contribute to teaching for the School-wide undergraduate MPharm degree in the areas of drug discovery, medicinal chemistry, pharmaceutical and analytical chemistry and pharmacognosy/medicinal plants.

The department is responsible for two one-year master courses. The MSc in Drug

Discovery, first offered in 2003, has proved highly popular and recruits over 30 international and home students per year. The MSc in Pharmacognosy, first offered in 2008, recruits about 12-15 students per year interested in natural products discovery and herbal medicines. In addition we offer options within the newly-established research-based MRes programme. There is extensive industrial involvement in the MSc programmes, especially in Drug Discovery and a number of students have industrial placements for their research projects.

### **Location and facilities**

The department is located in the School's main building in Brunswick Square. There are three principal synthetic chemistry research laboratories, with a total of over 30 fume hoods. Other experimental areas provide facilities for cell culture and biological experimentation. Several of the laboratories are in the recently-built Molecular Pharmacy Research wing. Chemistry research has a full range of analytical support services – NMR and mass spectroscopy are run on a shop basis with experienced support staff. Other facilities within the School include a BSU, electron microscopy and confocal microscopy. There are a number of dedicated study areas for PhD students.

The specialist Pharmacy library is on this site, which includes an excellent chemistry section. The full range of UCL library facilities will be available to the School after 1<sup>st</sup> January 2012. The School will maintain a comprehensive local administration supported by UCL corporate services.

## **Job Description**

The School of Pharmacy and UCL invite applications for a Chair in Medicinal Chemistry from candidates with an outstanding record of academic research and publication to carry out research and teaching and take a leadership role within the School. Specifically, the responsibilities of this new Chair will include:

### **Research**

To conduct a vigorous, high-level research programme in one or more branches of medicinal chemistry and to provide leadership in these areas;  
To generate external income to support this research programme;  
To publish regularly in high-quality journals and participate in national and international conferences;  
To provide training and supervision for research students and post-doctoral staff;  
To develop productive links with colleagues undertaking relevant work elsewhere in UCL and to establish external collaborations both nationally and internationally.

### **Teaching**

To contribute to the Department's undergraduate and postgraduate teaching programmes and to be involved in developing new modules and courses;  
To provide and supervise research projects for both undergraduate and postgraduate courses;  
To contribute to curriculum development;  
To contribute to the assurance and enhancement of teaching quality in the School;  
To contribute to the recruitment and selection of students at all levels.

### **Management and Administration**

To be involved as necessary with staff recruitment and assessment at all levels;  
To mentor and supervise junior research staff and faculty;  
To undertake appropriate administrative tasks within the School and UCL more widely, in line with responsibilities assigned by the Director of the School;  
To contribute to the management activities of the School and UCL where required;  
To comply with policies on safety, equal opportunities, and other matters.

In addition to the person specification criteria, the successful candidate will need to meet UCL's expectations of Management competency as outlined in 'Competency expectations of post holders with management responsibilities' ( [HYPERLINK "http://www.ucl.ac.uk/hr/competencies/index.php"](http://www.ucl.ac.uk/hr/competencies/index.php) ) <http://www.ucl.ac.uk/hr/competencies/index.php>

### **Person Specification**



	E = e s s e n t i a l D = d e s i r a b l e	Assessed by: A = application I = interview
<b>Qualifications / Certification</b>		
Higher academic degree e.g. PhD in a relevant subject, and evidence of a high level of attainment in research publications	E	A / I
<b>Skills / Experience</b>		
Track record of extensive publications in high quality peer-reviewed scientific journals and conferences	E	A / I
Active research profile at international level	E	A / I
Continuing track record of external research grant funding	E	A / I
Involvement in knowledge transfer	D	A / I
Experience of teaching at undergraduate and/or postgraduate level	E	A / I
Experience of programme and course development	D	A / I
Ability to carry out administrative tasks in a competent and efficient manner	E	A / I

Evidence of active participation in departmental and/or institutional wide committees and

## Working Parties

D	A / I	
Excellent communication skills (verbal and written); good command of written and spoken English	E	A / I
<b>Knowledge</b>		
Knowledge and experience of UK university teaching, research and administration	D	A / I
Awareness of Higher Education issues and the possible implications for the Department	D	A / I
<b>General</b>		
Commitment to high quality teaching and to fostering a positive learning environment for undergraduate and Masters students	E	A / I
Commitment to equal opportunities and the ability to work harmoniously with colleagues and students of all cultures and backgrounds	E	A / I
Involvement in professional activities external to the workplace	D	A / I

## Leadership

Ability to lead, develop and motivate colleagues, working as part of a team to achieve Departmental, Faculty or institutional goals	E	A / I
Commitment to excellence in areas of teaching, research and administration	E	A / I
Awareness of the wider context (College wide, national and international as appropriate)	E	A / I

Effective self management and focus

E

A / I

### **People Management**

Successful supervision and mentoring of graduate students and/or research staff E

A / I

Trained in interview and selection skills D

A / I

### **Resource Management**

Ability to manage project and other workloads to meet timescales, budgets and deliverables E

A / I

November 2011

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