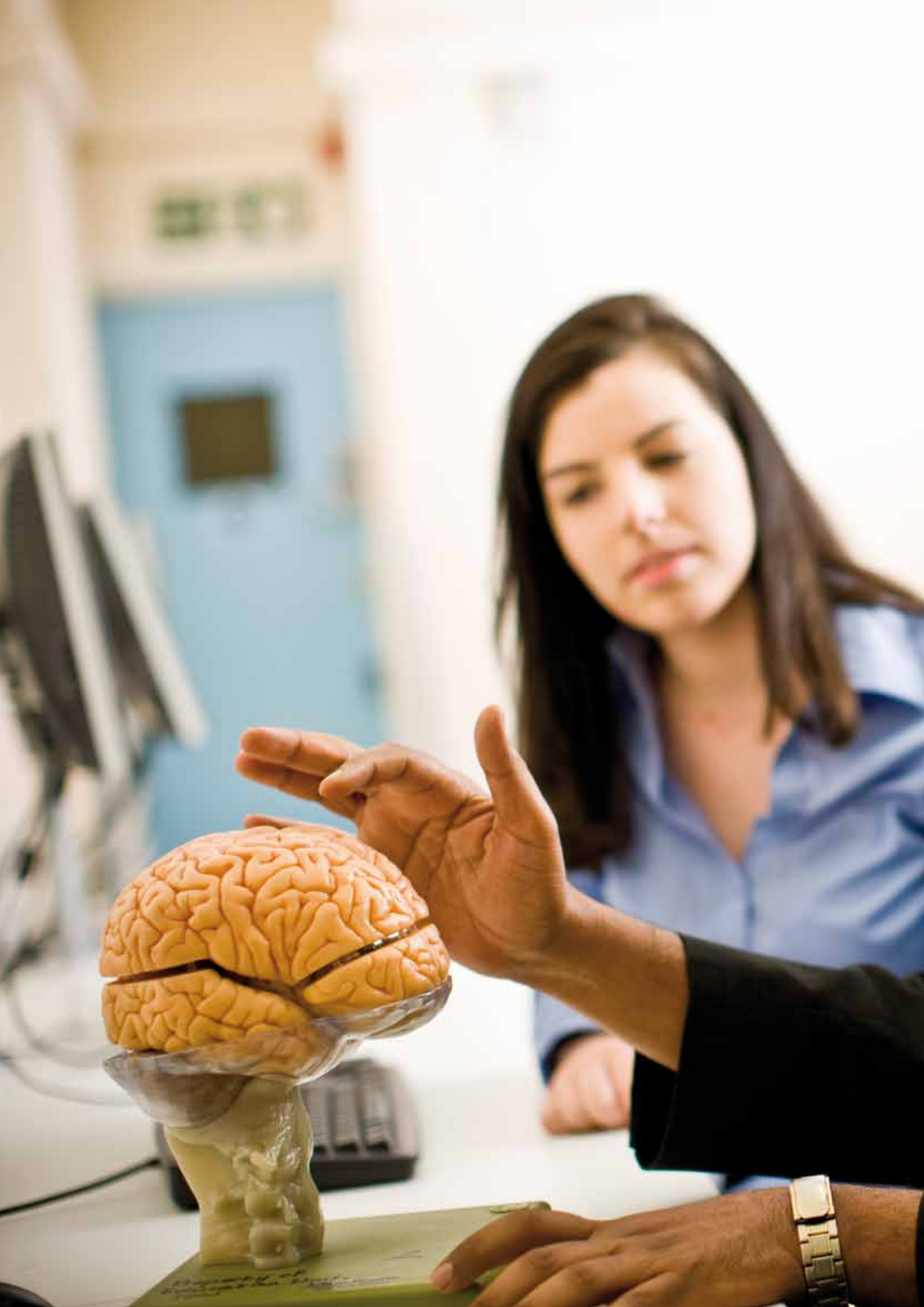

FACULTY OF BRAIN SCIENCES

The Faculty of Brain Sciences brings together outstanding scientists and teachers studying every level of central nervous system function. Areas of research and education encompass every aspect of neuroscience, including: basic molecular signalling pathways; the structure and function of neural systems and circuits; perception, cognition and language; as well as mental health and neurological disease. The translation of research into tangible clinical benefit is a strategic priority, necessitating extensive collaboration, not only with the NHS, but also within UCL, as well as nationally and internationally. The faculty is an exciting place to pursue graduate study, with a strong focus on interdisciplinary training, supported by world-leading scientists delivering research-embedded teaching and expert supervision.

Ear Institute 56

Mental Health Sciences 57

Neurology 58

Ophthalmology 59

Division of Psychology and Language Sciences 60

Clinical, Educational and Health Psychology 61

Institute of Cognitive Neuroscience 62

Cognitive, Perceptual and Brain Sciences 63

Developmental Science 64

Language and Communication 65

Linguistics 66

Speech, Hearing and Phonetic Sciences 67

UCL Interaction Centre 68

42 academic staff
20 research students
59 taught graduate students

Research Assessment 2008
70% rated 4* or 3* (see page 5)

EAR INSTITUTE

- The UCL Ear Institute is the largest and most multi-disciplinary centre for research into hearing and deafness in Europe.
- We provide a unique environment for graduate teaching and research training in hearing sciences and related clinical subjects.
- Our programmes draw on clinical expertise from the associated Royal National Throat, Nose and Ear Hospital, housing the largest clinical audiology unit in the UK.
- The UCL Ear Institute and Royal National Institute for Deaf People Libraries provide a collaborative housing of the largest library in Europe that specialises in deafness and hearing loss.

Research programmes		
MPhil/PhD	FT3	**PT5**
MD(Res)	FT2	**PT2**

Research areas are:

- **Cell biology of hearing and balance loss**: understanding how to protect sensory hair cells from damage; repair of the sensory epithelia; hair cell regeneration; stem cell therapies
- **Cellular physiology of hair cells**: mechanisms of transduction; biophysics of afferent synapses; physiological characterisation of auditory neurons; electrophysiology
- **Clinical audiology**: evaluating current approaches for hearing impairment, tinnitus, cochlear implants, balance disorders and new diagnostic tools
- **Cochlear homeostasis**: epithelial barrier functions; roles of gap junctions; fluid and ion homeostasis
- **Cognitive neuroscience**: brain mechanisms of sound localisation; coding complex sounds in auditory cortex; molecular physiological basis of synaptic and neural activity
- **Molecular genetics of hearing and deafness**: identifying susceptibility genes for age-related hearing loss
- **Psychophysics and speech perception**: spectral and temporal processing, pitch perception, binaural hearing, development of speech perception, music perception
- **Testing auditory function**: otoacoustic emissions to identify susceptibility to hearing loss; development of sensitive audiological test procedures for diagnostic clinical use.

Entry requirements

A UK Master's degree in a relevant discipline, or a minimum of an upper second-class UK Bachelor's degree from a UK university, or an overseas qualification of an equivalent standard.

Career prospects

Recent graduates have gone on to work in research institutions across the world (Zhongshan Ophthalmic Center), higher education (Royal Veterinary College, Oxford University, UCL), schools, the NHS (Moorfields Eye Hospital) and other disciplines.

Taught programmes		
Advanced Audiology MSc (flexible 3-5 years)	FT1	**PT2**
Postgraduate Diploma (flexible 3-5 years)	*FT9m*	
Audiological Science MSc	FT1	**PT2**
Postgraduate Diploma	*FT9m*	
Audiovestibular Medicine MSc (flexible 3-5 years)	FT1	**PT2**
Postgraduate Diploma	*FT9m*	
Postgraduate Certificate	*FT9m*	
ENT Practice (Otology) MSc	FT1	**PT2**
Postgraduate Diploma	*FT9m*	
ENT Practice (Voice Pathology) MSc	FT1	**PT2**
Postgraduate Diploma	*FT9m*	

Entry requirements

A minimum of a lower second-class UK Bachelor's degree in a relevant discipline or an overseas qualification of an equivalent standard. For Advanced Audiology MSc, applicants should have at least two years' clinical experience in audiology or a related discipline. For Audiological Science MSc applicants should have a UK Bachelor's degree in a related subject (typically science, engineering, psychology) or an overseas qualification of an equivalent standard. For Audiovestibular Medicine MSc and ENT Practice (Otology) MSc, applicants must hold a medical degree. The ENT Practice (Voice Pathology) MSc is suitable for both speech and language therapists and laryngologists; other professionals with relevant work experience may also be considered.

Career prospects

The vast majority of students graduating recently have gained employment within an audiology or audiovestibular medicine setting within the NHS, including senior audiological roles at Great Ormond Street Hospital and the Royal National Throat, Nose and Ear Hospital. Others have gone on to pursue further study at institutions including UCL and Cairo University.

Carolina Leal
Advanced Audiology MSc

"UCL is one of the top universities in the country. In addition, the Ear Institute (where I study) is next door to the Royal National Throat, Nose and Ear Hospital (where I work) and I can make use of the opportunities that both places offer in terms of research and clinical practice and translate my studies into my everyday job. I am already an audiologist and am doing the MSc to update my knowledge so that I can take on new responsibilities in my job afterwards and hopefully do research. Originally from Brazil, I have been living in London for seven years and absolutely love it. It's a multi-cultural place where you can make a lot of friends so you never feel alone."

Contact details

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Tuition fees

Up-to-date tuition fee information is available at www.ucl.ac.uk/current-students/money

Funding

There may be opportunities through individual research grants from various sources.

Further information on pages 26-31

Related departments

Cell and Developmental Biology, page 89

Neuroscience, Physiology and Pharmacology, page 92

Speech, Hearing and Phonetic Sciences, page 67

65 academic staff
27 research students
24 taught graduate students

Research Assessment 2008
70% rated 4* or 3* (see page 5)

MENTAL HEALTH SCIENCES

- A unique interdisciplinary grouping of international experts in psychiatry encompassing epidemiological, biological, genetic and health services research as well as trials.
- Close collaborations with the Institute of Neurology and the Division of Infection and Immunity provide wide-ranging academic resources and a rich environment in which to study.
- Unrivalled access to clinical and community samples in which to conduct cutting-edge translational research, having strong collaborative links with five NHS Trusts operating within diverse, multi-cultural populations.
- For graduate research, detailed and considered discussions with prospective supervisors and the graduate tutor are provided prior to admission, to ensure research and career aspirations match with individual student's experiences.

Research programmes		
MPhil/PhD	FT3	**PT5**
MD(Res)	FT2	**PT2**

Staff of the department work in three thematic research groups:

- Common mental disorders
- Dementia and disorders of old age
- Psychosis.

Each theme covers research across the whole range of methods. Our expertise covers the full range of mental health sciences research including biological psychiatry, neuroimaging, psychiatric genetics, epidemiology, health services research (including quantitative and qualitative methods), social psychiatry and clinical trials. It extends to psychiatric genetics, covering schizophrenia, dementia, alcohol dependence and affective disorders; to psychiatric epidemiology; and to common mental disorders, psychosis and the mental health of older people, including dementia research.

Entry requirements

A recognised medical qualification, or a Master's degree, or a minimum of an upper-second class Bachelor's degree from a UK university, or an overseas qualification of an equivalent standard.

Career prospects

Recent graduates have taken up academic posts in UK universities and others have progressed to senior clinical positions in NHS Trusts.

Taught programme	
Psychiatric Research MSc *Postgraduate Diploma* *(flexible up to 5 years)*	**PT2**

Entry requirements

A minimum of an upper second-class UK Bachelor's degree in a relevant discipline, or an overseas qualification of an equivalent standard.

The Psychiatric Research MSc is intended for medically qualified doctors working in psychiatry and those who are not medically trained but are academically highly qualified and have substantial experience working in mental health.

Career prospects

Students graduating in the last three years have entered research (UCL, Mental Health Service, charities), MRC/NIHR training fellowships academic (UK and European universities including the Universities of East Anglia and Milan) and health care professional roles in mental health trusts and hospitals.

Sumeet Jain
Cultural Psychiatry PhD

"My PhD in Cultural Psychiatry has provided me with a stimulating environment for my learning and career development. As a researcher you have access to a range of specialist areas in mental health and social sciences across the university as well as excellent facilities and outstanding supervisory and pastoral support. I have had several important learning opportunities including involvement in international teaching and research initiatives. The UCL Graduate School runs useful courses in a range of soft skills as well as providing support to attend relevant conferences."

Contact details

Research programmes:
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Psychiatric Research MSc:
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TEL +44 (0)20 7679 9475

Tuition fees

Up-to-date tuition fee information is available at www.ucl.ac.uk/current-students/money

Funding

All funding opportunities are advertised at: www.ucl.ac.uk/infection-immunity.

Further information on pages 26-31

Related departments

Epidemiology and Public Health, page 120

Health Informatics and Multiprofessional Education, page 121

Infection and Population Health, page 122

Neurology, page 58

Primary Care and Population Health, page 123

85 academic staff
220 research students
70 taught graduate students

Research Assessment 2008
70% rated 4* or 3* (see page 5)

NEUROLOGY

- The UCL Institute of Neurology, together with the National Hospital for Neurology and Neurosurgery, forms a national and international centre at Queen Square for teaching in neurology and neuroscience.
- UCL Neurosciences is currently ranked second in the world by Thomson Reuters Essential Science Indicators.
- Four of the top 12 most highly cited authors working worldwide in neuroscience and behaviour work at the institute
- Our Postgraduate Diploma in Clinical Neurology, offered online by distance learning, is a world first.

Research programmes		
MPhil/PhD	FT3	**PT5**
MD(Res)	FT2	**PT2**

Research is focused within the following eight departments:

- Brain Repair and Rehabilitation
- Clinical and Experimental Epilepsy
- Clinical Neuroscience (Royal Free campus)
- Molecular Neuroscience and the Reta Lila Weston Institute
- Neurodegenerative Disease
- Neuroinflammation
- The Sobell Department of Motor Neuroscience and Movement Disorders
- The Wellcome Department of Imaging Neuroscience.

Further details of our research and a list of selected publications are available via our website (www.ion.ucl.ac.uk).

Entry requirements

A first or an upper second-class UK Bachelor's degree in an appropriate subject, or an overseas qualification of an equivalent standard, or a recognised taught Master's degree, is required. In some areas of clinical research, General Medical Council (GMC) registration may also be required.

To be eligible for the MD(Res) programme, applicants must have obtained the MBBS degree or some other registerable primary qualification in medicine, or an overseas qualification of an equivalent standard, and be eligible for full registration with the UK General Medical Council (GMC).

MD(Res) applicants are normally hospital clinicians undertaking research associated with their employment. Other applicants wishing to pursue clinical research should apply for MPhil/PhD admission.

Career prospects

Recent graduates have taken up academic posts at UCL, Radbould University and the Universities of Oxford, Edinburgh and Queensland. Clinically trained research students have taken up specialist registrar and consultant level posts on re-entering the NHS.

Taught programmes		
Advanced Neuroimaging MSc	FT1	**PT2**
Brain and Mind Sciences Dual Master's MSc	FT2	
Clinical Neurology MSc	FT1	
Postgraduate Diploma	*FT6m*	
Clinical Neuroscience MSc	FT1	
Neurology (for Clinical Trainees) MSc (flexible 2-4 years)		
Clinical Neurology (by Distance Learning) Postgraduate Diploma	*FT6m*	

Entry requirements

For MSc programmes a first or second-class UK Bachelor's degree in an appropriate subject, or an overseas qualification of an equivalent standard.

Applicants for the Dual Master's in Brain and Mind Sciences must be able to follow a postgraduate curriculum in both the French and English languages as the programme involves a year of study in London and a year of study in Paris.

Applicants for the Clinical Neurology MSc must be medically qualified, hold registration with the UK General Medical Council (GMC), or be fully registered in their home country, and have at least two years of postgraduate experience in clinical medicine, with at least six months in neurology.

Applicants for the Neurology (for Clinical Trainees) MSc must hold a National Training Number verifiable through the London NHS Deanery and must have passed their MRCP examination.

Career prospects

Approximately one third of our MSc students go on to study medicine. One third will continue on to higher degrees at UCL and elsewhere, and one third have entered professional occupations with organisations such as the Royal Bank of Scotland and Barclays Bank.

Varun Sethi
Clinical Neurology MSc

"UCL is known for its quality of education and the complete 'educational experience' that it offers students. In addition, being an international student, the charm of being in a city like London and in a university known for its diversity of students meant that coming to UCL was more of a dream than a choice. UCL was one of the few universities that offered 'medics' like me the opportunity to bridge the gap between the clinical and the academic worlds, ensuring excellence and parallel growth in both. Being attached to the Institute of Neurology has been an experience to cherish all the way."

Contact details

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Tuition fees

Up-to-date tuition fee information is available at www.ucl.ac.uk/current-students/money

Funding

MPhil/PhD Studentships: Medical Research Council DTA Studentships. MRC Capacity Building Studentships and UK charity studentships are also awarded.

Further information on pages 26-31

Related departments

Cell and Developmental Biology, page 89

Clinical, Educational and Health Psychology, page 61

Gatsby Computational Neuroscience Unit, page 94

Mental Health Sciences, page 57

Psychology and Language Sciences, page 60

OPHTHALMOLOGY

Research Assessment 2008
70% rated 4* or 3* (see page 5)

- The UCL Institute of Ophthalmology is a premier centre in the world for the study of vision and the mechanisms, diagnosis and therapy of eye disease.
- World-leading investigators come together to create a unique, exciting, goal-oriented and highly creative multi-disciplinary environment.
- From visual neuroscience to retinal imaging, and stem cell and gene therapy to epidemiology, the opportunities for graduate students are immense.
- Close links with laboratories in Europe and North America, strong clinical collaborations and growing commercial partnerships enrich the opportunities for learning and provide networks for future career development.

Research programmes		
MPhil/PhD	FT3	**PT5**
MD(Res)	FT2	**PT2**

Principal research areas are:

- **Cell science**: angiogenesis; membrane trafficking; annexin biology; tight junction biology; cytoskeleton; cell signalling; leukocyte trafficking; chaperones; neurodegeneration; control of wound healing
- **Genetics and gene therapy**: single gene and complex genetics of eye disease; genetic epidemiology; gene therapy for eye disease from experimental models to clinical trials
- **Multi-disciplinary studies of disease**: age-related macular degeneration; glaucoma; diabetes; retinitis pigmentosa; ocular scarring; neurodegeneration
- **Ocular immunology and allergy**: applied ocular immunology; understanding basic mechanisms causing disease to identify novel therapeutic approaches; determining to what extent T-cells, eosinophils and mast cells damage the cornea and conjunctiva in allergic eye disease
- **Regenerative medicine**: stem cell therapy for eye disease; transplantation strategies (corneal and retinal disease); optic nerve regeneration
- **Visual neuroscience**: neurophysiology of central visual processing; imaging of retina and CNS; neuronal plasticity; evolutionary paradigms of vision; visual pigments.

Entry requirements

MPhil/PhD: candidates normally require a minimum of an upper second-class Bachelor's degree from a UK university (or its overseas equivalent) in a relevant subject.

MD(Res): candidates must have a clinical orientation and must a) have obtained the MBBS degree of the University of London; or some other registerable primary qualification in Medicine, and b) be eligible for full registration, or hold limited registration, with the General Medical Council (GMC).

Career prospects

Recent graduates have taken up a number of academic posts at UK universities including UCL and Oxford. Others have pursued careers in industry or continued with clinical or other medically related careers.

Taught programmes	
Biology of Vision MSc	FT1
Clinical Ophthalmology MSc (flexible 2-5 years)	FT1
Postgraduate Diploma (flexible up to 2 years)	*FT1*
Postgraduate Certificate (flexible up to 2 years)	*FT12weeks*
Ophthalmology MSc (flexible 2-5 years)	FT1
Postgraduate Diploma (flexible up to 2 years)	*FT1*
Postgraduate Certificate (flexible up to 2 years)	*FT12weeks*

Entry requirements

Biology of Vision MSc: applicants must have a minimum of a second-class UK Bachelor's degree in a relevant subject, or an overseas qualification of an equivalent standard.

Clinical Ophthalmology MSc and Ophthalmology MSc: applicants must have a minimum of a second-class UK Bachelor's degree in optometry, orthoptics or a medical discipline, or an overseas qualification of an equivalent standard.

Career prospects

Clinical Opthalmology graduates are well placed to pursue further academic study, for example by embarking on an MD(Res) or PhD or continuing where relevant with clinical or medical careers. The Biology of Vision MSc provides excellent preparation for a PhD or a successful research career in academia or for positions in the public or commercial sectors. For those pursuing a clinical career in Ophthalmology it also provides excellent training in eye-related sciences and research.

Andrea Pisauro
Visual Neuroscience PhD

"UCL is among the very best universities in the world and the best European university for neuroscience. Studying the roles and the functions of the higher cortical areas in the visual system allows me to ask fundamental questions about the brain, its ability and its goals. The visual system in general, given the vast amount of knowledge already gained in 50 years of research, allows deeper questions on the specificity of the computational properties of the brain during perception. At the end of my studies I will probably try to continue working in research and specifically neuroscience, even though I'll keep an eye on what exciting opportunities are going on in the rest of the world!"

Contact details

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Tuition fees

Up-to-date tuition fee information is available at www.ucl.ac.uk/current-students/money

Funding

Normally several studentships available each year.

Further information on pages 26-31

Related departments

Brain Sciences departments, see list page 55

Medical Sciences departments, see list page 107

Population Health Sciences departments, see list page 117

DIVISION OF PSYCHOLOGY AND LANGUAGE SCIENCES

130 academic staff
387 research students
309 taught graduate students

- The Division of Psychology and Language Sciences undertakes world-leading research and teaching in mind, behaviour, and language.
- We provide an outstanding learning environment, with cutting-edge resources including a behavioural neuroscience laboratory, a centre for brain imaging, and extensive laboratories for research in language sciences.
- Our research is funded by the UK Research Councils, charities such as the Wellcome Trust, government departments, the EU, and the NHS.
- Opportunities for graduate students to work with world-renowned researchers exist in all areas of investigation, from basic processes to applied research.

Taught programmes		
Linguistics MRes (with specialisation in Phonology; Pragmatics; or Syntax)	FT1	**PT2**
Speech, Language and Cognition MRes	FT1	**PT2**
Linguistics MA	FT1	**PT2**
Phonetics MA	FT1	**PT2**
Cognitive and Decision Sciences MSc	FT1	**PT2**
Cognitive Behavioural Therapy for Children and Young Adults MSc (flexible 2-3 years)		**PT2**
Postgraduate Diploma		*PT2*
Postgraduate Certificate		*PT1*
Cognitive Neuroscience MSc	FT1	**PT2**
Developmental Neuroscience and Psychopathology MSc	FT2	
Developmental Psychology and Clinical Practice MSc	FT21m	
Human-Computer Interaction with Ergonomics MSc	FT1	**PT2**
Postgraduate Diploma	*FT9m*	*PT2*
Postgraduate Certificate	*FT3m*	*PT2*
Language Sciences MSc (with specialisation in Language Development; Linguistics with Neuroscience; or Speech and Hearing Sciences)	FT1	**PT2**
Neuroscience, Language and Communication MSc	FT1	**PT2**
Research Methods in Psychology MSc	FT1	**PT2**
Social Cognition: Research and Applications MSc	FT1	**PT2**

Taught programmes *continued*		
Speech and Language Sciences MSc	FT2	
Theoretical Psychoanalytic Studies MSc	FT1	**PT2**
Low Intensity Cognitive Behavioural Interventions Postgraduate Diploma	*FT9m*	

Entry requirements

Normally a minimum of an upper second-class Bachelor's degree from a UK university or an overseas qualification of an equivalent standard.

Career prospects

Our graduates go on to a wide variety of careers including counsellors and therapists, interpreters, journalists, psychologists, speech and language therapists, translators. Those interested in pursuing careers as educational or clinical psychologists undertake doctoral programmes. Others continue studying towards a PhD in order to pursue an academic career while some study and/or work in business, computer and software design, finance, IT, law, management, publicity and advertising, publishing and teaching.

Victoria Edwards
Speech and Language Sciences MSc

"I chose UCL because of its high standards, interesting location and challenging programme. When I qualify I intend to gain employment as a speech and language therapist working with adults who have acute communication and swallowing difficulties (longer term within the field of head and neck cancer) and my Master's is well known within the profession I am entering into."

Contact details

For MRes, MSc and MA programmes, please refer to: www.ucl.ac.uk/lifesciences-faculty/degree-programmes/psychology-language-sciences

Tuition fees

Up-to-date tuition fee information is available at www.ucl.ac.uk/current-students/money

Funding

Further information on pages 26-31

Related departments

Clinical, Educational and Health Psychology, page 61

Cognitive Neuroscience, page 62

Cognitive, Perceptual and Brain Sciences, page 63

Developmental Science, page 64

Language and Communication, page 65

Linguistics, page 66

Speech, Hearing and Phonetic Sciences, page 67

UCL Interaction Centre, page 68

CLINICAL, EDUCATIONAL AND HEALTH PSYCHOLOGY

54 academic staff
276 research students

Research Assessment 2008
75% rated 4* or 3* (see page 5)

- We are committed to world-class research applying psychological theory and methods to major problems of health, mental health and education and the effective dissemination of knowledge to the psychology community, to patients and carers.
- In the 2008 RAE, we accounted for over 700 peer-reviewed papers during the review period (2001–2007) and £33million in grant funding.
- There is immense international interest in the work of our members of staff and the rate of completed PhDs is impressive.

Research programmes		
MPhil/PhD	FT3	**PT5**
Doctorate in Clinical Psychology	FT3	
Doctorate in Educational and Child Psychology	FT3	
Doctorate in Educational Psychology		**PT4**

Research areas are:
- Brain behaviour and cognition
- Clinical psychopharmacology
- Cognitive behaviour therapy (CBT) theory and practice
- Developmental psychology
- Health psychology
- Social, educational and occupational psychology.

Entry requirements

Applicants for the MPhil/PhD should possess a minimum of an upper second-class UK Bachelor's degree or a taught Master's degree, or the overseas equivalent, in a relevant subject.

Applicants for the Specialist Doctorates should note that additional requirements, including relevant work experience, will apply. UK and EU applications for the Doctorate in Clinical Psychology and UK applications for the Doctorate in Educational and Child Psychology are handled by Clearing Houses.

Career prospects

A majority of PhD students go on to postdoctoral positions and academic careers at institutions including UCL, Oxford University, Macquarie University, Yuanze University, Harvard University, Exeter University and the Eugenio Medea Institute. Many graduates of our specialist doctorates go on to become professional practitioners either in the NHS, local councils, charities, in private practice or other settings.

Chia-Ying Chou
Clinical, Educational and Health Psychology MPhil/PhD

"UCL is rich in academic resources and studying here provides me with the great opportunity to work with many outstanding researchers. My study has been focused on the memory process of post-traumatic stress disorder. I am very interested in how people vary in the way they remember and react to traumatic events and how this influences their psychological outcome. As an international student from Taiwan, living in such a culturally diverse city has been a really novel and interesting experience for me. I have not only been able to learn about the cultures of different countries, but have also had the chance to co-operate with other international researchers who are at the top of their fields."

Contact details

MPhil/PhD and international applicants for Clinical Psychology programme:
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Funding

Further information on pages 26-31

Related departments

Cognitive Neuroscience, page 62

Cognitive, Perceptual and Brain Sciences, page 63

Developmental Science, page 64

Epidemiology and Public Health, page 120

INSTITUTE OF COGNITIVE NEUROSCIENCE

17 academic staff
31 research students

Research Assessment 2008
70% rated 4* or 3* (see page 5)

- An interdisciplinary research institute that brings together researchers from different fields with a common interest in the workings of the human mind and brain.
- We have £22.6million in research funding and numerous prizes.
- The institute co-locates top researchers from many different disciplines in Queen Square, a London hub for research activity in the field.
- Located next to the unique patient populations of the National Hospital for Neurology and Neurosurgery and to state-of-the-art brain imaging facilities.

Research programmes		
MPhil/PhD	FT3	**PT5**

Research areas are:
- Cognitive neurology
- Cognitive neuropsychiatry
- Cognitive neuropsychology
- Cognitive neuroscience.

Areas of human cognition studied include:
- Attention
- Awareness
- Cognitive control
- Development
- Executive function
- Memory
- Motor control
- Numeracy and literacy
- Social perception
- Spatial cognition
- Speech communication
- Visual cognition.

Entry requirements

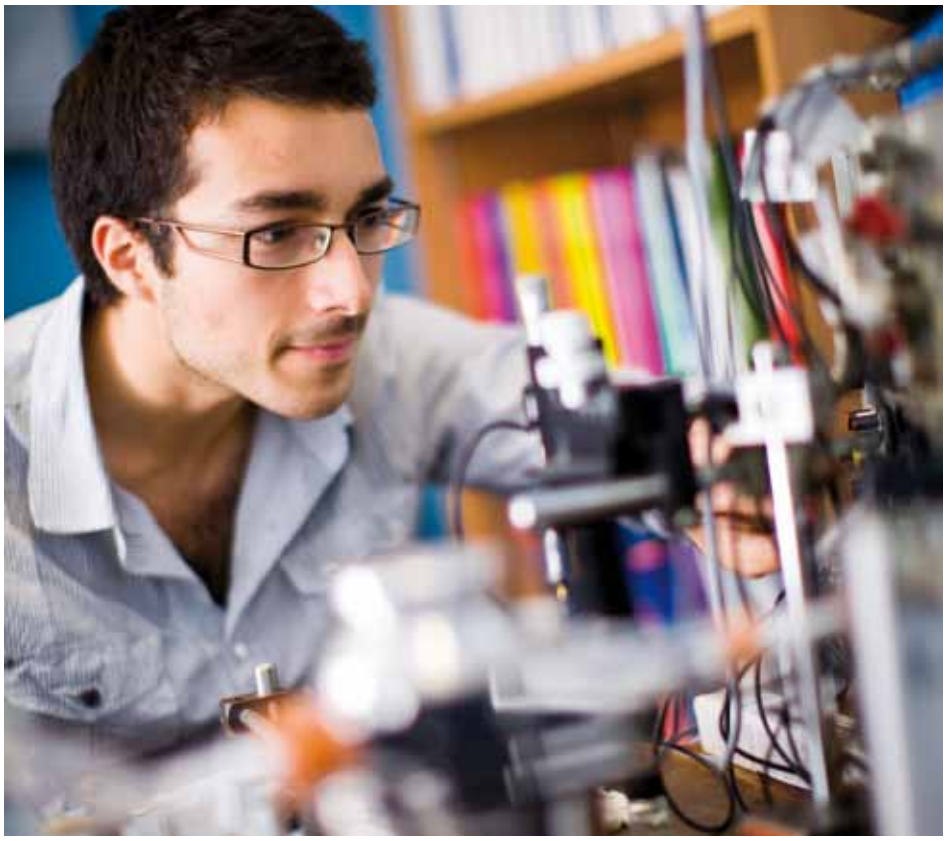
A minimum of a second-class Bachelor's degree in a relevant subject from a UK university, or an overseas qualification of an equivalent standard, and some relevant research experience.

Career prospects

The vast majority of graduating PhD students have gone onto postdoctoral positions in leading universities such as UCL, Cambridge and Oxford in the UK and UCLA and Berkeley in the USA.

Jennifer Cook
Neuroscience PhD

"The Institute of Cognitive Neuroscience (ICN) is packed full of internationally renowned scientists and attracts top speakers. It's a great place to learn about cutting-edge cognitive neuroscience research. I am very grateful for the PhD funding I have received from the Wellcome Trust. This has enabled me to use a number of different techniques, including neuroimaging, to answer the questions that interest me – namely the mechanisms that underpin the development of very basic social abilities and why these develop atypically in some people. The travel funding I have received has enabled me to communicate my research findings in a number of countries including France, Belgium, Germany and the USA."



Contact details

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Tuition fees

Up-to-date tuition fee information is available at www.ucl.ac.uk/current-students/money

Funding

Funding is available from UK Research Councils, Wellcome Trust Studentships and the Brain Research Trust. Teaching assistantships may also be available.

Further information on pages 26-31

Related departments

Clinical, Educational and Health Psychology, page 61

Cognitive, Perceptual and Brain Sciences, page 63

Neurology, page 58

Neuroscience, Physiology and Pharmacology, page 92

COGNITIVE, PERCEPTUAL AND BRAIN SCIENCES

24 academic staff
46 research students

Research Assessment 2008
75% rated 4* or 3* (see page 5)

- We offer an outstanding research and teaching environment providing opportunities for graduate students to work with world-renowned researchers across a wide spectrum of topics.
- Our impressive research facilities include functional imaging, TMS, eye-tracking and motion capture, and a multi-modal communication lab, in addition to state-of-the-art equipment for most behavioural research.
- There are extensive collaborations with UK and international partners on a range of research projects, with UK Research Council, charitable trust and European funding.
- Our staff are involved in the Centres for Human Communication; Economic Learning and Social Evolution; Mathematics and Physics in the Life Sciences and Experimental Biology; Neuroimaging and the Institute of Behavioural Neuroscience.

Research programmes		
MPhil/PhD	FT3	**PT5**

Research areas are:
- Behavioural neuroscience
- Cognitive neuroscience of language
- Comparative cognition and behaviour
- Deafness, cognition and language
- Language and memory
- Language processing
- Neural basis of spatial cognition
- Reasoning and decision-making
- Social cognition
- Speech production and perception
- Visual perception and modelling.

Entry requirements

Normally a minimum of an upper second-class UK Bachelor's degree or a taught UK Master's degree, or the overseas equivalent, in a relevant subject.

Career prospects

Recent graduates have pursued postdoctoral research positions at UCL. Others have found employment in translation, interpreting and speech and language therapy.

Freyja Olafsdottir
Behavioural Neuroscience PhD

"I chose UCL for my PhD as it is world renowned for its neuroscience research, and because some of the fundamental discoveries in my particular area of interest were made at UCL. I find all aspects of my studies interesting. I enjoy being challenged by the complexity and artistry of electrophysiological techniques, as well as the challenges one faces when designing behavioural tasks that are both suitable for rodents and target a research question appropriately."

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Tuition fees

Up-to-date tuition fee information is available at www.ucl.ac.uk/current-students/money

Funding

Opportunity to apply via the ESRC Open Competition and the BBSRC. Departmental demonstratorships are also available.

Further information on pages 26-31

Related departments

Clinical, Educational and Health Psychology, page 61
Cognitive Neuroscience, page 62
Developmental Science, page 64
Gatsby Computational Neuroscience, page 94
Language and Communication, page 65
Linguistics, page 66
Speech, Hearing and Phonetic Sciences, page 67
UCL Interaction Centre, page 68

14 academic staff
4 research students

Research Assessment 2008
75% (Psychology), **60**% (Allied Health) rated 4* or 3* (see page 5)

DEVELOPMENTAL SCIENCE

- A unique interdisciplinary group of developmental scientists and clinicians working in developmental experimental psychology, neuropsychology, psycholinguistics, cognitive neuroscience, developmental disorder and speech and language pathology.
- Our facilities comprise special laboratories for infant testing, including EEG and behavioural methods.
- Clinical applications include studies of the development of very premature infants, children with autism spectrum disorder, dyslexia, specific language impairments, hearing impairments, and therapeutic interventions.
- We benefit from close contact with research departments working on cognitive neuroscience, language, cognition, child neurology and behaviour. Members have many international links with developmental scientists in Europe, the USA, China and Japan.

Research programmes		
MPhil/PhD	FT3	**PT5**
Doctorate in Speech and Language Therapy		**PT4**

Research areas include:

- Assessment and intervention for children with speech production difficulties
- Development of language and communication (e.g. in dyslexia)
- Development of language and mathematical skills
- Development of perceptual and attentional abilities in children with autism spectrum disorders
- Development of social communication skills in children with autism spectrum disorder
- Development of the child's understanding of causality
- Normal and abnormal development of vision: sensory, perceptual, cognitive (including visual attention). This includes the Visual Development Unit (www.psychol.ucl.ac.uk/vdu) with significant research funding from the Medical Research Council.

Entry requirements

Normally a minimum of an upper second-class UK Bachelor's degree or a taught Master's degree, or the overseas equivalent, in a relevant subject.

Career prospects

Recent graduates have taken up academic posts at the University of Sheffield and UCL, while others have taken up professional occupations within organisations such as the NHS.

STAFF VIEW Dr John Wattam-Bell
Reader in Developmental Science

"UCL attracts the best national and international students, which ensures that teaching is challenging, stimulating and rewarding. I study the typical and atypical development of human visual perception and cognition. The aim is to understand the normal development of visual processing in the brain, and how this can go wrong in developmental disorders. There are great opportunities for interdisciplinary, collaborative research, which as an institution UCL actually fosters and supports. I also very much enjoy contact with colleagues in different areas, which helps to see one's work in a wider perspective."

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Tuition fees

Up-to-date tuition fee information is available at www.ucl.ac.uk/current-students/money

Funding

Further information on pages 26-31

Related departments

Clinical, Educational and Health Psychology, page 61

Cognitive Neuroscience, page 62

Cognitive, Perceptual and Brain Sciences, page 63

Language and Communication, page 65

LANGUAGE AND COMMUNICATION

9 academic staff
9 research students

Research Assessment 2008
60% rated 4* or 3* (see page 5)

- The Research Department of Language and Communication supports one of the largest university speech and language therapy programmes in the UK.
- We explore the nature, causes and treatment of adult communication disorders. Our research draws on knowledge and methods from many disciplines, including: linguistics, sociology, medical sciences and cognitive neuropsychology.
- Applied research is funded by the ESRC, the Department of Health, and voluntary organisations such as Leonard Cheshire Disability and The Stroke Association.
- We maintain close links with other UCL academic units including: Developmental Science; Speech, Hearing and Phonetic Sciences; Cognitive, Perceptual and Brain Sciences; Linguistics, and the Institute of Cognitive Neuroscience.

Research programmes		
MPhil/PhD	FT3	**PT5**
Doctorate in Speech and Language Therapy		**PT4**

Research areas are:

- Acquired disorders of speech, language, cognition and communication
- Acquired swallowing disorders
- Conversation analysis
- Language, health and disability
- Language of the typically ageing population
- Reflective practice in speech and language therapy training.

The research department has close links with three virtual centres that bring together experts in speech, language and communication research, and promote collaborations with practising speech and language therapists: the Centre for Speech and Language Therapy Research (www.ucl.ac.uk/clh), the Centre for Applied Interaction Research (www.ucl.ac.uk/cair), and the Centre for Human Communication (www.ucl.ac.uk/chc).

Entry requirements

A Master's degree in a relevant discipline from a UK university, or an overseas qualification of an equivalent standard.

Career prospects

Graduates pursue careers in academic research, applied health research and advanced clinical practice and leadership.

Fiona Johnson
Language and Communication
MPhil/PhD

"I trained at UCL as a speech and language therapist and developed an interest in, and some skills for, research as part of my final-year project. When I started considering pursuing further research it was natural to contact my project supervisor for advice. These conversations led to my research proposal and eventually to getting funding to do a PhD with her. My research is closely connected to my clinical role. Being a part-time student in the first phase of my research, it feels like completing the PhD is still a long way off, but it already feels like there are many opportunities within the research department to explore and discuss the options for integrating research and practice longer term. I have lived and worked in London for seven years and it has loads of good nooks to steal quiet moments – Hampstead Ladies Pond, the cobbled backstreets of Wapping, and Walthamstow marshes."

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Tuition fees

Up-to-date tuition fee information is available at www.ucl.ac.uk/current-students/money

Funding

Further information on pages 26-31

Related departments

Cognitive Neuroscience, page 62

Cognitive, Perceptual and Brain Sciences, page 63

Developmental Science, page 64

Gatsby Computational Neuroscience Unit, page 94

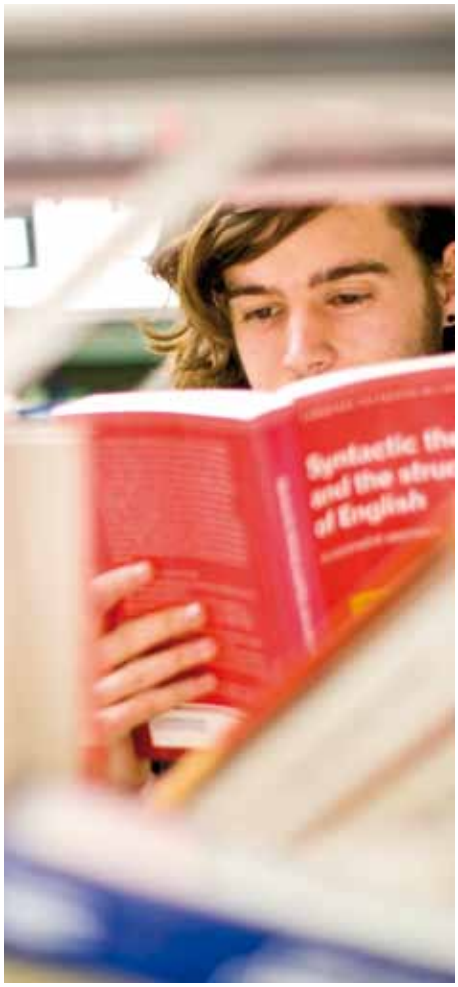
Speech, Hearing and Phonetic Sciences, page 67

14 academic staff
20 research students

Research Assessment 2008
50% rated 4* or 3* (see page 5)

LINGUISTICS

- The Research Department of Linguistics has an eminent reputation for its work in theoretical linguistics, which has attracted significant AHRC funding.
- Our staff carry out research aimed at discovering the nature and origin of the abstract principles and representations that characterise the form and acquisition of human language.
- Forming part of the UCL Division of Psychology and Language Sciences, we are able to offer enhanced opportunities for cross-disciplinary research.
- As a member of the UCL Centre for Human Communication, we encourage and facilitate cross-disciplinary interaction among the full spectrum of UCL staff involved in research on human language and communication, as well as extensive international collaborations.



Research programmes		
MPhil/PhD	FT3	**PT5**

The research department is pre-eminent in theoretical linguistics, especially in syntax, semantics and pragmatics, phonology, and normal and abnormal language development.

Research areas include:

- **Language development**: language acquisition (syntax, morphology and lexicon); development of communicative and pragmatic abilities; experimental pragmatics; pragmatics and atypical development
- **Neurolinguistics**: semantic, syntactic and morphological deficits in aphasia; noun-verb differences in different populations
- **Phonology**: relation between phonological representations and the speech signal; syllable typology; phonological variation and change
- **Semantics and pragmatics**: relevance theory; philosophy of language; the semantics/pragmatics interface; formal semantics and pragmatics; foundations of communication; semantic/pragmatic deficits in autism and other syndromes
- **Syntax**: relation between syntax and information structure (topic/focus); interactions between different movement types; syntactic and morphological deficits in aphasia and other syndromes; (research is carried out in a broadly Chomskyan framework).

Research students benefit from a range of training opportunities, offered by the UCL Graduate School, by the research department, and through ACTL (Advanced Core Training in Linguistics), a graduate school in Linguistics (www.actl.ucl.ac.uk).

Entry requirements

A Master's degree in a relevant discipline from a UK university, or an overseas qualification of an equivalent standard.

Career prospects

Recent graduates have pursued careers in academic teaching and research in linguistics; high school teaching; the civil service; speech and language therapy (for children and adults); experimental work on children's language development and artificial intelligence (human-machine interaction).

Matthew Gotham
Linguistics MPhil/PhD

"I chose UCL for my PhD because of the positive experience I had taking my Master's in Linguistics here, and because I was conscious of its worldwide reputation for producing high-quality research. I find it fascinating to see how language understanding interacts with other areas of psychology, to see how much the structure and function of language tells us about ourselves and about the world external to us, and to see what part language plays within the more general ability to communicate. I aim to continue academic research when I graduate."

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Tuition fees

Up-to-date tuition fee information is available at www.ucl.ac.uk/current-students/money

Funding

One scholarship of £1,000 for MPhil/PhD research and two MA scholarships of £500 to exceptional candidates for graduate study (see page 60 for a list of our MA programmes).

Further information on pages 26-31

Related departments

Cognitive, Perceptual and Brain Sciences, page 63

Developmental Science, page 64

Language and Communication, page 65

Speech, Hearing and Phonetic Sciences, page 67

SPEECH, HEARING AND PHONETIC SCIENCES

10 academic staff
13 research students

Research Assessment 2008
60% rated 4* or 3* (see page 5)

- Our internationally leading research on the perception and production of speech spans the disciplines of phonetics, hearing, perception, neurobiology and computational modelling.
- Basic science connects to practical applications addressing hearing impairment, atypical perceptual and cognitive development, language training, and security/forensic technologies.
- We share a refurbished building and state-of-the-art laboratory facilities with the Research Departments of Linguistics, Developmental Science, and Language and Communication.
- We have close ties to the Institute of Cognitive Neuroscience and the UCL Ear Institute, and industrial links with major cochlear implant manufacturers and companies in the speech technology sector.

Research programmes		
MPhil/PhD	FT3	**PT5**

Prominent research areas are:

- Auditory Processing Disorder (APD) and its role in speech/language development and communication ability
- Auditory prostheses for speech communication and the receptive capacity of the impaired auditory system for acoustic and electrical stimulation
- Computational methods for improving the intelligibility of speech recordings
- Neuroimaging investigations of speech processing pathways
- Phonetic variability in connected discourse and its impact on perception
- Plasticity in speech perception during first and second language learning
- Quantitative modelling of tone, intonation, and rhythm
- Sociophonetic analyses of accent change and development.

Entry requirements

A Master's degree in a relevant discipline from a UK university, or an overseas qualification of an equivalent standard.

Career prospects

Recent graduates have secured academic positions in speech or hearing science in the UK at institutions such as Kingston University, City University, Manchester University, and UCL; and across the world at the University of Canterbury (New Zealand), and University of Washington. They have secured positions in the speech technology industry in companies such as Microsoft and Toshiba UK.

Melanie Pinet
Experimental Phonetics PhD

"I originally took my Master's at UCL and decided to stay on as it offered a very specific subject I wanted to study which other universities did not. I'm investigating how native and non-native listeners of English cope with accented speech in a noisy listening situation. What I like about my research is that it is directly applicable to everyday life situations. Living in London is actually a great advantage for my research because it's a multi-cultural and therefore multi-accented city which means I can recruit a variety of linguistic minorities very easily."

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Tuition fees

Up-to-date tuition fee information is available at www.ucl.ac.uk/current-students/money

Funding

Three-year ESRC scholarships are available for MPhil/PhD applicants who have completed a Master's programme including appropriate research training. Departmental scholarships are also available to provide partial support for fees.

Further information on pages 26-31

Related departments

Cognitive Neuroscience, page 62

Cognitive, Perceptual and Brain Sciences, page 63

Developmental Science, page 64

Ear Institute, page 56

Language and Communication, page 65

Linguistics, page 66

UCL INTERACTION CENTRE

Academic staff of the centre are drawn from UCL departments

Research Assessment 2008
80% rated 4* or 3* (see page 5)

- UCL Interaction Centre (UCLIC) conducts interdisciplinary research on human-computer interaction that spans psychological and computing sciences. The focus is on understanding people and their interactions, and using that understanding to inform design.
- We collaborate with both usability companies and users of technology, including hospitals, law firms, news organisations, e-commerce suppliers and control rooms.
- Facilities include a standard usability laboratory with eye tracker and a reconfigurable space in which experiments using a motion capture system, a driving simulator or other large-scale equipment can be run.
- The centre has links with universities in North America, Europe, Japan and New Zealand.

Research programmes		
MPhil/PhD	FT3	**PT5**

Current focuses of research include:

- Designing ubiquitous technologies for behavioural change
- Exploring how findings from the human sciences can be represented in ways that readily inform computer system design
- How people make sense of large bodies of information
- In the wild prototyping and user studies of innovative technologies
- Posture recognition for assessing affective state
- The nature of immersion (particularly in computer games)
- Understanding the cognitive basis of human error, visual interactive search, and multi-tasking.

Theoretical understanding from empirical studies is applied and tested through novel interactive systems that are designed to improve the user experience, e.g. reducing errors, improving effectiveness and creating a positive overall user experience.

Entry requirements

Normally a minimum of an upper second-class UK Bachelor's degree or a taught Master's degree, or the overseas equivalent, in a subject relevant to H-CI. Such subjects include Psychology, Computer Science, Information Technology, Engineering Design, or other cognitive or applied sciences. Applicants with other qualifications and sufficient relevant experience and background knowledge may be considered.

Career prospects

Recent graduates have either pursued academic careers as researchers and/or lecturers or gone on to work as researchers or consultants for commercial organisations or government agencies. Examples include Senior Lecturer, University of Petronas, Malaysia, Postdoctoral Research Fellow at the Centre for Health Informatics, University of New South Wales, Australia, Lecturer at the Universidad Politécnica de San Luis Potosí, Mexico and Postdoctoral Researcher at the London Knowledge Lab.

Amiruddin Kamsin
Computer Science PhD

"I chose UCL for its excellent academic reputation and am proud to be a PhD student here, particularly at UCL Interaction Centre (UCLIC) which is well known to be one of the best Human-Computer Interaction (H-CI) research centres in the UK. UCL offers a wide range of remarkable opportunities and continuous support for students to embark on their research effectively and efficiently. Once I have completed my studies, I am going back to Malaysia to continue my job as a senior lecturer at the University of Malaya, one of the most prestigious universities in Malaysia."

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Tuition fees

Up-to-date tuition fee information is available at www.ucl.ac.uk/current-students/money

Funding

Further information on pages 26-31

Related departments

Clinical, Educational and Health Psychology, page 61

Cognitive Neuroscience, page 62

Cognitive, Perceptual and Brain Sciences, page 63

Computer Science, page 79

Developmental Science, page 64

Language and Communication, page 65

Linguistics, page 66

Speech, Hearing and Phonetic Sciences, page 67