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 all aspects 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.
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 specialising in deafness and hearing loss.

**Research programmes**

<table>
<thead>
<tr>
<th>Programme</th>
<th>Duration</th>
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</thead>
<tbody>
<tr>
<td>MPhil/PhD</td>
<td>FT3 PT5</td>
</tr>
<tr>
<td>MD(Res)</td>
<td>FT2 PT2</td>
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</tbody>
</table>

Research areas are:

- **Cell biology of hearing and balance loss**: understanding the mechanism of sensory hair cell death; 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 and music perception
- **Testing auditory function**: otocoustic 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 Bachelor’s degree from a UK university, or an overseas qualification of an equivalent standard. MD(Res) applicants must have obtained the MBBS degree (or equivalent) and be eligible for registration with the UK General Medical Council.

**Career prospects**

Recent graduates have gone on to work in: research institutions across the world including the National Institutes of Health, NYU, the University of Western Ontario, Zhongstan Ophthalmic Center, Ospedale San Raffaele and UCL, in higher education, in schools, the NHS (Moorfields Eye Hospital) and other disciplines.

**Tuition fees**

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

**Contact details**

Research programmes:

Mrs Cheryl Overington
EMAIL c.overington@ucl.ac.uk
TEL +44 (0)20 7679 8910

Taught programmes:

Mr Robert Heller
EMAIL robert.heller@ucl.ac.uk
TEL +44 (0)20 7679 8966

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 87

Neuroscience, Physiology and Pharmacology, page 90

Speech, Hearing and Phonetic Sciences, page 63

**Carolina Leal**

Advanced Audiology MSc

I find Audiology interesting as a whole, but I have a particular interest in auditory processing disorders, which studies what the brain does with what we hear. I am already an Audiologist and I am doing the MSc to keep myself abreast of new research and update my knowledge in the field. I find that in London everything is easily accessible, so in terms of studying, there is always a library, a quiet internet cafe or a park where you can sit and revise. There is also a lot going on in terms of free lectures promoted by libraries, universities, hospitals, etc.
MENTAL HEALTH SCIENCES

UCL Mental Health Sciences represents 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 diverse academic resources and a rich study environment.

We offer 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 each student’s experience.

Research programmes

MPhil/PhD  FT3  PT5
MD(Res)  FT2  PT2

Staff in 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  PT2
Postgraduate Diploma (flexible up to 5 years)

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, and charities), MRC/NIH training fellowships, and academic (UK and European universities including the Universities of East Anglia and Milan) and health care professional roles in mental health trusts and hospitals.

Contact details

Research programmes: Dr David Osborn EMAIL d.osborn@medsch.ucl.ac.uk TEL +44 (0)20 7472 6168
Psychiatric Research MSc: Mrs Christine Coup EMAIL c.coup@ucl.ac.uk TEL +44 (0)20 7679 9093

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 118
Health Informatics and Multiprofessional Education, page 119
Infection and Population Health, page 120
Neurology, page 54
Primary Care and Population Health, page 121
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, Harvard, King’s College London, Imperial College London and Oxford University, and consultancy posts at GlaxoSmithKline and Deloitte. Clinically trained research students have taken up specialist registrar and consultant level posts on re-entering the NHS.

Research programmes

<table>
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<tr>
<th>Programme</th>
<th>Tuition</th>
<th>Part-time Options</th>
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<tbody>
<tr>
<td>MPhil/PhD</td>
<td>FT3 PT5</td>
<td>FT1 PT2</td>
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<tr>
<td>MD(Res)</td>
<td>FT2 PT2</td>
<td>FT1 PT2</td>
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</tbody>
</table>

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, 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 Clinical Neurology MSc must hold a National Training Number verifiable through the London NHS Deanery and must have passed their MRCP examination.

Career prospects

Just over half of our MSc students are clinicians who continue their training in neurology or related fields after completing their programme. Just under half pursue a research career in academia or industry. Approximately 10% enter other professional occupations. Career destinations include UCL, Cambridge, Humboldt University of Berlin, Charité Berlin, Université Pierre et Marie Curie, as well as UK, EU and other international hospital trusts and authorities.
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

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<tr>
<th>Programme</th>
<th>FT</th>
<th>PT</th>
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<tbody>
<tr>
<td>MPhil/PhD</td>
<td>FT3</td>
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<tr>
<td>MD(Res)</td>
<td>FT2</td>
<td>PT2</td>
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</table>

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 registrable primary qualification in Medicine, and b) be eligible for full registration, or hold limited registration, with the UK General Medical Council.

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

<table>
<thead>
<tr>
<th>Programme</th>
<th>FT</th>
<th>PT</th>
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</thead>
<tbody>
<tr>
<td>Biology of Vision MSc</td>
<td>FT1</td>
<td></td>
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<tr>
<td>Clinical Ophthalmology MSc (flexible 2-5 years)</td>
<td>FT1</td>
<td></td>
</tr>
<tr>
<td>Postgraduate Diploma</td>
<td>FT1</td>
<td></td>
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<tr>
<td>(flexible up to 2 years)</td>
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<td></td>
</tr>
<tr>
<td>Postgraduate Certificate</td>
<td>FT1</td>
<td></td>
</tr>
<tr>
<td>(flexible up to 2 years)</td>
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<td></td>
</tr>
<tr>
<td>Ophthalmology: Cataract and Refractive Surgery MSc (flexible 2-5 years)</td>
<td>FT1</td>
<td></td>
</tr>
<tr>
<td>Postgraduate Diploma</td>
<td>FT1</td>
<td></td>
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<tr>
<td>(flexible up to 2 years)</td>
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<tr>
<td>Postgraduate Certificate</td>
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<td></td>
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<tr>
<td>(flexible up to 2 years)</td>
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<td></td>
</tr>
<tr>
<td>Ophthalmology: Retina MSc (flexible 2-5 years)</td>
<td>FT1</td>
<td></td>
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<tr>
<td>Postgraduate Diploma</td>
<td>FT1</td>
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<tr>
<td>(flexible up to 2 years)</td>
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<tr>
<td>Postgraduate Certificate</td>
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<td>(flexible up to 2 years)</td>
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</table>

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.
- All other MSc programmes: applicants must have a minimum of a second-class UK Bachelor’s degree in optometry, ophthalmics or a medical discipline, or an overseas qualification of an equivalent standard.

Career prospects

Clinical Ophthalmology 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.

Contact details

Mrs Anne Snowling
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TEL +44 (0)20 7608 6968

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

All Brain Sciences departments, see list page 51
All Medical Sciences departments, see list page 105
All Population Health Sciences departments, see list page 115
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 continued**

<table>
<thead>
<tr>
<th>Programme</th>
<th>FTE</th>
<th>PTE</th>
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<tbody>
<tr>
<td>Language Sciences (with specialisation in Neuroscience) MSc</td>
<td>FT1</td>
<td>PT2</td>
</tr>
<tr>
<td>Language Sciences (with specialisation in Speech and Hearing Sciences) MSc</td>
<td>FT1</td>
<td>PT2</td>
</tr>
<tr>
<td>Psychoanalytic Developmental Psychology MSc</td>
<td>FT1</td>
<td>PT2</td>
</tr>
<tr>
<td>Research Methods in Psychology MSc</td>
<td>FT1</td>
<td>PT2</td>
</tr>
<tr>
<td>Social Cognition: Research and Applications MSc</td>
<td>FT1</td>
<td>PT2</td>
</tr>
<tr>
<td>Neuroscience, Language and Communication MSc</td>
<td>FT1</td>
<td>PT2</td>
</tr>
<tr>
<td>Speech and Language Sciences MSc</td>
<td>FT2</td>
<td></td>
</tr>
<tr>
<td>Theoretical Psychoanalytic Studies (Non-Clinical) MSc</td>
<td>FT1</td>
<td>PT2</td>
</tr>
<tr>
<td>CYP IAPT Management Postgraduate Diploma</td>
<td>FT9m</td>
<td></td>
</tr>
<tr>
<td>Low Intensity Cognitive Behavioural Interventions Postgraduate Diploma</td>
<td>FT9m</td>
<td></td>
</tr>
<tr>
<td>CYP IAPT Management Postgraduate Certificate</td>
<td>FT3m</td>
<td></td>
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</tbody>
</table>

**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 and include counsellors and therapists, interpreters, journalists, psychologists, speech and language therapists and 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.

**Contact details**

For MRes, MA and MSc programmes, please refer to: [www.ucl.ac.uk/psychlangsci/students/prospective/PGT](http://www.ucl.ac.uk/psychlangsci/students/prospective/PGT)

**Tuition fees**

Up-to-date tuition fee information is available at [www.ucl.ac.uk/current-students/money](http://www.ucl.ac.uk/current-students/money)

**Funding**

Further information on pages 26–31

**Related departments**

Clinical, Educational and Health Psychology, page 57

Institute of Cognitive Neuroscience, page 59

Cognitive, Perceptual and Brain Sciences, page 59

Developmental Science, page 60

Language and Communication, page 61

Linguistics, page 62

Speech, Hearing and Phonetic Sciences, page 63

UCL Interaction Centre, page 64
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 £33 million 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 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 Professional 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, Yuan Ze 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.

Research programmes

<table>
<thead>
<tr>
<th>Programme</th>
<th>FT3</th>
<th>PT5</th>
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<tbody>
<tr>
<td>MPhil/PhD</td>
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</tr>
<tr>
<td>Doctorate in Clinical Psychology</td>
<td>FT3</td>
<td></td>
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<tr>
<td>Doctorate in Educational and Child Psychology</td>
<td>FT3</td>
<td></td>
</tr>
<tr>
<td>Doctorate in Educational Psychology</td>
<td>PT4</td>
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</tr>
</tbody>
</table>

Contact details

MPhi/PhD and international applicants for Clinical Psychology programme:
Ms Sharinjeet Dhiman
EMAIL s.dhiman@ucl.ac.uk
TEL +44 (0)20 7679 8231

UK/EU applicants for Clinical Psychology programme:
Dr Joshua Stott
EMAIL j.stott@ucl.ac.uk
TEL +44 (0)20 7679 5950

Educational and Child Psychology and Educational Psychology programmes:
Ms Helen Hosier
EMAIL ed-admin@psychol.ucl.ac.uk
TEL +44 (0)20 7679 5307

Funding

Further information on pages 26–31

Related departments

Cognitive Neuroscience, page 58
Cognitive, Perceptual and Brain Sciences, page 59
Developmental Science, page 60
Epidemiology and Public Health, page 118
This interdisciplinary research institute brings together researchers from different fields with a common interest in the workings of the human mind and brain.

We have £22.6 million 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.

We are located next to the unique patient populations of the National Hospital for Neurology and Neurosurgery and to state-of-the-art brain imaging facilities.

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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
- Visual communication.

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 the University of California, Berkeley in the USA.

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Contact details
Dr Mairead MacSweeney
EMAIL m.macsweeney@ucl.ac.uk
TEL +44 (0)20 7679 1157

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 57
Cognitive, Perceptual and Brain Sciences, page 59
Neurology, page 54
Neuroscience, Physiology and Pharmacology, page 90
COGNITIVE, PERCEPTUAL AND BRAIN SCIENCES

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

MPhi/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.

Contact details

Ms Antonietta Esposito
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TEL +44 (0)20 7679 5332

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. Departmental demonstratorships are also available.

Further information on pages 26–31

Related departments

Clinical, Educational and Health Psychology, page 57
Cognitive Neuroscience, page 58
Developmental Science, page 60
Gatsby Computational Neuroscience, page 93
Language and Communication, page 61
Linguistics, page 62
Speech, Hearing and Phonetic Sciences, page 63
UCL Interaction Centre, page 64
UCL Developmental Science is 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 laboratories comprise special laboratories for infant testing, including EEG and behavioral 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 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.

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

Maryam Bahakeem
Developmental Science PhD

My field of study is Arabic language acquisition, specifically the speech development of young Saudi children. What is interesting about the field of Arabic-language acquisition is understanding how young Arabic children develop their language, (i.e. the trajectory of the sounds and patterns of errors of young children). In addition, the outcome of this research will be a unique Saudi-Arabic speech test that would help in the diagnosis of children with speech and language disorders and delay.

Contact details
Dr John Swettenham
EMAIL j.swettenham@ucl.ac.uk
TEL +44 (0)20 7679 4220

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 57
Institute of Cognitive Neuroscience, page 58
Cognitive, Perceptual and Brain Sciences, page 59
Language and Communication, page 61
UCL 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 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.

Research programmes

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<tr>
<th>Programme</th>
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<tr>
<td>MPhil/PhD</td>
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<td>P5</td>
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<tr>
<td>Doctorate in Speech and</td>
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<tr>
<td>Language Therapy</td>
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<td>P4</td>
</tr>
</tbody>
</table>

9 academic staff
9 research students

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

Contact details

MPhil/PhD:
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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 58
- Cognitive, Perceptual and Brain Sciences, page 59
- Developmental Science, page 60
- Gatsby Computational Neuroscience Unit, page 93
- Speech, Hearing and Phonetic Sciences, page 63
UCL Linguistics is eminent 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.

We encourage and facilitate cross-disciplinary interaction among the full spectrum of UCL staff engaged in research on human language and communication, both theoretical and experimental, and we are involved in extensive collaboration with international research groups.

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).

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Tuition fees
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Funding
One scholarship of £1,000 for MPhil/PhD research and two MA scholarships of £500 to exceptional candidates for graduate study (see page 56 for a list of our MA programmes).

Further information on pages 26–31

Related departments
Cognitive, Perceptual and Brain Sciences, page 59
Developmental Science, page 60
Language and Communication, page 61
Speech, Hearing and Phonetic Sciences, page 63
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.
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 larger scale equipment can be used (e.g. motion capture system) as well as a new Interaction Research Lab with technologies such as touch tables and physical computing kits to support research in ubiquitous computing.

The centre has links with universities in North America, Europe, Japan and New Zealand.

Research programmes

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<tr>
<th>MPhil/PhD</th>
<th>FT3</th>
<th>PT5</th>
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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 human-computer interaction. 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, Universiti Teknologi 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, Postdoctoral Researcher at Goldsmiths, University of London and Research Intern at Microsoft Research, USA.

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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 57
Cognitive Neuroscience, page 58
Cognitive, Perceptual and Brain Sciences, page 59
Computer Science, page 77
Developmental Science, page 60
Language and Communication, page 61
Linguistics, page 62
Speech, Hearing and Phonetic Sciences, page 63

Academic staff of the centre are drawn from UCL departments

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