







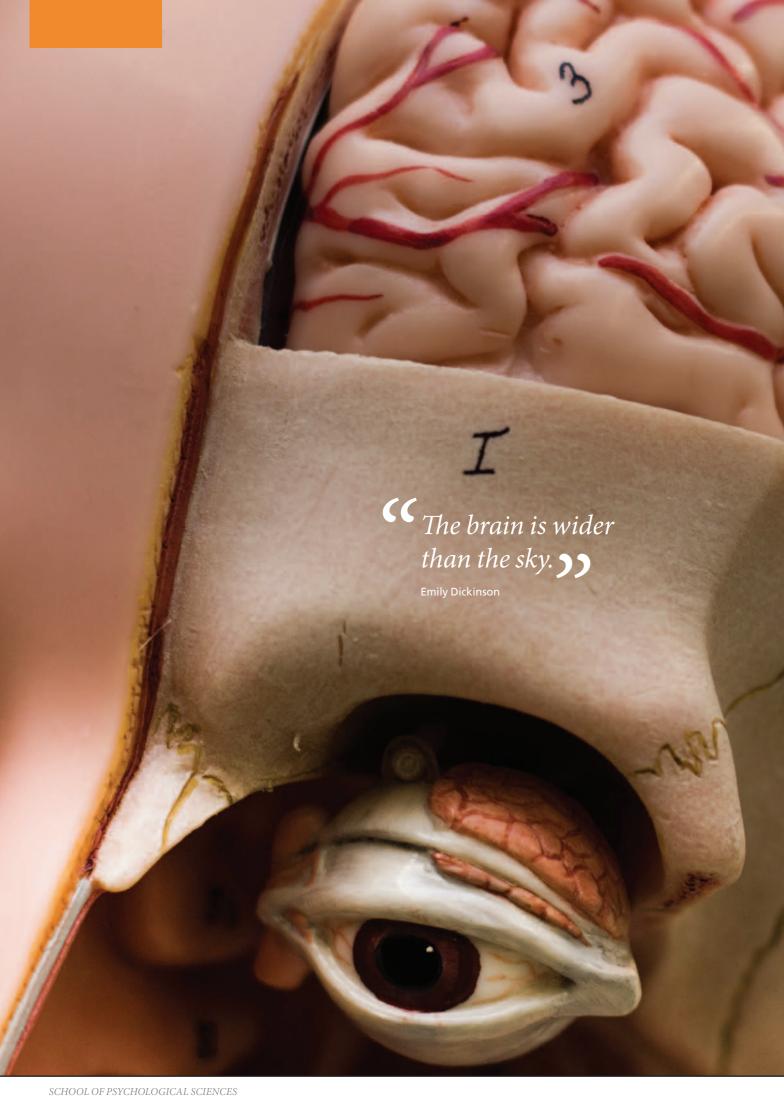






### The School of Psychological Sciences

2013 Prospectus and Five Year Strategic Plan



## Contents

2	Dean's introduction
5	Introduction by the Head of School
6	Background and organisation
8	Strategy, aims and objectives
9	Our strengths
1.	Priorities
	Excellence in education and learning
1	Excellence in research
1	Social responsibility for the greater good
1	Institute and School Centres
	Centre for Clinical and Cognitive Neuroscience
	Centre for Developmental Science and Disorders
2	Centre for New Treatments and
	Understanding in Mental Health (CENTRUM)
2	Manchester Centre for Health Psychology
	Audiology and Deafness Research Group
	MAHSC: The Manchester Academic Health Science Centre
3	School resources
3	Areas of excellence
3	Challenges
4	Impact and importance
4	Future developments
4	Appendix

### Dean's introduction

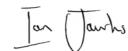


I am delighted to introduce the 2013 prospectus for the School of Psychological Sciences in the Faculty of Medical and Human Sciences at The University of Manchester. Our Faculty has now implemented a new strategy and structure which is intended to transform our contribution to research and education in medicine and health. We aim to build on the reputation of Manchester as a world leading centre for biomedical sciences and their clinical application.

The Faculty and the School of Psychological Sciences are committed to achieving excellence through an ethos of collegiate and collaborative working involving all of our Faculty Schools and Institutes and the highest quality interactions with other University of Manchester Faculties, our NHS partners via MAHSC (Manchester Academic Health Science Centre) and our broader higher education and NHS partners in the new GM-AHSN (Greater Manchester Academic Health Science Network).

Importantly the School of Psychological Sciences is part of a matrix structure (Figure 1) which is deliberately designed to break down barriers and encourage cross cutting interactions with staff in other Schools and Institutes. Staff are encouraged to affiliate to other Faculty structures and a high level of interaction is being achieved as illustrated in Figure 2. This type of cross linking is crucial to achieving the full benefits for education and research of our unusual breadth of health disciplines.

This document provides an overview of the School in 2013 and is work in progress. In the near future the School will host a visit by an international external advisory panel to help guide further developments and provide. The School already has a set of truly outstanding achievements and excellent staff but we have a lot more to do to achieve our ambitious objectives. I am grateful to all of the academic and support staff in the School for their contribution to the success to date and further plans.



#### Ian Jacobs

Dean, Faculty of Medical and Human Sciences Vice President, The University of Manchester Director of Manchester Academic Health Science Centre Professor of Cancer and Woman's Health

### Faculty of Medical and Human Sciences Structure

Matrix of six Faculty Institutes and five Faculty Schools intended to facilitate cross cutting interactions

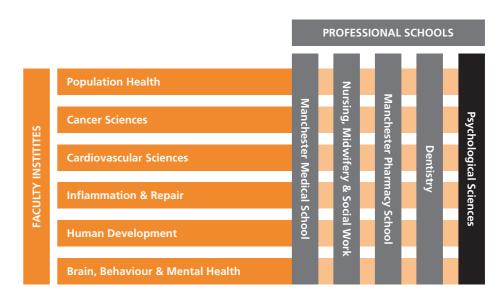


Figure 1
Faculty Structure – matrix of six
Faculty Institutes and five
Faculty Schools intended to
facilitate cross-cutting interactions.

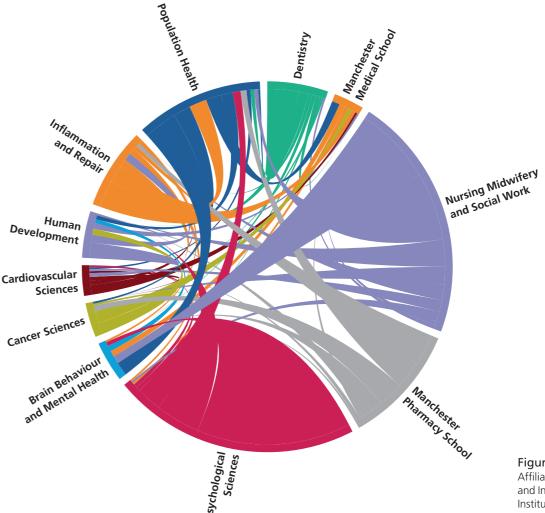


Figure 2
Affiliations across Faculty Schools and Institutes (showing the School/ Institute providing the affiliation)

### The University and Faculty

Our University has a tradition of world-leading innovation which has led to a stepwise improvement in the health, wealth and wellbeing of populations across the world since the industrial revolution. Sitting at the heart of the City of Manchester, which is a global hub, excelling in arts, music, sport and commerce, the University is a beacon for research and education with a deep commitment to the economic transformation of Manchester and the North West of England. Tracing its origins back to John Dalton's Mechanic's Institute and John Owen's philanthropic desire to educate the local population, The University of Manchester was England's first 'civic' and now its largest campus-based university. No fewer than 25 Nobel Laureates have worked at the University and since the merger of the Victoria University of Manchester with UMIST in 2004 we have delivered in excess of 1,600 invention disclosures and formed 17 new companies attracting £117m in third party benefit, demonstrating a formidable track record of commercialisation.

Our Academic and Support staff in the Faculty of Medical and Human Sciences (FMHS) number over 2,000 and work to deliver three core priorities:

Development and delivery of the highest quality education and training for health professionals and scientists.

Conducting outstanding, world leading research in the biomedical and health sciences.

Social Responsibility to make a contribution to the 'greater good'.

Each year we train over 400 doctors, 90 dentists, 150 pharmacists and 900 nurses, midwives and allied health professional staff. We are the largest supplier of healthcare graduates to the NHS within the North West of England but many of our graduates go on to deliver healthcare provision and scholarship in developed and developing health systems across the globe. Through the use of cutting edge technology, the highest quality workplace-learning environments and a highly trained educational faculty, we strive to deliver a personalised learning experience to each of our students so that they develop a real sense of identity and belonging to a world-class university. This in turn fully prepares them for life after graduation making the 'Manchester-made' graduate the first choice for healthcare employers. Our extensive postgraduate and continuing professional development programmes are hosted by our new Faculty Graduate School providing support and training to postgraduates undertaking a diverse range of study from short term professionally linked programmes through to research training in multidisciplinary areas. We believe that we are a complete resource for lifelong healthcare learning.

The scale, breadth and structure of our Faculty provide outstanding opportunities for basic biomedical research discoveries to be rapidly translated into effective new therapies with a strong emphasis on knowledge transfer and partnerships with industry. Our new matrix structure is designed to enhance opportunities for novel and multidisciplinary research (diagram). The matrix involves five schools (Medicine, Dentistry, Manchester Pharmacy School, Psychological Sciences and Nursing, Midwifery & Social Work) and six research institutes (Cancer Sciences, Cardiovascular Sciences, Population Health, Brain, Behaviour & Mental Health, Human Development, Inflammation & Repair) with an emphasis on affiliation across these structures. The leadership team for each of the Institutes involves clinicians, basic scientists and healthcare researchers from both our own Faculty and our sister Faculty of Life Sciences. Our academics have the benefit of access to the large, stable population in the North West providing unique opportunities to study and address most causes of disease and deprivation. The opportunities are further enhanced by strong links to our partner Faculties (Humanities, Engineering, Physical Sciences, and Life Sciences) and the NHS through the Manchester Academic Health Science Centre (MAHSC). These partnerships facilitate rapid translation into practice and targeted biomedical, technological and psychosocial research based on clinical need.

In addition to our research and education activity, the Faculty is committed to make a major contribution to the greater good for society by contributing to solutions of the major challenges of the 21st century and the social and economic success of our local, national and global communities. We will ensure that social responsibility is embedded within all of our education and research activities, ensuring the highest ethical standards of professional practice from our staff and students. We are committed to equality and diversity in all our activities and to building on successful programmes such as the Manchester Access Programme which targets talented students from underrepresented backgrounds and a wide ranging global health programme which will help deliver sustainable capacity building within the health systems of developing economies.

Whether you are a visitor or a prospective student, staff member or collaborator, we hope that you will be engaged by the enthusiasm and vibrancy of our students and staff, our commitment to improving health and quality of life and the diversity of opportunity in research, and education that our faculty has to offer.

What Manchester thinks today
England will think tomorrow.

JB Priestly: The English Journey 1934

# Introduction by the Head of School

A vibrant and flourishing centre for research and teaching across the range of psychological sciences, from brain function to behaviour change, with a very strong commitment to social responsibility and an award-winning outreach programme

This document provides an overview of the School in 2013, and highlights our mission to provide excellence in teaching, in research and in our commitment to social responsibility. We have transformed the structure of the School to ensure that we are closely aligned with the University and Faculty's key objectives. We teach a range of popular subjects, with excellent feedback, and have developed new research Centres and groupings which offer exceptional opportunities for innovation. We work with colleagues across the Faculty to ensure that our teaching and research is at the cutting edge.

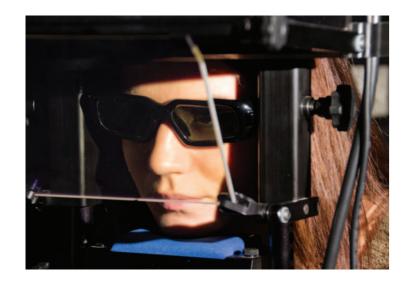
From January 2013 we have been implementing a new strategy and structure designed to build our reputation as a strong School in a world leading University. Our strengths span the spectrum of our science, from furthering understanding of fundamental principles in psychological processes through to the development and implementation of new therapies which will transform the way health care is delivered and, through that, to enable positive changes in people's lives. We work closely with colleagues in practice in health, social care and education, taking advantage of the exceptional opportunities that Manchester and the region offers for innovation. We work to engage with people living locally, so that the School is in touch with the wider community.



Rachel Calam Head of the School of Psychological Sciences Professor of Child and Family Psychology

### Background and organisation

The School of Psychological Sciences (SPS) is a major centre for research and teaching. We cover a wide range from basic sciences in psychology, communication and hearing through to the translation of these into applications in health and education.



The School is made up of three sections: Cognitive Neuroscience and Experimental Psychology, Clinical and Health Psychology, and Communication and Deafness. We engage in internationally recognised research and attract significant funding from UK and US research councils, government sources (including the NHS), charities, and industrial partners.

We have major strengths in cognition and cognitive neuroscience; neuroscience and aphasia; psychological treatments for disorders; behaviour change; language learning and disorders, and audiology and deafness. Staff belong to joint Centres with the Institute of Brain, Behaviour and Mental Health with staff from the School leading three of these Centres: Clinical and Cognitive Neuroscience; Developmental Science and Disorders, and New Treatments and Understanding in Mental Health. The School is the home of the Centre for Health Psychology and our Audiology and Deafness group affiliate with the Centre for Hearing and Vision Research in the Institute of Human Development. The Centres offer an exceptional breadth of opportunities for significant, ambitious research collaborations.

The School is committed to providing teaching and learning of the highest possible quality. Across our undergraduate and postgraduate programmes there is common purpose in aiming for excellence, in sharing the excitement of our sciences and in training the professionals of the future. A significant proportion of our teaching is rated excellent with year on year improvement. There is strong demand for our sciences in healthcare, social care and education as well as the world of business. We aim to educate

curious, knowledgeable graduates with a commitment to lifelong learning and to train highly skilled compassionate healthcare and education professionals in Audiology, Clinical Psychology, Speech and Language Therapy and Teaching of the Deaf. We have a very strong outreach team which has picked up numerous awards for its work and shows tremendous commitment to widening participation in, and broadening the reach of, psychological sciences.

### Organisation

We have a large staff group, made up of 23 professors (including 4 consulting professors), 2 readers, 2 senior research fellows, 35 senior lecturers and senior clinical tutors (of which 15 are teaching-focused), 41 lecturers and clinical tutors (of which 15 are teaching-focused) and 4 teaching assistants. Many staff are part time (42%); some are joint appointments with the NHS. There are 34 professional support staff.

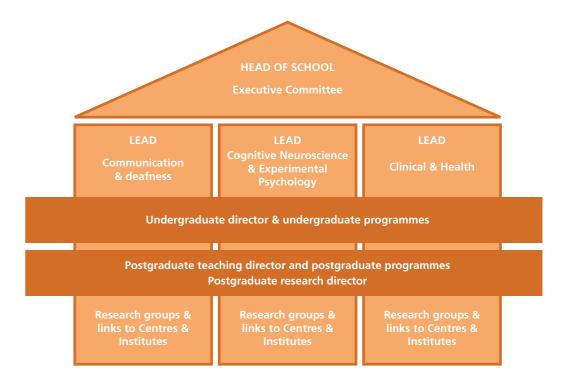
The School is managed by an Executive committee which is chaired by the Head of School with representation of all major areas of activity on the committee. The membership of the committee includes the Section Leads who are line managers for the three sections and are responsible for overall management of staff and their teaching, research, social responsibility activities, and allocation of duties to staff as required. The research and teaching directors, key PSS staff and other staff in leadership roles sit on the committee. Each of the major leadership roles chairs a committee which manages their area of responsibility.

### The School's leadership team

### School Executive Committee membership

Head of School, Professor Rachel Calam
Head of School Administration, Mrs Anna Reeder
Director of Research, Professor Wael El-Deredy
Director for Undergraduate Studies, Ms Fiona Kevan
Director of Postgraduate Research, Dr Andrew Stewart
Director of Postgraduate Teaching, Dr Susan Speer
Section Lead, Cognitive Neuroscience and Experimental Psychology,
Professor Sonja Kotz
Section Lead, Clinical and Health, Professor Gillian Haddock
Section Lead, Communication and Deafness,
Professor Gina Conti-Ramsden
Commercialisation/CPD Officer, Dr Warren Mansell
School Accountant, Mrs Kimberley Jones
Secretary, Mrs Jayne Ward

Figure 3
Chart showing the administrative structure of the School



### Teaching

The School of Psychological Sciences offers undergraduate and postgraduate opportunities within the disciplines of psychology, speech and language therapy, audiology and deaf education across a range of Masters, doctoral and short programmes.

### Undergraduate Programmes

BSc (Hons) Psychology

BSc (Hons) Psychology (intercalating MBChB/BDS students)

BSc (Hons) Speech and Language Therapy

BSc (Hons) Healthcare Science (Audiology)

BSc (Hons) Audiology (running down current cohorts only, final cohort complete 2015)

final conort complete 2015

BSc (Hons) Cognitive Neuroscience and Psychology (joint honours with FLS)

### Postgraduate Programmes

Doctorate in Clinical Psychology (ClinPsyD)

PhD Audiology

PhD Clinical Psychology

PhD Psychology

PhD Speech and Language Therapy

MRes Psychology

MSc Audiology

MSc Advanced Audiology Studies

MSc Clinical & Health Psychology

MSc Clinical Science (Neurosensory Sciences)

MSc Deaf Education

MSc Neuroimaging for Clinical and Cognitive Neuroscience

Effective Amplification for infants and children (short course)
Postgraduate Diploma Deaf Education (distance learning)
Irish Certificate of Clinical Competence in Audiology
Audiology Short Courses CPD Masters Level Modules

Taught programmes are managed by programme directors who belong to committees for undergraduate or postgraduate teaching. These committees are chaired by the Director for Undergraduate Studies and the Director for Postgraduate Teaching. These committees work to ensure that programmes are consistent with the School and Faculty's strategic goals and that education of high quality and relevance is delivered. In addition, programmes that are funded by the NHS have meetings at Faculty level to ensure that required quality standards and resources are well managed.

### Research Committee

The Research Committee, chaired by the Director of Research, comprises Section Leads, the Lead for the Centre for Health Psychology, non-professorial representatives from the sections and the director of Postgraduate Research. The research committee's mission is to coordinate, facilitate and support research activities across the school and monitor progress against school goals.

Members of the research Centres, groups and units making up the School groups interact through meetings and away days, conferences and other research activities. Group Leads mentor and facilitate research activity. In consultation with group members, the Leads develop the research group strategy which contributes to the School research strategy.

Annual performance development reviews (P&DRs) for staff have historically been carried out by research group leaders but from January 2013 they are being undertaken under the direction of the Section Leads or their delegates, so that all aspects of contribution can be considered in the round.

A key challenge inherent in the new structure is the establishment of an effective workload model to ensure effective management of staff time and resources.

### Strategy, aims and objectives

### **Our Priorities**

Until 2011, the School operated as three distinct, relatively autonomous divisions. In 2011–12, the School reviewed its priorities and identified five key strategic priorities to guide our development over the next five years. Central to this was the aim of establishing an integrated School which could respond more flexibly and collegially to opportunities and challenges. A starting point was to identify a simple set of agreed priorities that all members of the School could unite to achieve. Establishing these priorities allowed us to reflect on our strengths, and also the areas in need of development. These priorities were reviewed by staff in November 2012.

Our priorities are designed to be highly consistent with the University 2020 agenda and Faculty objectives and the enabling actions; progress to date towards these priorities are set out in Appendix A. The priorities are met through our focus on the three key strategic aims highlighted by the University and Faculty: excellence in teaching, excellence in research, and social responsibility for the greater good.



Figure 4
The strategic goals of the University and School

### Our strengths

### A strong staff group

We have high calibre, dedicated, experienced staff in both teaching and research, some with awards in recognition of excellence. We have strong early career researchers with emerging international reputations and very senior staff who are internationally recognised as outstanding. We have excellent professional support staff who work in partnership to deliver our mission and we have excellent collegial relationships between staff. All these are fundamental to realising our ambitions.

In 2012, Jayne Ward, Academic Group Administration Manager, won the Faculty Distinguished Achievement Award and David Parry, our PGT Education Manager, the Students' Union support staff award.

### Excellent research

We obtain grants from research councils, the NHS, charity sources and international sources including the Max Planck Institute. We undertake research into basic science which is published in leading journals. We undertake multi-disciplinary research with demonstrable impact for the public, particularly in the areas of health, mental health, speech and language, audiology and deafness. The establishment of our new Centres will fuel our potential to undertake world leading work.

### Commitment to excellence in teaching and learning

A significant proportion of our teaching is rated excellent, with year on year improvement in NSS results. Our programmes are revised and refreshed in the light of student feedback and we have recently undertaken a major revision of the BSc Psychology curriculum, with the first and third years changing in 2012–13, and the second year, in 2013–14. We are sensitive to the funding context and have anticipated changes in income, bringing in new programmes where there are identifiable employment opportunities. Some of our programmes stand out as leading: Audiology and Deafness is one of only two in the UK to receive a commission for the new Neurosensory Clinical Science MSc. The Masters in Clinical and Health is one of a very small number internationally preparing students for a wide range of exposures to healthcare contexts. The Clinical Psychology programme is consistently the most applied-for programme of its kind outside London. As a School we have been proactive in supporting and encouraging staff to apply for promotion on the grounds of their teaching and leadership performance. We have recently had successful promotions on these grounds and continue to encourage this.

In 2012, the Faculty Teaching Award went to Dr Alison Fisher, one of our teaching-focused staff on the BSc Psychology Programme.

### Widening participation and outreach

We have a very strong outreach team which has picked up numerous awards for its work and shows tremendous commitment to widening access to, and broadening the reach of, psychological sciences.

The service user involvement in the ACT NoW study, led by Audrey Bowen, was hailed by the NIHR Stroke Research Network as an example of best practice, evidenced by its inclusion as a case study in their recent publication 'Patient and Carer Involvement – An essential component of Stroke Research' intended as a guide for researchers.

### Strong partnerships with the NHS

The Faculty of Medical and Human Sciences at The University of Manchester is characterised by the quality of its research and researchers and by the close relationships between the University and the NHS, represented by formal shared structures to foster collaboration. The scale of the population served by collaborating members of the Manchester Academic Health Science Centre (MAHSC) and the very diverse local population, with many different ethnic groups and widely ranging socioeconomic circumstances, provides exceptional opportunities for research. The exceptional opportunities offered by Manchester's healthcare environment and very strong, well established NHS partnerships in combination with MAHSC means that we have outstanding opportunities for translational research. Our healthcare programmes receive excellent feedback from professional bodies. We have particular strengths in patient and public involvement in research. These approaches are becoming more widely disseminated and integrated into research nationally.

### Strong relationships across the Faculty

Such is the contribution of Psychological Sciences to the Faculty as a whole, that we have three joint Centres with the Faculty Institute of Brain, Behaviour and Mental Health. The scale and strength of the Faculty of Medical and Human Sciences means that we have, in 2012–13, been able to develop our ambitions to contribute to health care through significant new investment to form the Manchester Centre for Health Psychology. We have very strong existing relationships across Faculty in the mental health and behavioural medicine arenas; the new Faculty Institutes and Centres offer tremendous scope for connections and collaborations. The Faculty is also committed to the co-location of the School onto a single site and has invested in the first stages of this, with further developments planned.



### Priority 1: Excellence in education and learning

We aim to achieve excellence in teaching and learning in all our subjects, ranging from basic psychological science through to practical training for translation and application in healthcare and other applied settings.

> In line with the University's 2020 Vision of improving the student learning experience, and in common with Priority 1 of the Faculty for Medical and Human Sciences, the School is committed to providing teaching and learning of the highest possible quality. Across the undergraduate and postgraduate programmes provided by the School, there is common purpose in providing both excellence in inspiring students in the study of our sciences and in training the professionals of the future.

> We are proud of the diversity of our taught provision. Psychological sciences have influence in many spheres including basic research, healthcare, social care and education, as well as the business and commercial world. We provide a BSc in Psychology and aim to train healthcare and education professionals of high calibre, highly skilled, compassionate and fit for purpose for the 21st century in the fields of Audiology, Clinical Psychology, Speech and Language Therapy, and Teaching of the Deaf.

### BSc Psychology feedback from the 2012 **National Student Survey**

"The teachers are extremely passionate about what they are teaching and this helps to understand the content."

"There is a very good support network if you choose to use it."

"The teaching staff are really approachable. There is a lot of staff available at hand and prepared to help with any problems presented to them."

### Goals

- 1. We will maintain a strong overview to ensure that we review and update our curricula and take careful account of feedback to keep pace with needs in changing times in order to satisfy the needs of the student body, professional body requirements and the needs of stakeholders in the wider community.
- 2. We will maintain and build on our high level of commitment to student support, with academic advisory systems well established across all programmes. We will build on our Peer Assisted Study Scheme (PASS) and Peer Mentoring to continue to improve the student experience.
- 3. Year on year we will continue, as we have already done, to satisfy the funders' requirements as commissioners of the teaching of our healthcare programmes. We know that our approaches are commended for good practice, strong collaboration and sharing of good practice with colleagues in the School of Nursing, Midwifery and Social Work. We will build on this foundation to provide the best possible programmes.
- 4. We have strong collaborative relationships with all our professional regulatory bodies. We are aware of our responsibilities and develop our programmes and partnerships to enhance our provision and will be alert to opportunities which our partnerships with the NHS and other bodies can offer.
- 5. The School has a clear commitment to parity of teaching and learning with research and clarity of expectation with regard to promotion criteria on the grounds of teaching and leadership. We will continue to build on our recent improved success in promotions on the grounds of teaching and learning and will continue to ensure that excellent teaching is highly valued.

The standard of teaching is fantastic and the other people on the course are lovely too. )

Student, Clin Psy D

FIVE YEAR STRATEGIC PLAN 11

Priority 2

### Key performance indicators:

### (a) The student experience

Key performance indicator	Target
1. Improvement of School's facilities, with co-location of the School	To undertake improvements to space and facilities in the Zochonis building, and co-locate the School across the Zochonis and Dover Street buildings by 2018.
Year-on-year     increase in student     satisfaction as	All programmes to reach ≥90% by 2015.
measured by the NSS	Psychology from 78% to 85% for 2013.
	HCD from 88% to 90% in 2013.
3. Increased student communication and engagement	To widen the use of web facilities, in order to provide students with more information on updates, successes, actions arising from feedback, and student engagement opportunites.
	Weekly web-based updates.
	Regular opportunites for students to meet with the Head of School (or alternative) to provide feedback.
4. Improve student employability	All programmes to be in the national top quartile for employability.
	Psychology alumni group to be established to enhance communication and networking opportunities by 2013.

### (b) Methods of teaching

Key performance indicator	Target
1. Systems in place to monitor and improve teaching performance	Improvement in teaching quality measured by peer review output and by the results of NSS Q1-4 being ≥90% by 2015.
	Psychology from 85% to 90% by 2014.
	CD to maintain > 96%.

### (c) Measurement of quality of teaching with recognition/reward of teaching excellence

Key performance indicator	Target
1. Systems in place to monitor and improve teaching performance	Improvement in teaching quality measured by peer review output and by the results of NSS Q1-4 being ≥90% by 2015.
2. Steady increase in % of staff promoted where the strength of teaching contributes significantly to the promotion	50% by 2017.

### Priority 2: Excellence in research

In line with the 2020 vision, and the Faculty's second priority for world-leading research, the School aims to undertake cutting edge research which represents all aspects of the innovations pipeline from basic science through translation to real-world applications in order to create impact in improving people's lives.

In 2009 Professor Christine Barrowclough and Liz Pitt (Service user researcher) won an NIHR annual Mental Health Research Network Gold Award for Exemplary Service User Involvement for their Self Help Therapy and Recovery project in the NIHR funded Recovery Programme.

Staff in the School belong to Centres, research groups and units which produce internationally recognised research. Our work attracts significant funding from UK and USA research councils, government sources (such as the NHS), charities, and a variety of industrial partners, as well as international funders, including the Max Planck Institute for Evolutionary Anthropology. Membership of, or affiliation to, Centres across the Institutes of the Faculty of Medical and Human Sciences offers an exceptional breadth of opportunities for significant, ambitious research collaborations.

The degree of affiliation of SPS with the Institute for Brain, Behaviour and Mental Health (IBBMH) is so strong that we have created three joint Centres with Centre Leads who are members of SPS. In addition, there is a newly established Manchester Centre for Health Psychology based within SPS, with the appointment of three new professors in the 2012–13 academic year. This Centre has strong affiliations across the Faculty and University, and will build strong collaborative relationships throughout the University and NHS. Our Audiology and Deafness research group are affiliated to the Centre for Hearing and Vision Research, in the Institute of Human Development which helps to build critical mass for this significant group. The research activity of the Centres is described in detail in Section 3.

We encourage groupings of different configurations to grow and evolve, acknowledging that the pursuit of excellence can flourish in groups with different structures and compositions. The large, over-arching structures are designed to facilitate aggregation around opportunities, and identification of potential for future developments so that we are poised to anticipate grant calls and potential for large scale developments. We are also active participants in the development of strong research alliances with the University of Liverpool and working towards the development of the North West Institute for Mental Health.

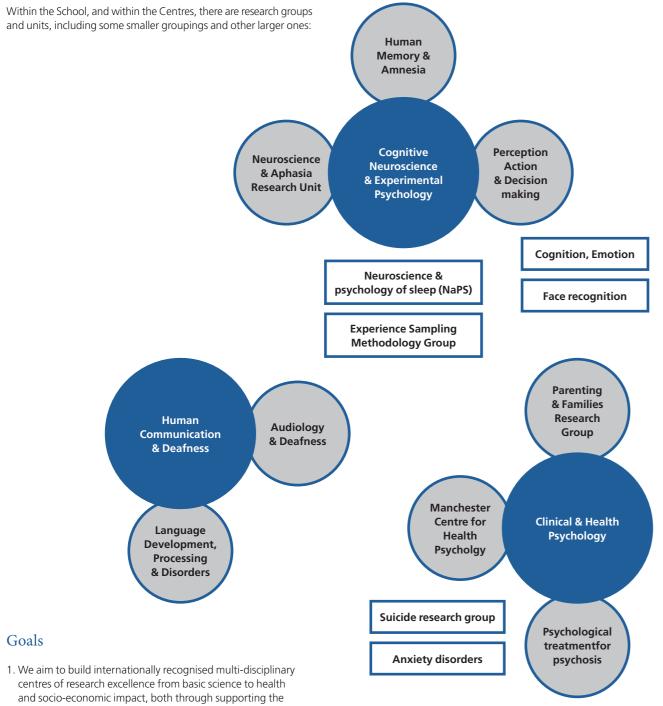
Dr Paul Warren received the prestigious BPS award which recognises outstanding published contributions to research in the area of Cognitive Psychology.

Two of our academic staff are recent award winners of the British Psychological Society's May Davidson prize for outstanding achievement in Clinical Psychology in the first 10 years post qualification: Dr Warren Mansell in 2011, followed by Dr Richard Brown in 2012. Two of our clinical professors, Gill Haddock and Tony Morrison, are previous winners of this award.

A paper by Professor Chris Armitage won the "Highly Cited Article" award in 2011 from Web of Knowledge, as being in the top 1% within its field.

Armitage, C. J., & Conner, M. (2001). Efficacy of the theory of planned behaviour: A meta-analytic review. British Journal of Social Psychology, 40, 471-499.

**Priority 2** 



### Key performance indicators:

### (a) Deliver research excellence

Key performance indicator	Target
To identify and support the development of internationally	To identify priority areas and have funded projects in place that build capacity for an application by 2014.
recognised centres of research excellence	At least one to be externally funded by 2016.
	To form a North West Centre for Mental Health by 2013.
2. Increase research grant applications and improve	100% of grant applications to be peer reviewed ahead of submission.
success rate.	Research grant and contract income to be increased by 9% a year.
	Coordinate, support and manage a rolling programme of research applications (including fellowships) with the aim of doubling overall research income by 2020.
3. Align with the Faculty Strategic plan and aim to	To be in the top five Schools nationally for research council support by 2017.
double research council support	To double our research council income by 2017.
4. Improve quality of research outputs and citations	80% of school research papers to be published in the top 25% of journals by 2015.
-creations	Reduce percentage of un-cited papers by 10% annually.

### (b) Establish cross-cutting themes/grand challenges

Key performance indicator	Target
1. Engage in the Faculty's crosscutting areas, ensuring that they are interwoven within School strategy by the end of 2013.	To obtain at least one external grant for a cross-cutting theme by the end of 2014 and at least two additional substantive external grant awards by the end of 2017.

### (c) Increase the number of internationally competitive researchers

Key performance indicator	Target
1. 70% of staff to be judged as A or B in REF or REFPE by 2020	60% to be judged A or B by 2017.
2. Increase the PG student population	By 10% by 2017.
3. Identify and Increase number of incoming research fellow	Double the number of research fellowship applications through the School by 2015.

### 1. We aim to build internationally recognised multi-disciplinary centres of research excellence from basic science to health and socio-economic impact, both through supporting the development of existing staff and through strategic appointments.

Goals

- 2. We will plan and manage research grant applications with the aim of significantly increasing our research income, in line with the 2020 vision.
- 3. We will work with our own Faculty and Humanities to increase the success of grant applications to research councils.
- 4. We will ensure all staff have the opportunity to build strong research careers by establishing a contribution model that enables research planning, implementation and accountability. We will support researchers through mentoring development reviews and provision of opportunities for peer review of grant applications and publications.

14 SCHOOL OF PSYCHOLOGICAL SCIENCES FIVE YEAR STRATEGIC PLAN 15

# Priority 3: Social responsibility for the greater good

The School is very active and innovative in a range of initiatives to bring our sciences to public knowledge, to widen understanding and to work in partnership to develop excellent systems for healthcare and education. Our mission in this regard is aligned with Goal 3 of the University's 2020 Vision regarding social responsibility and the Faculty's Priority 3.

We are proud that we succeed in recruiting students from a diverse range of backgrounds. We consider it a core aspect of our approach to attract the brightest and the best to The University of Manchester, irrespective of the degree of privilege in students' backgrounds.

### Outreach Group Membership and Mission

The SPS Outreach Group comprises 13 members from across the School. The Group's work encompasses widening participation, public engagement and community involvement, mainly, but not exclusively, addressing the University's Social Responsibility goal. We plan to expand to address social and environmental impact and patient and user-involvement. We support the involvement of students at all levels in outreach activities.

A sample of the recent activities of the group is included in the report of the group for 2011–12 in the Appendix.

### Highlights of activities in the last 12 months

The SPS Outreach Group has engaged with more than 1000 members of the public in the last 12 month period, including schoolchildren, parents, older people, students, service users, carers, and academics from other disciplines.

### Increasing accessibility

In feedback from sixty four schoolchildren attending a session, "What do psychological scientists do?" 98% agreed that they had found out something about psychology that they didn't know before and 53% agreed that the talks had made them more likely to want to study psychology at university.

Hannah Brotherton, who is studying for a PhD in Audiology, won first prize in the 2013 'I'm a Scientist, get me out of here' competition which aims to give school pupils an insight into how science works and is part of modern life.

### Examples of projects for children:

What do Psychological Scientists do?

Big Brain Summer School.

MHS Awareness day on Audiology and Clinical Psychology.

Science Fair during National Science and Engineering week; memory activities for Year 9 pupils at the John Rylands Library on Deansgate.

Work experience programme for 1st year A-level students to participate in a work experience programme in SPS.

School talks and other university activities, including the Year 12 Manchester Access Programme (MAP) and Year 13 MAP Summer School.

### Success4Life

In a new project in 2012, three clinical psychology students worked with the Directorate for Student Experience on a programme for care-experienced children. They ran a 10 week project for 14 looked-after children from years 7–9 recruited from schools in Manchester. The programme aimed to help the young people build their confidence, reflect on their developing knowledge, and familiarise themselves with the University. All the participants completed the project and the clinical students were given the Faculty Widening Participation award for their contribution.

### Projects with the wider public

The School Outreach group have many projects running with the wider public.

The well established Clinical Psychology Community Liaison Group (CLG) has developed into an integral part of the Clin Psy D programme. The CLG comprises service users, carers, and community members and now advises on research as well as teaching.

Café Scientifique features a scientist from a variety of disciplines who gives a 30 minute talk about his or her work. The talks take place in the function room of a local bar and the events remain simple, low-key and inclusive.

A Museum Event was supported by an ESRC grant to run a one-day 'Memory Matters and Communication Counts' event at the Museum of Science and Industry as part of the ESRC Festival of Social Science.

Adult Education talks are also given by members of the group.

At Manchester Beacon's Recognition Awards Ceremony in 2012, the Community Liaison Group was commended for their community-university partnership.

### **Sharing best Practice**

Through presentations and consultation, the group now presents on good practice locally and nationally.

In 2012, one of the group was an invited expert at a national discussion on 'Researching the Engaged University' commissioned by the Arts and Humanities Research Council.

### Sustainability

We aim to consider the social and environmental impact of SPS's activities.

We provide support and feedback to staff and students working towards embedding impact in their research and teaching.

Though our sustainability champion, we aim to ensure that the School embeds the University agenda on sustainability in teaching, research and operations.

We work closely with the University's Sustainable Consumption Institute and host joint appointments in our School which fosters embedded research developments in this field.

In 2012, the Zochonis Building won a silver impact award for environmental sustainability.



**BrainStorm event 2012** was funded and supported by Manchester Beacon, The Neuroscience Research Institute and The Wellcome Trust.

See http://beamlab.lab.ls.manchester.ac.uk/news/



Youtube PsyFile – Misconceptions in Psychology: Funded by the 'Investing in Success' award to Karen Lander, with interviews with SPS staff, including Dr. Luke Jones (pictured).

See http://www.youtube.com/ user/psyfile?feature=watch. Two clips uploaded to date – over 33,000 hits

### Key performance indicators:

### (a) Research and education

Key performance indicator	Target
1. Develop and publicise major impact case studies in order to demonstrate the impact of research	At least one major impact case study by 2013.
2. Work with MAHSC to deliver socially responsible activities	At least one demonstrable health advance in routine practice in Greater Manchester by 2017.
3. To outperform the benchmarks for recruiting students from Low Participation Neighbourhoods and from lower socio-economic	By 2017, recruitment of students from Low Participation Neighbourhoods to be greater than 11% and recruitment of students from lower socioeconomic groups to be greater than 26%.  Annually, deliver or contribute to
groups	events targeting under-represented groups.
	Annually, link with the School's admissions team to explore monitoring our intake for demographics and previous contact with University Outreach activities to develop evidence for best practice.

### (b) Public engagement

Key performance indicator	Target
1. In collaboration with key partners, develop and deliver new public engagement activities involving young people and the general public and increase the number of staff and students involved in key public engagement events	To maintain the current programme of established events and identify further opportunities.
2. Engage with the public to generate interest in our subject areas and science more generally, as well as spark inspiration, amongst people of all backgrounds and ages	Work in partnership with community groups or individuals around teaching and research.  Encourage user and patient involvement in our programmes (e.g. teaching, student selection and evaluation) and at all stages of the research process.  Promote educational and employment opportunities for community members.
3. Engage with the community and seek for their input into our work	Work in partnership with community groups and individuals around teaching and research.  Encourage user and patient involvement in our programmes (e.g. teaching, student selection and evaluation) and at all stages of the research process.  Promote educational and employment opportunities for community members.  Compile a resource to highlight good practice in public/patient involvement in teaching and research by 2013.

### (c) Equality of opportunity

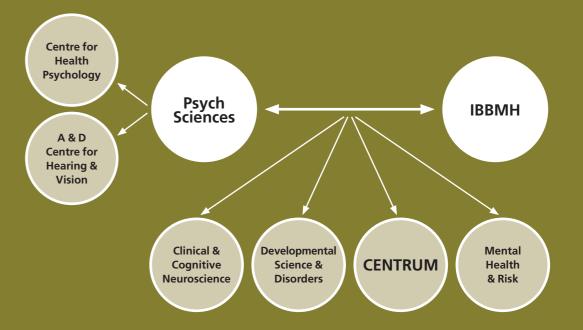
Key performar indicator	ice Target
1. Equal opportunities the all staff	To achieve an Athena SWAN silver award in 2013–14.

# Institute and School Centres

Staff in the School of Psychological Sciences make an important contribution to the major Centres in the Faculty, through membership or affiliation.

The primary relationships are shown below and there are many additional affiliations both into, and out of, the School which build significant synergies across Faculty and beyond. The majority of Centres were formed in September 2012, with the Centre for Heath Psychology evolving through 2012–13. Each of the major

Centres and groups is described below. In addition there are collaborations outside the Faculty. For example there is a long standing collaboration with the Sustainable Consumption Institute (SCI) based in Humanities and some SCI staff are based in the School



#### Figure 6

**Key:** A & D: Audiology and Deafness research group affiliate to the Centre for Hearing and Vision Research in the Institute of Human Development.

CENTRUM: Centre for New Treatments and Understanding Mental Health

IBBMH: Institute of Brain, Behaviour and Mental Health

Centres



### Centre for Clinical and Cognitive Neuroscience

A joint Centre between SPS and IBBMH

### **Director**Daniela Montaldi

### Senior members of CCCN

Alistair Burns (IBBMH)

Stuart Pickering Brown (IBBMH)

David Mann (IBBMH)

Anthony Jones (IBBMH)

Karl Herholz (IBBMH)

Michael Horan (IBBMH)

Matt Lambon Ralph (SPS)

Wael El-deredy (SPS)

### Senior affiliates

Julie Snowden (NHS, Salford)

David Challis (Nursing/PSSRU)

John Keady (Nursing)

### Key Collaborators/Partners

Members of Institute of Population Health

FLS

MAHSC groupings (e.g., Dementia)

Pharmaceutical companies

### Current status overview

The Centre for Clinical and Cognitive Neuroscience (CCCN) is composed of members from IBBMH (about one third) and SPS (about two thirds). Although areas of expertise extend across basic, cognitive, and clinical neuroscience, reflecting a real breadth of high level research, there is also real potential for a significant amount of novel and productive convergence.

### Vision for the future

The strategic priority for CCCN is to further promote and strengthen our existing areas of excellence while developing new and competitive collaborations that exploit the breadth of expertise that exists in the Centre. In particular, we aim to encourage and facilitate a step increase in translational research while maintaining a clear focus on the importance of

strong basic, clinical and cognitive neuroscience. CCCN intends to present itself as an ideal model of how research can translate from basic, through systems, to translational and impactful work. The focus on translational research will be broad and will span areas such as diagnosis, rehabilitation, patient treatment and care, and social policy as well as areas of social responsibility including sustainable behaviour. The focus on basic and cognitive neuroscience will span both thematic and methodological research and will ensure that we apply highly developed and optimised methodological techniques to answer critical thematic questions. In turn, this approach will maximise our translational success. We have an exceptional opportunity to establish a world-leading community of scholars working on Cognitive Neuroscience, backed by a wealth of cutting-edge technologies at Manchester.

### Areas of excellence

Fronto-temporal dementia

Semantic dementia and semantic memory

The psychophysiology of pain

Cognition and behaviour

Neuroscience and psychology of sleep

Neuroimaging and neurophysiological methods

Episodic memory and amnesia

### Research Highlights

#### Neurodegeneration and Dementia

This is highly multidisciplinary; spanning 'molecule to care plan'

Neurogenetics and neuropathology (Pickering-Brown, Manns)

Neuroimaging – PET & MRI (Herholtz, Lambon Ralph, Montaldi)

Diagnosis, cognitive deterioration and change (Burns, Snowden, Lambon Ralph, Montaldi)

Old-age psychiatry/gerontology (Burns, Horan, Pendleton)

Nursing, care policy and practice (Challis, Keady)

#### Pain research

The novelty of the Manchester vision stresses the need to feed developing knowledge of underlying mechanisms directly through to patient benefit

Mechanisms (Jones, El-deredy)

Neuroimaging and neurophysiology

Placebo-based research

Pharmacology

### Mechanisms of cognition and behaviour and their neural bases

This is an area with large critical mass (around 20 members) supporting an enviable breadth of theoretical and methodological expertise. Key areas of strength include:

Perception, language and memory

Emotion, decision making and reward

Neuropsychology, neuroimaging, neurophysiology, and computational modelling

### Recent significant research findings

Research at Manchester helped to find the first gene for fronto-temporal dementia (FTD) and also contributed to the identification of subsequent other genes, including the recent finding of a repeat expansion mutation in C9ORF72 being the most common genetic cause of FTD identified to date.

Baker M, et al Mutations in progranulin cause tau-negative frontotemporal dementia linked to chromosome 17, Nature 2006, 442:916-919.

This latter mutation is also a cause of motor neuron disease (MND) and this finding proved that FTD and MND are part of a disease spectrum.

Renton AE et al A Hexanucleotide Repeat Expansion in C9ORF72 Is the Cause of Chromosome 9p21-Linked ALS-FTD. Neuron 2011; 72: 257-68.

Research at Manchester has shown unparalleled levels of diagnostic accuracy thus meeting the Government's Dementia Strategy objectives of good quality early diagnosis.

Snowden JS, Thompson JC, Stopford CL, Richardson AMT, Gerhard A, Neary D, Mann DMA. Clinical diagnosis of early-onset dementias: diagnostic accuracy and clinicopathological relationships. Brain 2011; 134: 2478-92.

Neuroimaging research has also highlighted the potential of FDG PET as a biomarker for early Alzheimer's disease.

Herholz, K. Use of FDG PET as an imaging biomarker in clinical trials in Alzheimer's disease. Biomarkers in Medicine 2012, 6(4), 431-439.

Manchester has been at the forefront in describing the pathology of FTD, thus helping the field harmonise its use of nomenclature for this disorder.

Mackenzie IR et al. Nomenclature and nosology for neuropathologic subtypes of frontotemporal lobar degeneration: an update, Acta Neuropathol 2010, 119:1-4

Use of a novel direct comparison of distortion-corrected fMRI, rTMS and semantic dementia to illustrate inferolateral aspects of the anterior temporal lobe are crucial in semantic memory.

Binney, R, Embleton, K, Jefferies, E, Parker, G & Lambon Ralph, M. The Ventral and Inferolateral Aspects of the Anterior Temporal Lobe Are Crucial in Semantic Memory: Evidence from a Novel Direct Comparison of Distortion-Corrected fMRI, rTMS, and Semantic Dementia. Cereb Cortex, 2012, 20(11), 2728-38.

continued overleaf

Centres

### Recent significant research findings (continued)

High resolution MR and fMRI illustrate the selective role of the hippocampus, mammillary bodies and fornix in recall and recollection memory; confirming a recall-specific extended hippocampal circuit.

Kafkas, A, & Montaldi, D (2012). Familiarity and recollection produce distinct eye movement and medial temporal lobe responses when memory strength is matched. Neuropsychologia, 50 (13), 3080–3093.

Tsivilis, D, Vann, SD, Denby, C, Roberts, N, Mayes, AR, Montaldi, D & Aggleton, JP (2008) A disproportionate role for the fornix and mammillary bodies in recall versus recognition memory. Nature Neuroscience 11, 834 – 842.

Demonstration by a PSSRU study that intensive case management can enable older people with dementia to remain at home longer and improve the quality of care and quality of life of them and their carers.

Clarkson, P; Abendstern, M; Sutcliffe, CL; Hughes, J; Challis, DJ. (2009). Reliability of needs assessment in the community care of older people: impact of the Single Assessment Process in England. Journal of Public Health, 4, 521-529.

Successful decision-making requires that the uncertainty at the heart of the decision-making problem is taken into account; recent findings confirm that humans are finely tuned to exogenous uncertainty information and can exploit it to quide action.

Warren, PA, Graf, EW, Maloney, LT & Champion, R (2012). Visual extrapolation under risk: Humans estimate and compensate for exogenous uncertainty. Proceedings of the Royal Society B – Biological Sciences, 279, 2171-2179.

Concepts are grounded in the same neural systems that govern perception and action as modality-specific perceptual information plays a functionally constitutive role in our mental representations of objects.

Connell, L, Lynott, D, & Dreyer, F (2012). A functional role for modality-specific perceptual systems in conceptual representations. PLoS ONE, 7(3), e33321.

Research in Manchester is providing a new understanding of how semantic knowledge is created during sleep.

Durrant, SJ; Cairney S; Lewis PA (2012). Overnight Consolidation Aids the Transfer of Statistical Knowledge from the Medial Temporal Lobe to the Striatum. Cerebral Cortex. Epub ahead of print. (IF = 6.8). Lewis, PA; Durrant, SD (2011). Overlapping memory replay during sleep builds cognitive schemata. Trends in Cognitive Neuroscience. 15(8):343-51. (IF= 12.5)

### Key Challenges for the Centre

CCCN is made up of disparate groups that are physically spread: the potential for novel, rich and impactful collaboration is very high but the challenge lies in bringing this new community together and engaging researchers in the health, and other translational and impactful, agenda while not undermining their theoretical strengths and motivations.

Participant recruitment infrastructure: the success of this Centre will depend greatly on the success of patient and participant recruitment. This is a very time-consuming and sensitive process that needs to be run centrally, with uniform governance and data recording/storage.

The Centre's focus on basic and systems neuroscience means that it is highly dependent on rapidly developing technology, high-level and expensive equipment and technical support.

### Impact and Importance

Short and long-term impact on treatment and care for the elderly and those with neurodegenerative disease.

Short and long-term impact on treatment and care for pain sufferers

Impact on promoting and optimizing sustainable behaviour.

### Future Developments and Key Objectives for the next 5 years

To expand on and draw together neurodegeneration and dementia research to ensure that we are in a very strong and unique position to bid for MRC Centre status for the study of 'neurodegeneration and dementia: from molecule to care plan'.

To increase the number of collaborative funding applications (especially to MRC and other research councils) that draw on the exceptional opportunities we have to answer key clinical and biological questions using strong cognitive, methodological and technological approaches.

To establish a Manchester Pain Consortium where patient impact drives multi-disciplinary research drawing on a rich theoretical and methodological expertise set.

To establish a centre of excellence in cognition and cognitive neuroscience displaying unparalleled success in integrating theoretical and translational research.

To significantly increase the number of PhD studentships awarded to CCCN and to ensure that they reflect the Centre's key objectives.

To strengthen our fMRI expertise from a physics/computer science perspective. This is absolutely fundamental to the objectives of this Centre. It is one of the key bridges between theoretical and translational research. A lecturer/senior lecturer appointed jointly between IBBMH/SPS would be ideal.

### Centre for Developmental Science and Disorders

A joint Centre between SPS and IBBMH



#### Current status overview

The Centre for Developmental Science and Disorders (CDSD) was formed in September 2012 and is led by Elena Lieven who has just returned to part-time University employment after 14 years at the Max Planck Institute for Evolutionary Anthropology in Leipzig, Germany. At this time, CDSD consists of a number of currently disparate labs and interests. We have held two meetings in late 2012 at which we concentrated on potential translational research in early communication and development: typical and atypical.

#### Vision for the future

The strategic priority for CDSD is to promote basic and translational research. CDSD aims to be a centre of excellence in understanding typical and atypical language, communication and behaviour development. Our crucial strengths lie in the ability to translate normative research on typically developing children into understanding the developmental pathways that give rise to atypical development in language, communicative and behaviour disorders and in the implementation of new and more informed interventions.

### To achieve this vision we need to:

strengthen CDCS to enable a larger critical mass of members to carry out investigations which have higher impact (in both typical and atypical development)

build on the unique strengths of the North West in the study of language and communicative development from ages 0-5 years.

### **Director** Elena Lieven

### Key members

Gina Conti-Ramsden (SPS)

Jonathan Green (IBBMH)

Jonathan Hill (IBBMH)

### Areas of excellence

Conti-Ramsden: Specific language impairment (SLI) research: Longitudinal study of children with SLI from childhood to early adulthood. Pragmatic language disorders (ESRC current funder).

Green: Atypical social development: Controlled study of at-risk infants. Interventions with individuals at risk and their families (funding from MRC, EU, NIHR, CMFT, US and UK charities).

Hill: Wirral Child Health and Development Study of fetal and infancy origins of psychiatric disorders (funded by two grants from the MRC). Integrates study of social, genetic and psychological contributions.

Lieven: Studies of the language environment; Communicative and syntactic development: 1-5 (Funder: Max Planck Institute for Evolutionary Anthropology).



### Research Highlights

Longitudinal paradigms: all four key collaborators have a substantial track record in research using longitudinal studies.

Developmental processes: as a result of these longitudinal studies, we have been able to make major theoretical contributions to understanding the developmental pathways involved in typical and atypical outcomes for communicative development in young children.

There is a clear coherence in the CDSD through the focus on interaction and communication in children's development.

### Recent significant research findings

Conti-Ramsden: Determining the developmental trajectories of individuals with specific language impairment (SLI) from childhood to adolescence in a variety of key domains of functioning: language abilities, nonverbal skills, social relations, emotional health, and behavioural adjustment.

(Conti-Ramsden, G, St. Clair, MC, Pickles, AP & Durkin, K (In-press). 'Developmental Trajectories of Verbal and Nonverbal Skills in Individuals with a History of SLI: From Childhood to Adolescence'. Journal of Speech, Language, & Hearing Research.)

Green: Targeted parent-mediated training improves dyadic communication in pre-school children with autism, and leads to modest improvement in generalised autism symptom outcomes.

(Green et al. Parent-Mediated Communication-Focused Treatment for preschool children with Autism (PACT); a randomised controlled trial. The Lancet 2010, 375(9732), 2152-2160.)

Hill: Maternal stroking in infancy, as reported by mothers, has effects strongly resembling the effects of observed maternal behaviours in animals, pointing to future studies of the epigenetic, physiological and behavioural effects of maternal stroking.

(Sharp H, Pickles A, Meaney M, Marshall K, Tibu F, & Hill, J. Frequency of Infant Stroking Reported by Mothers Moderates the Effect of Prenatal Depression on Infant Behavioural and Physiological Outcomes. PLoS ONE 2012, 7(10): e45446.)

Lieven: Developing a model that tracks the way in which children's grammars converge on the norm between two to three years of age.

(Bannard, C, Lieven, E & Tomasello, M. Modeling children's early grammatical knowledge, Proceedings of the National Academy of Sciences 2009, 106 (41), 17284-17289).

### Key Challenges for the Centre

All four PIs have well-established methods of working and strong collaborations both within and outside the University. It is important that the vision for CDSD does not interfere with or impede the on-going research excellence already achieved. Thus the focus needs to be on creating new meaningful collaboration and identifying clear translational pipelines.

### Impact and Importance

Developing scientific understanding of complex developmental systems.

Informing new and more effective intervention (evidence-based practice).

Self-advocacy of individuals and families.

Raising public awareness.

### Future Developments and Key Objectives for the next 5 years

To secure funding for a state-of-the art child research centre.

Plans are under way for a bid to the ESRC with Liverpool and Lancaster universities for a centre of excellence in children's language and communicative development.

To secure funding for ongoing projects (Conti-Ramsden, MRC; Hill, MRC; Green, Wellcome; Lieven, ESRC).

To increase synergies between members of CDSD and beyond, focussing on multiple levels of funding from seed grants to Centre-level programme grants.

To develop the potentialities of joint publication with team members.

To establish collaborative education through a visiting lecturer series.

Our School is home of the Manchester Language Study, the longest and most comprehensive UK longitudinal study of children with specific language impairment (SLI) from childhood to early adulthood.

Dr Ludovica Serratrice has been successful in securing a highly competitive British Academy Fellowship.

24 SCHOOL OF PSYCHOLOGICAL SCIENCES

FIVE YEAR STRATEGIC PLAN 25

Centres Centres



### Centre for New Treatments and Understanding in Mental Health (CENTRUM)

A joint Centre between SPS and IBBMH

Director Gillian Haddock (SPS)

**Deputy Director** Alison Yung (IBBMH)

#### Current status overview

We are one of the largest research groups in the UK and comprise a multi-disciplinary group of clinical and health psychology, neuroscience and psychiatry. We have close collaborations with Primary Care, Nursing, Health Methodology and Imaging Sciences, and are research partners with NHS sites across the North West. The centre is jointly managed by the Institute of Brain Behaviour and Mental Health (IBBMH) and by the School of Psychological Sciences (SPS), plus affiliates from other schools, institutes and faculties.

**Areas of Expertise** 

The Centre has expertise in a range of mental health conditions (e.g. psychosis, mood, and

impulse disorders), behaviours (e.g. suicide, parenting, addictions, health behaviours) and

research methodologies. Areas of methodological expertise include qualitative approaches,

The strength of the Centre is that these three strands of expertise (disorders, behaviours and

to explore new avenues of research. For example, the development of psychological, social,

interventions to a range of psychosocial problems; the investigation of the key themes of

often in the form of clinical trials or population level interventions.

**26** SCHOOL OF PSYCHOLOGICAL SCIENCES

cognition, interpersonal environments; and the integration of psychological and biological

environmental and biological models to the development of new treatments or other relevant

explanations to derive understanding, prevention and intervention of mental health problems,

methods) intersect in different combinations resulting in creative environments with critical mass

discourse analysis, quantitative methods, trial expertise, neuroscience and neuroimaging.

### Vision for the future

Our vision is the understanding, prevention and treatment of mental health problems and the enhancement of mental health well-being. The Centre aims to create knowledge and to translate this knowledge into policy, practice, training and teaching and to be recognised as an international centre of excellence

### Planned contribution to the strategic aims and objectives

We produce high quality research that is translated into policy, practice, teaching and training. Strategies through which this is achieved include collaborations nationally and internationally, high levels of grant income, high quality publications in high impact journals, integration of the work into the NHS and other domains and facilitation of service user involvement. Specific examples of our strategy include the recent partnership with the Universities of Liverpool and Lancaster to form a North West consortium around preventative treatments for mental illness and partnership with the Faculty of Life Sciences around preclinical drug development, including use of the new ICON Clinical Pharmacology facility on the Central Manchester site.

### Current grant profile

The group has funding across a range of bodies from the basic science to implementation and translation into practice, including significant funding from research council programmes (EME, MRC developmental medicine, Wellcome, EU, NIHR RfPB, NIHR programmes etc). The group has two NIHR senior investigators (Lewis,

### Research Highlights

We have internationally recognised expertise in research in a range of areas with significant, agenda setting publications in Archives General Psychiatry, British Medical Journal, Lancet. Some kev examples are below:

Mobile mental health has attracted significant MRC and EU funding and will be developed into commercial products. For example, the Psygrid study established a national catchment of first episode psychosis cases (Lewis) and developed and validated m-health personalised approaches to ambulatory assessment and intervention for people with psychosis (www. clintouch.com). This programme extends into the new MRC Centre for e-Health Research and the MAHSC mHealth ecosystem. Linked to this are three EU grants assessing mHealth enabled medication management in early psychosis (Optimise), new treatments for cognitive deficits in psychosis (Newmeds), and building a roadmap for mental health treatment research across Europe (ROAMER).

Improving the lives of vulnerable women and their children through international collaborative studies of maternal effects on mental health offspring outcomes (Abel). Key research foci are prenatal maternal stress and child and adult mental health outcomes, early life stress and childhood risk of psychosis, post-term birth and later psychopathology, effect of paternal age on life expectancy and risk. fMRI and mHealth are being used to explore relationships between mothers and their offspring e.g. parental responsiveness in new mothers with schizophrenia assessed with fMRI and the development of e-resources to improve knowledge about schizophrenia and engagement with services in African Caribbean families (Abel, Edge).

Parenting and families (Calam, Sanders, Wittkowski) has provided the centre with a longstanding and productive collaboration with the University of Queensland, Australia (Sanders). This has allowed the widespread development of Triple P parenting programmes to new and novel areas of particular importance. For example, the MRC funded Thrive trial in collaboration with the University of Glasgow will focus parenting interventions on vulnerable women in pregnancy. Triple P is also being trialled in low and middle income countries.

The development and evaluation of psychological treatments is a key strength, for example,

The group carried out the largest trial ever funded trial (MRC) evaluating the effectiveness of psychological treatments for people with psychosis and substance misuse (MIDAS trial; Barrowclough, Haddock, Lewis).

The development of cognitive therapy for anxiety (Wells) and bipolar disorders (Mansell, Tai) that have influenced NHS provision and are included in NICE treatment guidelines.

A programme of first episode psychosis research led by Lewis, Marshall, Haddock, Morrison, Barrowclough and Bucci. In 2012, they were joined by Alison Yung, from Melbourne, Australia. Professor Yung is a pioneer in the field of prodromal research. The Centre has one of the highest concentrations of early psychosis researchers in the world, and has many collaborative links both nationally and internationally. The strategy of this group is to examine ways of preventing or minimizing the personal, social and economic impact of psychosis, investigating aetiological mechanisms and ensuring that evidence is translated into policy and practice.

The Neuroscience and Psychiatry Unit (NPU) (Deakin, Anderson, Elliot, Talbot, Drake) uses experimental medicine to identify and validate potential targets for new treatments and confirm that treatments work by acting on their intended target. For example, an MRC funded study is attempting to identify psychobiological mechanisms of resilience to depression by comparing cognitive, imaging and genetic biomarkers in people who survive major life events without developing depression with biomarkers in those prone to depression. Biomarkers for these resilience processes may then be used to detect efficacy of new drugs and to validate preventative psychological treatments. Other key work involves the experimental administration of drugs and the use of performance and functional magnetic resonance imaging (fMRI) biomarkers. Some studies are proof of concept studies to determine whether a single dose of a drug engages the cognitive target of interest (e.g. reward processing in addiction). Other studies aim to understand mechanisms of efficacy. For example, the group recently reported that the antibiotic minocycline is effective in early schizophrenia; now the £2m BeneMin trial is using MRI to determine whether minocycline works because it lessens loss of grey matter early in the illness.

**Developmental disorders:** This includes cross faculty work on Mucopolysaccharidosis type III (Sanfilippo syndrome) (Hare) which has examined the behavioural phenotype, sleep and circadian rhythm functioning and impact on families. This work resulted with Sheena Grant being awarded the Pat Howlin Prize for the Scientific Study of Behavioural Phenotypes for her work on the psychological impact of parenting a child with MPS III. Clinical practice within services for children with disabilities has been changed in response to this work.

Psychological approaches to the prevention of suicide, including development of assessment tools, psychological models of suicidal behaviour, psychotherapy interventions individuals vulnerable to suicidality (Gooding, Pratt, Awenat, Haddock) is also a growing area of research within the Centre which has attracted some significant funding and important outputs. There is close collaboration with the Centre for Mental Health and Risk.

The application of health psychology to mental health (Wearden, Armitage, French, Speer, Peters, Ulph). The centre for Health Psychology within the School of Psychological Sciences is closely aligned to this Centre, particularly in relation to its work on physical health and severe mental illness and addictions. The work has attracted significant funding from MRC, HTA, NIHR RfPB, ESRC and NIHR programme funding streams.

FIVE YEAR STRATEGIC PLAN 27

### Key Challenges for the Centre

The group is diverse and large, presenting challenges to the oversight and management of the group. A key challenge will be ensuring that the work of the group continues to develop its key areas of work and to ensure that the expertise in the group is not diminished through competition from other institutions. In addition, we need to ensure that we provide support and leadership for junior researchers to provide continued expertise within our areas of strength.

### Future Developments and Key Objectives

To secure funding for a North West centre for the study of schizophrenia via our Manchester/Liverpool/Lancaster collaboration.

To secure increased research council funding for planned projects and to consolidate our strengths across the Centre members and across the Faculty.

To develop and capitalise on international collaborations which contribute to our profile and quality of our outputs.

To increase the number of NIHR investigators, and funding across the spectrum (from PhD, fellowship awards) to Centre-level programme grants.

To continue to target high impact, international journals with agenda setting and world leading publications.

To develop and improve the contribution of mental health teaching across the programmes within the Faculty.

To foster a thriving and vibrant research and teaching community, with representation from service users and the community, by making our research and teaching inclusive and developing support and training for member of the community to take part in our work.

### Key Collaborators/Partners

This work is embedded within a close collaboration with the NHS and other partners, primarily as part of the Manchester Academic Health Sciences Centre (MAHSC) and the newly formed Academic Health Sciences Network (AHSN). This has facilitated a major programme of implementation and dissemination resulting in significant improvements and developments in prevention, services and care. We are committed to the involvement of service users in our research and teaching and have been nationally recognised for service user involvement in the recent NIHR funded Recovery Programme (Barrowclough and Pitt). In addition, we have commendations from national bodies such as the BPS for service user involvement in teaching and have an active and integrated Community Liaison Group which contributes to the overseeing of curricula and their delivery.

An important part of our strategy is to lead collaborations with other UK universities to enhance recruitment to trials and enhance scientific exchange. Internationally, we have major collaborations. For example, our proven success in large-scale recruitment to schizophrenia studies in Pakistan is a major strength which has resulted in a highly efficient infrastructure for clinical trials in psychosis in Pakistan (Chaudhry and Husain). Our ongoing collaboration with the University of Queensland on Triple P parenting programmes (Sanders, Calam, Wittkowski) has led to significant funding and outputs.

Collaboration with industry is also important (partnerships with, for instance, Astra Zeneca and Lundbeck) and their strategic withdrawal from CNS drug development and their shift to out-sourcing is a major opportunity. Members of this group are developing a number of projects with an industrial collaboration element, in line with the MRC's recent emphasis on this area.

### Manchester Centre for Health Psychology

An SPS Centre

### Current status overview

The Manchester Centre for Health Psychology (MCHP) is a newly formed research hub, with the impetus provided by the appointment of three outstanding Chairs in Health Psychology in 2012–13, plus the addition of an iconic 20% appointment from the USA. There is tremendous scope for Manchester to take an internationally leading position in health psychology and behavioural medicine. The combination of the outstanding resources and networks that Manchester offers across the University and MAHSC, in combination with the Faculty's strategic priorities, provides an unparalleled opportunity for development. Building on the existing scale of the opportunities that Manchester provides, these new appointments will facilitate transformational change and establish Manchester as the leading UK centre for health psychology.

### Current and future priorities

- 1. Establishing a critical mass of internationally-leading health psychology.
- 2. Strengthening translational research from theoretical models of health-related behaviour, cognition and emotion into development, evaluation and implementation, leveraging strongly collaborative research across a range of Institutes and Schools.
- Accessing strategic research council and NIHR funding as well as from charities that have dedicated funding streams to disorder-specific health psychology.
- Aligning with emerging NHS agendas bridging physical and mental health, prevention, and patient self-management.
- 5. Provision of research-led, evidence based teaching and training in Health Psychology.

Alison Wearden

**Director** Alison Wearden

**Current members** Chris Armitage Belinda Borrelli Michèle Birtel Christine Bundy Lucie Byrne-Davis Lis Cordingley Linda Davies Richard Emsley Dawn Edge David French Joanne Hart Maria Horne Simon Kyle Sarah Peters Rachael Powell Torben Schulz Suzie Skevington Debbie Smith Susan Speer Fiona Ulph

Centres

### Key objectives

### Encourage the highest quality research, attracting funding

To draw in major research funding to establish a leading Centre with research links locally (e.g. the North West Health Psychology Research network), nationally (e.g. via the UKSBM) and through collaborations worldwide.

Set up a clinical trials unit dedicated to complex behaviour change interventions.

Have affiliations with all of the Faculty Institutes.

Promote health psychology within MAHSC, the Experimental Medicine Strategy Board, and throughout the NHS.

### Provide a supportive working environment for members

Network and share intelligence about funding opportunities.

Support members by mentoring, career development, pairing experienced and more junior researchers. Seek bridging funding to retain good contract researchers.

Seek funding for PhDs and postdoctoral research fellows.

### Raise the profile of Health Psychology at Manchester

Branding, publicity and events to make the Manchester Centre for Health Psychology distinctive and recognisable.

Develop a role in training and education for other health professionals, and providing consultancy for health care providers

Disseminate consulting expertise.

Develop close links with public health departments in local councils and with service providers and commissioners in the NHS.

Enter discussions with relevant local and national organizations for training places and bursaries for Health Psychology trainees.

### Areas of specialised research expertise

### Behaviour change for health promotion and prevention of ill health

More than half of preventable deaths are caused by behaviour (e.g. smoking, alcohol consumption, dietary intake and lack of physical activity) and behavioural factors (from attendance at clinic to take up of screening to lifestyle change) are important in the treatment and prevention of all diseases.

#### Long-term conditions

While people are on the whole living longer, many are living with chronic ill-health problems, which pose challenges for patients and those who live with them or care for them. We research and develop interventions for the management and self-management of symptoms and distress in long-term conditions. We also work on interpersonal factors in illness experience and management, including the how family members impact on illness and how illness impacts on them.

### Health inequalities and quality of life

Members of the Manchester Centre for Health Psychology carry out research to improve health and access to health for people from vulnerable populations, such as those with mental health problems, and members of disadvantaged minorities. We have world-leading expertise in the measurement of quality of life in many health conditions and across many social, ethnic and cultural groups.



#### Medical education and communication

We recognise the importance of taking health psychology to our colleagues from other health care professions. We have expertise in medical education research and the training and supervision of members of other health care professions in the delivery of psychological interventions.

#### Expertise in Interventions

In accordance with the Medical Research Council's guidance on the conduct of complex behaviour change interventions:

**Development** – We identify the evidence base, develop theory, and model the processes and outcomes associated with complex interventions targeted at changing behaviour and managing distress.

**Feasibility/piloting** – We develop and test novel, theory-driven evidence-based interventions and seek to identify the key active ingredients of successful interventions.

**Evaluation** – We assess the effectiveness of complex behaviour change interventions, develop key outcome measures (e.g. quality of life) and seek to understand the process of behaviour change (e.g. how interpretation of symptoms impacts on management behaviours).

Implementation of complex behaviour change interventions – We disseminate our findings, monitor the effects of our interventions, conduct long-term follow-ups, and embed the public in our research.

### Multi-disciplinary research in a range of conditions, using multiple methods

In conducting this research, we work collaboratively with colleagues across the Faculty (e.g. health economists, health services researchers, statisticians, oncologists, dieticians), target priority groups (e.g. women, children, adolescents, people with mental health conditions, people with low socioeconomic status), deal with many health conditions (e.g. cardiovascular disease, cancer, obesity/overweight, pain, psoriasis, chronic fatigue, asthma), via different media channels (e.g. clinical communication, parenting, Internet), and employ significant methodological expertise (e.g. systematic reviewing, field experiments, surveys, quasi-experiments, experience sampling, and multiple qualitative methods, including providing the qualitative lead for the North West Research Design Service).

Centres



### Audiology and Deafness Research Group

Working in affiliation with the Centre for Hearing and Vision Research

### **Group lead** Kevin Munro

### Key collaborators

Chris Plack

Collette McKay

Karolina Kluk-de Kort

### Vision for the future

The Audiology and Deafness Research Group aspires to be the leading centre in the UK and a world leader in two broad areas:

Innovative research that translates basic underpinning research into direct benefit to people who have a hearing dysfunction.

Research that underpins and delivers improved services in health care and education for adults and children with a hearing loss.

### Current status overview

The Manchester Audiology and Deafness Group (A&D) is one of the leading centres in the world for hearing research that leads to patient benefit. Although treatments for hearing loss are available, outcomes are often poor for a number of reasons, including inadequate diagnosis, the limitations of current prostheses, and problems with uptake, habilitation (adapting to the use of the hearing device), and service delivery. A&D is actively involved in improving performance in each of these areas, through the development of new audiological test batteries, improvements to auditory devices, and improved habilitation and service delivery for individuals with hearing loss.

The group was instrumental in the implementation and evaluation of the UK National Newborn Hearing Screening Programme, more than 5 million babies screened to date, and has allowed early detection and treatments for hearing loss. The group was also responsible for the DH programme of Modernising Children's Hearing Aid Services (MCHAS) – the research and training programme which introduced digital signal processing hearing aid technology into the NHS. The MCHAS guidelines for new fitting procedures and working practices are now imbedded into clinical practice and are used as a quality standard by which good practice in Paediatric Audiology can be measured. We are continuing our research in this area, and have a £680,000 grant from the MRC to develop a comprehensive objective test battery that could revolutionise paediatric diagnostics. We have also secured Central Manchester Foundation Trust (CMFT) research strategy funding to develop procedures that will provide information about the appropriateness of intervention strategies for infants. Hearing impairment can have a dramatic impact on learning outcomes for children. A&D is the leading centre in the UK for research on deaf education and the training of teachers of the deaf; we have the only Professor of Deaf Education in the country.

Manchester Auditory Implant Centre (MAIC) is the largest centre in UK for providing cochlear and brainstem implants, surgically implanted devices that can restore hearing to people with severely damaged ears by direct stimulation of the auditory nervous system. MAIC provides these devices to over 100 children and adults every year. Our research collaboration with CMFT and leading industrial partners aims to improve the performance of these devices. A significant factor determining the effectiveness of hearing devices, such as cochlear implants and hearing aids, concerns how the brain adapts to hearing loss and to the partial restoration of auditory function by the devices. The group is working with international industrial partners to understand the physiological mechanisms underlying these changes and to investigate training and habilitation strategies that may help the brain to use the hearing device more effectively.

Our multidisciplinary research team includes professionals in audiology, deaf education and medicine, in addition to scientists who are expert in psychophysics, electrophysiology, signal processing and neural imaging.

The group is affiliated to the Centre for Hearing and Vision Research in the Institute of Human Development and also has collaborative links across the university with Engineering, Social Sciences, and Medicine. Our research is supported by funding from the Department of Health, UK research councils, industrial partners, and charities. In 2008, Deafness Research UK designated our group as a Centre of Excellence for research that leads to benefit for people with a hearing impairment.

Piers Dawes and Kevin Munro are the first researchers to receive data from the UK Biobank.

### Research Highlights

#### Coding and processing

Theme coordinator: Chris Plack

This theme focuses on physiological processing within the auditory system, with the goal of understanding how the normal and impaired auditory system codes and processes sounds. The theme has the translational goals of:

- Improving and individualising auditory diagnostics and the fitting of hearing devices
- Developing new signal processing strategies for hearing devices

#### Members of research theme:

Chris Plack, Colette McKay, Karolina Kluk-de Kort, Kathryn Hopkins, Richard Baker.

### Clinical assessment and management

Theme coordinator: Kai Uus

This theme focuses on clinical assessment and management of adults and children with hearing impairment, tinnitus and balance disorders. Research is aimed at improving patient outcomes using innovative technologies or techniques.

### Members of research theme:

Kai Uus, Kevin Munro, Karolina Kluk-de Kort, Chris Plack, Colette McKay, Kathryn Hopkins, Richard Baker, Tim Wilding.

#### Plasticity in the auditory system Theme coordinator: Kevin Munro

This theme is concerned with understanding the changes that occur over time in the auditory system due to training, deafness, development, or restoration of input to a deaf auditory system. The translational goal of this research is to guide fitting and management options for hearing devices.

### Members of research theme:

Kevin Munro, Chris Plack, Karolina Kluk de Kort, Kathryn Hopkins, Colette McKay.

#### Implantable auditory prostheses Theme coordinator: Colette McKay

This theme aims to improve the outcomes of implantable devices (Cochlear Implants, Auditory Brainstem Implants, and Auditory Midbrain Implants) for people with a severe to profound hearing loss. We aim to:

Understand the variability in outcomes through understanding perceptual and physiological factors in the auditory system, and thus develop improved and individually optimised coding strategies for individuals.

Improve signal processing techniques in the devices, and to develop diagnostic and prognostic tools to aid the choice of device type and surgical approach.

We use and develop new techniques in the fields of psychophysics, imaging, electrophysiology, and signal processing.

#### Members of research theme:

Colette McKay, Karolina Kluk, Martin O'Driscoll, Kevin Green, Chris Plack.

### Improving service delivery

Theme leader: Wendy McCracken

Service delivery to individuals who are deaf seeks to ensure best practice but a range of factors at governmental, institutional, service level, or at the level of the individual recipient, reduce efficacy and result in less than optimum experience for the client and efficiency for the service provider. By exploring aspects of service delivery with both quantitative and qualitative methods the aim of this group is to improve quality of provision. Currently this group is involved in:

Assessing real world benefit of FM amplification for deaf children

Understanding the reflective component of student experience when training to be work in audiological services

Understanding current provision of this HEI for students with identified hearing loss.

Recently this group completed research into:

Use of FM amplification with pre-school deaf children

The growth of sexual understanding in deaf children

Parental experience of services for deaf children with additional and complex needs.



### MAHSC: The Manchester Academic Health Science Centre

MAHSC is a partnership between The University of Manchester and six NHS organizations. These include some of the most highly rated NHS Trusts in the country.

**Director**Professor Ian Jacobs

MAHSC (Manchester Academic Health Science Centre) is a partnership between The University of Manchester and six NHS organisations which include some of the most highly rated NHS trusts in the country:

Central Manchester University Hospitals NHS Foundation Trust

Manchester Mental Health and Social Care Trust

Salford CCG (formerly NHS Salford) as lead representative for GM CCGs

Salford Royal NHS Foundation Trust

The Christie NHS Foundation Trust

University Hospital of South Manchester NHS Foundation Trust

These six NHS partners joined with The University of Manchester to create MAHSC (Manchester Academic Health Science Centre), which is the only Department of Healthaccredited Academic Health Science Centre outside the South East. The strong relationships that the Faculty has with these outstanding NHS partners are critical in achieving our mission in facilitating excellent education, research and activities aimed at building our links with the local community and demonstrating our commitment to social responsibility. MAHSC provides unprecedented opportunities to ensure research and education to impact on clinical care on a large scale. This enables our work to contribute positively to the social, economic and health needs of the Greater Manchester region and population.

The Dean of the Faculty of Medical and Human Sciences, Professor Ian Jacobs, is Director of MAHSC, thus ensuring close relationships across the partner Trusts and the University. These close relationships offer exceptional opportunities to foster both teaching and research activities.

MAHSC strategy is separate to, but symbiotic with, the Faculty. The relationship is characterised by:

Alignment of the Faculty research priorities with MAHSC sections.

Cooperative and collaborative working on a range of crosscutting initiatives including fundraising, conference programmes, the Research Office and the 'grand challenge' themes.

Integrated planning of undergraduate, postgraduate and continuing professional education across the Faculty and MAHSC.

Expansion of interactions with other AHSCs both in the UK and overseas.

### School resources

### Space

The School was formed from the merger of three separate groupings in 2004, and the space it occupies reflects its history, being spread across campus on three sites, with some administrative staff on a fourth site. Coupland 1 is the historical home of Psychology, where there is now a concentration of health psychologists, and the language development group based around the Max Plank Child Study Centre. The Zochonis Building now houses some of psychology's basic scientists, particularly the neuroscientists, and clinical psychology. Communication and Deafness are based in the Ellen Wilkinson Building. There are specialist laboratory facilities in each building. In Coupland, there are specialist observational facilities for child study and areas for undergraduate laboratory teaching; in Zochonis, there is a concentration of neuroscience laboratories, as well as psychophysiology and pain laboratories; and in Ellen Wilkinson there are specialised auditory laboratory faculties.

There are plans to co-locate the School across Zochonis and a building opposite on Dover Street, to concentrate areas of activity together, which should reduce needs for both space and duplication of specialist laboratories. The Dover Street development will also have scope to develop shared interdisciplinary facilities for clinical areas of expertise; planning for this phase begins in 2013. The larger refurbishment of Zochonis is planned for 2018. The first phase of these developments has been the development of a hub in Zochonis to provide a café, with social space and Wi-Fi, to create a focus for students and for the School.

We have a pressing need for improvements in teaching space. There is a need for a large bookable computer cluster for the teaching of statistics for which the basement in Zochonis has been flagged as a possibility. The ideal would be a large cluster of machines that can be booked for the teaching of classes, with facilities such as PowerPoint so lecturing does not have to take place in a separate room. The results of the student barometer survey (PGT) showed that we compare less favourably, by a significant margin, with other Schools on 'Technology' and 'Learning spaces'.

The positive planned developments are crucial to ensuring that we offer a competitive environment which can attract the best students and staff to study and work here.

#### Finance

Taught programmes form the core of the School's budget, with the BSc in Psychology forming the largest component of this. Programmes have different sources of finance; there are two undergraduate and three postgraduate-taught programmes funded by the NHS, with a total of 169 students on these. Major sources of research funding include a number of major grants, but we are under no illusions that our research grant income is sufficient, or that our trajectory is strong enough for a School of our size.

#### Staff

We have a large staff group, made up of 23 professors (including 4 consulting professors), 2 readers, 2 senior research fellows, 35 senior lecturers and senior clinical tutors (of which 15 are teaching-focused), 41 lecturers and clinical tutors (of which 15 are teaching-focused) and 4 teaching assistants. Many staff are part time (42%); some are joint appointments with the NHS. There are 34 professional support staff. All staff are expected to work collaboratively to promote collegial, effective working relationships and an excellent experience for staff and students alike.

The School is working towards an Athena SWAN silver award and has active strategies to ensure equality of opportunity. Workshops and presentations are used to work toward s these goals, as well as active promotion of equality through Head of School communications.

### Equipment

The work of our School ranges from low technology, face-to-face work requiring primarily pen-and-paper approaches through to very high-tech neuroscience; some access to brain scanning equipment is through shared facilities within the Faculty.

Within the FMHS and the School there exists very extensive facilities and equipment for use in neuroscience research, with the main laboratories in the Zochonis building. This includes three MR scanners (two of which are 3T), a pre-clinical MR scanner, two PET scanners, extensive EEG facilities as well as MRI compatible EEG, TMS, a mock MR scanner suite, several eye-trackers (including an MR compatible eye-tracker), extensive testing cubicles and specialised laboratories (e.g. vision, sleep, multisensory and language laboratories). Audiology and Deafness have extensive laboratory provision in the Ellen Wilkinson building with soundproof booths and specialist equipment. In the Coupland building, the Max Planck Child Study Centre has experimental and observational facilities for developmental research.

34 SCHOOL OF PSYCHOLOGICAL SCIENCES

FIVE YEAR STRATEGIC PLAN 35

### Areas of excellence

### Research

#### Examples of recent significant current funding:

#### MRC award, £548,223

Principal investigator: Karolina Kluk de Kort. Title: "An Objective Audiological Test-Battery. 2012–2014.

#### Wellcome Trust award, £627,985

Principal investigator: Daniela Montaldi. Title: "Is the Medical Temporal Lobe Functionally Heterogeneous for Familiarity and Recollection?". 2011–2016.

#### ESRC award, £798,605

Principal investigator: Gina Conti-Ramsden. Title: "Specific Language Impairment (SLI) and Adulthood: Identifying Pathways to Resilience/Maladjustment in Personal, Social and Societal Functioning". 2011–2014.

#### EPSRC award, £812,212

Principal investigator: Stephen Welbourne.

Title: "PDP squared: Meaningful PDP language models using parallel distributed processors". 2008–2013.

#### MRC award, £1,673,048

Principal investigator: Matt Lambon Ralph.
Title "Towards a unified, computationally-implemented neural network for understanding semantic cognition and its disorders". 2012–2017.

#### Max-Planck award, £1,990,568

Principal investigator: Elena Lieven.

Title: "Research into Child Language Development in English Speaking Children between 9 Months and 5 Years of Age". 1999–2014.

### Undergraduate highlights and areas of excellence

The School has achieved an improvement in overall satisfaction on the National Student Survey of 18 points over 5 years.

The BSc in Psychology team has worked closely with students, using feedback to completely overhaul the curriculum for 2012 onwards. The degree is being further strengthened by an emphasis on employability skills, including the options available for international study, and the option to take the Manchester Leadership Programme.

Audiology has demonstrated flexibility in the face of the Modernising Scientific Careers agenda. It has developed an impressive suite of degree programmes which include groundbreaking, innovative curriculum development informed by its internationally renowned research and employing innovative teaching and learning methodology.

The BSc SLT team addressed issues raised in 2011, communicated openly with the student body and achieved 100% response rate and an overall satisfaction score of 97% in 2012. We are delighted with this outcome and are keen to explore the sharing of good practice across all programmes in the School.

SPS ran a welcome event for new 1st years at Whitworth Hall for this first time in 2012. Feedback from students and also staff who attended the event has been very positive.

BSc Audiology student coordinators won the 'Mentorship Award' at the annual Peer Mentoring

### Postgraduate highlights and areas of excellence

The Manchester ClinPsyD is one of the leading Clinical Psychology training programmes in the UK and normally has the highest student application rate outside London; it receives consistently excellent feedback from students, graduates and employers, has a high publication rate for trainee research and outstanding employment outcomes.

The British Psychological Society accreditation team commended the relationship that the Clin Psy D programme team has with the University, NHS Trusts and the Strategic Health Authority and other stakeholders, noting that "The programme is clearly held in high regard by these stakeholder groups and trainees, past and present.

The MSc Clinical & Health Psychology was the first, and remains one of the only programmes in the world to deliver training across the broad spectrum of clinical and health psychology specifically tailored to the needs of those wishing to pursue a psychology career applied to healthcare. It attracts about 5 times as many home and overseas applications as there are places.

MSc/PG Dip Deaf Education: The first e-blended course in Deaf Education, the programme is highly regarded within the profession and has the only Professor of Deaf Education in the UK. Students are taught by Teachers of the Deaf, Audiologists, a Speech and Language therapist and a Paediatrician. The programme has made innovative use of iPads in the assessment of phonetics.

The MSc in Clinical Science (Neurosensory Science) is one of only two Modernising Scientific Careers MSc Clin Science (neurosensory sciences) programmes funded by the Department of Health.

MSc Neuroimaging for Clinical and Cognitive Neuroscience graduates are very successful in gaining PhD studentships both in Manchester and in other major imaging centres. Intercalating medical students are very enthusiastic about the role of the course in the medical careers.onwards. The degree is being further strengthened by an emphasis on employability skills, including the options available for international study, and the option to take the Manchester Leadership Programme.



### Manchester's got everything except a beach.

Ian Brown, lead singer with The Stone Roses

36 SCHOOL OF PSYCHOLOGICAL SCIENCES

FIVE YEAR STRATEGIC PLAN 37

### Challenges

### The financial landscape

Student recruitment can no longer be taken for granted. The landscape for postgraduate recruitment is uncertain and there have been cuts in the number of postgraduate studentships. This has created potential vulnerabilities for some undergraduate and postgraduate programmes. At the same time, student expectations have increased. There have also been significant changes in NHS funding for programmes and the future for some areas is less certain.

### Space and estates

The current estate, split across three sites, with some key administrative staff on a fourth, is not conducive to the effective integration of the School. This presents a challenge to both students and staff in terms of our sense of identity and cohesion as a School. We are making some adjustments so that staff are co-located by subject area in our existing buildings where possible, and a new student hub opened in Zochonis in April 2013. Co-location around the Zochonis and Dover Street buildings is planned but will not come on stream for several years. It is important to highlight the lack of consistently good quality teaching accommodation and student common space across all our sites. This affects both the student learning experience and staff morale and performance. We look forward to the improvements that will come with the development of the University's planned investments in estates.

### Research

The challenges for research are those that face every institution in the current highly competitive climate; the need to adopt a strategic approach to the identification of, and response to, funding opportunities, and the need to aggregate areas of excellence to build significant centres capable of bidding for large scale funding. The School needs to realise ambitious targets if it is to compete with the best Universities in the field. Staff need to plan their time carefully and think strategically about how they invest their efforts to enable them to attain the high levels of award that we are ambitious to achieve. The imbalance in funding and the level of investment in "Loxbridge" means that our highest achieving staff come under considerable pressure to accept favourable offers in the South and this constitutes a major risk. We need to develop a model which motivates and rewards success and productivity without risk to other activities of the School. Creating the conditions to enable us to retain our outstanding staff in the face of competing offers of tempting opportunities elsewhere is important.

As a School with a large number of staff working in health-related areas, staff identify difficulties in determining priorities for funding and dissemination of findings. The NIHR funding streams may not yield full economic costs, but their impact and value in conducting high quality research is potentially very high. Similarly, while bibliometric statistics may favour a smaller number of publications in prestigious journals, NIHR funders may ask for a higher number of lower impact and more accessible accounts of research activity. Also, the development of evidence-based practice may have high impact which is not reflected in publication quality. We are working with Faculty on a way forward.

As with every institution with a serious commitment to excellence in teaching, there is a need for staff to achieve a balance in the time that they devote to research. Our School has a heavy commitment across a number of areas of education. Helping staff to manage this balance is an important challenge for the School leadership. We are working on a new workload model, to come on stream for 2013–14.

The challenge is maintaining excellence in the face of all the other calls on our time.

### Teaching

NSS results – it is fully acknowledged that we need to address our attainment as a School as a matter of urgency. While we are moving in the right direction in terms of our 'overall satisfaction' rating by students, our rate of improvement needs to be faster. Our Director of Undergraduate Studies is reviewing our activity and working with programme directors to clarify what areas of good practice we should be sharing between programmes and where we can be bold in identifying and addressing unsatisfactory practice or inadequate resourcing.

Employability – The level of employment among our graduates in what are termed 'positive destinations' is disappointing compared to other parts of the Faculty. This is especially the case for BSc Psychology & BSc Speech and Language Therapy graduates. Following improvements in our profile, our School Employability Lead is now taking a lead at Faculty level seeking solutions.

Staff:student ratios – We need to ensure that we adhere to professional body and regulatory requirements while considering equity across the whole School. The new Section Leads have been tasked with examining the profile of their workforce and identifying where there are opportunities or needs to make changes. The new workload model should help rollout of this.

Health related programmes are challenged by the shifting landscape of the NHS and, in some cases, cuts to funding for programmes. Developing innovative solutions to these challenges and providing our graduates with a genuine advantage is essential in an increasingly competitive employment landscape. We have developed new programmes in Audiology in the face of funding cuts and continue to monitor for opportunities in, for example, CPD.

E-learning support is not yet adequate to make programmes effective online. We are discussing this with the Faculty IT team and seeking a long term solution.



### Impact and importance

We have many examples of activities by the School which have made an important contribution to health, education, science, the economy or wellbeing. A few examples are below; for more, please see our online appendix.

A group led by Professor Tony Morrison has demonstrated that it is possible to identify young people at very high risk of developing psychosis, and has demonstrated ways of reducing symptom severity. CBT for psychosis has been included within NICE guidelines and in the US PORT guidelines on the treatment of schizophrenia and has resulted in considerable national and international impact. Professor Morrison is currently a member of two NICE guideline development groups (adults with psychosis update and children and young people with psychosis).

Professor Adrian Wells is the originator of metacognitive therapy which is a recommended treatment for Generalised Anxiety Disorder by the National Institute of Clinical Excellence (NICE, GAD Guideline, September 2012). His treatments have contributed to the core syllabus used in the national DH funded Improving Access to Psychological Therapies (IAPT) training initiative.

Research on parenting has informed national and international policy. Professor Rachel Calam advises the United Nations Office on Drugs and Crime (UNODC) on parenting programmes to assist in prevention of drug use, and has contributed to international quidelines for member states.

Dr Sara Tai was awarded an International Visiting Fellowship from Flinders University to work in Australia setting up research in remote areas within disadvantaged populations, which has direct impact for communities.

Dr Fiona Ulph has recently been an invited speaker at an EU working group on the future of newborn genetic screening; an EU working party has been formed to address research and practice needs.

Dr Audrey Bowen is the BPS representative on the Intercollegiate Stroke Working Party which produced the National Clinical Guideline for Stroke.

Professor Gina Conti-Ramsden leads the largest longitudinal study of specific language impairment (SLI) in the UK. She is co-founder of RALLI, a campaign to raise awareness and public understanding of language learning impairments. The campaign has a dedicated YouTube channel with over 60,000 views in less than one year since its launch in May 2012 (http://www.youtube.com/user/RALLIcampaign)

Dr Ludovica Serratrice was awarded a British Academy Mid-Career Fellowship in 2012. The Fellowship is an extremely competitive award whose aim is to support outstanding individual researchers and outstanding communicators who will promote public engagement and understanding of the humanities and social sciences.

Dr Catherine Adams leads the team that has developed an assessment tool (TOPICC) to identify young people at risk of social communication difficulties. She has also developed an individualised speech and language therapy intervention programme (SCIP Manual) for children and young people with social communication difficulties including autism spectrum disorders.

A team led by Dr Karolina Kluk-de Kort has received substantial MRC funding to develop an objective audiological test battery, based on measures of the electrical response of neurons in the brain that can automatically diagnose hearing disorders. This could revolutionise auditory diagnosis, particularly for individuals who are unable to take a conventional hearing test, such as infants and adults with special needs.

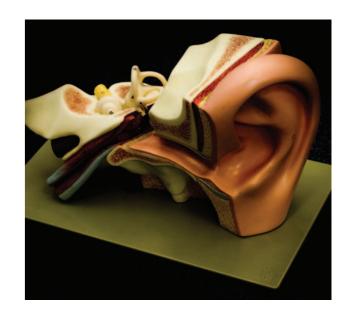
Professor Kevin Munro leads a project to improve the prevention of hearing loss by identifying individual risk factors such as genetic susceptibility and environmental factors. To further this aim, his group is the first in the world (across all disciplines) to have obtained access to UK Biobank data.

Professor Chris Plack has built an international consortium to determine the causes and consequences of "hidden" damage to the auditory nerve that is not identified by current audiometric procedures. This could have major implications for the future diagnosis and prevention of hearing loss, particularly with respect to health surveillance in the workplace.

Professor Alison Wearden led the MRC-funded FINE Trial, the largest primary care trial of treatment for chronic fatigue syndrome at the time. The treatment it tested, pragmatic rehabilitation, has been incorporated into practice in Lancashire and London. The paper reporting the FINE Trial was nominated for the RCGP paper of the year award.

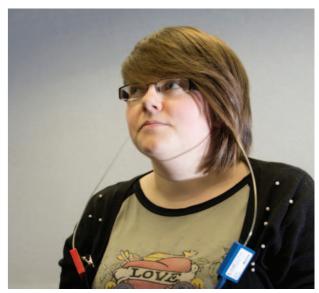
A systematic review conducted by Professor David French has been cited as a cutting-edge synthesis in the 2012 NICE draft scope on individual behaviour change.

Professor Suzanne Skevington has worked with several UN agencies on the value of assessing subjective quality of life cross-culturally. In 2010, the United Nations Environment Program (UNEP) commissioned a policy brief on Biodiversity, Health and Wellbeing (ISSN 1998-0477), following a UNEP-promoted book. She presented international HIV research from the WHOQOL-HIV collaboration at a UNAIDS stakeholder meeting on stigma in Washington DC, in 2009. She contributed to an invited meeting on HIV and gender at OECD in Paris (2010), and has engaged with UNESCO policy-making in their Bureau of Strategic Planning (2009–11). With her groups she has published rare international findings on the quality of life of older adults with HIV.









### Future developments

### Research

The major investment in the development of the Centre for Health Psychology means that this will be a significant area of growth for the School. The Centre will develop significant research grants, both through PI leadership of research into health psychology and through contribution to large collaborations led by researchers across the Faculty.

The development of the joint Centres across the Institute of Brain, Behaviour and Mental Health, and affiliations with Human Development and other Institutes, will foster significant gains in research funding.

An agreement on collaboration between the Universities of Liverpool and Manchester will be supported by grant applications which leverage the combined strengths of the two institutions and the complementarity of interests in the field of mental health, particularly psychosis and developmental psychopathology. The aim is to establish a formal North West collaboration for mental health.

The North-West contains the strongest group of internationally recognised researchers in typical language development in the world (at the Universities of Manchester, Liverpool and Lancaster). There is already considerable collaboration across these sites and there is an aim to consolidate and develop this with an application to the ESRC for a Centre of Excellence.

### Teaching

Given the developments in health psychology, The MSc Clinical & Health Psychology team is appraising the possibilities for further development of the programme. Possibilities include: an accredited Stage 1 Health Psychology path; developing a Stage 2 health psychology programme; developing the intercalated BSc for medical students; and developing a programme of CPD training in health psychology.

The MSc/PG Dip Deaf Education Deaf education team are investigating ways to increase numbers of overseas students to increase Deaf Education around the world.

### Social responsibility

### The group will examine ways of:

Tapping into opportunities provided by other organisations, funding bodies and groups working towards similar aims, e.g. opportunities to participate, training and funding.

Providing feedback to staff and students during the development of their own projects and socially responsible outcomes for their research.

Recording and evaluating outreach and social responsibility activities within SPS.

Sharing good practice in area of widening participation and public engagement within SPS, the university and further afield.

# Priorities and enabling activities for 2012–13

Priority	Actions	Match to 2020 enabling strategies (ES) and progress
1. Alignment with Faculty and University priorities	Monitor, review and update action plans against Faculty and University 2020 Plan priorities to ensure coherence	The School should be fully aligned with the University and Faculty strategies, with:  • World-class ambitions for research  • Outstanding learning and student experience  • Demonstrating social responsibility, with contribution to the local, national and international community  ES1 Quality people
		School management restructured to clarify leadership and management Active review being established to improve performance to pursue the three 2020 goals
		Progress World-class ambitions for research
		4 Project Diamond professors appointed
		Centres established with ambitious strategies
		Seed funding established to prepare grants Peer review and monitoring embedded
		-
		Outstanding learning and student experience Active strategies to address inadequacies
		Explicit goals for satisfaction and employabilit
		Clear messages to staff
		Promotions for excellent teachers
		Student hub under construction in Zochonis
		Demonstrating social responsibility, with contribution to the local
		national and international community
		Already very well established and very strong staff support for further developments
		developments
2. Improving	Working group to address	ES1 Quality people
the student experience	student satisfaction with clear action plan and regular meetings	Ensure staff excellence through recruitment and review Staff training – excellent feedback from new academics programme
	2. Clear messages to staff on the	Staff and student messages from HoS, programme directors committee
	value of teaching and on supporting and encouraging	action, peer review
	students	Working group – Student experience action plan
	3. Significantly improve activity in	Employability events arranged and publicised
	relation to:	
	• Feedback	ES4 Internationally competitive funding
	Personal development and employability	Recruit internationally, both students and staff, to ensure a financially well supported school which can provide opportunities for enhancement of activity

Priority	Actions	Match to 2020 enabling strategies (ES) and progress
3. Improving staff experience and activity	1. Review staff activity against strategic goals  2. Make clear strategic cases for recruitment and ensure appropriate staff-student ratios  3. Develop coherent approaches to recognising each person's overall contribution to University strategic goals  4. Encourage flexible, collegial working and sharing skills	ES1 Quality people ES5 A reputation for excellence  Examine the actual staffing, areas of expertise, areas where staff thinly spread or absent and investment needed Scrutiny of budget, identification of funds for additional posts and resource Non-recruitment and non-retention when not up to standard Examine contribution models and workload Awaydays to encourage collegiality and excellent working Athena SWAN application April 2013 Maternity buddies  ES6 An international institution Recruit internationally  ES7 Quality processes Monitoring, reviewing and changing processes, in partnership with PSS
4. Maximising our research income and outputs and engagement with the scientific community	1. Recruit high calibre staff to agreed priority areas  2. Establish consistent review process for enhancement of grant applications to ensure high quality submissions  3. Co-ordination of applications to maximise hits  4. Engage with the wider science community nationally and internationally	ES1 Quality people Active search for, and retention of, excellent staff Identifying underperformance and managing this Critical analysis of research group performance, as well as individual activity Engagement with NHS via MAHSC and industry to aid identification of potential collaborations  ES3 Managing information Work with Deanery to target research councils, identify areas of opportunity Work with fundraisers  ES4 Internationally competitive funding Active planning of grant application process with milestones and meaningful review processes Aiming for large grants involving significant groups of collaborators Working with research groups, Institutes and Centre leads and cross- cutting themes to develop links that will unlock our research potential  ES5 A reputation for excellence Developing a clear identify for Manchester's distinctive contribution to research internationally
5. Building a welcoming, lively, outgoing community engagement with the scientific community	1. Develop estates plan for excellent, coherent facilities, including social space for students and staff  2. Convey positive messages within and about the School  3. Develop our websites to showcase our work and improve networking  4. Continue to support and extend public engagement and outreach activities  5. Ensure our policies work well to promote safety and wellbeing	ES2 World class estate Major initiative on estates under way with plans for co-location of School in Zochonis and Dover Street  ES3 Managing information Review and development of websites with more shared responsibility across the School  ES5 A reputation for excellence Well established active outreach activities, eg. Café Scientifique, to share excitement of research in psychological sciences Service user research group to complement community liaison group Positive messages via Student Experience Officer HoS messages Close partnership with NHS, MAHSC representative on senior team  ES7 Quality processes Health and Safety Committee established 2011 and functioning well 2012 initiative to ensure encryption and prevent breaches of data security in progress, for completion January 2013  ES8 Environmental sustainability Green enthusiast actively supported and silver impact award, Zochonis and Coupland 1 buildings, 2012

The University of Manchester Oxford Road Manchester M13 9PL

tel +44 (0)161 306 6000 www.manchester.ac.uk



