Research Profile
We believe in the collaboration of professional bodies across Liverpool and by creating a growing environment we’ve set the scene for excellence, transparency and integrity in research and development. By applying these principals in day to day clinical practice we are transforming healthcare to benefit patients and professionals in Liverpool, nationally and across the globe.

Our partners in this exciting venture include NHS organisations and HEIs, with an array of world-class facilities and clinical and scientific expertise.

Our Partners are:
- Aintree University Hospital NHS Foundation Trust (AUHFT)
- Alder Hey Children’s NHS Foundation Trust (Alder Hey)
- The Clatterbridge Cancer Centre NHS Foundation Trust (CCC)
- NHS Liverpool Clinical Commissioning Group (LCCG)
- Liverpool Heart and Chest Hospital NHS Foundation Trust (LHCH)
- Liverpool John Moore’s University (LJMU)
- Liverpool School of Tropical Medicine (LSTM)
- Liverpool Women’s NHS Foundation Trust (LWH)
- Mersey Care NHS Foundation Trust (Mersey Care)
- The Royal Liverpool and Broadgreen University NHS Trust (RLBUHT)
- University of Liverpool (UoL)
- The Walton Centre NHS Foundation Trust (Walton Centre)
LHP Leadership

The Board at LHP includes Chief Executive Officers and Chairs from each of our partner organisations as well as some of the UK’s most respected senior academics and clinicians.

Our Board Chairman, Professor Sir Ian Gilmore, is an honorary consultant physician at RLBUHT and holds an honorary chair at UoL. He is a past-president of the Royal College of Physicians (RCP) and the British Society of Gastroenterology. He chairs the UK Alcohol Health Alliance, is President of Alcohol Concern and is a member of the Climate and Health Council. He is a deputy Lord-Lieutenant of Merseyside.

Our Executive Director is Professor Sir Munir Pirmohamed, David Weatherall Chair of Medicine at UoL, NHS Chair of Pharmacogenetics and Consultant Physician at the RLBUHT, Associate Pro Vice Chancellor for Clinical Research, UoL. He is also Director of both the M.R.C. Centre for Drug Safety Sciences, and the Wolfson Centre for Personalised Medicine.
We support the most promising, high quality programmes that can demonstrate international excellence in research. Our chosen programmes must also show that they are supported by clinical services that can be developed in a coordinated way across the partnership.

The LHP CAPs are:
- Therapeutics
- Infection
- Cancer
- Musculoskeletal

Our CAPs enhance the whole LCR in providing an effective engine for business to business research.
Major Achievements

LHP has successfully delivered a range of programmes in the North West Coast (NWC).

- The Liverpool Alcohol Research Alliance (LARA) initiated by LHP, has grown to develop bid submissions & a speciality in this area. Plans are underway for a Liverpool Alcohol Research Institute.

- Facilitating and developing the NWC Genomic Healthcare Alliance which resulted in a successful bid for one of 13 Genomic Medicine Centres as part of the 100,000 Genomic project.

- Commissioned the Precision in Medicine Strategy (PRiME) as part of the LCR Innovation Plan around developing and commercialising research in precision medicine.

- Building capacity with a Joint Research Office and an Industry Gateway Office to allow a one point of contact approach across LCR for research.
1) The FUTURE Initiative
Development of a panel of healthy volunteers who have had genetic information extracted from genes that are important for drug metabolism and transport, and who can be readily recruited for early phase trials. Funding of >£1m for this project was awarded from UoL.

2) Genomics
Genomics is a field in which the NWC region is particularly strong. This foundation resulted in the establishment of NWC Genomics Healthcare Alliance (NWC GHA), which is supported by the Innovation Agency. Through this collaborative venture we hope to develop opportunities for establishing new genetic diagnostics and improving medicines. The NWC Genome Medicine Centre is driving recruitment for the 100,000 Genomes Project in the Region. The project aims to sequence whole genomes from NHS patients with certain cancers or rare diseases. The project will also ask family members of recruited patients to provide samples for sequencing. With their consent, patient’s genetic data and clinical details will be linked to facilitate a more complete understanding of their condition. The national footprint of this project means that more patients can be recruited, creating a very powerful way to better understand the causes of ill health and how to treat it.

3) Liverpool PRiME
LHP and Price Waterhouse Coopers co-produced the Liverpool Precision in Medicine (PRiME) report, which was published in 2015. The report provides a detailed overview of expertise and infrastructure for precision medicine within the LCR, and a coherent, deliverable action plan for 2015-2020.

4) Pharmacovigilance in LHP
The LHP Yellow Card Working Group, established in May 2014 to improve adverse drug reaction (ADR) reporting in NHS partner organisations, has helped improve overall reporting by 61% in 2014/15 compared with 2013/14. The success of this group has led to a wider initiative across the North West. Work supported by CLAHRC NWC is exploring the implementation of the Liverpool Adverse Drug Reaction Causality Assessment Tool into practice, which is designed to reduce uncertainty in detecting ADRs. This is an important part of our patient safety agenda.

The Therapeutics theme at LHP is led by Professor Sir Munir Pirmohamed, and aims to improve treatment options for patients. The research in this theme spans from discovery to implementation, and works towards tailoring treatment to individual patients by improving efficacy and reducing side effects. Pharmacology-related work is a particularly important element of our research, teaching and service delivery strategies.
Several initiatives are ongoing under LARA including the development of care pathways for Alcohol related brain injury (ARBI), a collaboration between Mersey Care and RLBUHT, and a collaboration with Sensor City and an SME around alcohol sensors. We are also working on UK biobank data to identify new drug targets for alcohol dependency.

Work within LARA has resulted in >£5m in funding applications and strong links to the Connected Health Cities programme through AUHFT. LARA plans to establish the Liverpool Alcohol Research Institute in the coming years; a centre that will further address issues of alcohol use, and the first of its kind in the UK.
MRC Centre for Drug Safety Science
Established by UoL in 2009 to bring together a critical mass of knowledge and technologies in order to advance the understanding of adverse drug reactions. The Centre has recently had funding extended by the Medical Research Council (MRC) up to 2019 and continues to make significant progress.

Wolfson Centre for Personalised Medicine
Professor Sir Munir Pirmohamed is leading a team of scientists, researchers and nurses in identifying genes and pathways which dictate a patient’s positive or negative response to a drug. The multidisciplinary team collaborate with researchers locally, regionally, nationally and internationally to identify predisposing factors for drug responses associated with a number of disease areas, including epilepsy and asthma.
Warfarin, however, is difficult to use because of the inability to predict the doses needed to achieve adequate anticoagulation. The variability in daily dose requirements is caused by both genetic and environmental factors. In an international randomised controlled trial led from Liverpool, and published in the New England Journal of Medicine (2013; 369(24):2294-303), the team have been able to show that personalised dosing based on determining the patient’s age and body size, together variation in two genes (CYP2C9 and VKORC1), led to a significant improvement in anticoagulation control. This study highlights the potential value of a personalised approach to medicine.

Case Study: Precision Medicine and Warfarin Dosing

Executive Director, Professor Sir Munir Pirmohamed is leading work for precision medicine and warfarin dosing. Warfarin is an essential drug used by 1% of the population.
Infection

The infection theme is led by Professor Neil French, and its strength is underpinned by the internationally renowned research conducted by the UoL and LSTM. The theme covers major clinical infection problems including antimicrobial resistance with skills in therapeutics, vaccinology, diagnostics, vector control and antimicrobial surfaces. The expertise of Liverpool-based researchers cover all major pre-clinical and clinical requirements for infection research.

Centre for Excellence in Infectious Disease Research (CEIDR)

Liverpool has the greatest concentration of translationally focused public sector R&D activity in the UK with a strong focus in infectious diseases. Capitalizing on these strengths the UoL and LSTM have formed CEIDR in order to establish a translational ecosystem to support collaboration with industry academics, Innovation entrepreneurs and the NHS, capable of addressing current and future health priorities in infection. We provide seamless access to world class facilities, know-how and funding for organisations' looking to develop products for the diagnosis, prevention, or treatment of infectious diseases.

Health Protection Research Unit in Emerging and Zoonotic Infections (HPRU)

The overarching aim of the HPRU is to support and strengthen Public Health England (PHE) in its role of protecting the population from emerging and zoonotic infections. By bringing together internationally leading researchers at UoL, LSTM and PHE, it will exploit the synergy, world-class facilities, and breadth and depth in relevant research between these institutions. Research projects are focused on risk mitigations epidemiological surveillance, vector control, and development of rapid diagnostic approaches. The unit has also been at the forefront advising government on the likely consequences of major global threats, in particular Ebola and Zika and the threat to the UK.
Case Study

UoL’s IGH has been awarded more than £500K as part of an initiative to help tackle the current Zika virus outbreak in the Americas.

The Zika Rapid Response Initiative is being funded by the MRC, the Newton Fund and the Wellcome Trust. Four research projects are being led by UoL that will provide new insights into the nature of the risk posed by the Zika virus, and potential avenues for its management or prevention.

Professor Tom Solomon, Head of the IGH and Director of the HPRU, said: “I have been impressed by the willingness of team members to focus their attentions to this urgent need to develop research which will help answer key unanswered questions around the Zika virus outbreak.

“The fact that more than one quarter of all the funding available was awarded to researchers involved with the HPRU shows our national and international role in conducting research to protect against emerging infections.”

Health Protection Research Unit for Gastrointestinal infections

The NIHR HPRU in Gastrointestinal Infections focuses on understanding the threat to health from diarrhoeal diseases and how to reduce this. The unit aims to resolve how best to deploy novel technologies, and develop and apply new methodologies for investigating outbreaks and detecting pathogens in the environment. Research focuses on bacterial, viral, and parasitic pathogens, and covers the description of disease burden, outbreak investigation, incorporation of new genomic technologies to surveillance, the role of human, animal and environmental interaction on pathogen transmission, and the role of the microbiome in disease development.

Vaccines

The Centre for Global Vaccine Research is an interdisciplinary research initiative based within The Institute of Infection and Global Health (IGH), reaching across UoL, national and local collaborators, and international partners. The centre undertakes basic and applied research to inform the development, implementation, and optimal use of vaccines to reduce the global burden of infectious diseases. The long-standing quality research for which UoL is internationally recognized is the base for current ongoing investigations into factors that affect effectiveness of rotavirus vaccines, the development of a novel mucosal protein-based adjuvanted vaccine against invasive pneumococcal disease, and the ongoing evaluation of antigens for a vaccine against onchocerciasis.
Cancer

Interim CAP lead, Professor Sarah Coupland leads the Cancer theme uniting the broad spectrum of cancer expertise present in the region, to improve its prevention, diagnosis and treatment collaborating with the Trusts, Charities, Universities and the NWCR Cancer Research Centre. It is estimated that deaths due to cancer are 76% higher across Merseyside and Cheshire compared to the European average: the Cancer Research Centre, its Liverpool Cancer Inequalities Research Network (LCIRN) and the Liverpool Regional Lung Cancer Alliance (LRCLA) are active in trying to change this.

Clatterbridge Cancer Centre (CCC) is a leading centre of excellence for cancer research. The centre works closely with the Liverpool Clinical Trials Unit, the Early Drug Development Unit (recruited 734 patients 2013-2015) and the RLBUHT Clinical Research Facility (Four oncology phase I studies since 2011 with three more set up). These close affiliations have resulted in several trials, including:

PATHOS/PATHOS-T
The Cancer Research UK funded clinical trial finds out how medical and radiotherapy treatments might be best combined with laser or robotic surgery for tumours caused by Human Papillomavirus. An additional funded translational study looks at how the virus causes cancer.

The Liverpool Bio-Innovation Hub (LBIH) Biobank
Brings together existing tissue banks, such as the Liverpool Tissue Bank (formally the Cancer Tissue Bank Research Centre) to form a single comprehensive library of biological material, which could provide vital information for new treatments. The LBIH Biobank recruits an average of 800 patients per year and was awarded £20m by the UoL and the European Regional Development Fund (ERDF).

The North West Cancer Research Centre (NWCR)
The aim of the NWCR is to improve cancer prevention, diagnosis and treatment through high quality research. The centre works closely with its stakeholders which include LHP, UoL, Lancaster University, NWCR-Institute Bangor, local NHS trusts, NHS Commissioners and Liverpool City Council. The NWCR facilitates horizon scanning, networking, seminars, research exchange programmes, collaborative grants, cancer education for medical undergraduates, mentoring and provides PhD studentships as well as Postdoctoral training.

Haematological cancer
The UK Lymphocytic Leukaemia Trials Biobank Received an investment of £3.5m by Genomics England (GEL) as part of the 100,000 Genomes Project. An important outcome includes a trial demonstrating the importance of p53 status in patients which helped stratify treatment, leading to better responses than general chemotherapy.
LCIRN wishes to foster, support and undertake research into inequalities in cancer outcomes in the Liverpool region. LCIRN is supported by a partnership between the NWCRC, the Department of Public Health and Policy, UoL and LHP. Our inaugural symposium in November 2016 will inform the LCIRN research strategy for the next 12 months.

Representatives of LCIRN have helped to establish the cancer theme group of the Northern Health Science Alliance (NHSA). We are represented on the Local Awareness and Early Diagnosis Initiative group at Liverpool City Council. We are engaged in projects concerned with head and neck cancer inequalities, cancer screening, reductions in A&E admissions for cancer patients and common risk factors between cardiovascular disease and gastric cancer.
Musculoskeletal

Professor Robert Moots is theme lead for Musculoskeletal research at LHP whose research aims to improve outcomes for sufferers of chronic disease and injury. Musculoskeletal (MSK) diseases are a major burden to our population. Challenges include poor understanding of the aetiology of conditions, limited effective therapies and a disjointed patient pathway for care.

1) Experimental Arthritis Treatment Centre for Children
   The only UK Experimental Arthritis Treatment Centre for Children was awarded by Arthritis Research UK in 2014 (£225,000). With significant inward investment and matched funding from UoL and Alder Hey Children’s Charity, with additional investment from Alder Hey’s Research Directorate and partner organisations, this unique consortium has resulted in a major step forward in establishing an internationally competitive platform for early translational and experimental medicine in the sphere of childhood arthritis and related rheumatic and musculoskeletal health.

2) European League Against Rheumatism Centre of Excellence (EULAR)
   LHP excels in the area of musculoskeletal research, as demonstrated by the successful 2015 LHP-led bid for EULAR Centre of Excellence status, highlighting the depth and quality of research into rheumatoid arthritis among partners, including: UoL, AUHFT, RLBUHT, and Alder Hey.

3) LJMU Research Institute for Sport and Exercise Sciences (RISES)
   RISES has significant clinical focus in gait analysis, virtual rehabilitation, Alkaptonuria and Anterior Cruciate Ligament. A study assessing virtual rehabilitation (real-time game-based movement training) in cerebral palsy and scleroderma, aims to train movement coordination of the pelvis and trunk, and is supported by the WellChild Trust, AUHFT and LJMU (£250,000).
Case study: Behçet’s Syndrome Study

Aims to investigate the potential for novel genetic and metabolomic biomarkers to target biologic therapy in the treatment of severe organ threatening involvement in this multi system autoinflammatory disease.

This 3-year international research project, led by UoL and involving sites in London, Birmingham, Leeds and Paris as well as Liverpool, will recruit 100 patients who have failed to respond to initial treatment and split them into two groups, one of whom will be given infliximab and the other interferon alpha. Genetic information from blood and metabolites from urine will be collected and analysed to identify factors that predict efficacy. This study is the first of its kind and will for the first time, allow doctors to prescribe medication for Behçet’s based on the likelihood of it being effective, rather than by guesswork. This precision medicine study is supported by the Efficacy and Mechanism Evaluation (EME) Programme of the MRC and NIHR and will save the NHS a minimum of £500K in the cost of prescribing medicine to sufferers.

4) Medical Research Council – Arthritis Research UK Centre for Integrated Research into Musculoskeletal Ageing (MRC-ARUK CIMA)

The MRC- CIMA brings together specialist expertise and clinical excellence from UoL, Sheffield and Newcastle Universities to improve our understanding and treatment of ageing and musculoskeletal disease. The centre supports both innovative research programmes and aims to develop the next generation of researchers via an MRes in Musculoskeletal Ageing.

5) LHP MSK Network

The newly established LHP MSK Network brings together researchers and health professionals from across partner Universities and NHS Organisations to exploit the wealth of musculoskeletal resources across LCR. Bringing together university based research institutes (Institute of Ageing & Chronic Disease (AICD) [UoL] and RISES [LJMU]) with Rheumatology, Orthopaedic and Primary Care NHS units to promote innovative collaborative research through workshop events, combined seminar series and bid support. They have already initiated new research collaborations in medical devices and chronic disease management.
The LHP Joint Research Office

The LHP Joint Research Office (JRO) streamlines the research and development process across LCR.

It delivers a streamlined research and development process for research approvals, helping the region to deliver non-commercial research at pace, and to time and target. The LHP JRO demonstrates the LCR’s ability to deliver collaborative projects, whilst enhancing its position as a world-class centre for national and international clinical research.

LHP JRO has established a single sponsorship committee, which means that those wishing to conduct trials have a single point of contact.

In addition, LHP has funded a LHP NHS Contracts Officer, which has already more than doubled the number of contracts overseen and contracts are now completed within the target timescales.
The LHP Industry Gateway Office (IGO)

Commercial clinical research is vital to the health and wealth agenda within the NHS, attracting resources that can lead to direct patient benefit. However, this section is extremely competitive and is continually looking at novel approaches to streamline processes and add value.

In July 2015 LHP Board agreed to establish an IGO. The LHP IGO works in full collaboration with the Clinical Research Network NWC (CRN NWC), and in alignment with the Health Research Authority.
Highlights of Our Partners’ Research Interests

Aintree University Hospital NHS Trust

- The Aintree Arthritis Centre hosts the National Centre of Excellence for Beçhet’s Disease.

- The Trust has an established programme of clinical research in hepatobiliary surgery and a developing trauma and emergency research program.

- Aintree has the largest Head and Neck Cancer Unit in England, the main hub for the Merseyside Regional Head and Neck Cancer Service. This is becoming the focus for novel translational and clinical trial research into Head and Neck Cancer.
Liverpool Heart and Chest Hospital
NHS Foundation Trust

• LHCH and the Royal Brompton Hospital have formed a partnership – The Institute of Cardiovascular Medical Sciences.

• LHCH and the Royal Brompton Hospital have formed a Cardio-Oncology Board with a personalised medicine theme utilising a big data approach linked to translational research.

• Fundraising of £3 million for PCI patient research using tele-medicine resulting in a successful grant for procurement of complex devices in this area.

• Research activities include personalised medicine, interventional cardiology, heart failure, arrhythmia, aorta and valve surgery, respiratory and mycobacterial infection, lung cancer, cystic fibrosis, critical cardiothoracic care, cardiothoracic anaesthesia, regenerative medicine and digital healthcare.

Alder Hey Children’s NHS Foundation Trust

• Currently Alder Hey recruits more children into clinical research studies than any other UK children’s hospital.

• It hosts the NIHR Clinical Research Network (CRN): Children’s Theme, Medicines for Children Clinical Trials Unit, and an NIHR Clinical Research Facility (CRF) for experimental medicine.

• Internationally competitive in research of paediatric inflammatory disorders and paediatric infectious diseases, focused around the theme of “Better, Safer Medicines for Children and Babies”.

• The only UK ‘Experimental Arthritis Treatment Centre for Children’

• Recent formal partnership agreement with IBM/Watson using cognitive computing in child health, focusing on the patient experience
The Clatterbridge Cancer Centre NHS Foundation Trust

- Part of the Liverpool Experimental Cancer Medicine Centre collaboration which has recently received £1.5 million funding over the next 5 years
- An active member of the Liverpool Regional Lung Cancer Alliance.
- Founding partner in the Liverpool and Merseyside Academic Breast Unit working to deliver basic and translational research in breast cancer.
- The only UK source of proton therapy for eye cancer with an associated research unit

Liverpool Women’s NHS Foundation Trust

- Home to the Harris-Wellbeing Preterm Birth Centre, focusing on identifying novel biomarkers for pre-term birth
- Host of the NWC GMC, contributing to the national 100,000 Genome Project led by Genomics England.
- Major centre for neonatal research focusing on clinical trials and translational studies, including pre-term pharmacology.
- Home to the Hewitt Fertility Centre for assisted conception treatments.
- Increasing program of research into endometriosis including the development of novel therapies through repurposing strategies.
Royal Liverpool and Broadgreen University Hospitals NHS Trust

- The largest NHS Trust in Merseyside and Cheshire, running three hospitals, whilst being a major teaching and research hospital for student doctors, nurses, dentists and AHPs.

- Undertakes the highest number of clinical trials and research studies in the NWC with around 400 ongoing trials each year.

- Home to the first NHS clinical research facility (“Clinical Research Unit”) in England to be granted MHRA “Standard and Supplementary Phase 1 Accreditation” with a strategic collaboration with Covance.

- Leading centre for pancreas disease focusing on acute pancreatitis, chronic pancreatitis and pancreas cancer, linking up with the Liverpool Cancer Trials Unit (LCTU).

- A new hospital building, once open, will be the largest all single-patient room hospital in the UK.

The Walton Centre NHS Foundation Trust

- The dedicated Neuroscience Research Centre runs a range of research studies, linking with partners in industry, academia and the NHS, around neurology, neurosurgery and pain.

- Hosts 5 NIHR funded projects, including the study of Standard and New Antiepileptic Drugs (SANAD-II), neurosurgical trials, and the ENCEPH-UK trial to develop a predictive tool for Herpes Simplex Virus Encephalitis.

- Host to the Pain Research Foundation which undertakes novel work in chronic relapsing pain syndrome, and is about to appoint a new Chair of Pain Medicine.

- Only specialist hospital trust in the UK dedicated to providing comprehensive neurology, neurosurgery, spinal and pain management services over 50 satellite clinics around the region.
NHS Liverpool Clinical Commissioning Group
• LCCG is responsible for planning and buying most NHS services, including hospital care, community clinics and GP services in Liverpool.
• It works in close partnership with those involved in providing care in the city, such as local hospitals, and the Council so that NHS services meet the needs of the local population. It plays a key role in future planning and improving health and health services in the city.

Healthy Liverpool Programme (HLP)
LHP enjoys close strategic alignment with Healthy Liverpool, the city’s plan to improve the health of people and make sure the health and care system is focused on the needs of people. Supporting more of us to stay well for longer, providing the very best treatment and care when needed.

Healthy Liverpool encompasses five key themes:
• Living Well - helping the whole city get moving, so that we can all enjoy the physical and mental health benefits of physical activity;
• Digital Care and Innovation - using the latest technology to help people stay well, and making it possible for different parts of our health and social care system to share information more easily and making it easier for you to see your medical records;
• Community Services - providing more services closer to home, making it easier to see a GP and providing care for people who are vulnerable or need more attention, before they become ill. This also looks at supporting people in ways which aren’t about medical treatments but affect our health;
• Urgent and Emergency Care - making it easier to find the right service when needed, seven days a week, and helping people avoid unnecessary time in hospital;
• Hospital Services - ensuring that all of our hospitals offer consistently high standards of care by working more closely together.
Mersey Care NHS Foundation Trust

• Provides healthcare for adults with mental health problems, learning disability, acquired brain injury and addictions. One of only three Trusts in England to provide secure mental health services.

• 3 main research priorities physical health, suicide prevention and decreasing the level of restraint used. Increasing interest in developing personalized medicine approaches in psychiatry.

• Established a Centre for Perfect Care with the mission to continuously improve services whilst addressing the mental health and wellbeing challenges of the future.

• An organisation that strives to support learning and improvement across services.
University of Liverpool

- Associated with 9 Nobel Laureates, ranked in the top 1% of HEIs worldwide, and a founder member of the prestigious Russell Group with particular research strengths in advanced materials, infection and personalised health. Personalised Health is boosted by having one of the UK’s largest pharmacology departments which gives it the ability to drive research from bench and newly generated drug compounds into clinical trials. Its first-rate facilities (genomics, proteomics, biobanking and imaging) and expertise (computational biology, clinical trials methodology and molecular pathology) are located on the Liverpool Biocampus next to the RLBUHT Hospital.

Liverpool School of Tropical Medicine

The first institution in the world dedicated to research and teaching in the field of tropical medicine, LSTM is at the forefront of research into infectious, debilitating and disabling diseases worldwide, improving the health of the world’s poorest people, with a research portfolio well over £210 million.

As well as providing specialist postgraduate education to students from around the world, LSTM carries out research across four main departments within six research themes: Neglected tropical diseases (NTDs), resistance research & management, lung health & tuberculosis, malaria & other vector borne diseases, applied health and maternal & newborn health.
Liverpool John Moores University

- Research and scholarship are at the heart of everything we do at LJMU. Research is central to the student experience and informs the curriculum at all levels.

- Our research covers a range of health topics from the maintenance of the healthy body and mind (wellbeing, sport and physical activity, nutrition and children’s health), the prevention of illness (interventions, predictions and public health) to the understanding, management and treatment of disease and illness (pharmacy, nursing, pharmacology, biomedical science, therapeutics and health technology).

- The Institute for Health Research (IHR) is a reflection of the vibrancy of LJMU’s research culture and it’s commitment to undertake multidisciplinary research with the potential to improve health locally, nationally and internationally.
What LHP’s work means

LHP is ultimately designed to have a positive impact on patient outcomes. We prioritise evidence-based research that will improve the way patients are treated and how professionals work and learn.
INVENTION  RESEARCH  ADOPTION  DIFFUSION
LHP/parenleft.capAHSC/parenright.cap  INNOVATION AGENCY /parenleft.capNWC  AHSN/parenright.cap
RESEARCH  EDUCATION  SERVICE  EVALUATION
EDUCATION  SERVICE  EVALUATION
HEALTHY LIVERPOOL PROGRAMME
RESEARCH
CLAHRC
DIFFUSION
INVENTION
LHP(AHSC)
RESEARCH
Phase 1 CTU
Bio Innovation Hub
Bio Accelerator
Biobank
CRFs
LHP JRO
LHP IGO
LHGL
26