

Impact Facts

Charitable expenditure highlights for July 2017

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Addenbrooke's
Charitable Trust

Registered charity number: 1170103

July 2017

ACT Clinical Research Fellowships 2016/17

The ACT fellowship scheme provides an entry point into a clinical academic career-track for doctors who want to develop their career in a way which will enable them to combine clinical practice with clinical research. These are the individuals who, in the future, will be leading the research programmes that will translate scientific advance into benefits for patients.

Five fellowships have been awarded as follows:

- **Ben Warne** – a genome based rapid response to infection
- **Sarah Hopkins** – palliative care for frail older people: what are their needs and how can they best be met?
- **Mary-Ellen Lynall** – investigating the role of B cells in susceptibility to anxiety and depression
- **Claire Ma** - the role of pf AP3 in protein sorting and cytotoxic T cell killing
- **Matthew Seah** – novel labelling and tracking strategies to understand mesenchymal stem/stromal cell populations relevant to musculoskeletal regenerative therapy.

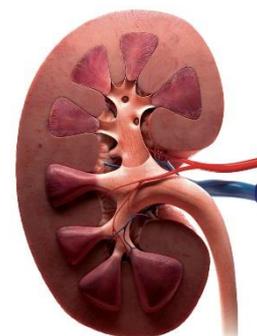
A contribution of £75,000 was received through ACT by two individuals who wished to remain anonymous.



Development of a hand-held blood potassium sensor

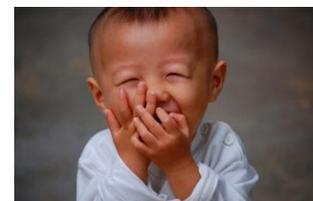
Kidney patients are endangered by very high potassium, with a small minority having the opposite problem of dangerously low potassium. In both cases, the ability to use a finger-stick blood sample and home-based kit to check potassium would improve management and identify potential life-threatening levels.

ACT has awarded £18,000 for research, which will conduct proof of concept sensor development and testing as a step towards allowing patients to self-monitor.)



Laughter specialists for children's wards & outpatient clinics

ACT has awarded £15,000 to once again fund and train entertainers who through therapeutic play, interaction and improvisation bring much-needed fun and laughter to children on the wards. Children can become bored and frightened but feedback has shown they benefit from interaction from non-medical professionals.

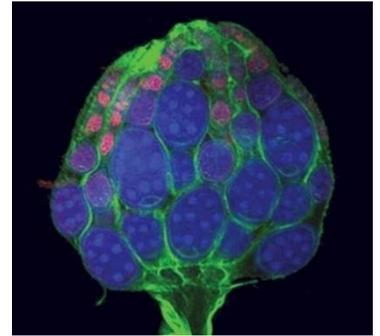


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Classifying malignant germ cell tumours

Malignant germ cell tumours are cancers of egg and sperm-forming cells occurring mainly in young people. They arise in the testes and ovaries but also in other sites. Taking biopsies of these tumours is challenging as these difficult to access sites carry high risk. In addition, current blood-based tests for diagnosis are not accurate enough.

There is now a need to be able to tell the tumours apart using a second set of blood tests. ACT has funded £18,580 towards a research project that would tell different types of these tumours apart. This is important as different types need different treatments.



Analysing the anterior cruciate ligament in osteoarthritis

Osteoarthritis (OA) of the knee is a common and debilitating condition and its frequency is increasing. The anterior cruciate ligament (ACL) is one of the major structural ligaments of the knee. Visual damage occurs at different stages of the disease. It is unclear if these changes in the ACL lead to cartilage changes and progression of OA or if the OA within the cartilage leads to damage of the ACL. ACT has provided £10,000 for a research study to help develop defining the cell population within the ACL and optimise techniques for further analysis.



Support for young people with acquired brain injuries

£10,000 has been awarded by ACT to once again fund the Support Co-ordinator's work providing varied support for young people with acquired brain injuries within the hospital. The grant will enable work to continue to support these families within the hospital and throughout the young people's rehabilitation and education until they turn 24.



E-flows – A new generation of nebuliser

A grant of £3,600 has been awarded to provide nebulisers for new patients with cystic fibrosis. There is a group of children with complex disabilities and health needs who must be given nebulised antibiotics twice a day to maintain their health, which can be a significant burden on families. ACT funding will provide a new generation of nebuliser to make taking medication easier for children and their families.



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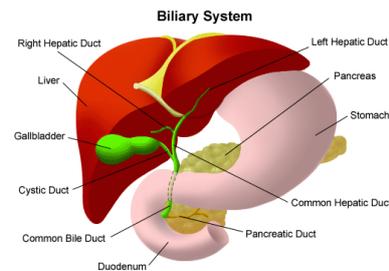
Chester Chest to teach central line care

ACT has awarded a grant of £740 to buy a Chester Chest simulator with Advance Arm and Case. This simulator teaches parents and carers to deliver nutrition through central lines, enabling patients to receive nutrition at home.



Synthetic bile ducts reducing need for liver transplants

Currently, bile duct disease is the most common cause for liver transplants in children, which could be avoided if healthy tissue was available to repair defective ducts. To address this, ACT has awarded £15,252 from hepatology funds to generate the first synthetic bile duct from bile duct cells grown in the lab and transplant it in animals to test its function. This new method for generating synthetic organs could be applied to many diseases and will provide an alternative treatment for the most common cause of transplantation in children.



Oscillator for Paediatric Intensive Care Unit (PICU)

The oscillator is primarily used for PICU patients in respiratory distress. When patients are in a situation that requires very high volumes to ventilate them it can damage their lungs, which in turn has a significant effect on their outcomes. The oscillator, funded by £23,405 of ACT funds, allows the team to ventilate at rapid rates but at much lower pressures. This results in patients recovering well, leading to extubation or stepping down on to conventional ventilation.



Sharing moments of happiness – Poetry in Moments

Taking Note is a project encouraging people to find and share moments of happiness with others in an environment (the hospital) that can be busy and fraught. In the first year of the project people were invited to share stories at pop-up events held around the hospital. This year, Poetry in Moments has invited poets to come to the hospital to continue exploring these themes of noticing and sharing. Poetry in moments will be launched at the hospital as part of National Poetry Day on Thursday 28 September. ACT has awarded £13,100 for this project.

