

### Agenda Item 3i

<b>Report to:</b>	<b>Board of Directors</b>	<b>Date: 5<sup>th</sup> July 2018</b>
<b>Report from:</b>	<b>Dr Ian Smith and Dr Vikki Hughes On behalf of the Medical Director</b>	
<b>Principal Objective/ Strategy and Title</b>	<b>RESEARCH &amp; DEVELOPMENT Research/Education</b>	
<b>Board Assurance Framework Entries</b>	<b>Unable to improve cardiothoracic care in the wider health care community BAF numbers: 730 and 731</b>	
<b>Regulatory Requirement</b>	<b>None</b>	
<b>Equality Considerations</b>	<b>None believed to apply</b>	
<b>Key Risks</b>	<b>Failure to give R&amp;D strategic recognition resulting in damaged reputation. Adverse changes to funding streams resulting in reduced opportunity for education and training.</b>	
<b>For:</b>	<b>Information</b>	

The last year has been characterised by increasingly close working with the University of Cambridge, through the current development of a new Cambridge-wide Cardiorespiratory Research Strategy headed up by Ron Zimmern. This has included interviewing academics and clinicians to gain an understanding of the current and future research landscape.

During 2017/18 the Trust recruited to 67 studies of which 58 were portfolio studies (2016/17: 60 studies and 50 portfolio studies). Participant recruitment figures for NIHR portfolio studies were slightly down on the previous year, reflecting the drop in patient numbers across the Trust. There was a similar profile of complex interventional and observational studies. Dr Joanna Pepke-Zaba and Mr Steven Tsui and their research teams have both successfully recruited a global first subject for commercial studies.

Following a full review of the allocation of consultant research PAs in 2016/17 and again in 2017/18, fewer were allocated than in previous years, generating savings. The agreed aim was for the Trust to separate out the Research PA budget from the medical staffing budget to enable savings to be utilised half for R&D to facilitate new Research posts such as 50:50 and fellows and half as a Trust CIP. However, as yet this work has not been completed which has halted further progress on this front.

There have been a significant number of successful grant applications over the previous 6 months. This are:

- a collaborative Innovate UK grant looking at a novel technique to treat bronchopleural fistulas (Mr Aman Coonar (£1.9m of which £400K will come directly to Papworth),
- a collaborative EU Grant looking at tracking patient journeys (Dr Ian Smith £120K),
- three grants awarded from a recent call from the Moulton Trust (Dr Stephen Hoole £115K; Mr Pedro Catarino £97K; Dr Florian Falter £112K)
- a grant from Foundation for Sarcoidosis Research (Dr Muhunthan Thillai £70K)

These show the strength and diversity of research across the Trust and highlight how having Research PAs for consultants is having a significant impact.

The Trust continues to look at new collaborations with academic and industrial partners. A pilot study is about to start with the Dept of Psychology, University of Cambridge around sleepiness, shift work in the ICU and patient safety. New studies in collaboration with device manufacturers are in set up in the areas of AF and sleep apnoea, blood gas estimation in COPD patients and with Oxford University for the

diagnosis of REM behaviour disorder via home screening. The Mesobank project is extending to international recruitment with agreements in Australia.

The R&D Department is raising its profile and that of the research carried out at Papworth Hospital. There was a highly successful Research Symposium showcasing our work on Wednesday 8<sup>th</sup> November in Papworth Village Hall. We are also increasing our Patient and public involvement and have recently appointed three Patient Research Ambassadors who help represent the Trust at events such as the recent Papworth Village fete and will be speaking at a Health Education week event in the central Cambridge Library organised by the Library Team here at Papworth.

The Clinical Trials Unit continues to strengthen its resources, with the collaboration for Health Economics moving to King's College London. The Unit are now offering 2 monthly 'open surgeries' for potential investigators able to come and discuss their research ideas with a statistician, health economist and Clinical Project Manager. The Trials Unit also recently submitted an application to the UKCRC to upgrade the provisional registration to full status. The Outcome is expected in October 2018.

High impact papers published by Papworth Hospital staff [*in italics*] in the last 6 months include:

1. Human heart transplantation from donation after circulatory-determined death donors using normothermic regional perfusion and cold storage. [Messer S](#), et al [J Heart Lung Transplant](#). 2018 Jul;37(7):865-869 [*Stephen Large - CI*]
2. Amaze: a double-blind, multicentre randomised controlled trial to investigate the clinical effectiveness and cost-effectiveness of adding an ablation device-based maze procedure as an adjunct to routine cardiac surgery for patients with pre-existing atrial fibrillation. [Sharples L](#), et al. [Health Technol Assess](#). 2018 Apr;22(19):1-132. [*Sam Nashef - CI*]
3. Identification of rare sequence variation underlying heritable pulmonary arterial hypertension. [Gräf S](#), et al. [Nat Commun](#). 2018 Apr 12;9(1):1416 [*Nick Morrell - CI, Joanna Pepke-Zaba*]
4. Normothermic ex-vivo preservation with the portable Organ Care System Lung device for bilateral lung transplantation (INSPIRE): a randomised, open-label, non-inferiority, phase 3 study. [Warnecke G](#)<sup>1</sup> et al. [Lancet Respir Med](#). 2018 May;6(5):357-367 [*Steven Tsui*]

The Research & Development has a number of aims to strengthen the existing research infrastructure and prepare for the move to the Biomedical Campus. These include:

1. Enabling the R&D Directorate to directly manage the consultant research PA funding to allow for more accountability with the distribution of the funding and allow for redistribution to more active researchers, including the creation of further 50:50 posts if the funding envelope allows.
2. Increasing and strengthening collaborations with the University of Cambridge and other CBC partners.
3. Preparing the department for a successful transition to the Biomedical Campus. This follows a successful move for some of the team to Royal Papworth House and the start of split site working for the R&D Department.

**Recommendation:**

**The Board of Directors is requested to note the contents of this report.**