Annual Report 2015

ABOUT THE FOUNDATION

Approximately 10 years ago the Intensive Care Society (ICS) established the Intensive Care Foundation (ICF). Our purpose as the ICF is to ensure that the ICS upholds its objective of ‘the promotion of study and research into critical care…’

Over the past 10 years we have firmly established an important role for ourselves within the critical care community.

The ICF currently co-ordinates over 70% of UK intensive care research and our medium term objective, is to establish regular diverse income streams to follow in the footsteps of other successful medical charities such as; the British Heart Foundation, Cancer Research UK and the British Lung Foundation.

The ICS currently provides most of our funding, but our long-term focus is to become self-funding.
INTRODUCTION

One of the challenges we face as a charity is the public perception of critical care and critical care research. We aim to inform the public about the role of Intensive Care Units (ICUs) and how our work impacts intensive care treatment both in the UK and worldwide. Many charitable organisations concentrate on chronic diseases (e.g. heart disease, cancer, Multiple Sclerosis), rather than the wide range of acute medical conditions that are treated in ICUs. As a result, a significant amount of public support is donated to societies with “disease” labels, rather than a diverse speciality such as critical care. In contrast to the issues faced by critical care charities at a national level, fundraising at a local level in individual ICUs by staff, patients and relatives is often quite successful. The drive for this is often the desire for the user to reward or improve the hospital or service they have shared an experience with. It is one of our aims to understand how we can encourage people to also donate to a national body. Supporting the public to understand our role as a speciality is a major challenge.

FUNDING MATTERS

We have a well-rehearsed, established and successful model of allocating our income. The ICF has six Directors and Deputy Directors of Research who are some of the highest regarded professionals within critical care. The role of the Directors and Deputy Directors of Research is to identify, administrate and execute research undertaken by the ICF. Grants are awarded by the ICF to encourage or pump-prime ICU research and time is funded for the Directors and Deputy Directors of Research to work on our collaborative UK critical care trials. The quality of the research projects we have directly funded has contributed to three Directors of Research achieving professorships in their own academic institutions.

1. Annual direct contribution from many individual members of the ICS, ideally boosted by gift aid.

2. Donations to fundraising activities, where the ICF is the recipient of the fundraisers endeavours. Details of these activities and participants are shown on www.ics.ac.uk.

3. Direct financial contributions of 2 Industry Partners, B Braun and Draeger, that have each committed to 5 years’ support of the Foundation. In 2016 the ICF welcomes an additional Partner, Orion Pharmaceuticals.

4. Grants and funding from individual trusts and grant awarding bodies. These organisations give awards often used to pump prime fund research awards given by the ICF.

5. Financial contribution from the ICS to underpin ICF activities and provide funding until our fundraising development plans are actioned.

www.ics.ac.uk
Grants and awards

INTRODUCTION

All of the awards granted by the ICF are made through a competitive peer review process assessed by the ICS Research Committee, and chaired by Dr Andrew Bentley. The Research Committee jointly identify and judge potential future projects to be undertaken or funded by the ICF.

2015 AWARDS AT A GLANCE

All of the awards granted by the ICF are made through a competitive peer review process assessed by the ICS Research Committee, and chaired by Dr Andrew Bentley. The Research Committee jointly identify and judge potential future projects to be undertaken or funded by the ICF.

NURSING AND ALLIED HEALTH PROFESSIONAL FOUNDATION FELLOWSHIP (£2,105)

1. Miss Sarah Robinson received £2,105 towards the MSc dissertation study. ‘How does the adult critical care nurses’ previous experiences of organ and tissue donation affect their confidence in preparing relatives?’

NEW INVESTIGATORS AWARD SHARING (£45,000)

1. Dr Roger Davies: Investigation of monocyte immune function and the impact of common ICU medications in sepsis using chemotaxis and migration assays

2. Dr Ben Creagh-Brown: Repetitive occlusive stimulus (ROS) of the proximal lower limb and muscle wasting in critically ill patients – a pilot study

3. Dr Charlotte Summers: Defining the role of neutrophils in lung injury and remote organ dysfunction: a pilot study

4. Dr Angela McNelly: Randomised Controlled Trial of Intermittent vs. Continuous Feeding on Skeletal Muscle Wasting in Critical Illness

MEDICAL STUDENT ESSAY PRIZE (£200)

1. Akhsa Ramaesh: Incidence and long term outcomes of patients with diabetic ketoacidosis admitted to intensive care: a retrospective cohort study
Grants and awards

**TRAVELLING FELLOWSHIP (SHARING £5000)**

1. Dr Ruth Tighe: Intensive Care strengthening in post-ebola recovery period—facilitating intubation and ventilation as a sustainable treatment

2. Miss Leona Bannon: An exploration of factors supporting the successful implementation of a US intervention for sleep promotion and prevention of delirium in ICU to assist development of a contextually relevant UK intervention

**GOLD MEDAL AWARD STATE OF THE ART 2015**

1. Dr Simon Biddie. Molecular memories and epigenetic imprints of critical illness. As the winner of the Gold Medal Award Simon will now have the opportunity to sit on the ICS Research Committee for 2 years

**ABSTRACT FREE PAPERS STATE OF THE ART 2015 (WINNERS)**

1. Sepsis Free Paper Presentation - Dr Marc Chikhani: Surviving sepsis: one-year survival following a decade of whole systems audit

2. Research Free Paper - Dr Aimee Brame: The novel biased apelin receptor agonist MM07 is a potent inotrope and vasodilator in vivo

3. Clinical Practice Free Paper - Dr Kate Tatham: “Who to admit and when to call the boss?” A review of current training in assessing ICU referrals and what influences discussion with senior colleagues

4. Sepsis Poster Presentation - Dr Sneh Shah: The lungs are a major site for uptake of circulating micro-vesicles during subclinical endotoxaemia

5. Clinical Practice Poster Presentation - Miss Sarah Morgan: Restoration of speech and swallowing in dysphagic spinal cord injured patients receiving mechanical ventilation via tracheostomy – a case series
In focus: JLA prioritisation exercise

INTRODUCTION

In 2014, the ICF began a 2-year process with the James Lind Alliance (JLA) to survey a broad range of stakeholders including medical professionals and patients, to identify key research themes within critical care.

THE PROCESS

At the beginning of the collaboration between the JLA and the ICF there were over 500 separate research themes identified. Through a peer review process run by the ICF and chaired by Dr Stephen Brett (President, ICS) and Hannah Reay (Deputy Director of Research), these ideas were developed into research questions.

The research questions were then presented to a second expert group who selected the 12 they believed could be turned into feasible research questions. The 12 ideas for projects were then presented back to the intensive care community to compete for the best project proposal, and funding from the Foundation.

“This rigorous peer reviewed process of selection will appeal to prestigious grant awarding bodies”

At this point those that received the best response from the community were asked to present at a research forum led by Hannah Reay, Dr Nazir Lone and Dr Kenneth Baillie, the Foundation’s Deputy Directors of Research. The Research Forum then proceeded to select the top 5 research questions, which they assessed met the required criteria.

Finally, the authors of the chosen questions were asked to submit a more comprehensive study design to the ICS Research Committee, the winner was then awarded £50,000 to conduct a pilot study.

We anticipate that this rigorous peer reviewed process of selection will appeal to prestigious grant awarding bodies led by the National Institute for Health Research (NIHR).

2015 WINNERS

The 2015 JLA Award worth £50,000 went to Dr Brenda O’Neill and Dr Bronagh Blackwood of Queen’s University Belfast, who led a UK-wide collaborative project proposal entitled ‘Getting it right: the continuing support and service needs of ICU survivors’.

This study aims to develop survey tools to improve the assessment of ICU survivor’s support needs across the continuum of care. This study has the potential to revolutionise post-ICU patient care and contribute to improved quality of life for ICU survivors.

Our bi-annual research prioritisation exercises within the critical care research community has shown notable success, with several studies being primed with £50,000 from the ICS or from external charitable trusts. The Foundation has contributed to three nationally funded, collaborative studies (VANISH, LeoPARDS and REST).

ABOUT JAMES LIND ALLIANCE

The JLA is a not-for profit initiative which was established in 2004. It brings patients, carers and clinicians together in Priority Setting Partnerships (PSPs) to identify and prioritise the unanswered questions about the effects of treatments that they agree are most important.
Clinical trials

INTRODUCTION

The ICF Directors of Research are involved with over 20 current or recently completed studies. They are often the principal investigator but also collaborate and assist other researchers with trial design and submission of grant proposals. Our Directors of Research also support the studies through the CTU’s with which the ICF collaborates.

CURRENT PROJECTS

BREATHE
Protocolised trial of invasive and non-invasive weaning off ventilation

- Principal Investigator: Professor Gavin Perkins, Director of Research ICF, University of Warwick.
- Start date: 1st Jan 2013
- Funding: NIHR Health Technology Assessment Programme.

The BREATHE trial will be a pragmatic, randomised, controlled, open, multi-centre, effectiveness trial of 400 patients in 22 UK ICUs. The purpose is to determine if the use of Non Invasive Ventilation (NIV) as an intermediate step in the protocolised weaning of patients off invasive ventilation is of clinical benefit and cost effective.

Public benefit: About 60,000 people each year in the UK become critically ill and require sedation and treatment with invasive mechanical ventilation given via a tube placed in the windpipe. Although initially lifesaving, invasive mechanical ventilation can be associated with a number of complications. The longer a person requires invasive ventilation the poorer their chances of surviving. The process of liberating patients from invasive ventilation is referred to as weaning. There is international evidence that switching from invasive to non-invasive ventilation (also called mask ventilation) as an intermediate step in the weaning process may reduce the amount of time spent on the ventilator and the risk of complications. Find it on www.controlled-trials.com/ISRCTN15635197.

MoDUS
Modifying Delirium using Simvastatin

- Principal Investigator: Valerie J. Page, ICM Consultant, Watford General Hospital.
- Start date: 1st Feb 2013
- Funding: Research for Patients Benefit program from NIHR. Grant preparation supported by Intensive Care Foundation Directors of Research

A single centre, randomised, double-blind, placebo controlled, superiority, phase II trial, to recruit 142 patients randomised to receive once daily simvastatin 80mg placebo for up to 28 days. The aim of this study is to investigate the efficacy of statins initiated early during an ICU stay for the prevention of ICU delirium; to determine any improvement in related neurocognitive sequelae to reduce the incidence.

Public benefit: The incidence of delirium in mechanically ventilated patients can reach 80%. Delirium may predispose patients to long-term cognitive impairment after critical illness and is associated with inflammation and neuronal apoptosis, which may lead to brain atrophy. Therefore an intervention which reduces delirium could potentially translate to a reduction of long-term cognitive impairment and dementia.
Clinical trials

PARAMEDIC 2
Randomised placebo controlled trial of Adrenaline for out of Hospital Cardiac Arrest

• Principal Investigator: Professor Gavin Perkins, Director of Research ICF, University of Warwick.
• Start date: 1st March 2014
• Funding: NIHR Health Technology Assessment Programme

Working with 5 NHS ambulance services, patients in cardiac arrest will be randomly assigned (in equal numbers) to receive adrenaline or matching placebo. We will determine the effect of adrenaline from a clinical (long term survival), patient focused (brain function, health related quality of life) and cost effectiveness perspective. The study will recruit 8000 patients and will provide a definitive answer as to whether adrenaline is an effective treatment for cardiac arrest.

Public benefit: Around 50,000 people experience sustained sudden cessation of heart function (cardiac arrest) each year in the UK. Initial resuscitation efforts are effective in restarting the heart in about 1 in 4 cases (25%), but over half of these patients subsequently die in intensive care as a consequence of severe brain damage. Adrenaline currently forms part of the Resuscitation Council Protocols. More recently, possible harmful side effects of adrenaline treatment in cardiac arrest have been recognised. PARAMEDIC2 will provide a definitive answer as to whether adrenaline is an effective treatment for cardiac arrest.

VAP RAPID
Rapid detection of Ventilator Associate Pneumonia (VAP) – towards improved antibiotic stewardship

• Principal Investigator: Professor John Simpson, Professor Respiratory Medicine Newcastle University
• Start date: 1st January 2011
• Funding: Health Innovation Challenge Fund Welcome Trust. Grant preparation supported by Intensive Care Foundation Directors of Research

Phase 1. A study of 100 patients with VAP criteria clinically proven from 5 ICUs will have Bronchoscopic Lavage fluid will be sent for microbiology and centrifuged for additional analysis of cytokines IL-1b, HNE, MMP-8, MMP-9, IL-8. The results will be used to test whether IL-1b levels can be used to exclude VAP.

Phase 2 of the study patients will be randomised to 2 groups. In the control group the Cytokine test will not be performed and antibiotic management will be according to normal practice. In the treatment arm, Cytokine results will be used to either stop or continue with antibiotic therapy. The outcome will be a reduction in antibiotic free days.

Public benefit: VAP is an iatrogenic condition that typically occurs in 12-40% of critically ill patients who are intubated and mechanically ventilated for more than 2 days.3-8 Overall mortality associated with VAP generally ranges from 20-40%. However it is often difficult to prove the presence of bacteria. Earlier bedside diagnosis of a bacterial cause for the VAP in a given patient, using this technique could lead to a reduction in mortality but equally lack of proof of actual bacterial infection could shorten the course of potentially unnecessary antibiotics. Ultimately this would slow the onset of multi-resistant bacteria evolving in response to indiscriminate use of antibiotics.
Clinical trials

CURRENT PROJECTS

Gatekeeping in Intensive Care

Understanding and improving the decision-making process surrounding admission to the ICU

The project has 4 work packages (WP). WP1 will describe current practice and explore the experience of key participants: WP2 We will conduct a Discrete Choice Experiment, designed using factors identified in WP1 and in the literature, to identify preferences of ICU physicians and ICU outreach nurses regarding factors determining patient’s admission to ICU. WP3: Informed by WPs 1&2 we will develop, implement, and test a decision support framework to guide clinicians through the decision making process together with a patient/family support document to help them understand and participate in the process. WP4: We will develop and test an evaluation tool for assessing the impact of the decision support framework on decision-making.

Public benefit: NHS intensive care bed capacity is limited and under constant pressure. This is likely to increase with an ageing population. Admission to an ICU allows critically ill patients access to life-saving treatments but this care involves invasive and distressing interventions. Approximately one in three people admitted to ICU do not survive to go home. For those that do survive, many continue to have serious problems.

Given the burdens of therapy on an intensive care unit and the limited prognosis for many critically ill patients, admission to an ICU bed will not be appropriate for all patients. Little is known about how decisions regarding ICU admission are made, or should be made for patients in the NHS. By studying this area of clinical practice we will develop a mechanism to improve the quality and consistency of decision-making about access to ICU for critically ill patient.
Clinical trials

Prevention HARP – 2

- Principal Investigator: Dr Murali Shyamsundar, Queen’s University Belfast.
- Start date: 1st April 2016
- Funding: NIHR Clinician Scientist Award

This project will deliver a multi-centre, randomized, double blind placebo controlled clinical trial to determine whether in patients undergoing elective oesophagectomy, simvastatin 80mg or placebo for four days pre-surgery and up to 7 days post-surgery improves patient outcomes. We will recruit 452 patients from at least 12 sites.

Public benefit: Acute respiratory distress syndrome (ARDS) is a serious illness which affects the lungs and can occur after surgery such as removal of the food pipe (oesophagectomy). The objective of this trial is to investigate the efficacy of simvastatin in reducing the occurrence of ARDS and other post-operative complications in patients undergoing oesophagectomy. If effective, there will be significant benefits to patients and the NHS.

REST

- Principal Investigator: Professor D McAuley, Director of Research ICF, Queen’s University Belfast.
- Start date: 1st April 2016
- Funding: NIHR Health Technology Assessment Programme

This project will deliver a multi-centre randomized clinical trial to determine whether veno-venous extracorporeal carbon dioxide removal and ultra-protective mechanical ventilation improves clinical outcomes and is cost-effective, in comparison with standard care in adult patients who require invasive mechanical ventilation for acute hypoxaemic respiratory failure. We will recruit 1120 patients from at least 40 ICUs in the UK.

Public benefit: Respiratory failure is common in the UK; about 100,000 people each year need treatment with mechanical ventilation. Although mechanical ventilation is life-saving, it can be linked with damage to the lungs. A mechanical ventilator acts like bellows with air being forced into the lungs under pressure. If the pressure needed to help the patient breathe is too high this can cause lung damage. New devices are available that can help remove carbon dioxide from the patient’s blood, which is one of the main functions of the lungs.

This may allow more gentle mechanical ventilation. This more gentle ventilation may cause less harm to the lungs and improve the outcome of patients with respiratory failure. More information about the devices is needed to help doctors decide whether they are helpful or not. This project will provide this information. Find it on www.nets.nihr.ac.uk/projects/hta/1314302.
Clinical trials

IN PREPARATION FOR 2016

REALIST

- Principal Investigator: Dr Cecilia O’Kane, Queen’s University Belfast.
- Start date: June 2016
- Funding: Wellcome Trust

The aim of this study is to investigate the role of mesenchymal stromal cells (MSCs), in treating patients with Acute Respiratory Distress Syndrome (ARDS). The specific objectives are:

1. to assess the safety and maximum tolerated dose of a single intravenous infusion of MSCs in patients with ARDS in a phase 1 study

2. to assess the potential efficacy of a single intravenous infusion of MSCs in 66 patients with ARDS and to acquire mechanistic data regarding the activity of these cells in patients with ARDS in a phase 2 study.

Public benefit: ARDS is a common condition affecting over 20,000 people per year in the UK: approximately 6000 will die. ARDS occurs in response to many different illnesses including severe trauma, infection and major surgery, and affects all age groups. In ARDS the lungs becomes leaky, and fill with fluid so it becomes difficult to breathe. There is no known specific drug treatment to treat ARDS that improves outcome.

Mesenchymal stromal cells (MSCs) can reduce inflammation, fight infection and improve repair of injured tissue. In this proposal we want to test MSCs in patients with ARDS. If MSCs were effective in this small clinical trial we would proceed to a large trial across the UK to confirm the effect. A treatment that reduced death and long-term disability from ARDS would have major healthcare impact.
Clinical trials

- Principal Investigator: Anthony Gordon, Director of Research ICF, Reader Imperial College.
- Start Date: January 2013
- Completion Date: May 2015
- Funding: NIHR Research for Patient Benefit Programme

This study of 414 patients in 18 Critical Care Units in the UK were randomized to receive Vasopressin or Noradrenaline for the duration of their septic shock. Once the maximum dose of the vasopressin or noradrenaline study drug was reached either steroids or placebo were added in. The aims of this trial were 1) to test if vasopressin reduces renal dysfunction compared to noradrenaline when used as the initial vasopressor in the management of adult patients who have septic shock and 2) to test if there is an interaction between vasopressin and steroids.

Public benefit: Vasopressin and steroids are both naturally produced hormones that are released during times of severe illness. However, when blood pressure drops due to infection, these compensatory mechanisms often fail. Studies have shown that administering both of these drugs can help restore blood pressure and reduce the use of other adrenaline-type drugs. Recent studies found that vasopressin may be most effective if used earlier and for less severe drops in blood pressure and may have a specific role in preventing kidney failure. It may also be more effective if administered with steroids. This study is aimed to help doctors to understand better how to treat this life-threatening condition. We know that the onset of kidney failure increases the risk of dying from severe infection and can sometimes lead to the requirement for life-long dialysis. By preventing and reducing kidney failure we would provide patients with better outcomes, improved survival rates and less need for dialysis, and also reduce the costs to the NHS of treating these patients.
Clinical trials

**LeoPARDS**
Levosimendan for the Prevention of Acute Organ Dysfunction in Sepsis

- **Principal Investigator:** Anthony Gordon Director of Research ICF, Reader Imperial College.
- **Start date:** 1st Jan 2014
- **Funding:** NIHR Efficacy and Mechanisms Evaluation Programme

A double blind, randomized controlled trial of 516 adult critical care patients within 24 hours of the onset of septic shock from 34 critical care units in the UK. Levosimendan infusion for 24 hours v matching placebo infusion.

Public Benefit: Overwhelming infection, often called sepsis, is a major problem for the health community. According to a recent report in the UK at least 100,000 people each year suffer from sepsis, of these around 37,000 die. This study is carefully designed to try and identify whether using a drug called levosimendan in patients with sepsis could produce important benefits by reducing multiple organ failure, which will then hopefully lead to better survival rates. Find it on www.controlled-trials.com/ISRCTN12776039.

**ICON**
The Intensive Care Outcome Network

- **Principal Investigator:** Dr Duncan Young, John Radcliffe Hospital Oxford
- **Funding:** BUPA Foundation and Intensive Care Foundation

The Intensive Care Outcome Network study (ICON) is a long-term study of patients who have spent at least 24 hours on an intensive care unit (ICU) at one of the hospitals taking part in the study. Patients who agree to take part in the study from 17 units were asked to fill in a set of questionnaires at 3 months, 12 months and two years after being discharged from the intensive care unit (ICU). The questionnaires ask about the patient’s health immediately before admission to ICU and their current health state.

Public benefit: The comprehensive assessment of quality of life and psychological health for up to 2 years after discharge will help to describe the impact of an intensive care stay on development of stress related disorders, anxiety and depression. This has never previously been studied in such detail.
ABLE
Age of Blood Evaluation

- Principal Investigator: Professor Tim Walsh (Critical Care) University of Edinburgh.
- Start date: July 2011
- Completion: Dec 2014
- Funding: NIHR Heath Technology Assessment Programme, Grant preparation supported by Intensive Care Foundation Directors of Research

Double-blind, multicentre, randomized controlled clinical trial of 500 Adult critically ill patients in 7 ICU’s, who have had a request for their first Red Blood Cell (RBC) unit transfusion during the first 7 days of their admission to the ICU, are likely to require invasive and/or non-invasive mechanical ventilation exceeding 48 hours. Patients will be randomized to receive either standard issue RBCs (average 18 to 21 days storage) or RBCs stored 7 days or less. Primary outcome is 90 day mortality study to run concurrently with Canadian arm.

Public benefit: 4 out of every 10 patients in Critical Care require blood transfusions. Although we use RBC sparingly with a target haemoglobin of usually <7.5, some 10% of the UK blood supply is used in intensive care. Currently RBCs are stored by blood banks for up to 35 days before transfusion. We know that changes occur during RBC storage that reduce the ability of RBCs to transport oxygen to tissues, and that harmful substances can accumulate in stored blood. A positive trial would confirm that prolonged storage has clinical consequences; a negative trial would reassure clinicians and blood banks regarding the safety of prolonged storage. The outcome of the completed study of 1211 patients in 64 centres across Canada and Europe demonstrates no significant difference between the groups. Hence "old" blood was not shown to be harmful and there is no need to change current blood bank practices. Publication: NEJM 2015;372:1410-1418.

DNACPR
Do Not Attempt Cardiopulmonary Resuscitation

- Principal Investigator: Professor Gavin Perkins, Director of Research ICF, University of Warwick.
- Start date: June 2013
- Completion: March 2015
- Funding: NIHR Health Service Delivery Research Programme

This proposal seeks to summarise the research evidence around DNACPR decisions, in 48 acute hospital trusts, to identify the reasons why conflict and complaints arise and identify inconsistencies in implementation of national guidelines across NHS Acute Trusts. The approach includes a systematic search and detailed synthesis of published research, assessment of the extent of the problem through reviewing NHS complaint registries and enforcement notices and measuring inconsistency in implementation of current guidelines across acute NHS Trusts.

Public benefit: The outcome shows a wide variation in practice around the translational of DNACPR national guidelines into local practice. A better understanding from this study of the reasons for this variation and making the users aware of this variation will improve standardisation and adoption across the UK, and will reduce some of the adverse patient and relative experiences which have been frequently described in the media.

Publications:
Clinical trials

PUBLISHED IN
2015

PARAMEDIC

Mechanical chest compression for out of hospital cardiac arrest

Public benefit: A range of mechanical devices to deliver chest compressions within a cardiac arrest have come into healthcare in the last 8 years. This study tested the efficiency of one of these commonly used devices against conventional manual CPR. This very large study failed to show any benefit of this mechanical device in reducing mortality. Therefore a strong recommendation is that although these devices do no significant harm, a cost benefit of the device cannot be supported. Publication: Perkins et al Lancet 2015(385)p947-955.

HARP2

A multi-centre, double-blind clinical trial of 540 patients with onset of ARDS within previous 48 hours were commenced on daily simvastatin v placebo in 40 UK Critical Care Units. Outcome was Simvastatin therapy, although safe and associated with minimal adverse effects, did not improve clinical outcomes in patients with ARDS. Publication Mcauley et al NEJM 2014;371:1695-1703.

BALTI prevention


VACS

Clinical trials

HOPE

Intravenous Haloperidol is the most commonly used therapy in critical care for the treatment of Delirium. 142 critical care patients were randomized to receive intravenous haloperidol v N saline to treat acute onset of delirium. Haloperidol did not reduce the duration of delirium in these patients compared with placebo. This study has helped us to move onto other strategies which may prove more effective. Publication: Page et al The Lancet Respiratory Medicine 2013;1(7):515-523.

ICAN

The Intensive Care Aftercare network was the first study in europe to estimate the social, economic and quality of life impact of a period of critical illness on patients and their families. An exploration of social and economic outcome and associated health-related quality of life after critical illness in general intensive care unit survivors: a 12-month follow-up study. Because of its broad resonance, the study was picked up by the wider news media such as the Radio 5 Live, The Today Programme and BBC Breakfast. Publication: Griffiths J, et al Crit Care. 2013 May 28;17(3):R100.

OSCAR

A multicentre study in 29 UK Critical Care Units, 795 patients with ARDS were randomly assigned to High Frequency Oscillation or “Normal” Ventilation. This study showed no significant benefit for either strategy. UK clinical practice has moved on significantly and patients are referred earlier for ECMO now that HFOV is not considered a suitable therapy. Publication: Young et al NEJM 2013;368:806-813.

TracMan

A study in 70 UK Critical Care Units involving 909 ventilated patients clinically shown to warrant a Tracheostomy to aid on going care were randomized to receive Tracheostomy by Day 4 of Ventilation or delay tracheostomy to day 10 unless extubated before. There was no significant difference in mortality outcome between these groups. This was a particularly important study, the findings of which reversed a trend to perform early tracheostomy in UK critical care patients. This effectively reduces the risk to patients of unnecessary Tracheostomy giving the clinician more confidence to persevere with conventional extubation strategies for up to 10 days. Publication: Young et al JAMA 2013:309:2121-2129.

BALTII 2

A multi-centre trial examining the safety and effectiveness of intravenous salbutamol for ARDS. The study found that use of intravenous salbutamol was harmful. UK ARDS and international sepsis guidelines recommend this therapy is no longer used and clinicians should continue with best supportive care. Publication: Gao, Perkins, Gates et al. Lancet 2012, 379(9812):229-35.
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<td><strong>4</strong> PARAMEDIC 2: <a href="http://www.nets.nihr.ac.uk/projects/hta/12127126">http://www.nets.nihr.ac.uk/projects/hta/12127126</a></td>
<td><strong>12</strong> OSCAR: Young et al NEJM 2013;368:806-813</td>
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WHY ICF?

The ICF has made, and is continuing to make, a significant contribution to intensive care research both nationally and internationally. As a result of coordinating peer reviews within the speciality and our successful track record of completing clinical studies, we have achieved respect and recognition by the major UK grant awarding bodies (NIHR, MRC and Wellcome Trust) who have helped fund much of our recent research.

“The ICF has made, and is continuing to make, a significant contribution to intensive care research both nationally and internationally”

Representatives from all of these organisations participated in our successful “Research Colloquium” held in September 2015 that brought researchers and funders together in a particularly informative and constructive meeting. As an organisation, we also have had considerable success in shaping future themes for ICU research with respect to calls of interest from grant awarding bodies.

I would like to thank past members of the Intensive Care Foundation Dr Saxon Ridley, Prof Duncan Young and Professor Monty Mythen whose vision was responsible for setting up the ICF. I also give huge thanks to Professor Tim Walsh who has been such a strong ally of the ICF and of what it is striving to achieve.

Over £24 million has been awarded so far from major grant awarding bodies, to deliver the studies described in this report. The ICF has now become the focal point to make collaborative UK Critical Care Research the norm and we have now achieved a strong international profile amongst the Critical Care Fraternity.

Dr Timothy Gould FRCP FRCA FFICM
Chair of the Intensive Care Foundation
The Foundation Board

Chair

Dr Tim Gould FRCP FRCA FFICM
Consultant ICM University Hospital Bristol,
Clinical Lead West Critical Care Network.
Member National Clinical Reference Group Critical Care
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