

## **Barts Charity Seminar**

31<sup>st</sup> January 2014

*“Can advances in medicine and research at Barts Health impact the number of killed or seriously injured people from cycling incidents?”*



In memory of every cyclist who has  
lost their life on our roads

## Table of Contents

<b>Introduction .....</b>	<b>3</b>
<b>Speaker Biographies.....</b>	<b>4</b>
<b>Format for Day .....</b>	<b>7</b>
<b>Summary of Presentations.....</b>	<b>8</b>
<b>Center for Trauma Sciences Paper .....</b>	<b>9</b>
<i>Major trauma and urban cyclists: physiological status and injury profile</i>	
<b>Barts Health Cycling Injury Data .....</b>	<b>16</b>
<b>Innovations for Change .....</b>	<b>18</b>
<b>Comments and Research .....</b>	<b>22</b>
<b>Barts Charity Overview .....</b>	<b>27</b>
<b>Delegation List.....</b>	<b>28</b>
<b>Seminar Team .....</b>	<b>29</b>

## Barts Charity Seminar 31<sup>st</sup> January 2014

### INTRODUCTION

Dear Delegate,

Welcome to the inaugural Barts Charity Seminar:

*“Can advances in medicine and research at Barts Health impact the number of killed or seriously injured people from cycling incidents?”*

We appreciate you taking the time out of your busy schedules to take part in this seminar. We are excited by the varying viewpoints and experience that our delegates will bring and look forward to an informative and beneficial discussion.

The format has been devised to maximise engagement and opportunities for participation, taking a focused, evidence-based approach to uncover innovative ideas and solutions for tackling cycle safety and injury prevention.

Contained within this document is more information on how the seminar will be structured, including speaker biographies, an overview of presentations, a summary of projects, an appendix of information on cycling and trauma and an overview of the Charity and how we can work together in the future.

Best regards,

*The Barts Charity Development Team*

**Barts Charity**

12 Cock Lane

London

EC1A 9BU

Tel: 020 7618 1720

[www.bartscharity.org.uk](http://www.bartscharity.org.uk)

Charity Commission Registered Number 212563

## Barts Charity Seminar 31<sup>st</sup> January 2014

### SPEAKER BIOGRAPHIES

#### Chair – Jon Snow



##### Journalist and presenter

Jon Snow joined ITN in 1976 and has travelled the world to cover the news – from the fall of the Berlin Wall and the release of Nelson Mandela, to Barack Obama's inauguration and the earthquake in Haiti – winning numerous awards along the way. He is best known as the longest-running presenter of Channel 4 News. Jon has been commuting to work on a bike for over 40 years and is a campaigner for safer cycling, and President of the National Cycling Charity. Jon was an active supporter of the Lord Mayor's Appeal and Barts Charity in 2012, helping promote the important work at the Major Trauma Centre at The Royal London Hospital.

#### Co-host & Topic 1 Speaker – Professor Allyson Pollock



##### Professor of Public Health Research and Policy; Co-director, Global Health, Policy & Innovation Unit (Barts and The London School of Medicine and Dentistry)

Allyson undertakes research and teaching intended to assist the realisation of the principles of social justice and public health. She trained in medicine in Scotland and became a consultant in public health. Among her previous roles she has been director of the Centre for International Public Health Policy at the University of Edinburgh and director of research & development at UCL Hospitals NHS Trust.

#### Co-host & Topic 3 Speaker – Nigel Tai



##### Trauma Clinical Director; Trauma and Vascular Surgeon (Barts Health NHS Trust)

Nigel Tai is Clinical Director of Trauma for Barts Health and the Royal London Hospital. He trained in Vascular and Trauma Surgery in the UK and South Africa, and is a past Tutor for Trauma and Emergency Surgery at the Royal College of Surgeons of England. He convenes and teaches on a number of national and international trauma courses. He is a military surgeon and has deployed overseas on a number of occasions.

#### Topic 1 Speaker – Manoj Ramachandran



##### Consultant Orthopaedic and Trauma Surgeon (Barts Health NHS Trust)

Manoj is a Consultant Orthopaedic Surgeon in paediatric and young adult orthopaedics and trauma. He is the lead for paediatric orthopaedics, clinical informatics officer (CIO) and the director of research for surgery. Manoj has a strong academic interest, having authored and published a number of text books and papers and presented all over the world, building international research collaborations. He is particularly interested in innovation in the digital health space and medical devices.



### **Topic 2 Speaker – Tom Konig**

Vascular and Trauma Surgeon (Barts Health NHS Trust)

Tom Konig is a Vascular and Trauma Surgeon and a prehospital care doctor with London's Air Ambulance. He has regularly spoken on television and to the press about the efforts needed to make cycling safer for the people of London. He is a Major in the Royal Army Medical Corps and has seen service in the Balkans, Iraq and Afghanistan. Tom is a cyclist and tries to travel on his bike as much as possible.



### **Topic 3 Speaker – Dr Dianna Smith**

Lecturer in Trauma Epidemiology (Barts and The London School of Medicine and Dentistry)

Dianna Smith is a postgraduate lecturer and has led modules in health inequalities and migration. She is trained in geography with a focus on public health and brings this expertise to her teaching and research; she is working on several projects to assess the relationship between local environments, populations and incidence of injury or ill health. She held a Medical Research Council fellowship in small-area health estimation and continues to run workshops on mapping health data using Geographic Information Systems.



### **Topic 3 Speaker – Graham Kirkwood**

Research Fellow, Public & Policy, Trauma Sciences (Barts and The London School of Medicine and Dentistry)

Graham is a former nurse who went onto study epidemiology at Imperial College, London. He has worked in several research posts on systematic reviews including the use of routine NHS data to predict outcomes and inequalities in access to health care. In his current role Graham continues an interest in injury research and injury data collection and the use of such data to inform and evaluate injury prevention in the community. Graham enjoys cycling to work in the better weather.



### **Topic 4 Speaker – Elaine Cole**

Trauma Research Fellow and Senior Lecturer (Barts and The London School of Medicine and Dentistry)

Elaine has extensive experience in emergency nursing, caring for trauma patients in the acute phases following their injury. She currently leads on research into complex acute outcomes in trauma patients and is completing a PhD characterising factors predictive of infection in severely injured patients – a significant adverse outcome causing increased mortality, morbidity and prolonged recovery. A keen cyclist, Elaine has been commuting on her bike in London for 20 years and is passionate about encouraging safe cycling for as many people as possible.



### **Topic 4 Support – Dr Clarence Liu**

Consultant Neurologist (Barts Health NHS Trust)

Clarence is a Consultant Neurologist at the Royal London Hospital and his main clinical interests are brain injuries (particularly head injury and hypoxic brain injury), disabilities and their rehabilitation. He is also a member of the Barts Trauma outcomes unit, a Consultant at the Regional Neurological Rehabilitation Unit (at Homerton) and a trustee director of Headway, East London (brain injury charity).

In addition to the speakers listed above, the following ‘thought-leaders’ will be seated at tables to support our speakers and facilitate the roundtable discussions around each topic:

- **Dr. Rachel Aldred**, Senior Lecturer in Transport at the University of Westminster
- **Professor Karim Brohi**, Professor of Trauma Sciences at Barts and The London School of Medicine and Dentistry and Consultant Vascular & Trauma Surgeon at Barts Health NHS Trust
- **Kaya Burgess**, News Reporter at The Times, Deputy Editor of Times Diary and Young Campaigning Journalist of the Year for Cycle Safe Campaign
- **Dr. Gareth Davies**, Consultant in Emergency Medicine and Medical Director at Barts Health NHS Trust and London's Air Ambulance
- **Charlie Lloyd**, Campaigns Manager for London Cycling Campaign
- **Ross Lydall**, Health Editor and Chief News Correspondent for London Evening Standard
- **James Moore**, Deputy Business Editor for The Independent and trauma patient at the Royal London Hospital
- **Mark Townsend**, Home Affairs Editor, The Observer

## Barts Charity Seminar 31<sup>st</sup> January 2014

### FORMAT

#### Note to all delegates:

We appreciate the prompt arrival of all attendees given the tight schedule. Please also be aware that presentations will be filmed for dissemination following the seminar. **If you do not wish to appear in this content** please inform us by email at [belinda.dee@bartshealth.nhs.uk](mailto:belinda.dee@bartshealth.nhs.uk) with the subject 'Consent for filming'.

- 07.45 – 08.00 Registration, guests seated, breakfast
- 08.00 – 08.05 Welcome and introduction  
**Jon Snow**
- 08.05 – 08.13 Topic 1: What do we know about injury and mortality from cycling?  
**Professor Allyson Pollock and Manoj Ramachandran**
- 08.13 – 08.21 Topic 2: How do our trauma and emergency teams save cyclists' lives?  
**Nigel Tai and Tom Konig**
- 08.21 – 08.29 Topic 3: How can we use collected data to inform and evaluate prevention strategies?  
**Dr Dianna Smith and Graham Kirkwood**
- 08.29 – 08.37 Topic 4: How are we addressing long-term outcomes and the need for rehabilitation?  
**Elaine Cole**
- 08.37 – 08.40 Roundtable discussion briefing  
**Jon Snow**  
Four tables of ten with presenters leading discussions, answering questions and offering more information on each topic, facilitated by thought-leaders.
- 08.40 – 08.55 Roundtable discussion 1
- Table 1, topic 1: DATA - measurement and monitoring of cycling injuries and mortality*  
*Table 2, topic 2: TREATMENT - clinical interventions to improve outcomes*  
*Table 3, topic 3: PREVENTION - data analysis and prevention strategies*  
*Table 4, topic 4: OUTCOMES - the long-term cost to individuals, families and society*
- 08.55 – 09.10 Roundtable discussion 2
- Table 1, topic 3: PREVENTION - data analysis and prevention strategies*  
*Table 2, topic 4: OUTCOMES - the long-term cost to individuals, families and society*  
*Table 3, topic 1: DATA - measurement and monitoring of cycling injuries and mortality*  
*Table 4, topic 2: TREATMENT - clinical interventions to improve outcomes*
- 09.10 – 09.13 A personal account of trauma from cycling  
**James Moore - Journalist for The Independent and trauma survivor**

09.13 – 09.16	Summing up, Topic 1 – DATA
09.16 – 09.19	Summing up, Topic 2 – TREATMENT
09.19 – 09.22	Summing up, Topic 3 – PREVENTION
09.22 – 09.25	Summing up, Topic 4 – OUTCOMES
09.25 – 09.30	Conclusions from Jon Snow and thank you from Michael Smith (Barts Charity Chairman)
09.30	CLOSE

## Overview of Presentations

### ***Topic 1: What do we know about injury and mortality from cycling?***

Allyson and Manoj will look at available information and data to measure and monitor the severity of the problem. Allyson will start with a macro view of injury and the difference in reporting as severity decreases, highlighting the limitations of current knowledge and understanding. Looking at cycling as a subset of all injuries, cycling deaths and annual trends will be reviewed with data from Tower Hamlets, City and Hackney and Newham, using various sources including the ambulance service and police. Manoj will pinpoint data from patients with musculoskeletal injuries that require intervention, using this as an example of gaps in existing injury data collection and how this can be addressed.

### ***Topic 2: How do our trauma and emergency teams save lives?***

Nigel and Tom will provide an insight into the work of the trauma and emergency teams at The Royal London Hospital. Nigel will explain trauma as a disease and The Royal London Hospital's status as a Major Trauma Centre. He will go through the major trauma and cyclist caseload at RLH and the characterisation of physiological status and injury profile of the cyclists admitted. Tom will give an insight into the day to day of the trauma and emergency unit, and the observed increase in cycling injuries over the last few years. He will give an overview of pioneering treatment interventions which have transformed levels of care for cyclists injured on our roads.

### ***Topic 3: How can we use collected data to inform and evaluate prevention strategies?***

Dianna and Graham will give an overview of existing data sources and systematic reviews which inform what we currently know about cycling injuries and injury reduction. Dianna will explain the need for data which has greater detail and depth, with more examples of spatial and epidemiological analysis and an understanding of denominator values. Graham will summarise cycle safety interventions and the evidence for their efficacy. The presentation will conclude with a preview of two innovative research proposals for studies into the risk perception of cycling and the identification of optimal interventions.

### ***Topic 4: How are we addressing long-term outcomes and the need for rehabilitation?***

Elaine will present our fourth topic, focusing on the longer-term impact of trauma from cycling collisions and other injury types. She will explain what rehabilitation is and why it is so important, taking us through the rehabilitation pathway. Using existing data, Elaine will demonstrate the disparity in rehab needs versus rehab provision, in addition to the huge economic burden and long-term impact of injury across multiple dimensions. Elaine will present a patient story and introduce a novel idea for the provision of invaluable support for long-term trauma survivors and their families.

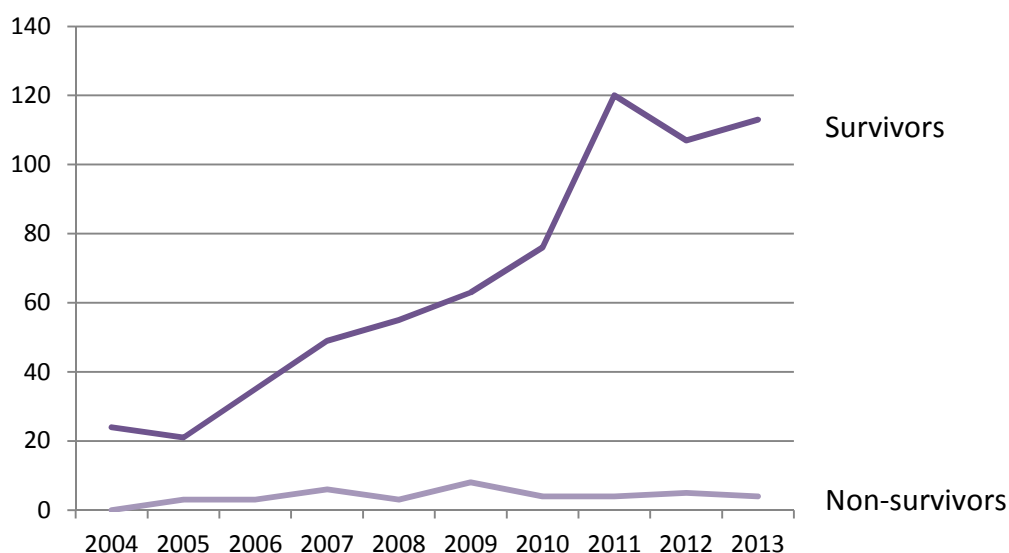


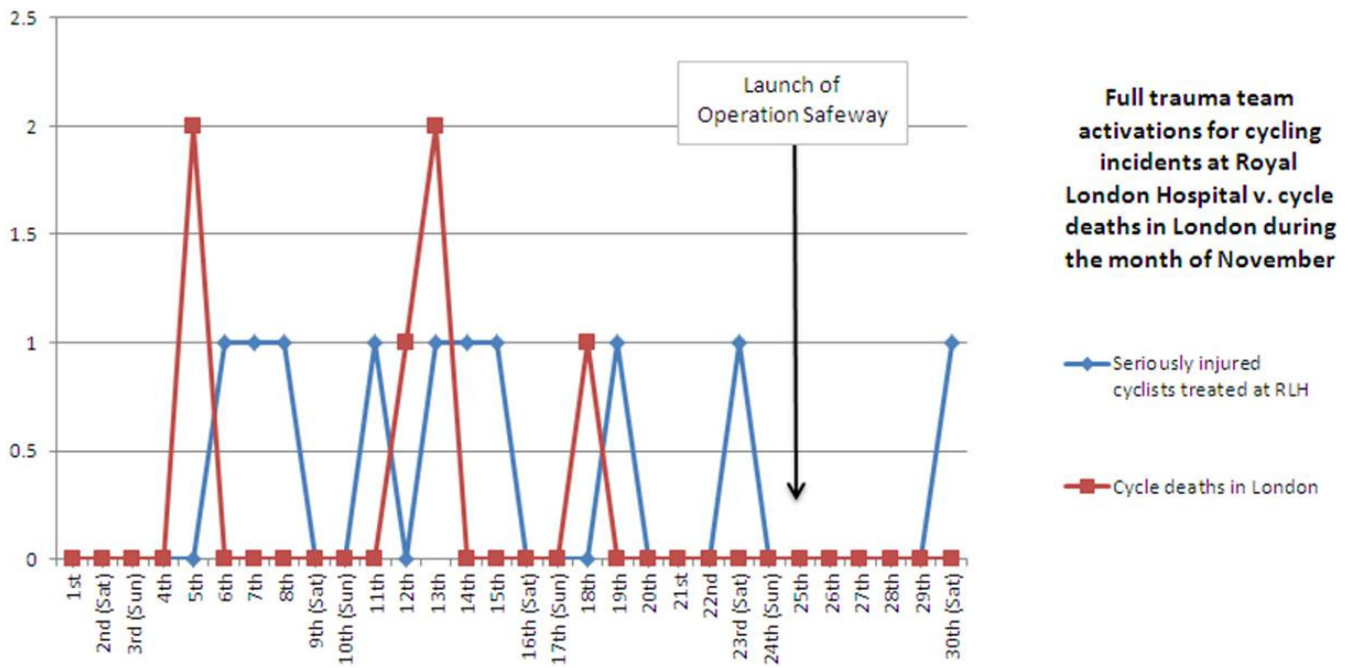
**Barts Charity Seminar 31<sup>st</sup> January 2014**  
**BARTS HEALTH CYCLING INJURY DATA**

A summary of serious cycling casualties requiring full trauma team activations RLH, 2004 to 2014

Year	All	Male	Female	Survivors	Non-survivors
2004	24	-	-	24	0
2005	24	-	-	21	3
2006	38	-	-	35	3
2007	55	-	-	49	6
2008	58	-	-	55	3
2009	71	49	22	63	8
2010	80	56	24	76	4
2011	124	102	22	120	4
2012	112	89	23	107	5
2013	117	101	16	113	4
2014 (as of 27th Jan)	5	4	1	5	0

Total number of survivors and non-survivors from full trauma team activations for cyclists treated at RLH





## Barts Charity Seminar 31<sup>st</sup> January 2014

### INNOVATIONS FOR CHANGE AT BARTS HEALTH

#### How can we innovate and precipitate change?

In preparation for this seminar, the Development Team at Barts Charity have collaborated with experts from Barts Health to identify areas ripe for investment which could precipitate positive change for cyclists and trauma patients. As the dedicated charity for a globally recognised Major Trauma Centre (MTC) and associated medical school, which has a reputation for breakthroughs in trauma care and research, we are ideally placed to create a step-change in injury treatment and prevention.

#### What is trauma?

Trauma is the disease caused by physical injury, and has only been called a “disease” since the 1970s. This may seem strange but it is the correct term to use. Trauma triggers a sequence of changes within our cells which can lead to critical and disabling illness. **Just like cancer, HIV and heart disease we need to understand these changes to improve survival and recovery.**

In the UK, the most common incidents are falls from height and collisions with motor vehicles either as drivers, passengers, pedestrians or **cyclists**. Trauma also occurs from injuries with weapons such as knives or guns. Unpredictable events like train crashes and natural disasters can injure many people at the same time.

**Trauma is by far the biggest killer of children and adults under 45.** It accounts for 18,000 UK deaths per year. For every patient who dies, several more become disabled. When you combine the loss of earnings, medical treatment and long-term care, the economic cost is huge – not to mention the unquantifiable personal loss to sufferers and their families.

#### Trauma and injury at Barts Health

The MTC at The Royal London Hospital (RLH) admits over 2200 patients every year – more than any other hospital in Europe – and is a flagship centre in the UK. The team develops and adopts cutting edge techniques and interventions, paving the way for other MTCs across the country. On average, seriously injured patients have a 36% higher chance of survival at RLH. **However, mortality rates are still worryingly high and trauma continues to pose a serious threat to public health.**

The Centre for Trauma Sciences (C4TS) at our associated medical school is a hotbed of trauma research, boosted by the rich and unique clinical environment at RLH. Focusing on the pathophysiology of injury and the translation of research from the lab to the bedside, world class research is disseminated for global impact, including in military settings.

Alongside this, a key aim of C4TS is to influence public health policy. After severe injury, people can have injuries which are non-survivable and they will die, some immediately at scene, including the six cyclists killed in London in November 2013. In these extreme cases no medical intervention can save them. Injury prevention strategies driven by e.g. data, modelling and statistics are the **only way to reduce immediate deaths.**

**However, funding is limited for innovative projects which push the boundaries of standard healthcare and research. In order to create change and save lives, further investment is essential.**

### *The BESPOKE injury database project: How, why and where? – £130,000*

**Aim:**

To build a prospective database of the circumstances surrounding major injury to provide insights into injury and how to prevent it, including road traffic and cycling incidents, falls, interpersonal violence, playground and sporting injuries.

**Objectives:**

- To capture detailed information about all major injuries at RLH over a 12 month period
- Record information in a comprehensive database, bespoke for this purpose
- Provide data for 'geomapping' of injury hotspots and to develop effective injury prevention strategies

**Methods:**

- Data collected on:
  - Demographics e.g. age, gender, ethnicity, occupation
  - Background e.g. what happened before event, location, whether protective / high vis clothing was worn
  - Mechanism e.g. did the cycling incident involve an HGV, pedestrian or car?
  - Injury pattern e.g. musculoskeletal, plastic, neurological, thoracic, abdominal
  - Treatment intervention required e.g. high dependency unit, intensive care unit admissions
- A standalone smartphone-based app to record patient-related outcome and detailed mechanistic data, enabling patients to provide information at their convenience on causes and effects of their injuries
- All 'bespoke' data fed into a database incorporated into the central hospital system for frontline recording and care

**Impact:**

This would be the first UK project to record detailed trauma data enhanced by smartphone-based data from patients on their own experiences, providing new information for geomapping and on the health cost of the financial and social impact of major injuries. This will offer novel insights to inform effective prevention strategies. After 12 months and with further funding, the project has the potential to be expanded across the UK, with the ultimate aim of creating a near real time database of serious injuries nationally, impacting death and injury from trauma.

### *Evaluating effectiveness of local authority cycling injury interventions – £20,000*

**Aim:**

To establish which local authority cycling injury interventions are most effective.

**Objectives:**

- To develop a modelling toolkit for use in local authorities
- To use the toolkit to predict how cycling injury incidence, prevalence, and outcomes may change given various intervention scenarios

**Methods:**

- Data collection from Hackney's public health and transport teams (agreements in place) and RLH
- Adaptation of available software by a modelling expert to create user-friendly solutions for local authorities to use in multiple settings

**Impact:**

A pilot project involving innovative use of data to establish how best to prevent cycling injuries. Recommendations would be made to Hackney Borough London Council on the most effective cycling injury interventions, with a follow-up audit 6-12 months after interventions are in place. If successful, the pilot project could be extended and rolled out, not just in Hackney but across London.

### *A new lifeline for trauma survivors – £380,000*

**Aim:**

To develop an innovative web-based resource to support long term trauma survivors and their families.

**Objectives:**

- To address the long term health problems and complex psychosocial needs of trauma survivors
- To improve access to services for patients, families and carers
- To educate healthcare professionals to deliver effective rehabilitation interventions

**Methods:**

- Development of a web-based trauma survivors network
- Provision of valuable, practical information and referral information for patients and clinicians
- Connectivity with peer mentors and support groups
- Enhancement of survivor skills to manage day to day challenges
- Development of communities to provide support and hope for trauma survivors, families and friends
- Provision of training to health care providers to deliver the best care and support

**Impact:**

There are currently no easily accessible resources to improve recovery of people with traumatic injuries, and no national centre providing information and co-ordination between trauma networks. This resource would significantly improve patient experience and health outcomes, and could also be used for research. All trauma patients older than 13 years and their families across the UK would benefit, with reduced demand on psychological services, fewer GP, outpatient and hospital visits and reduced readmission rates. The site would be modelled on a program in the USA which has shown demonstrable results, such as 49% lower odds of depression among survivors. The odds of suicidal activity after major trauma are 4:1 so this is a significant finding.

### *Investigating perceptions of injury risk from cycling – £50,000*

**Aim:**

To investigate the experiences, attitudes and socio-cultural meanings attached to cycling and risks of injury among local populations with the potential for national rollout.

**Objectives:**

- To understand cycle participation and injury risk in the context of everyday life
- To inform the design of a survey for future UK-wide research
- To inform local authority, national authority and school injury prevention strategies

**Methods:**

- Phase 1 - focus groups with families from schools in Tower Hamlets, Newham and City and Hackney
- Phase 2 - focus groups with school representatives and cycle training leads
- Phase 3 - detailed thematic analysis

**Impact:**

After presentation to the local community for discussion and feedback, a final report and academic journal paper would be used for education and dissemination. The subsequent design of a UK survey has the potential to impact prevention strategies nationally.

## *Life-saving research at the Centre for Trauma Sciences – various*

**Aim:**

To create a fundamental step-change in outcomes for critically injured trauma patients worldwide.

**Objectives:**

- The development of a world-leading Centre of Excellence for translational trauma research
- To investigate major causes of mortality and permanent physical and mental disability, such as severe bleeding, brain injury and organ failure
- To lead global networks to achieve the translation of research into practise and policy
- To disseminate findings to improve care and outcomes worldwide

**Methods:**

- Bleeding and Coagulation - over 2.5m people a year bleed to death from their injuries and trauma haemorrhage is often considered the largest cause of preventable lost life years in the world. This stream focuses on understanding problems with blood clotting in trauma patients and finding new devices for diagnosis and treatment.
- Brain and Spinal Cord Injury - neurotrauma is the biggest cause of injury related death and disability. Despite many advances in brain imaging and monitoring, outcomes are universally poor. This stream focuses on the development of new neuroprotective agents, hyperacute interventions, early biomarkers and the long-term follow up of these patients.
- Organ Failure and Protection - patients who survive the initial trauma often go on to develop multiple organ failure which can result in death, prolonged intensive care support, increased complications and worse long term outcomes. This stream focuses on the mechanisms of organ failure, finding new organ protective agents and understanding the burden of organ failure after trauma.

**Impact:**

The C4TS provides the unique infrastructure, resource and expertise necessary for delivering local and international studies in experimental medicine and translational science. They are ideally placed to investigate the mechanisms of trauma as a disease and develop novel treatments, as well as furthering understanding of the longer-term impact upon patient outcomes and rehabilitation needs. All levels of funding will have a positive impact, with the option for supporters to become true partners with the C4TS team with multiple opportunities to engage at every level.

## Barts Charity Seminar 31<sup>st</sup> January 2014

### COMMENT AND RESEARCH

#### **Cycling: an accident waiting to happen, or a life-giving pursuit?**

When it comes to cycling there is good news and bad news. The good news is cycling is great for our bodies and minds, and overall, cycling fatalities in the capital have decreased since 2002. 118m cycle journeys were made in London in 2002 with 20 deaths, compared to 209m cycle journeys in 2012 and 14 deaths. You'd be forgiven for thinking this small number represents a small problem, however it is important to recognise that each death is an entirely preventable cause of morbidity and premature mortality, with countless lives shattered by the ripple effect of these tragic events.

The bad news is that the relatively small number of fatalities does not fully illustrate the risks for cyclists, with the larger group of casualties difficult to consider due to the limitations of data. Many cyclists who survive collisions suffer debilitating physical and emotional effects, and recent data suggests that serious injuries are starting to rise once more. Furthermore, there is evidence that reduction in mortality is due to improvements in trauma and emergency care at Major Trauma Centres such as The Royal London Hospital, rather than effective pre-collision interventions.

Cycling presents clear benefits for individuals and for society, from both an environmental and economic perspective. With regards to health, regular cyclists on average have the fitness of someone 10 years younger, are half as likely to suffer from heart disease, are 27% less likely to have a stroke and live two years longer. Therefore it seems reasonable to believe that cycling is more likely to prolong life than to be detrimental to our health, and that innovations to make cycling safe and accessible are worthy of investment.

The following articles and reports have been collated to provide a summary of information and recent opinion on cycling and cycle safety, which bear relevance to the questions asked by this seminar.

*Belinda Dee (Head of Development, Barts Charity) - January 2014*

#### **1) Cycling figures and statistics**

"London pedestrian deaths and cycle injuries soar"

*Ross Lydall, Evening Standard – 29 June 2012*

<http://www.standard.co.uk/news/london/london-pedestrian-deaths-and-cycle-injuries-soar-7899270.html>

"Move over Amsterdam, the London cycling revolution is in top gear"

*Matthew Beard (Transport Editor), Evening Standard – 24 June 2013*

<http://www.standard.co.uk/news/london/move-over-amsterdam-the-london-cycling-revolution-is-in-top-gear-8671069.html>

"London road casualties rise for first time in seven years, with serious cycle injuries up 18%"

*Ross Lydall, Evening Standard – 1 November 2013*

<http://lydall.standard.co.uk/2013/11/london-road-casualties-rise-for-first-time-in-seven-years-with-serious-cycle-injuries-up-18.html>

"Is cycling getting more or less dangerous?"

*Sam Judah, BBC News Magazine – 19 November 2013*

[http://www.bbc.co.uk/news/magazine-24987425?ocid=socialflow\\_twitter\\_bbcnews](http://www.bbc.co.uk/news/magazine-24987425?ocid=socialflow_twitter_bbcnews)

"Cyclists: Jon Snow on cycling dangers of London roads"

*BBC News – 22 November 2013*

<http://www.bbc.co.uk/news/uk-politics-25046751>

"Cyclist injuries increase casualty toll on London's roads"

*Tim Donovan (Political Editor), BBC London – 10 December 2013*

<http://www.bbc.co.uk/news/uk-england-london-25306281>

"Have London's roads become more dangerous for cyclists? Statistical study\* says something has changed on London's roads. It's not by chance that six cyclists were killed in the capital in 14 days in November, say statisticians"

*Sarah Barth, road.cc – 4 January 2014*

<http://road.cc/content/news/105755-have-londons-roads-become-more-dangerous-cyclists-statistical-study-says>

[\*The full paper from The Royal Statistical Society paper by Jody Aberdein and David Spiegelhalter is attached]

## **2) The London cycling fatalities – 'Black November'**

"Camberwell crash death: Sixth cyclist killed in two weeks"

*BBC London - 18 November 2013*

<http://www.bbc.co.uk/news/uk-england-london-24989985>

## **3) HGVs and cycling**

An outline of the background to the Heavy Goods Vehicle (HGV) Cycle Safety issue

*Transport for London, Safety and Sustainability Panel - 9 October 2013*

<http://www.tfl.gov.uk/assets/downloads/corporate/SSP-20131009-Item05-Cycle-Safety.pdf>

"Two thirds of lorries are defective or illegal" ( please find full article attached)

*Philip Pank (Transport Correspondent), The Times – 6 January 2014*

## **4) Intervention and prevention**

"Coroner blasts Mayor's cycle superhighway as 'accident waiting to happen' at inquest of man killed in crash with tipper truck"

*Ross Lydall, Evening Standard – 15 October 2013*

<http://www.standard.co.uk/news/london/coroner-blasts-mayors-cycle-superhighway-as-accident-waiting-to-happen-at-inquest-of-man-killed-in-crash-with-tipper-truck-8879430.html>

"Coroner Recommends Action To Prevent Further Cycling Deaths"

*Rachel Holdsworth, londonist.com – 24 October 2013*

<http://londonist.com/2013/10/coroner-recommends-action-to-prevent-further-cycling-deaths.php>

"East London segregated cycle superhighway opened"

*BBC London – 6 Nov 2013*

<http://www.bbc.co.uk/news/uk-england-london-24832466>



“London's cyclist deaths are tragic. But panic changes won't work”

*Andrew Gilligan, The Guardian – 20 November 2013*

<http://www.theguardian.com/commentisfree/2013/nov/20/london-cyclist-deaths-panic-change-wont-work>

Report on lawless roads and four key reforms following a seminar attended by 120 cycling campaigners, the acting head of the Met's Transport Police and the Mayor's Commissioner for Cycling

*Jenny Jones AM, Greater London Authority – 17 December 2013*

<https://www.london.gov.uk/sites/default/files/Lawless%20roads%20%20final.pdf>

“Norman Foster proposes cycle network above London's railways”

*Joshua Cunningham, Cycling Weekly – 3 January 2014*

<http://www.cyclingweekly.co.uk/news/latest/541843/norman-foster-proposes-cycle-network-above-london-s-railways.html>

“London cyclist deaths: 13,800 drivers and cyclists fines issued”

*BBC London – 6 January 2013*

<http://www.bbc.co.uk/news/uk-england-london-25618915>

“Boris Johnson shoots down “fantastically expensive” SkyCycle plan for cycle routes in the sky; Mayor of London says that other initiatives to improve safety of cyclists must take priority”

*Simon MacMichael, road.cc – 7 January 2014*

<http://road.cc/content/news/106466-boris-johnson-shoots-down-fantastically-expensive%E2%80%9D-skycycle-plan-cycle-routes>

“Over 14,000 penalised by police in London road safety operation”

*Laura Laker, Cycling Weekly – 14 January 2014*

<http://www.cyclingweekly.co.uk/news/latest/542003/over-14-000-penalised-by-police-in-london-road-safety-operation.html>

“Transport minister: Responsible cyclists CAN ride on the pavement; Robert Goodwill tells Stop Killing Cyclists campaigner that 1999 Home Office guidance still applies & police must use discretion”

*Simon MacMichael, road.cc – 15 January 2014*

<http://road.cc/content/news/108119-transport-minister-responsible-cyclists-can-ride-pavement>

## **5) Perceptions of cycling**

“Vulnerable road users - how psychology can assist non-car drivers”

*Jon Sutton and Ian Walker, [www.thepsychologist.org.uk](http://www.thepsychologist.org.uk) – September 2012*

[http://www.thepsychologist.org.uk/archive/archive\\_home.cfm/volumeID\\_25-editionID\\_217-ArticleID\\_2136-getfile\\_getPDF/thepsychologist%5C0912walk.pdf](http://www.thepsychologist.org.uk/archive/archive_home.cfm/volumeID_25-editionID_217-ArticleID_2136-getfile_getPDF/thepsychologist%5C0912walk.pdf)

“London cycling deaths lead 1 in 5 to stop riding bike to work, finds poll. Further 3 in 10 vary route; we look at results of 2 recent surveys focused on cycling in the capital”

*Simon MacMichael, road.cc - 2 December 2013*

<http://road.cc/content/news/100070-london-cycling-deaths-lead-1-5-stop-riding-bike-work-finds-poll>

“Survey shows scale of fear on London's roads in wake of spate of cyclist deaths; 80% of cyclists are more concerned about safety than six months ago”

*Sarah Barth, road.cc – 9 December 2013*

<http://road.cc/content/news/100396-survey-shows-scale-fear-london's-roads-wake-spate-cyclist-deaths>

"Britain's new cycling minister calls for more 'everyday' riders"

*The Guardian Bike Blog – 15 January 2014*

<http://www.theguardian.com/environment/bike-blog/2014/jan/15/new-cycling-minister-robert-goodwill-everyday-cyclists>

## 6) Cycling and politics

"MPs to quiz police and cycling tsar on safer cycling"

*Ross Lydall, Evening Standard – 2 December 2013*

<http://lydall.standard.co.uk/2013/12/mps-to-quiz-police-and-cycling-tsar-on-safer-cycling.html>

"Improve local cycling and we'll vote for you, activists tell council candidates"

*Ian Johnston, The Independent – 8 December 2013*

<http://www.independent.co.uk/news/uk/politics/improve-local-cycling-and-well-vote-for-you-activists-tell-council-candidates-8990847.html>

## 7) The case for cycling

The Science Behind Why Cycling Makes Us Happier

<http://oopsmark.ca/science-behind-cycling-makes-us-happier/>

A case for making London a haven for cyclists, and comparisons with New York

*Christian Wolmar, writer and broadcaster – 17 November 2013*

<http://www.christianwolmar.co.uk/2013/11/make-london-a-haven-for-cyclists/>

How bicycles bring business, an example from New York City

*January 2014*

[http://i0.wp.com/yuriartibise.com/wp-content/uploads/2014/01/How-Bicycles-Bring-Business-Infographic.png?utm\\_source=buffer&utm](http://i0.wp.com/yuriartibise.com/wp-content/uploads/2014/01/How-Bicycles-Bring-Business-Infographic.png?utm_source=buffer&utm)

## 8) Official transport reports (TfL, Department for Transport, UN)

TfL's 5<sup>th</sup> annual publication - examines and summarises trends and developments relating to travel and transport in London

*TfL - 2012*

<http://www.tfl.gov.uk/assets/downloads/corporate/travel-in-london-report-5.pdf>

TfL Health, Safety and Environment Annual Report 2012/13

*TfL – 6 November 2013*

<http://www.tfl.gov.uk/assets/downloads/corporate/Board-20131106-Part-1-Item6-HSE-Annual-Report.pdf>

TST Issue Brief – Sustainable Transport

*The Technical Support Team (TST) co-chaired by the Department of Economic and Social Affairs and the United Nations Development Programme – 21 November 2013*

[http://sustainabledevelopment.un.org/content/documents/2634Issues%20Brief%20on%20Sustainable%20Transport\\_FINAL\\_21\\_Nov.pdf](http://sustainabledevelopment.un.org/content/documents/2634Issues%20Brief%20on%20Sustainable%20Transport_FINAL_21_Nov.pdf)

Facts on Cycling Safety

*Department for Transport – December 2013*

[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/265224/Pedal\\_Cyclist\\_Factsheet\\_2012.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/265224/Pedal_Cyclist_Factsheet_2012.pdf)

Transport Statistics Great Britain 2013

*TfL - 2013*

[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/264679/tsgb-2013.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/264679/tsgb-2013.pdf)

TfL's 6<sup>th</sup> annual publication - examines and summarises trends and developments relating to travel and transport in London

*TfL - 2013*

<http://www.tfl.gov.uk/assets/downloads/corporate/travel-in-london-report-6.pdf>

For further information or to find out more about the Barts Charity Seminar & Events Programme please contact Belinda Dee, Head of Development at Barts Charity:

***[belinda.dee@bartshhealth.nhs.uk](mailto:belinda.dee@bartshhealth.nhs.uk)***

***020 7618 1724***

***Twitter - @BeeBartsCharity***



**Barts Charity** changes people's lives through innovations in healthcare. We serve a patient population of 2.5 million across our six hospital network and receive referrals from across the UK.

Your participation in the seminar today is one of the many ways in which you can partner with Barts Charity and make a difference. However, without the support of our donors we can only support one-third of the life-changing projects which need our support.

Giving is just the beginning. A donation to Barts Charity is a journey that shapes the future of medicine and gives hope to thousands of patients. Our reporting system allows you to see the impact of your donation.

With **100% of all donations going straight to the cause**, our partners make a tangible difference not only Trauma, but across the entire spectrum of our disciplines, including Cancer, Cardiac, and Children's Health.

One in three people will get cancer. Barts NHS Health trust has a wide selection of specialist services and one of only two UK centres for children's eye cancer. We fund first class facilities and ground-breaking therapies and research that save and improve lives through prevention, early diagnosis and minimising treatment side effects.

Heart disease is the UK's biggest killer. Each year, our specialist heart attack centre treats 9,000 people that live and work in the capital. Barts Charity funds life-saving equipment, research and education, lowering mortality rates and moving us closer towards preventing the tragic and untimely loss of life caused by this virulent disease.

Over 60,000 children a year, from premature babies to teenagers, are treated by our network, including Tower Hamlets, where 79% live below the poverty line. Our projects save lives and transform the hospital environment giving thousands of sick and vulnerable children a positive future.

## **Our impact can be seen in every corner of Bart's vast network:**

### **100% of your donation will help us to:**

- Underpin research and clinical success
- Fund pioneering new treatments and cutting-edge equipment
- Improve hospital life
- Increase community awareness

**Together we can enhance patient care and transform lives**