

# NOTTINGHAM PAEDIATRIC RESEARCH SHOWCASE 2018

University of Nottingham  
Medical School  
21st June 2018



University of  
**Nottingham**  
UK | CHINA | MALAYSIA



Nottingham  
**Children's**  
Hospital

# Nottingham Paediatric Research Showcase Conference

**NPRS  
2018**

**Wednesday 21<sup>st</sup> June 2018**



## **Welcome**

Dear Colleagues

Welcome to the second Nottingham Paediatric Research Showcase Conference. We have an exciting programme of new and established research, audit and quality improvement in the field of neonatal and paediatric healthcare. There are keynote speakers and original papers presented by a range of healthcare professionals.

We hope the conference offers all an opportunity to present and listen to all the great work that goes on in this region to improve the care we deliver for children and their families. Nottingham has an enviable group of paediatric healthcare professionals and researchers who are not only advancing care locally but also nationally and internationally.

We hope you enjoy the conference and take any inspiration or learning back to the bedside to improve the care you deliver.

If you are interested in learning more about research in Nottingham and how you might get involved feel free to email the conference organiser Dr Don Sharkey, Associate Professor of Neonatal Medicine [don.sharkey@nottingham.ac.uk](mailto:don.sharkey@nottingham.ac.uk).

### **The NPRS Team**

Don Sharkey, Claire Shreeve, Joseph Manning, Hazel Rogers, Matt Hurley, Caroline Henry, James Law, Andrew Prayle, Tim Ritzmann, Lara Shipley

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A Floor Foyer and Lecture Theatre 3, Medical School,  
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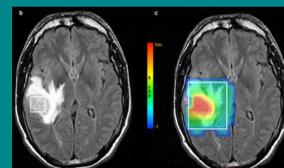


Time	Session	Final Programme
0830–0900	Registration	Tea/Coffee - University of Nottingham Medical School Entrance A floor
0900–0910	Welcome	<b>Dr Don Sharkey</b> (NPRS Organiser) - Lecture Theatre 3
0910–0940	Keynote Lecture 1	<b>Professor Russell Viner, President RCPC &amp; Professor in Adolescent Health, UCL</b> “Inequalities in Child Health: How can research benefit the most vulnerable?”
0940–1000	Guest Lecture 1	<b>Dr Maria Koufali, Deputy Director Research &amp; Innovation at NUH</b> “Research for All”
1000–1030	Oral Paper Session 1	<ol style="list-style-type: none"> <li>miRNA expression and its functional effects in paediatric astrocytoma</li> <li>Systematic review and meta-analysis of adverse events of ibuprofen in PDA management in preterm infants</li> <li>Thyroid function predicts brown adipose tissue activity in children with hypothyroidism</li> </ol>
1030–1105	<b>Coffee/Tea + Danish</b>	
1105–1130	Guest Lecture 2	<b>Nottingham Children’s Brain Tumour Research Centre Team, University of Nottingham</b> “From bench to bedside – leading the way in paediatric brain tumour research”
1130–1200	Oral Paper Session 2	<ol style="list-style-type: none"> <li>Do we need to re-evaluate the gold standard for urinary cultures? – An exploratory analysis in an acute paediatric centre</li> <li>Screening for retinopathy of prematurity – A comparison of Optos ultra-widefield retinal imaging and binocular indirect ophthalmoscopy</li> <li>A Clinical study of a novel cap mounted optical heart rate sensor for newborns</li> </ol>
1200–1220	Guest Lecture 3	<b>Dr Rob Dineen, Associate Professor of Neuroimaging, University of Nottingham</b> “The future of paediatric MRI research in Nottingham, the home of MRI”
1220–1330	<b>Lunch and Poster Session (presenters from 1245) – foyer of medical school</b>	
1330–1400	Keynote Lecture II	<b>Dr Niina Kolehmainen, Senior Clinical Lecturer &amp; Honorary Consultant AHP (children), Newcastle University</b> “Research into non-drug interventions to improve participation outcomes in children”
1400–1430	Oral Paper Session 3	<ol style="list-style-type: none"> <li>Validation of a scoring system to predict nursing dependency following posterior correction of scoliosis in adolescent patients</li> <li>RNA-seq analysis of recurrent paediatric ependymoma reveals immunological changes specific to molecular subgroups</li> <li>Caucasian SGA infants with bronchopulmonary dysplasia require longer, and more intensive treatment for their disease than non-Caucasian SGA counterparts</li> </ol>
1430–1450	Guest Lecture 4	<b>Dr Jon Dorling, Associate Professor of Neonatal Medicine, University of Nottingham</b> “Outcomes of two large randomised controlled trials for preterm infants”
1450–1520	<b>Coffee/Tea + Nibbles</b>	
1520–1545	Guest Lecture 5	<b>Professor Denise Kendrick, Professor of Primary Care Research, University of Nottingham</b> “Injury prevention in children: what we know and can we tackle it?”
1540–1605	Poster Platform Session	<ol style="list-style-type: none"> <li>Performance of dipstick &amp; microscopy for identification of urinary tract infection in children under 2 – a prospective diagnostic accuracy study</li> <li>An innovative model of inpatient and outreach paediatric neurorehabilitation – a new team approach</li> <li>Electrical impedance tomography: what is the optimal peep in children with bronchiolitis?</li> <li>Interventions to reduce interruptions to medication administration: A realist review. What works for whom, in what circumstances and why?</li> </ol>
1605–1635	Guest Lecture 6	<b>Professor Neil Marlow, Professor of Neonatal Medicine, UCL</b> “Where are we heading with neonatal research?”
1635–1650	<b>Prize Presentations and close</b>	

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Time	Session	Oral and Poster Platform Abstract Sessions
1000 – 1030	Oral Paper Session 1	<ol style="list-style-type: none"> <li><b>miRNA expression and its functional effects in paediatric astrocytoma</b> Maria Angeles Estevez-Cebrero, University of Nottingham</li> <li><b>Systematic review and meta-analysis of adverse events of ibuprofen in PDA management in preterm infants</b> Asma Al-Turkait, University of Nottingham</li> <li><b>Thyroid function predicts brown adipose tissue activity in children with hypothyroidism</b> James Law, University of Nottingham and Nottingham Children's Hospital</li> </ol>
1130 – 1200	Oral Paper Session 2	<ol style="list-style-type: none"> <li><b>Do we need to re-evaluate the gold standard for urinary cultures? – An exploratory analysis in an acute paediatric centre</b> Cath Rimmer, Sheffield Children's Hospital</li> <li><b>Screening for retinopathy of prematurity – A comparison of Optos ultra-widefield retinal imaging and binocular indirect ophthalmoscopy</b> Janine Abramson, University of Nottingham</li> <li><b>A Clinical study of a novel cap mounted optical heart rate sensor for newborns</b> Caroline Henry, University of Nottingham</li> </ol>
1400 – 1430	Oral Paper Session 3	<ol style="list-style-type: none"> <li><b>Validation of a scoring system to predict nursing dependency following posterior correction of scoliosis in adolescent patients</b> Philippa Horsfield, Nottingham Children's Hospital</li> <li><b>RNA-seq analysis of recurrent paediatric ependymoma reveals immunological changes specific to molecular subgroups</b> Tim Ritzmann, University of Nottingham, UCL, University of Colorado</li> <li><b>Caucasian SGA infants with bronchopulmonary dysplasia require longer, and more intensive treatment for their disease than non-Caucasian SGA counterparts</b> Eleanor Grimley, University of Nottingham and Nottingham Children's Hospital</li> </ol>
1540 – 1605	Poster Platform Session	<ol style="list-style-type: none"> <li><b>Performance of dipstick &amp; microscopy for identification of urinary tract infection in children under 2 – a prospective diagnostic accuracy study</b> Anne Rawnsley, Sheffield Children's Hospital</li> <li><b>An innovative model of inpatient and outreach paediatric neurorehabilitation – a new team approach</b> Jane Williams, Nottingham University Hospitals NHS Trust</li> <li><b>Electrical impedance tomography: what is the optimal peep in children with bronchiolitis?</b> David Bird, Nottingham Children's Hospital</li> <li><b>Interventions to reduce interruptions to medication administration: A realist review. What works for whom, in what circumstances and why?</b> Rachel Bower, Coventry University</li> </ol>



### Poster Session

Posters on view in Medical School Foyer, presenters available during lunch

- The burden of accidental poisoning - a cross-sectional study of children presenting to an emergency department over 1 year
- Early Phosphate Intervention study
- Clinical application of electrical impedance tomography in paediatric intensive care patients
- Invasive Streptococcal Infections in PICU: A Forgotten Foe?
- An evaluation of paediatric tinnitus services in the UK
- An Evaluation of the Brain Injury Living Life Service at Nottingham Children's Hospital
- Participation after Paediatric Acquired Brain Injury: Exploring levels of participation in children and young people after discharge from inpatient rehabilitation
- A protective splint for babies with an exomphalos/omphalocele
- Developing a child friendly resource to support children through a research pathway

Continued...

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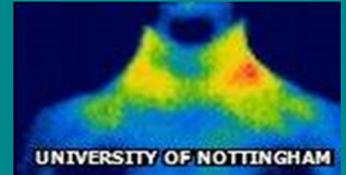
- Developing a New Tool to Measure Outcomes in a Multifaceted Disease to Facilitate Research
- Can whole body vibration, as experienced during neonatal ambulance transportation, cause lung inflammation?
- In vitro evaluation of the potential of glucose restriction as an adjuvant therapy for paediatric brain tumours
- Ketolytic and glycolytic enzymatic expression in paediatric medulloblastomas: implication for ketogenic diet therapy
- Novel mini-capsules markers and methods for magnetic resonance imaging of gastrointestinal transit in paediatric constipation (the MAGIC study)
- Paediatric Critical Care demand and capacity across the Nottingham Children's Hospital and its referring centres.
- Identifying Preventable Term Admissions to The Neonatal Unit – An Audit
- Improving patient attendance for follow-up imaging after NAI skeletal survey
- Paediatric Crohn's disease patients in remission have a reduced skeletal muscle protein balance after feeding.

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## Practical Details

- Venue: The University of Nottingham
- Getting to the Medical School at Nottingham University Hospital
  - Please use information for the various transport options and car parking for the hospital at <https://www.nuh.nhs.uk/getting-here/qmc-and-our-emergency-department/>
  - Be aware that parking is very limited and you may end up some distance from the venue
  - Once at the Hospital follow the signs for the Medical School. The conference will be held in the A floor Foyer (the main entrance of the medical school) and Lecture Theatre 3
- We have a list of all those registered. The event is fully subscribed so you must collect your badge from the registration point in the medical school foyer – no need to print your tickets just give your name
- Please wear your badge at all times, it is essential for refreshments and catering purposes as the Medical School is open to all
- We will be taking informal photos on the day to highlight the success of the event later on and for subsequent events. Please let us know if you'd rather we take/use photos with you in
- There will be plenty of refreshments and lunch for all attendees
- Please return to the lecture theatre promptly as we have a tight programme and it will be polite to start presenters on time and without interruption
- Please do not sit at the end of rows in the lecture theatre as the conference is near capacity so most spaces will be taken
- Attendance certificates are available via electronic feedback forms emailed after the conference – watch your inbox

Website <https://nottinghampaediatricresearch.org/>  
The RCPCH have approved this conference for CPD Points

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We'd like to say a special thank you to all the speakers and presenters at the conference. We would also like to say thank you to the teams below who have supported us setting this up and running the conference both financially and practically

  
*Health Education England*

Nottingham  
University  
Hospitals   
NHS Trust



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**Nottingham**  
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