

BEAUMONT HOSPITAL





RCSI-Clinical Research Centre

Professor Mark Sherlock

Consultant Endocrinologist, Beaumont Hospital Professor of Medicine, RCSI Director RCSI-Clinical Research Centre

RCSI-Clinical Research Centre (RCSI-CRC)









Clinical Research at RCSI and Beaumont Hospital

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RCS

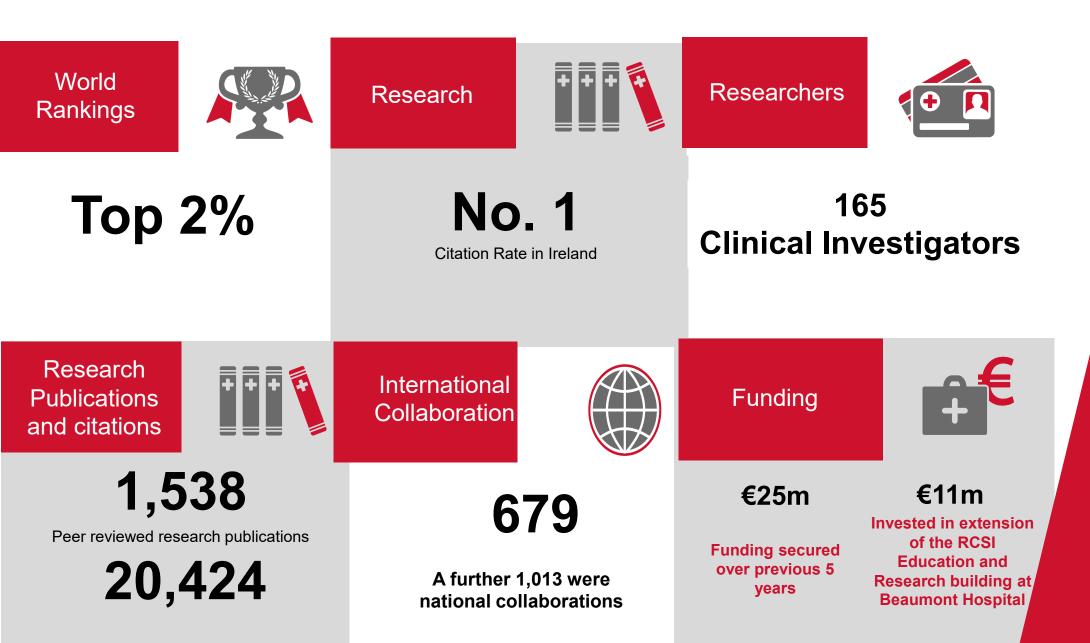
UNIVERSITY

OF MEDICINE AND HEALTH SCIENCES

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Supporting Excellence with Established & <u>Emerging Investigators</u>



What is unique and successful about Beaumont/ Rotunda Hospitals and RCSI?

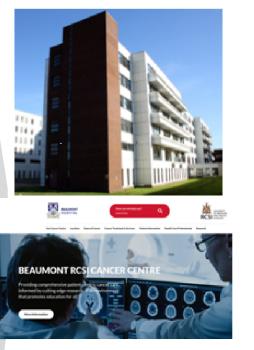




Serving 1.1 Million People

Serving the Country

Beaumont Hospital



Rotunda Hospital



National Cancer Centre National Centre for CF and AATD National Neuroscience Centre National Renal Transplantation Centre National ENT/Head and Neck Surgery National Pituitary Centre Regional/ National Adrenal Centre National Cochlear Implantation Regional Gastroenterology Centre Regional Rheumatology Centre

Maternity Services Maternal Fetal Medicine Neonatal Care Gynaecology Care









Beaumont RCSI Cancer Centre OECI Accreditation

- Research and clinical trials is a key metric
- Synergistic working Between RCSI-CRC and Cancer Clinical Trials Unit



RCSI-CRC Close Collaborations with RCSI-SSG for Translational Research



Irish Kidney Gene Project Professor Peter Conlon





HOSPITAL



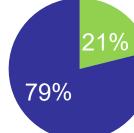


Aetiology Kidney **Disease in Non-PCKD** Positive **Family History** Lupus 🛛 6 8 **MPGN** 10 10 Drug Toxicity 12 13 Tubulointer... 15 15 FSGS 20 20 Alport's.. 22 35 lgA. 45 59 CAKUT 60 69

Other

78

Aetiology of Kidney Disease in the Positive Family History Cohort PCKD Non PCKD



	Experimental Nephrology and Genetics: Original Paper	
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Neurovascular Stroke Studies ESCAPE Study Professor David Williams and Professor John Thornton

The NEW ENGLAND JOURNAL of MEDICINE

ORIGINAL ARTICLE

Randomized Assessment of Rapid Endovascular Treatment of Ischemic Stroke

M. Goyal, A.M. Demchuk, B.K. Menon, M. Eesa, J.L. Rempel, J. Thornton, D. Roy, T.G. Jovin, R.A. Willinsky, B.L. Sapkota, D. Dowlatshahi, D.F. Frei, N.R. Kamal, W.J. Montanera, A.Y. Poppe, K.J. Ryckborst, F.L. Silver, A. Shuaib, D. Tampieri, D. Williams, O.Y. Bang, B.W. Baxter, P.A. Burns, H. Choe, J.-H. Heo, C.A. Holmstedt, B. Jankowitz, M. Kelly, G. Linares, J.L. Mandzia, J. Shankar, S.-I. Sohn, R.H. Swartz, P.A. Barber, S.B. Coutts, E.E. Smith, W.F. Morrish, A. Weill, S. Subramaniam, A.P. Mitha, J.H. Wong, M.W. Lowerison, T.T. Sajobi, and M.D. Hill for the ESCAPE Trial Investigators*

ABSTRACT

4180 citations

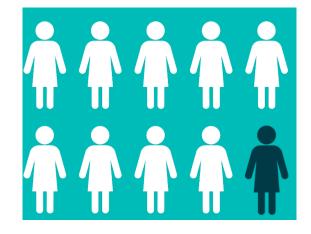
- 258,104 Page Views
- Beaumont CRC was the Largest Recruiter of Patients outside Canada
- Led to a 'seachange' in the management of ischaemic stroke
- ESCAPE recruitment model led to SCTNI



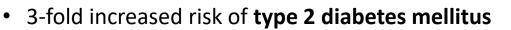




Polycystic ovary syndrome Professor Michael O'Reilly



Polycystic ovary syndrome - a life's journey Infertility Androgen Irregular Miscarriage periods excess Type 2 Liver disease Insulin Hyper-Cardiovascular resistance **Diabetes** (NAFLD) tension disease Childhood Adolescence **Reproductive years Post-menopause** Old Age



- 2-fold increased risk of non-alcoholic fatty liver disease
- 2-fold increased risk of cardiovascular disease

'PCOS guidelines are informed by low-to-moderate quality evidence'





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110XO-Diabetes

Prof. Michael O'Reilly HRB Emerging Clinician Scientist Award 2020

Mechanistic Research in PCOS leading to clinical trials





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110XO-Diabetes

RB Health

Research Board

Prof. Michael O'Reilly HRB Emerging Clinician Scientist Award 2020

Infectious Disease Research **Dr Eoughan De Barra and Prof Sam McConkey**







European

Horizon 2020

European Union funding for Research & Innovation

Commission

All Ireland Infectious Diseases Cohort RCSI >900 enrolled in biobank

> \odot NICP **National Irish COVID Biobank**



European Clinical Research Alliance for Infectious Diseases

Active recruitment Boostavac COVID vaccine study

Key member for future adaptive trial platforms across EU

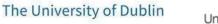
























WHO COVID-19 Solidarity Therapeutics Trial

RCSI-CRC largest recruiter Nationally







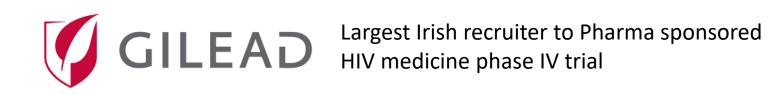
Infectious Disease Studies



Ongoing site for EU wide adaptive platform COVID and potentially other viral infections



Largest Irish recruiter to Pharma sponsored injectable HIV medicines trial. Positive findings now market approved.



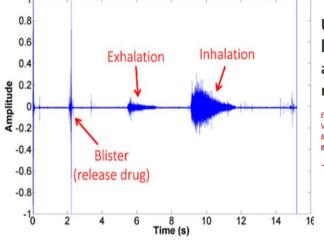






Professor Richard Costello Technology and Asthma Control (INCA studies)

b



Use of digital measurement of medication adherence and lung function to guide the management of uncontrolled asthma (INCA Sun): a multicentre, single-blinded, randomised clinical trial

Elaine Mac Hale", Garrett Greene", Christopher Mulvey", Matshediso C Mokoka", Job F M van Boven, Breda Cushen, Imran Sulaiman, Vincent Brennan, Patrick J Kerr, Richard B Reilly, Cian Hughes, Brian D Kent, David J Jackson, Marcus Butler, Ian Counihan, James Hayes, John Faul, Martin Kelly, Rory Convery, Alexandra M Nanzer Kelly, J Mark Fitzgerald, Desmond M Murphy, Liam G Heaney, Richard W Costello on behalf of the INCA Research Team†

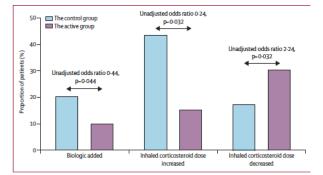


Figure 3: Proportion of patients randomly assigned who were referred for add-on biological therapy At 22 weeks, patients were referred for add-on biological therapy (n=22 control; n=11 active); or over the treatment adjusted period, patients had inhaled corticosteroid dose increased from PF 500 µg once per day to 1000 µg once per day (3 [16%] of 19 active patients and 11 [44%] of 25 control patients), or reduced from FP 1000 µg once per day to 500 µg once per day (26 [31%] of 83 active patients and 13 [18%] of 73 control patients). The odds ratios for each of the changes in the active group, compared with the control group having these medication changes are per protocol analysis. FP=fluticasone propionate.



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Professor Gerry McElvaney Cystic Fibrosis and alpha 1 antitrypsin research

on².

ORIGINAL ARTICLE

Trikafta Rescues CFTR and Lowers Monocyte P2X7R-induced

Inflammasc

The NEW ENGLAND JOURNAL of MEDICINE

Claudie Gabillard-L Anne-Marie Lyons²

¹The Irish Centre of G Royal College of Surg Hospital, Dublin, Irela

ORCID IDs: 0000-0002-4 0000-0002-1922-0447 (E

 ORIGINAL ARTICLE

 3 Centre, int

 Triple Therapy for Cystic Fibrosis Phe508del–Gating and –Residual Function Genotypes

 P.J. Barry, M.A. Mall, A. Álvarez, C. Colombo, K.M. de Winter-de Groot, I. Fajac, K.A. McBennett, E.F. McKone, B.W.

 E. Tullis, N. Ahluwalia, L.S. Jun, S.M

 Octoor Colspan="2">Octoor Updates

for the VX18-44 ORIGINAL ARTICLE

Clarifying the R Antitrypsin Defi

Alessandro N. Franciosi^{1,2} Cedric Gunaratnam^{1,2}, Ed



ORCID IDs: 0000-0002-4241-87



EDITORIAL ERS CLINICAL RESEARCH COLLABORATIONS

Clarke⁵.

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The European Alpha-1 Research Collaboration (EARCO): a new ERS Clinical Research Collaboration to promote research in alpha-1 antitrypsin deficiency

Marc Miravitlles ¹, Joanna Chorostowska-Wynimko², Ilaria Ferrarotti³, Noel G. McElvaney⁴, Karen O'Hara^{5,6}, Jan Stolk⁷, Robert A. Stockley⁸, Alice Turner⁹, Marion Wilkens^{6,10} and Timm Greulich¹¹on behalf of the EARCO Clinical Research Collaboration¹²



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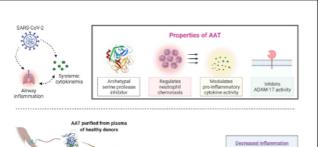
Investigator initiated Double blind, placebo controlled RCT in COVID Professor Ger Curley and Professor Gerry McElvaney

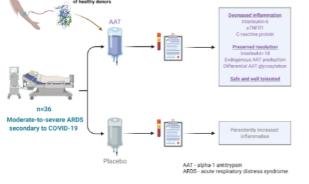
Med

CelPress

Clinical Advances

A randomized, double-blind, placebocontrolled trial of intravenous alpha-1 antitrypsin for ARDS secondary to COVID-19





Oliver J. McElvaney, Natalie L. McEvoy, Fiona Boland, ..., Ignacio Martin-Loeches, Noel G. McElvaney, Gerard F. Curley

olivermcelvaney@rcsi.ie (O.J.M.) gmcelvaney@rcsi.ie (N.G.M.)

Highlights

Patients with COVID-19-associated ARDS were randomized to receive IV AAT or placebo

Patients receiving IV AAT had decreased IL-6, sTNFR1, and CRP at 1 week

Differential glycosylation of endogenous AAT was preserved in the treatment group

Treatment with IV AAT was safe and well tolerated







Department of Gastroenterology & Hepatology Professor Karen Boland and Professor John Ryan

- **Inflammatory Bowel Disease**
 - M14-533: A Phase 3 Multicenter, Long Term Extension Study to Evaluate the Safety and Efficacy of • upadacitinib in Subjects with Ulcerative Colitis (UC)
 - Celgene RPC01-3201: A Phase 3, Multicenter, Randomized, Double-Blind, Placebo-Controlled Study of Oral Ozanimod as Induction Therapy for Moderately to Severely Active Crohn's Disease
 - **RPC01-3204:** Open label extension study of ozanimod in Crohn's disease
- Hepatology
 - **NUT-3/NAS:** Efficacy and safety of norursodeoxycholic acid in NASH ٠
 - NN9931-4553: The Effect of semaglutide in Subjects with Non-Cirrhotic Non-Alcoholic Steatohepatitis
- Interventional Endoscopy
 - Archimedes: To assess utility of bio-degradable bile duct stent
 - **Sure Study:** Multi-centre prospective study to assess performance of single use duoden
 - Impact of bariatric endoscopy on NAFLD (IBENA study)





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Pulmonary Fibrosis in Ireland Professor Killian Hurley

Aim 1. Determine the yield of genomic diagnostics in FPF



Patients from our National Referral Network



Evaluate Patients with familial and 'sporadic' ILD

Collaborators in All Hospital Groups

Dr. Killian Hurley (PI); Dr Katherine O'Reilly; Dr. Michelle Murray



- Prof. Seamas Donnelly
- Dr. Michael Henry
- Dr. Aidan O'Brien
- Prof. Anthony O'Regan

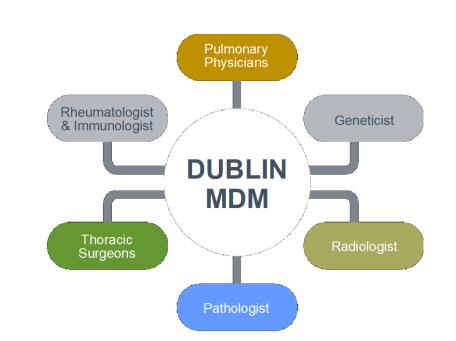




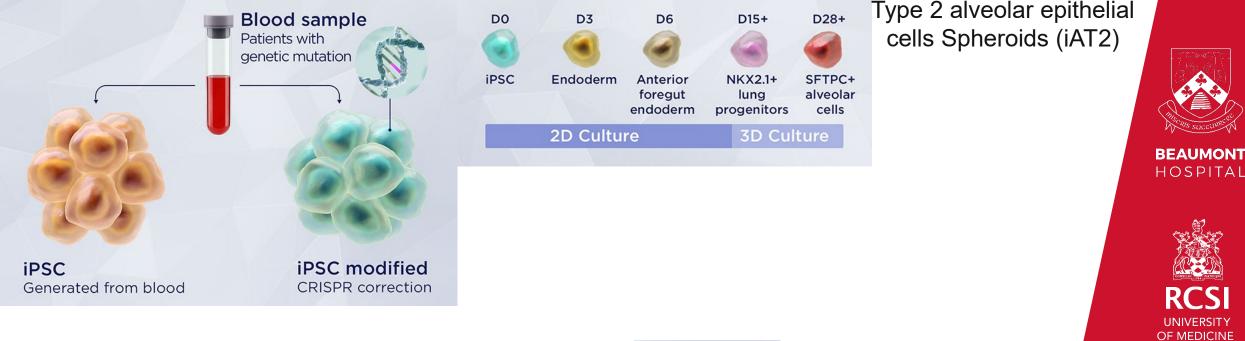




- National Referral Pathway
- Estimate prevalence
- Genotype/phenotype relationships
- Patient samples for disease modelling



Model familial pulmonary fibrosis using patient-derived iPSC lung organoids.









AND HEALTH

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Established by the European Commission

Rotunda Hospital Clinical Research and Trials

www.nature.com/jp

Journal of Perinatology

Check for updates

ARTICLE

Open access

The use of milrinone in neonates with persistent pulmonary hypertension of the newborn - a randomised controlled trial pilot study (MINT 1)

Aff EL-Khuffash ¹²⁸, Patrick J. McNamara ³, Colm Breatnach¹, Neidin Bussmann¹, Aisling Smith¹, Oliver Feeney⁴, Elizabeth Tully⁴, Joanna Griffin⁴, Willem P. de Boode⁵, Brian Cleary^{6,7}, Orla Franklin⁸ and Eugene Dempsey^{8,10}

Original research



Hypotension in Preterm Infants (HIP) randomised trial

OPEN ACCESS Eugene M Dempsey [●], ¹ Keith J Barrington, ² Neil Marlow [●], ³ Colm Patrick Finbarr O'Donnell [●], ⁴ Jan Miletin [●], ⁵ Gunnar Naulaers, ⁶ Po-Yin Cheung [●], ⁷ John David Corcoran [●], ⁸ Afif Faisal EL-Khuffash [●], ⁸ Geraldine B Boylan, ¹ Vicki Livingstone, ¹ Gerard Pons, ⁹ Jozef Macko, ¹⁰ David Van Laere, ¹¹ Hana Wiedermannova, ¹² Zbyněk Straňák [●], ¹³ On behalf of the HIP consortium

BMJ Open Trial of feasibility and acceptability of routine low-dose aspirin versus Early Screening Test indicated aspirin for preeclampsia prevention (*TEST* study): a multicentre randomised controlled trial

> Fionnuala Mone,¹ Cecilia Mulcahy,¹ Peter McParland,¹ Fionnuala Breathnach,² Paul Downey,³ Dorothy McCormack,⁴ Marie Culliton,³ Alice Stanton,⁶ Fiona Cody,² John J Morrison,⁶ Sean Daly,⁷ John Higgins,⁸ Amanda Cotter,⁹ Alyson Hunter,¹⁰ Elizabeth C Tully,² Patrick Dicker,² Zarko Alfirevic,¹¹ Fergal D Malone,² Fionnuala M McAuliffe¹



Research







CLINICAL RESEARCH COURSES

Good Clinical Practice (GCP): IMP Trials In-person or online	 Introduction to Drug Development & Clinical Research Clinical Research Governance & GCP Principles Investigator Responsibilities Safety Reporting, Essential Documents & Regulatory Inspection 	The second weeks
Good Clinical Practice in Medical Device Research In-person or online	 Introduction to Clinical Research and GCP Principles Medical Devices: Types & Classification; Legislation; Clinical Evaluation Planning and Conducting a Clinical Investigation Safety Reporting, Monitoring & Audit 	BEAUMONT HOSPITAT
Clinical Research Coordination and Management Online	 Study Set-up and Administration: Feasibility to Site Initiation Study Organisation and Management Patient Recruitment, Informed Consent & Study Visits Quality, Safety & Regulatory Issues 	OF MEDICINE AND HEALTH SCIENCES



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Thank you

Email: <u>Director of RCSI-CRC: Marksherlock@rcsi.com</u> <u>Director of Operations RCSI-CRC: FionnualaKeane@rcsi.com</u>