



Comparison of Clinician Scientist pathways: Singapore versus UK and Australia

Prof Sir John Savill Melbourne Academic Centre for Health





































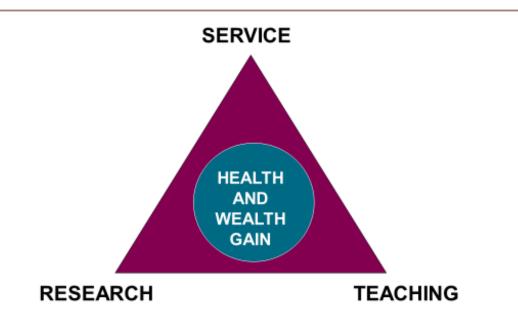




www.machaustralia.org



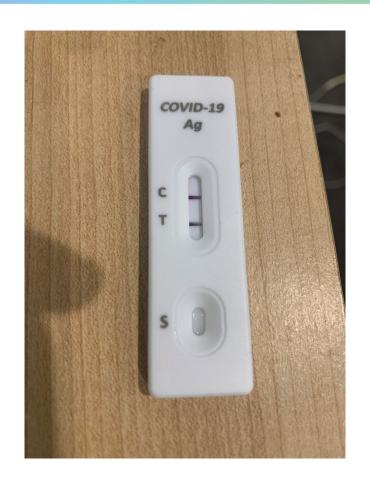
The clinical academic triangle





- 1. Find your theme and secure excellent training.
- 2. Be prepared to grab opportunities and mentors
- 3. Help other clinician researchers esp the young.

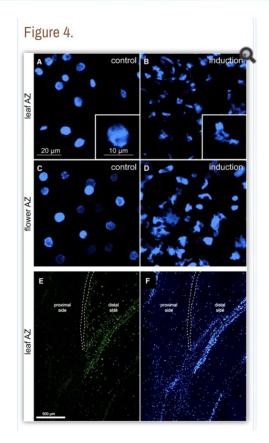








Leaf Abscission



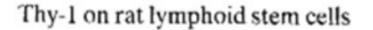
Programmed Cell Death

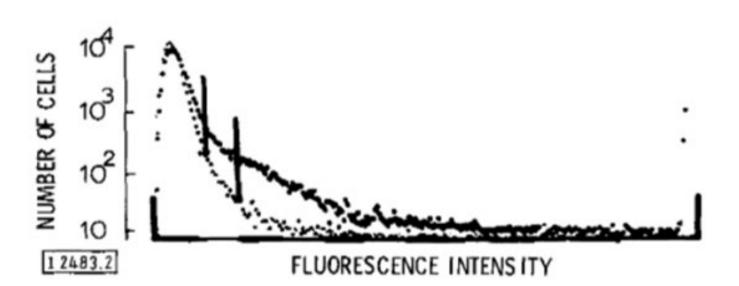


Oxford 1975-78



855







Sheffield 1978-83





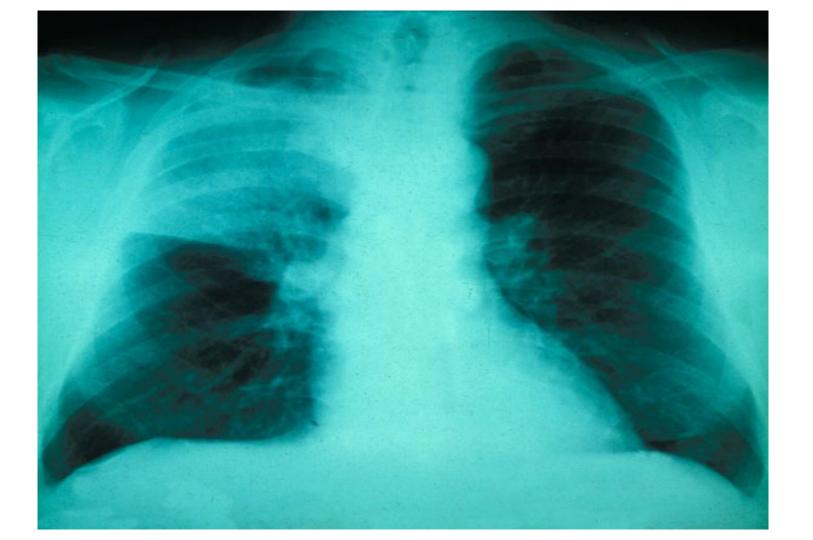
Finding a Theme and Excellent Training

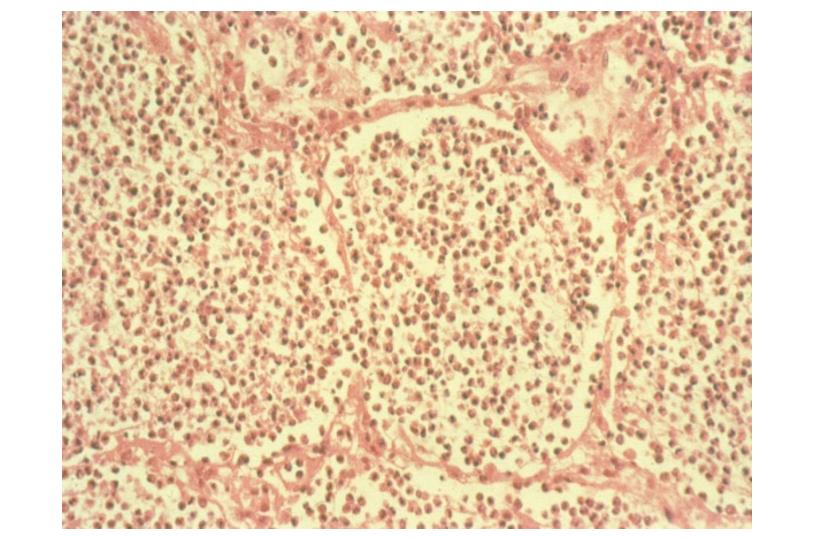
1973-75	Twickenham – 6 th Form College
1975-78	Oxford – BA Physiological Sciences
1978-81	Sheffield – MB ChB Honours & Pathology Prize
1981-84	Sheffield & Nottingham – Junior Doctor
1984-86	Ealing & Hammersmith – Registrar Renal/General
1986-89	MRC Training Fellow – PhD & on-call
1989-90	Hammersmith – Senior Registrar Renal/General
1990-93	Wellcome Senior Fellow & Honorary Consultant

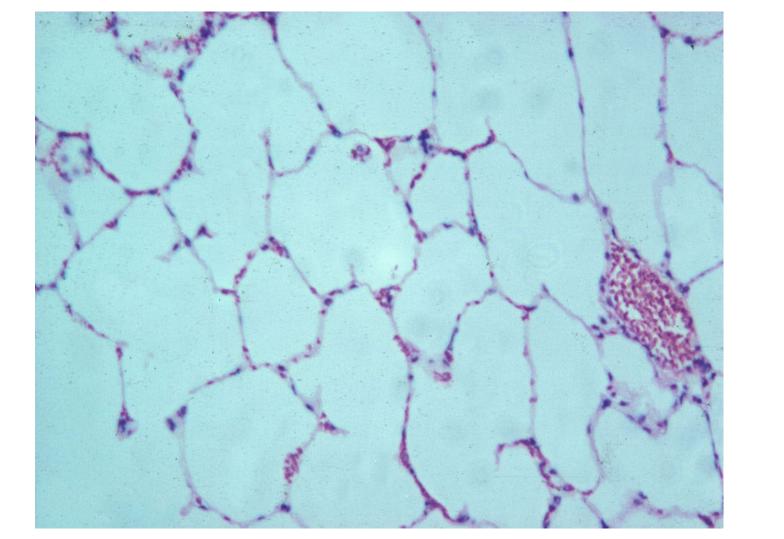


RPMS London 1985-93

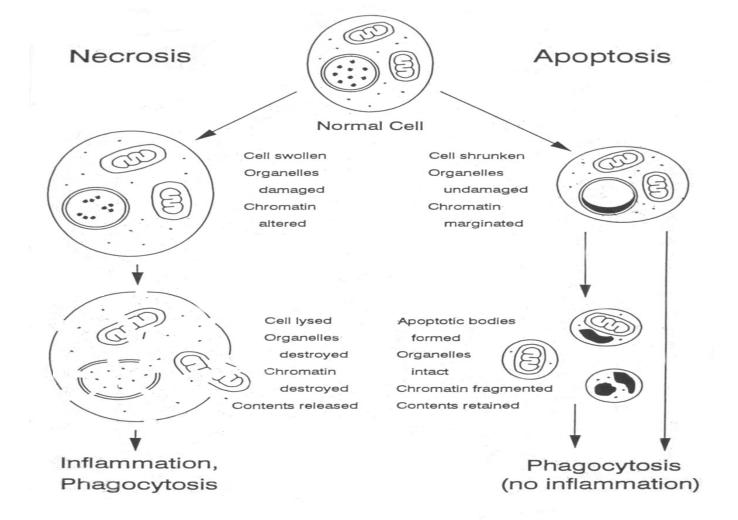


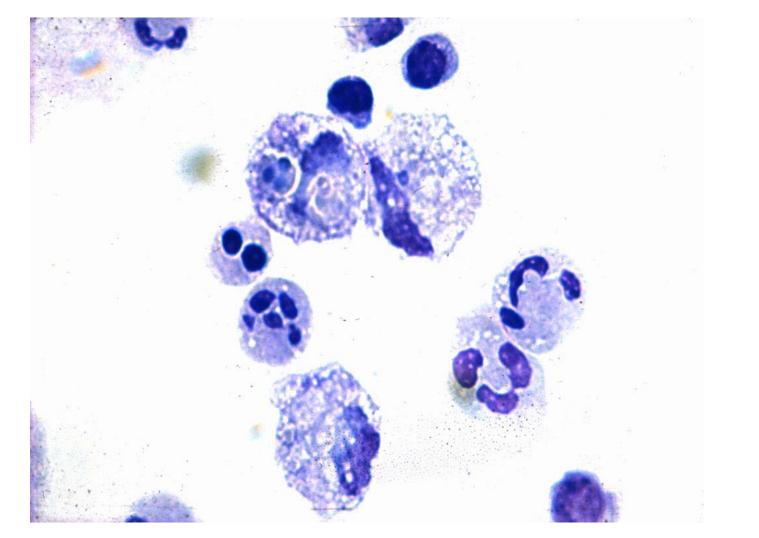






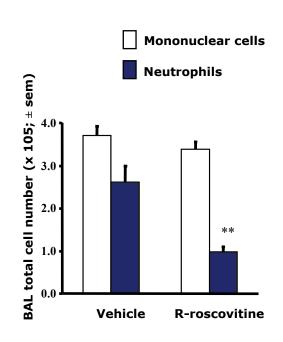




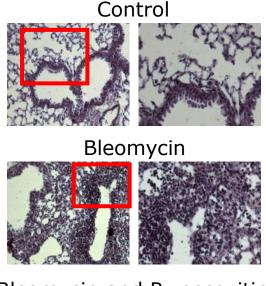




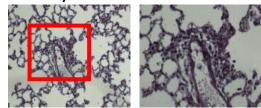
R-roscovitine promotes the resolution of neutrophilic-dependent inflammation in a bleomycin mouse model of lung inflammation



Rossi et al (2006) Nat Med. 12(9):1056-64



Bleomycin and R-roscovitine





Driving resolution of inflammation

- 1985 Observation of neutrophil apoptosis
- 1989 Original *J Clin Invest* paper (>1,000 citations)
- 1990 Apoptosis is regulated by external stimuli
- 1994 Animal model of resolution through apoptosis
- 2006 Driving resolution by driving apoptosis
- 2010 MRC Experimental Medicine study in idiopathic pulmonary fibrosis
- 2014 Study stopped toxicity





SIR PETER RATCLIFFE
Nobel Prize in Physiology or Medicine 2019



"Clinical research is a long game"





Help Other Clinical Researchers

1993-1998	Nottingham – Professor of Medicine; New Unit
1998-2002	Edinburgh – Professor of Medicine; HoD
2000-2002	Edinburgh – MRC Centre for Inflammation Research
2002-2018	Edinburgh - Head of College
2002-2007	MRC - Chair of Research Boards
2008-2010	Scottish Government – Chief Scientist Health (NHS R&D)
2010-2018	MRC – Chief Executive
2019-	ED Melbourne Academic Centre for Health





THE TENURE-TRACK CLINICIAN SCIENTIST:

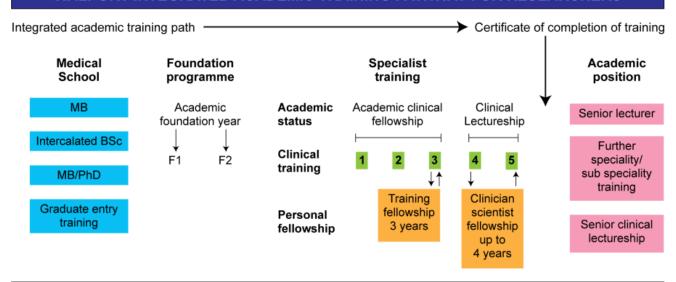
A NEW CAREER PATHWAY TO PROMOTE RECRUITMENT INTO CLINICAL ACADEMIC MEDICINE

> First edition: published on the Academy's web site www.acmedsci.ac.uk

> > 4th March 2000



WALPORT INTEGRATED ACADEMIC TRAINING PATHWAY FOR RESEARCHERS



Note: the timings of personal fellowships are indicative. There should be flexibility according to individual career progression

Driver for...

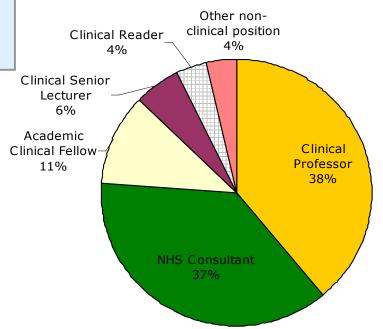
- Academic Foundation Year programmes
- A pool of academic NTNs in designated specialties for ACFs
- An expanded cohort of Lectureships



Great outcomes Example - for sample of MRC clinician PhDs (CRTFs) training in 1993 - 2003

- 65% now hold a senior academic position
- 27% are NHS consultants
- 85% are both clinically and research active
- 76% are leading research
- 63% have secured further funding

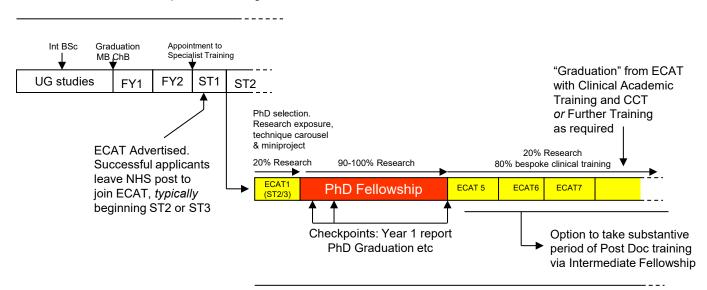
Current Positions of CRTF Class of 1993





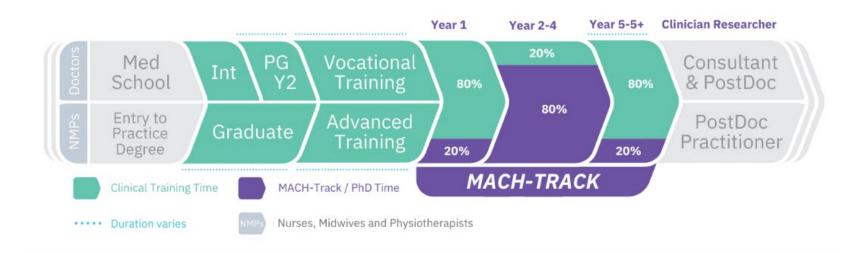
Structure of the Edinburgh Clinical Academic Track (ECAT) scheme

"Standard" Post MMC NHS Specialist Training



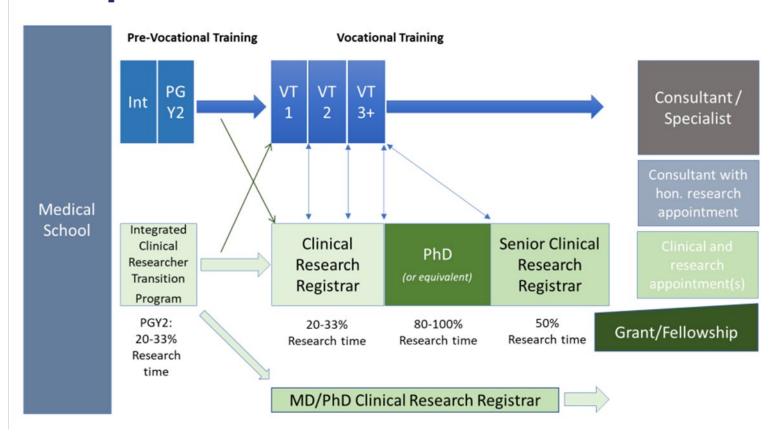
ECAT Lectureship





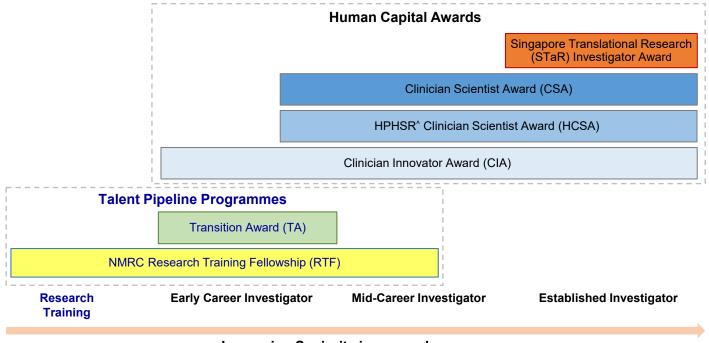


Go8 Proposed Track



RIE2025 NMRC Talent Programmes

The NMRC Office administers a range of talent programmes aimed at supporting individuals in their research and career progression. These programmes are as follows:



Increasing Seniority in research career





Conclusions

- Singapore now has university-based training opportunities that stimulate interest in research amongst most health professional groups
- NMRC provides clinician-scientists with a "talent ladder" comparable to the UK and superior to Australia
- Singapore has world-class environments in which to develop leading clinicianscientists
- 4. Singapore still has work to do on managing balance of clinical practice with research and teaching
- 5. And in developing clinician-scientists from AHP and nursing backgrounds