

WELCOME TO OUR NEW TEAM

Article by Charlotte Dobson

Photo: Charlotte Dobson;
Back Row L to R; Lucy, Mo, Paula,
Clair, Karen, Glenn, Nicky, Norma,
Suzy.

Front Row L to R; Liz, Carly,
Katherine, Tina, Charlotte



Since becoming part of the Nottingham Biomedical Research Centre (BRC), our Nottingham Respiratory Research Unit (NRRU) team has evolved. Wendy, one of our long-standing research nurses, has retired after 38 years in the NHS. Both staff and patients were sad to see her go and we all wish her all the best for a long and happy retirement.

New Faces

We have also gained lots of new faces who you may well bump into on your visit to the department.

Andy has joined us from Leicester and has succeeded Wendy's role in working alongside Dr Bolton on Chronic Obstructive Pulmonary Disease (COPD) studies.

Suzy our very friendly and welcoming new receptionist has also joined us. She replaces Tina who is now working alongside Charlotte as a Clinical Trials Assistant (CTA), helping Professor Harrison and Dr Shaw's research teams.

Nik has joined Liz, Katherine, Janet, Karen, Nicky and Clair working alongside Professor Harrison on both Primary and Secondary Care Research. Nik has previously worked as a Respiratory Nurse in the community and brings a wealth of experience to the team.

Mohammad has joined us from the Diabetic Research Team in NUH and will be working alongside Norma, Dr Shaw and Dr Adejumo on asthma research.

Joining Professor Jenkin's team is Lucy. Lucy has previously worked in cancer research at NUH and will now be working on studies focusing on Interstitial Lung Disease (ILD).

We also accommodate student and post-graduate researchers in the department who work closely with the research teams.

Behind The Scenes

As well as our patient facing staff, we also have some important members of staff who work behind the scenes.

Shani is our Research Development Manager and works alongside Professor Harrison and supports the Primary Care Research Team.

Also behind the scenes is our database manager Glenn. Glenn designs our Research Study Databases and other applications and is also our Web Editor.

We also have Carly and Helen who are our Scientists. They help to process our patient samples which are an important part of our research and also work closely with our large group of laboratory researchers.

Michael, our housekeeper, ensures our Clinical Trials Unit (CTU) is spotlessly clean every day.

"Each member of our team plays an equal and important part in our research and all have very varied roles"

SIMON'S RESEARCH STORY

Article by Liz Dark

Simon has just completed a yearlong study looking at a method of delivering a commonly used asthma drug via a new type of nebuliser.

This nebuliser uses innovative technology to ensure that the drug inhaled is delivered to the smaller airways of the lungs. It also enables optimal slow inhalation by controlling the speed and volume of the patient's breathing and the patient gets direct feedback if their inhalation is too fast.

The study has only just finished at our site and the results remain to be analysed.

Simon has enjoyed taking part in the study and says **"if it will help others in the future then all's well and good"**



Photo (By Liz Dark):
Simon Harrison, Nicola Neesham (Research Nurse)

We would like to thank Simon and all our Volunteers who have taken part in our Respiratory Studies. We are really appreciative of all of our patients who take time out of their day to help improve the lives of patients with respiratory illnesses.

NUCALA ASTHMA STUDY UPDATE

Article by Charlotte Dobson and Paula Almeida

Since May 2017, the unit has been working on a study which observes how patients with severe Asthma are responding to Mepolizumab (Nucala) – a new drug which tries to reduce Asthma attacks therefore reducing the amount of medication patients take to control their Asthma.

We have a regular Wednesday morning clinic where patients are given the Nucala (Mepolizumab) injection. Through this clinic, we have been able to enrol 17 patients in to the Nucala study overall, making us the top recruiters in the world! We are also conducting an audit alongside the Nucala clinic which involves taking blood samples and performing various lung function tests.

Results from the Asthma Control Questionnaire show that in the first 3 months of receiving the treatment, most patients have reported that their symptoms have improved. Patients have reported that they are now able to do things that they previously struggled to do.



Photo (By Glenn Hearson):
Charlotte Dobson Clinical Trials Assistant, Hayley Crofts (Patient), Tina Wilkinson (Clinical Trials Assistant)

Hayley, one of the patients taking part in both the audit and the study stated **"My quality of life has improved in general since starting the treatment. My breathing is better, I am able to sleep better and I am now able to exercise more"**.

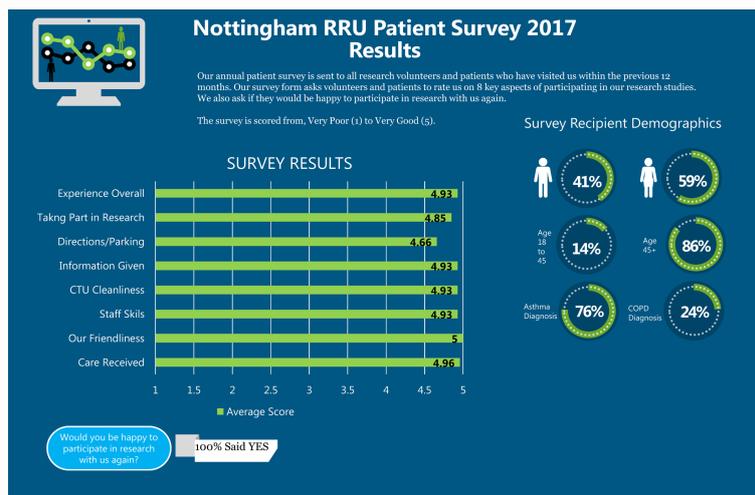
We will continue to collect data for the Nucala study over the next two years. We would like to thank all of the patients involved in the study and the audit and thank everyone for their continued support

Thanks to all our research volunteers and patients who completed our annual survey.

You once again rated us very highly on key aspects of participating in research with us and **100% of people who responded said that they would be happy to participate in research with us again.**

We will also be looking at your additional comments and continue to ensure that everyone has a positive experience when participating in research with us.

RESEARCH PATIENT SURVEY



NEW RESEARCH

ANDHI

We are now recruiting into a new trial for patients who suffer with severe uncontrolled Asthma. You must have had 2 or more flare ups (exacerbations) within the past year.

The study looks into whether a new drug (Benralizumab) can help decrease patients Asthma flare ups, improve the health of lungs and the quality of life for our patients.

The study involves having an injection of the drug Benralizumab or a placebo here at the Nottingham Respiratory Research Unit. Patients would be in the study for 8 months.

If you would like any further information please ring us on: 0115 8404844 or email research nurse Liz Dark: elizabeth.dark@nuh.nhs.uk



Biomarkers of ASM activation study (BioASMA)

We are now recruiting for a ground-breaking new study to try and identify a new method of diagnosing Asthma, funded by Asthma UK.

We know that making a correct diagnosis of Asthma is very important, but there is currently no blood test for asthma. We will be comparing blood and breathing tests from individuals with Asthma to those from individuals who don't have Asthma to see if we can find a unique chemical signature.

Ultimately, finding such a signature will help Asthma researchers develop a blood test for Asthma and, in the long-run, may even help develop better targeted treatments.

If you would like any further information please ring us on: 0115 8404844 or email research nurse Norma Thompson: norma.thompson@nottingham.ac.uk

NOVELTY

We will be looking at patients with Asthma and/or COPD, or who have symptoms that their doctor thinks might be due to Asthma and/or COPD and how these illnesses impact on their lives.

Asthma and COPD are long-term diseases which can affect people's quality of life. Therefore effective treatment plans and medicines are important. Different patients respond to treatment in different ways; we need to understand these responses so that we can learn how best to manage each individual patient's disease.

The NOVELTY study is an observational study, where the treatment chosen by the patient's doctor and the patient is not changed. We will collect health information from the patients over three years and will study their symptoms and the mechanisms underlying their disease.

The Novelty study aims to use this information to help the development of potentially new, better ways to diagnose and treat people with Asthma and/or COPD, depending on the type of Asthma or COPD they have.

INJUSTIS

We will shortly be commencing a new multi site research study looking into Interstitial Lung Disease (ILD).

Fibrotic lung conditions result in scarring of the lung tissue. This causes shortness of breath and cough, and has an enormous impact on people's quality of life.

We currently know that a few conditions like Rheumatoid Arthritis (RA) and previous exposure to asbestos are associated with this kind of lung scarring but we do not have a cure. We need to understand how the condition gets worse so that we can think about developing new treatments for the condition.

We want to study the number and type of cells found in participant's blood and in their lung tissue. It is hoped that by studying these cells, it will lead to a greater understanding of why people develop Lung Fibrosis and how the symptoms progress.

Specifically, we will be asking patients who have been told they have RA-ILD, Asbestosis, Chronic Hypersensitivity Pneumonitis and Unclassifiable Fibrotic Lung Disease to help us with the study.

If you would like any further information please ring us on: 0115 8404844 or email Lucy Howard: lucy.howard@nottingham.ac.uk

RESEARCH FINDINGS

Osteoporosis and Fracture in Patients with Chronic Obstructive Pulmonary Disease (COPD)

Dr Ralph Akyea and Dr Charlotte Bolton

Background

There has been some previous research studying thin bones (osteoporosis) in patients with COPD and the associated greater risk of breaking a bone (fracture), but there is still a lot to understand.

Fractures are due to a combination of osteoporosis and also greater risk of falls. If osteoporosis is diagnosed, there is treatment to try and strengthen the bones and therefore reduce the risk of fracture.

What we did

For this work, we used anonymous GP health records of people in the UK. We looked at over 70,000 people with a new diagnosis of COPD over the last 11 years and matched them to over 200,000 without COPD. We looked at new diagnoses of osteoporosis and fractures. There are scores that can be calculated that predict the risk of a fracture in the future. The scores use information including age of the person, their medical conditions, smoking status, medications and family history.

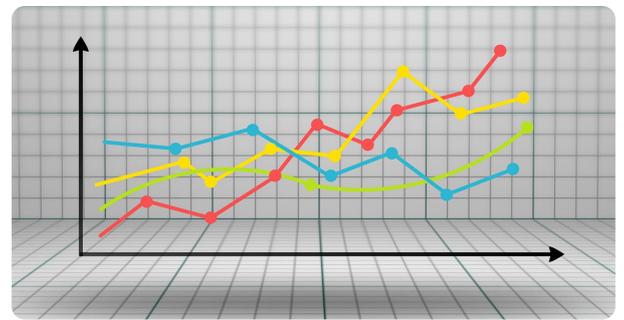
The findings

After diagnosis of COPD, people with COPD were more likely to develop osteoporosis than those without COPD. People with COPD were more likely to develop a fracture than people without COPD.

The fracture risk scores were rarely recorded in the health records. However, when we went back to calculate the score ourselves, we found that it was useful in predicting those at risk of a fracture fairly well.

What the findings mean

The risk of developing Osteoporosis is greater in patients with COPD than patients without COPD. The risk of fractures is greater too. Scores can be calculated to assess the risk but currently, this is not routinely done and recorded. We are looking at a future study to consider how these scores could be calculated in people with COPD at the time of COPD diagnosis or review and then those at high risk for a fracture offered treatment.



IGNITING FUTURES

THE FESTIVAL OF SCIENCE & CURIOSITY 2018

Saturday, February 17, 2018
9:30am-5:00pm
Broadmarsh Shopping Centre, intu Broadmarsh, Lister Gate, Nottingham, NG1 7LB



Run by STEMCity and curated by Ignite!, this week-long festival of events brings Science, Technology, Engineering and Maths to the Nottingham public.

Staff from ourselves and the Nottingham Molecular Pathology Node (NMPN) will be supporting an open day on Saturday 17th February where curious minds are invited to come along and take part in activities and learn more about what we do.



www.nrru.org

Find us on  nrruorguk

 @NottmBRCLung

RESPIRATORY WORDSEARCH

S	Q	S	P	M	J	M	M	Y	A	I	R	E	G	S
T	V	E	S	K	C	D	G	N	U	L	G	M	S	N
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C	T	Q	U	R	A	I	N	O	M	U	E	N	P	U

Hidden above are 16 words that are to do with respiratory and lung conditions, common medication treatments, or tests used for diagnosis.

See if you can find them all.

Words can be Horizontal, Vertical or Diagonal.