# Potential Talks for School Visits from the School of Pharmacy at the University of Reading

#### Dr Hisham Al-Obaidi

Hisham is in the division of pharmaceutics and pharmaceutical chemistry and specialises in the use of inactive ingredients in the formulation of medicines that aid or act as a "carrier" for the active chemical.

"Formulation of medicines: why do we need excipients?"

#### Dr Silvia Amadesi

Silvia is in the pharmacology division, is a pharmacist and a molecular pharmacologist and has interests in molecules involved in inflammatory and degenerative diseases.

"Breathing in and breathing out: what if the respiratory system gives up?"

"A PARTicularly intriguing story: enzymes that 'chew' receptors to cause diseases!"

## Dr Angela Bithell

Angela is in the pharmacology division and is a stem cell biologist who specialises in epigenetics (the study of changes in gene function that do not stem from changes in DNA structure).

"You can be anything you want to be... - what makes a stem cell a stem cell (and their potential for brain repair)"

#### Dr John Brazier

John is in the division of pharmaceutics and pharmaceutical chemistry and is a chemist who specialises in the study of the chemistry of nucleic acids (nucleosides).

"What do we really know about the DNA double helix?"

#### Dr Graeme Cottrell

Graeme is in the pharmacology division and is a biochemist and cell biologist specialising in receptors for drugs.

"RAMPing up the Migraine Pain"

#### Dr Mark Dallas

Mark is in the pharmacology division and is an electrophysiologist specialising in non-neuronal cells in the brain and neurodegenerative diseases.

"Danger! High Voltage"

"Getting excited about non-excitable cells in the brain"

"Brain glue: sticking it to dementia"

## Professor Parastou Donyai

Parastou is head of the Pharmacy Practice division, conducting research into improving the practice of pharmacy. Specifically, Parastou's research examines the psychology of medication usage and discontinuation and decision-making processes.

"Saving the planet? Why binning medicines matters"

#### Dr Alexander Edwards

Alexander is in the division of pharmaceutics and pharmaceutical chemistry and has interests in immunology and delivery of vaccines.

"Vaccine pills and smartphone diagnostics"

#### Flavia Ghouri

Flavia is a pharmacist and graduate teaching assistant. As well as assisting with pharmacy practice teaching, she is currently working on a PhD project focused on the issue of antimicrobial resistance due to antibiotic use in pregnancy.

"Our role in the 'bugs vs drugs' battle"

#### Dr James Hall

James is in the division of pharmaceutics and pharmaceutical chemistry and is a chemist whose research includes developing light-activated molecules for potential therapeutic applications.

"Lighting up cancer"

# Professor Vitaliy Khutoryanskiy

Vitaliy is in the division of pharmaceutics and pharmaceutical chemistry and specialises in drug delivery using membranes and gels.

"Drug delivery to the eye, nose and urinary bladder: problems and solutions"

#### Dr Patrick Lewis

Patrick is in the pharmacology division and is a biomedical scientist specialising in neurodegenerative disease, particularly Parkinson's.

"Google, back to the future and Parkinson's disease"

"All in your genes - how DNA sequencing is changing our lives"

# Dr Rosemary Lim

Rosemary is in the division of pharmacy practice and is a trained pharmacist who specialises in safety of healthcare systems.

"Why do medication errors happen?"

#### Dr Alister McNeish

Alister is in the pharmacology division and is a pharmacologist and electrophysiologist specialising in cardiovascular diseases.

"High Pressure! What happens when blood vessels go wrong?"

"A fishy tale 1 – Is eating fish really good for the mind and body?"

"A fishy tail2 – How do fish oils affect your (cardio)vascular health?"

### Professor Helen Osborn

Helen is in the division of pharmaceutics and pharmaceutical chemistry and develops chemical and enzymatic methods to treat cancers.

"Developing selective methods to treat cancer"

#### Dr Nilesh Patel

Nilesh is a lecturer in Pharmacy Practice and Programme Director. He started his career in community pharmacy before going on to do a PhD. He then became a lecturer and has taught a wide range of subjects. Some of his interests include reinforcing the importance of science in the practice of pharmacy, and evaluating pharmacy services.

"What importance has science in pharmacy practice?"

"Expanding roles of pharmacists"

## Mona Qassim

Mona is a teacher practitioner and a practising pharmacist. Mona balances many roles including work as a specialist mental health pharmacist and urgent care pharmacist. Education and training is an essential part of her role as she supports patients, carers and healthcare professionals, as well as undergraduate pharmacy students in optimizing medication.

"Dementia Friends" - Dementia Friends information session, aimed to help people understand what it's like to live with dementia, change the way we think, act and talk about the condition.

"Five a day for mental wellbeing"

"The routes to administer medication"

#### Kim Ridout

Kim is a teacher practitioner within the School of Pharmacy and combines this with being a hospital pharmacist at Frimley Park Hospital, where she works on an acute frailty unit.

"A day in the life of a hospital pharmacist"

# Professor Kath Ryan

Kath is Professor of Social Pharmacy which involves the application of the social and behavioural sciences to Pharmacy Practice. Her research interests include new roles for pharmacists especially in general practice; patient and public involvement in research and health professional education; personal experiences of health and illness; and infant feeding.

"Learning from other people: Personal experiences of health and illness online"

"Not breastfeeding is a public health issue"

#### Dr Kenneth Shankland

Kenneth is in the division of pharmaceutics and pharmaceutical chemistry and is a trained pharmacist who studies the solid-state structure of pharmaceutical materials.

"Crystals and cures – the role of crystallography in drug development"

#### Sue Slade

Sue is a Senior Teaching Fellow in the School of Pharmacy, who combines work as a practising GP pharmacist with teaching on the Postgraduate Prescribing Course for Pharmacists and Nurses. She has previously also worked in community and hospital pharmacy and taught on the undergraduate MPharm Pharmacy programme at Reading for six years.

"A day in the life of a pharmacist"

## **Professor Gary Stephens**

Gary is in the in the pharmacology division and is an electrophysiologist specialising in neurophysiology.

"How to survive (and learn from!) a chemical nerve agent attack"

"Medicinal use of cannabis"

# Dr Francesco Tamagnini

Francesco is in the division of pharmacology and is a neurophysiologist, specialising in the study of the electrical activity underlying the functions of the human mind, with a particular focus on their alterations in dementia.

"A spark of memory: the electricity in the brain and its role in memory formation (and its loss)"

# Dr Sakthivel Vaiyapuri

Sakthi is in the pharmacology division and is a pharmacologist specialising in cardiovascular systems and the biology of small blood cells that are important in clotting called platelets.

"Why can't we end the tragedy of snakebites in this modern scientific world?"

"Tiny cells (blood platelets) in the development of no.1 killer (cardiovascular diseases) in the world"

#### Dr Darius Widera

Darius is in the division of pharmacology and is a stem cell biologist specialising in the role of injury and inflammation in stem cells and regeneration.

"Cellular alchemy: How to turn any cell of the body into a stem cell"