Drop-in Activity Programme				
	Locations IGMM Volunteers		olunteers	
	Drop-in Activity	09:30 - 13:30	13:30 – 17:30	
1	Mighty Mitochondria (located in RECEPTION AREA)  Explore Mighty Mitochondria and help us activate energy production! Discover how our cells make the energy we need to live.	Portia McGhan Waad AlBawardi	Portia McGhan	
	Nucleus, Level 1			
2	Microscopes Histology slides & Cell Windows Craft Activity —  Delve into the fascinating world of histology: the study of the microanatomy of cells, tissues, and organs as seen through a microscope.  Look through the microscope to open the windows to different cells in the body and make your own Cell Window to take home.	Pin Tong Elena Lazarova	Alessandro Brombin Shipra Bhatia	
3	Genetic Taste Test  Do you like Brussel sprouts? Take part in the genetic taste test and find out if you are a super taster! It's amazing how a tiny mutation in your DNA can change how people taste different foods.	Ana Lima (EXPLORATHON)	Ana Lima (EXPLORATHON)	
4	Giant Cell  Explore the hidden microscopic worlds found inside your cells using fluorescent microscopy. Step inside a soft and squishy, ginormous cell and see what you can find using UV light.	Zahra Massoud	Janet Poplawski	
5	Immunology Ball Pit Explore how the immune system protects us from invaders and how these processes can be harnessed in immunotherapy for the treatment of cancer.	Estafania Esposito	Zahra Massoud	
6	Strawberry DNA Extraction  Ever wondered what DNA actually looks like? Using the same equipment a scientist uses in the lab for genetic research, you can extract the DNA from a strawberry and find out!	Laura Cano Abby Wilson	Lucy Scott	
7	Targeted Cancer Therapy  Discover how standard chemotherapy works and explore the new targeted approaches to cancer therapies currently in development in our laboratories.	Erisa Nita		
8	Target the Lung  Have you ever wondered how cells inside your lungs work? Discover how Cystic Fibrosis affects cells within the lungs. Cystic fibrosis is an inherited condition that causes sticky mucus to build up in the lungs and digestive system. This causes lung infections and problems with digesting food.	Kaly Anipandya Jeanette Baran-Gale	Kaly Anipandya Jeanette Baran-Gale	
9	Big Data Detectives  Meet our mental health data scientists and get hands-on with activities exploring genetics, medicines and big data. Roll the dice to find out how genetic & environmental risk factors add together to increase your chance of becoming unwell. Design paper people and choose which treatments to prescribe.  Play Dr Data – a decision game.	Iona Beange Laura de Nooj Mark Adams Miriam Barbu	Iona Beange Laura de Nooj Mark Adams Miriam Barbu	

















## Building Tours Programme



Time Guid	le I	Please sign up at the Reception Desk
10:30 - 11:00 IGMM 1	Alessandro Brombin	MRC IGMM Tour 1: Capacity 8
11:00 - 11:30 IGMM 2	Alessandro Brombin	MRC IGMM Tour 2: Capacity 8
11:00 - 11:30 EC 1	Sarah Thomas	CRUK Edinburgh Centre Tour 1: Capacity 6
11:30 - 12:00 IGMM 3	Shona Kerr	MRC IGMM Tour 3: Capacity 8
12:00 - 12:30 IGMM 4	Alessandro Brombin	MRC IGMM Tour 4: Capacity 8
12:00 - 12:30 EC 2	Sarah Thomas	CRUK Edinburgh Centre Tour 2: Capacity 6
12:30 - 13:00 IGMM 5	Shona Kerr	MRC IGMM Tour 5: Capacity 8
13:00 - 13:30 IGMM 6	Alessandro Brombin	MRC IGMM Tour 6: Capacity 8
13:00 - 13:30 EC 3	Sarah Thomas	CRUK Edinburgh Centre Tour 3: Capacity 6
14:00 - 14:30 EC 4	Sarah Thomas	CRUK Edinburgh Centre Tour 4: Capacity 6
15:00 - 15:30 EC 5	Sarah Thomas	CRUK Edinburgh Centre Tour 5: Capacity 6
15:30 - 16:00 IGMM 7	Helen Nickerson	MRC IGMM Tour 7: Capacity 8
16:00 - 16:30 IGMM 8	Helen Nickerson	MRC IGMM Tour 8: Capacity 8
16:00 - 16:30 EC 6	Sarah Thomas	CRUK Edinburgh Centre Tour 6: Capacity 6
16:30 - 17:00 IGMM 9	Dee Davison	MRC IGMM Tour 9: Capacity 8

Talks & Video Programme					
Time	Lecture Theatre	Title and Presenter			
10:00- 10:45	VIDEOS TITT	Generation Scotland Biobanks			
10:45- 11:00	TEN MINUTE TALK 1	International efforts to improve brain cancer survival  Dr Fiona Lickiss Postdoctoral Fellow, Kathryn Ball Group, CRUK Edinburgh Centre, MRC IGMM			
11:00- 11:15	TEN MINUTE TALK 2	Looking for genetic causes of eye disease Research to identify the genetic causes of common and rare eye diseases, and to understand how these changes in DNA can lead to eye disease.  Dr Chloe Stanton Postdoc Investigator Scientist, Veronique Vitart Group, MRC HGU, MRC IGMM			
11:15- 11:30	TEN MINUTE TALK 3	The Genetics of hair colour  There's a lot of variation in hair colour throughout European populations, but the genetic causes are unclear. Find out about a population study of British people to discover which genes affect your hair colour.  Dr Erola Pairo-Castineira Research Fellow, Ian Jackson Group, MRC HGU, MRC IGMM			
11:15- 12:00	VIDEOS TITO	IGMM Students: 3 Minute Thesis & Research Poster Competitions			
12:00- 13:00	PANEL PRESENTATION & DISCUSSION 1 THE BIG DATA REVOLUTION IN HEALTH CARE: ACCELERATING INNOVATION?	Big data is transforming healthcare and shaping its future delivery. Global healthcare systems are increasingly being challenged by complex conditions, where diagnosis and treatment can involve multiple specialists. New insights provided by the analysis of complicated health data have the potential to significantly improve diagnosis and treatments.  Big data provides opportunities to personalise treatments, design preventative care and predict population trends. Our researchers will share lessons learnt so far from the unique data health research environment in Scotland and reflect on the ethical and practical barriers to using huge sets of data in health research.  Host: Dee Davison, IGMM Public Engagement Manager  Presenters:  Dr Andy Sims, Senior Research Fellow, CRUK Edinburgh Centre Dr Jeanette Baran-Gale, Research Fellow, Chris Ponting RG, MRC HGU Dr Charlie Lees, Consultant Gastroenterologist, CGEM, MRC IGMM & NHS			
13:00- 13:30	VIDEOS TITT	Cancer Research & Diabetes Research			
13:30- 13:45	TEN MINUTE TALK 4	Faulty genetic switches leading to compromised vision Research to visualise defects in genetic switches using zebrafish as a model system  Dr Shipra Bhatia Research Fellow, Wendy Bickmore Group, MRC HGU, MRC IGMM			
13:45- 14:00	VIDEOS TITO	Doors Open Day 2017 & Science Insights Work Experience Week			

14:00- 15:00	PANEL PRESENTATION & DISCUSSION 2  USING ANIMALS IN RESEARCH – ARE THERE ALTERNATIVES?	A s a h th t U w
		P

Animal research has played a vital role in medical and veterinary breakthroughs. When scientists use animals in research, ensuring their welfare is fundamental and they always apply the principles of the 3Rs - Refinement, Reduction and Replacement that are at the neart of UK legislation. Is it possible to completely replace animals in research? How can the impact on animals be minimised? Do alternatives exist? Our panel will outline how the University of Edinburgh is reducing the use of animals in research, maximising their welfare and exploring the possibilities of alternatives.

Host: Hazel Lambert, CMVM, PE with Research Manager

## Presenters:

- Dr Stefano Guido, Named Veterinary Surgeon, BVS, University of Edinburgh
- Dr Cameron Wyatt, Zebrafish Facilities Manager, IGMM
- Dr Jana Travnickova, Research Fellow, Patton Research Group, Human Genetics Unit, IGMM

15:00-17:00

VIDEOS TITT



**Patient Engagement & Generation Scotland Biobanks** 

Research Posters			
Nucleus, Level 1	Research Centre		
Generation Scotland Biobank	Rachel Edwards, CGEM		
Viral Gene Therapy for Cystic Fibrosis	Ann Doherty, CGEM		
Discovering a New Medicine – not just a EUREKA moment!	MRC HGU		
4. Aicardi-Goutieres Syndrome (AGS)	CGEM – MRC HGU		
5. Hereditary Bowel Cancer Syndromes	CRUK Edinburgh Centre		
6. SCOTTY Study	CRUK Edinburgh Centre		
7. NHS Lothian Colorectal Cancer Nursing Team	NHS		
8. Understanding the Causes of Depression – Genetic Predisposition	Pippa Thomson, CGEM		
9. Genetic Basis of Eye Malformations	MRC HGU		
10. Genetic Eye Condition – Aniridia	MRC HGU		
11. Genetic Eye Condition – Cornelia de Lange Syndrome (CdL)	MRC HGU		
12. Genetic Eye Condition – Late Onset Retinal Degeneration (L-ORD)	MRC HGU		
13. Genetic Eye Condition – Keratoconus	MRC HGU		
14. Hutchinson-Gilford Progeria Syndrome (HGPS):	MRC HGU		
15. Myalgic Encephalomyelitis / Chronic Fatigue Syndrome (ME/CFS)	MRC HGU		
16. Moving Towards Novel Therapies for Ovarian Cancer	MRC HGU		
17. Fishing for Melanoma Treatments	MRC HGU		
18. Primary Ciliary Dyskinesia (PCD)	MRC HGU		