



# West Lothian Libraries Borrow a researcher

Heriot-Watt University researchers will visit various West Lothian Library locations to share their work through talks and interactive activities.

An event series generated by the 'Lothian Lugs' project, which is part of the Carnegie UK Trust, Engaging Libraries programme and is a collaboration between West Lothian Libraries and Heriot-Watt University.

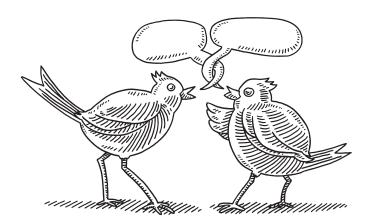




We often need to make decisions that affect our health and wellbeing, get to grips with new technology, or navigate the latest information. That can sometimes be overwhelming and that's where our Borrow a Researcher sessions can help. Across a range of activities, you'll have the chance to 'borrow' the expertise of a researcher to help you explore the latest research that affects all our lives. And what's more, you will be able to put your questions to them, to ensure the research they do addresses the things most important to you!

Over the past 18 months, **West Lothian Libraries** and **Heriot-Watt University**have been working together on the **Lothian Lugs** project. As the name
suggests, that has involved listening
and talking to communities in West
Lothian. The aim of the project is to
explore how we can share cutting edge
research with local communities, and
how communities can help shape future
research.

We held focus groups across West Lothian which led to some inspiring conversations about research and universities - What is research? What do universities do? How can we find out more?



Many interesting themes and topics emerged, allowing the team to shape an exciting programme of events we're calling **Borrow a Researcher**. Events will take place throughout September and October, and are specifically tailored to public interests. Events will explore subjects such as brain health, body representation, social interaction, robotics, artificial intelligence and many more!

Will visit various library locations to share their work through talks and interactive activities. There will also be online events as part of **Explorathon**, a Scotland wide celebration of research, so you can tune it at home and find out about research taking place in universities across Scotland and beyond.

Borrow a Researcher is being hosted by West Lothian Libraries in partnership with Heriot-Watt University. The project is funded by Carnegie UK Trust, Wellcome Trust and the Wolfson Foundation.

An event series across West Lothian Libraries. All face-to-face and online events are free to attend. No prior knowledge of the research areas is needed. Physical distancing measures remain in the library spaces, please wear a face covering when attending any sessions and follow the Test and Protect procedures through Check in Scotland provided.

All in person sessions can be booked via library.info@westlothian.gov.uk Bookings can also be made in person at library venues.

### **How to Stay Sharp** (for adults)

Researcher: Professor Alan Gow

As we age, we are more likely to experience changes in our thinking and memory skills. Some individuals experience declines in their thinking and memory skills across their 60s and beyond, while others maintain their abilities into old age. Why is this? And how do people stay sharp as they grow older?

In these Borrow a Researcher sessions, Alan Gow explores the ways in which you can keep your brain sharp! He'll discuss the science of 'brain training' and the benefits of remaining engaged in mental, social or physical activities. Exploring this research in a fun and interactive way, he'll showcase the many ways in which we can help stay sharp as we age!

**Professor Alan Gow** Professor Alan Gow leads The Ageing Lab at Heriot-Watt University and is Deputy Director of the Centre for Applied Behavioural Sciences. His research explores the identification of lifestyle and behavioural factors that predict healthy ageing, primarily brain health.

Duplicate sessions	
Linlithgow Library	Wednesday 15th September, 10.30-11:30am
Simpson Library, Bathgate	Thursday 23rd September, 10.30-11:30am
East Calder Library	Monday 27th September, 1.30-2:30pm
Fauldhouse Library	Wednesday 6th October, 2.30-3:30pm



# So you think you know your body? (for adults)

Researchers: Dr Anna Sedda and PhD researcher Myrto Efstathiou

Did you know that we can "see" and "feel" our body with the mind's eye - in our brain? We bet that when you wake up every morning, you don't question if your left arm is really yours. You simply know that your body belongs to you. If you are curious and want to learn more, join us!

We will make you use your imagined body (how far can you stretch your imagined arms?), acquire an additional limb (useful to drink more coffee) and show you where in your brain your body is. Be warned though: you will never think about your body in the same way!

**Presented by Dr Anna Sedda and PhD researcher Myrto Efstathiou,** both researchers within the Body & Emotions Lab (Centre for Applied Behavioural Sciences, Department of Psychology, School of Social Sciences). Their research aims to understand how humans survive our challenging environment, physical and social, by means of their powerful and mysterious bodies.

Duplicate sessions	
West Calder Library	Friday 24th September, 10.30-11.30am
Whitburn Library	Monday 27th September, 11am-12pm

# How to Adapt Voice Assistants for People with Dementia and People Affected by Sight Loss (for adults)

Researcher: Angus Addlesee

Many of us use Siri, Alexa, Cortana and Google Assistant - and yet many of us struggle to do so! Generally, these voice assistants - which are programmed through Artificial Intelligence (AI) - develop their algorithm patterns based on vocal tests under set conditions. Yet conversations and speaking patterns are often fluid, chaotic and hesitant as you pause for thought.

As people age, speech hesitancies are far more common, especially in people with dementia. We also experience changes in our eyesight over time. But instead of people having to keep up with the tech, why can't the technology be adapted for us? Researcher Angus Addlesee explores this through his work, examining a more natural conversational system, seeking to understand the noticeable differences in speech for different groups, such as those with dementia. Part of his work has been about identifying a list of features that must be handled if conversational systems are to perform fluidly, even if the user has a cognitive impairment and/ or sight loss. Find out more through this talk and Q&A session!

**Angus Addlesee** is a Machine Learning Engineer and Researcher, studying in the field of Artificial Intelligence. He is working to create a more natural conversational agent for those with cognitive impairments.

**Broxburn Library** 

Thursday 30th September, 5.30-6.30pp

# Training your robot pet! (for ages 12-15)

**Researcher:** Dr Mauro Dragone

When we think of programming robots, we often think of sci-fi films and extravagant scientific laboratories. We think of scientists in lab coats behind closed doors. But what about your local library? Did you ever imagine exploring and testing out robotics there? Transformed for the workshop duration, participants can take part in a practical coding session with Heriot-Watt University computer scientists. Join us for an exciting and interactive exploration into the programming of robots!

Workshop participants will be introduced to different examples of social robots, from pets to human-like social robots. Following this, participants will be given the chance to learn how to program some of these robots! Employing a distance learning tool for robotics, you'll have access to simulation software and will learn the basics of block coding - the data set of instructions which affect robot's movements, conversation and interaction!

This is a workshop designed by **Dr Mauro Dragone**, from the School of Engineering and Physical Sciences faculty. His research explores several areas in this field, including how robots working together can accomplish complex tasks, while also adapting to new environments and to changing and evolving requirements with minimum human supervision.

Lanthorn Library at Torridon House, EH54 6QY

Saturday 25th September, 10.30am-12.30pm

# The History and Story of Black Holes (for younger adults and adults)

Researcher: Dr Paul Dalgarno

Black holes remain one of the most fascinating and exotic phenomena in the universe. On the one hand they are physically simple (a black hole is a place in space where gravity pulls so much that even light cannot get out!), yet on the other we still know very little about them. Frequently associated with science fiction, black holes are real and much more common than you may think - and yet they remain a scientific curiosity! Much like the rest of outer space, they continue to be a subject of fascination for scientific study and have puzzled many scientists throughout history.

This talk will discuss the history of our understanding of black holes, some of the main properties of them and touch on some of the deeper questions connected to them. Pop along with any questions for the follow up Q&A session, as together we'll explore the mysteries of these fascinating spatial abysses!

**Dr Paul Dalgarno** is a Physicist at Heriot-Watt University whose work specialises in quantum physics and Advanced Microscopy (techniques that allow us to visualize biological samples with resolution to nanometer scale). He is Associate Professor and group leader of the Advanced Microscopy Group.

Carmondean Library at Livingston North Partnership Centre Thursday 7th October, 5.30-6.30pm

# **Understanding Online Abuse: an Artificial Intelligence Challenge** (for younger adults and adults)

Researcher: Gavin Abercrombie

Have you ever wondered what goes on behind the scenes of social media? Messages flying backwards and forwards, Tweets endlessly retweeted, quoted, shared, and hashtags multiplying with every new post. Social media companies and other online platforms have recently been criticised for the way they handle cases of abuse and hate speech. But how easy is such language to identify? And how can we analyse online speech and behaviour patterns? The sea of information is endless!

As part of the Borrow a Researcher series, Gavin Abercrombie will examine the challenges and difficulties of using Artificial Intelligence (AI) for moderation of online content, and discuss the technical, social, and ethical issues that we face in dealing with this problem. Join us for this talk and Q&A session - where you can ask questions and learn more about these devices and platforms that govern our everyday lives!

**Gavin Abercrombie** is a Research Associate at Heriot-Watt University in Natural Language Processing, the branch of Artificial Intelligence (AI) that examines how to automatically make sense of human language. He is currently working on abuse detection and gender biases in conversational voice assistants.

Blackridge Library (Craig Inn)

Tuesday 21st September, 6.30-7.30pm

# Why we should love hackers and how we can stop damaging security and privacy (ONLINE for younger adults and adults))

Researchers: Dr Shane Horgan, Yanna Papadodimitraki, Dr Sarah Anderson, Dr Ben Collier

What comes to mind when you hear the term 'computer hacker'? A malicious tech-savvy criminal mastermind infiltrating computer systems? A geeky kid in their bedroom trying to break into government computer systems? Agents of a foreign governments attacking UK institutions? In this virtual roundtable, we will unpick and challenge stereotypes and suggest why we should love hackers\*. We will explore how attempts by UK policing and security agencies to protect us online might work against this aim, damaging our security and privacy. These issues affect everyone, given the wealth of information held about us online - and the growing presence of cyber-attacks and surveillance in our everyday lives.

The event's format will feature a panel discussion with panel members offering 2 minute responses. Any audience member who would also like to contribute their thoughts on a question will also get 2 minutes to respond (so come prepared!).

\*Hacker: An expert or enthusiast of any kind. In our case a person who enjoys exploring computer systems and coding, pushing the limits of their capabilities.

**Panel:** Dr Shane Horgan, Edinburgh Napier University, Yanna Papadodimitraki, University of Leeds, Dr Sarah Anderson, Edinburgh Napier University, Dr Ben Collier, University of Edinburgh

This will take place online through Zoom and virtual booking details are available through Heriot-Watt Engage: hwengage@hw.ac.uk

Wednesday 22nd September, 2:00-3:30pm

# Why do some people find being social so difficult? (for adults)

Researcher: Dr Mary Stewart

The pandemic has had a significant impact across everybody's social lives this year, and so returning to normality might be something we're not feeling very confident about! We have seen a breadth of impacts on peoples' mental health and social confidence. But did you know that social confidence in Autistic people and those with high levels of autistic traits, are at greater risk of low mood, and mental health issues? There can be barriers to their social participation and engagement with society which can impact on their wellbeing. Find out more in our Borrow A Researcher session, where there will be plenty opportunity to ask questions!

**Dr Mary Stewart** and the Social Interaction, Mental Health and Wellbeing (SIMHW) lab work with autistic people and people with lived experience of mental ill-health, their carers, service providers and clinicians. They identify priorities from the autistic community and autistic people which most affect their mental health, well-being and social participation.

Armadale Library

Tuesday 21st September, 11.00-12.00pm

# Discovery Trail: Self-guided outdoor walk (for families)

#### **Heriot-Watt University Campus**

As well as researchers visiting West Lothian Libraries, we'd love for you to visit our Edinburgh campus! The Heriot-Watt University campus is a lovely, scenic spot for this interactive and self-led walk. There are twenty posts along the Trail, each of which includes a brass plaque for family fun brass rubbings and links to web content where you can find out more about ongoing research and related activities. The trail is approximately 3KM in length, mostly on paved pathways but with some steeper sections and gravel paths.

You don't need to visit all the stops in one go, feel free to return and do a different section each time! A smartphone is needed to read QR codes and access the videos and web pages. Booklets for brass rubbings will be available at main reception. There is plenty of free parking on campus. Toilets are on site and there will be takeaway food and drink venues open.

If you have any questions about visiting, feel free to get in touch with Heriot-Watt Engage: **hwengage@hw.ac.uk** 

Heriot-Watt University Campus

Ongoing event



# Doors Open Day (ONLINE, end of September launch (for all age groups)

#### **Heriot-Watt University Campus**

Explore Heriot-Watt University virtually and through a new series of outdoors trails, celebrating its bicentennial year! It was established in 1821 as the School of Arts of Edinburgh, the world's first Mechanics' Institute, to provide technical education for the working classes. Since then, the university has always strived to give everyone access to education in science and technology, and now has campuses across the world, pioneering in education, and working towards overcoming global challenges.

As part of Doors Open Day, you can explore the campuses virtually, take a sneak peak in the labs, and hear about how research is changing lives. You can also visit the 380 acres of beautiful parkland at the Edinburgh campus and discover the beautiful landscape with three new interactive trails, exploring our research, heritage and trees.

This will be available to explore virtually at www.hw.ac.uk/doorsopenday

# Scenario Planning in Post-Covid Scotland (for adults)

Researchers: Dr Megan Crawford and Dr Matthew Smith

As we begin to emerge from the COVID-19 pandemic, we have increased understandings that we all have various controls over the kinds of future Scotland we desire, individually and collectively.

This event will lead attendees through a quick-paced, futures-thinking scenario planning workshop to identify current trends, signals, and drivers across Scotland and globally (e.g. innovative technology, education, equality, policy, transportation, and public spaces), but key is facilitating exploratory thinking towards as-yet-realised horizons. Scenario planning is a group-based strategic planning method that uses creative and exploratory thinking to envision different plausible futures. It is a highly popular method used largely within political and private industries. The "Futures of Scotland" project was developed to break down the barriers between Scotland's decision-makers and stakeholders (you!) by facilitating scenario planning workshops between a wide variety of residents, businesses, and political leaders. This project places special importance on the inclusion of voices from historically under-represented groups. To achieve the kinds of plausible, desirable, equitable, and most importantly, inclusive Scotland desired, everyone must be heard.

This is your opportunity to Be Part of the Conversation. The workshop will aim to answer the questions "Where do we want to go from here?" and "Who do we want to be?"

**This event is presented by Dr Megan Crawford and Dr Matthew Smith** - both Lecturers in The Business School at Edinburgh Napier University.

Online through Microsoft Teams and virtual booking details available through Heriot-Watt Engage: hwengage@hw.ac.uk

Thursday 23rd September, 6:00-7:30pm



# How to research (Online for all)

**Presented by our Academic Leads for Public Engagement** and other researchers across Heriot-Watt University

Have you ever wondered how to make the right choice when you vote? Or where to look for reliable information on the Covid-19 vaccine? We often find ourselves wading through an endless sea of digital information and website links, not knowing where to begin!

In today's digital age, information is available in abundance; news blaring on the radio, images flooding through your phone, and news articles constantly pinging out updates! Yet amidst the sea of information, where can the truth be found? With fake news on the rise, it's becoming increasingly difficult to know what's real and what's false.

During focus groups we held as part of the Lothian Lugs programme, it was clear that building the skills around how to research is becoming ever more important. How to Research brings together expertise from across Heriot-Watt University and explores ways in which you can build on your personal research skills and the top tips for getting started!

Launch early October and can be accessed by getting in touch with Heriot-Watt Engage: hwengage@hw.ac.uk

#### **LIBRARIES**

## **Linlithgow Library**

Address: Linlithgow Partnership Centre, Tam Dalyell House, Linlithgow, EH49 7EZ

**Tel:** 01506 283880

Email: linlithgow.lib@westlothian.gov.uk

Web: www.westlothian.gov.uk/article/33629/Linlithgow-Library

# **Simpson Library (Bathgate)**

Address: Bathgate Partnership Centre South Bridge Street, Bathgate, EH48 1TS

Tel: 01506 282910

Email: bathgate.lib@westlothian.gov.uk

Web: www.westlothian.gov.uk/article/33632/Simpson-Library-Bathgate

#### **East Calder Library**

Address: The Dave King Partnership Centre, 139 Main Street East Calder, EH53 0EP

Tel: 01506 284020

Email: eastcalder.lib@westlothian.gov.uk

Web: www.westlothian.gov.uk/article/33626/East-Calder-Library

# **Fauldhouse Library**

Address: Fauldhouse Partnership Centre, Lanrigg Rd, Fauldhouse, EH47 9JD

Tel: 01501 773000

Email: fauldhouse.lib@westlothian.gov.uk

Web: www.westlothian.gov.uk/article/33627/Fauldhouse-Library

# **West Calder Library**

Address: Main Street, West Calder, EH55 8BQ

Tel: 01506 283550

Email: westcalder.lib@westlothian.gov.uk

Web: www.westlothian.gov.uk/article/33633/West-Calder-Library

# **Whitburn Library**

Address: Union Road, Whitburn, EH47 OAR

Tel: 01501 678050

Email: whitburn.lib@westlothian.gov.uk

Web: www.westlothian.gov.uk/article/33635/Whitburn-Library

# **Broxburn Library**

Address: Strathbrock Partnership Centre West Main Street, Broxburn EH52 5LH

Tel: 01506 284294

Email: broxburn.lib@westlothian.gov.uk

Web: www.westlothian.gov.uk/article/33624/Broxburn-Library

# **Lanthorn Library @Torridon House**

Address: Torridon House, Almondvale Boulevard, Livingston EH54 6QY

Tel: 01506 284940

**Email:** lanthorn.lib@westlothian.gov.uk **Web:** www.westlothian.gov.uk/article/33628/

Lanthorn-Library-Torridon-House-Almondvale-Boulevard-Livingston-EH54-6QY

# **Carmondean library**

Address: Livingston North Partnership Centre, Carmondean Centre Road, Deans, Livingston, EH54 8PT

Tel: 01506 280080

**Email:** carmondean.lib@westlothian.gov.uk **Web:** www.westlothian.gov.uk/article/33625/

Carmondean-Library-Livingston-North-Partnership-Centre-Carmondean-EH54-8PT

# **Blackridge Library**

Address: Craig Inn Centre Blackridge, EH48 3SP

Tel: 01501 752396

Email: blackridge.lib@westlothian.gov.uk

Web: www.westlothian.gov.uk/article/33622/Blackridge-Library

# **Armadale Library**

Address: Armadale Partnership Centre, North Street, Armadale EH48 3QB

Tel: 01506 282282

Email: armadale.lib@westlothian.gov.uk

Web: www.westlothian.gov.uk/article/33621/Armadale-Library



The 'Lothian Lugs' project is part of the Carnegie UK Trust, Engaging Libraries programme and is a collaboration between West Lothian Libraries and Heriot-Watt University.

If you have any questions about the 'Lothian Lugs' project or 'Borrow a Researcher' events, please email and book with us via: **library.info@westlothian.gov.uk** 

#### For more information:

www.hw.ac.uk/uk/research/engage/engaging-libraries.htm www.westlothian.gov.uk/article/70029/Lothian-Lugs

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