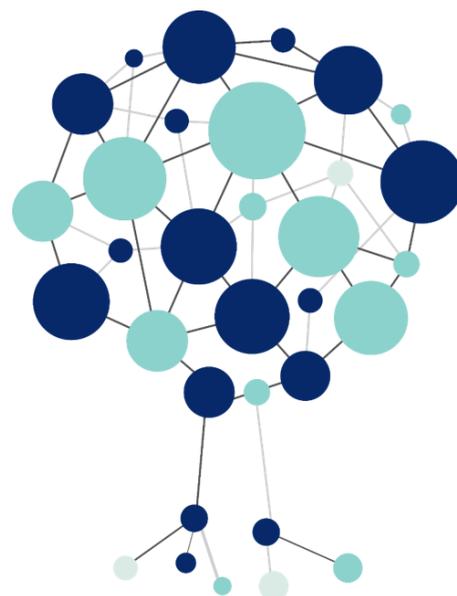




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Royal Society of
Biology



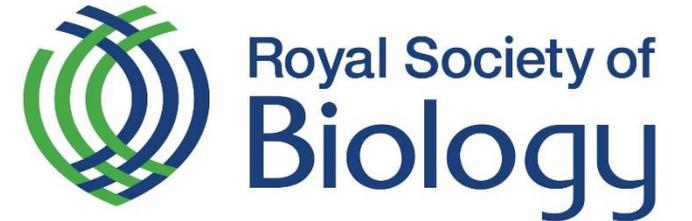
biosciences
outreach & engagement
symposium

#BiosciencesForAll

@RoyalSocBio



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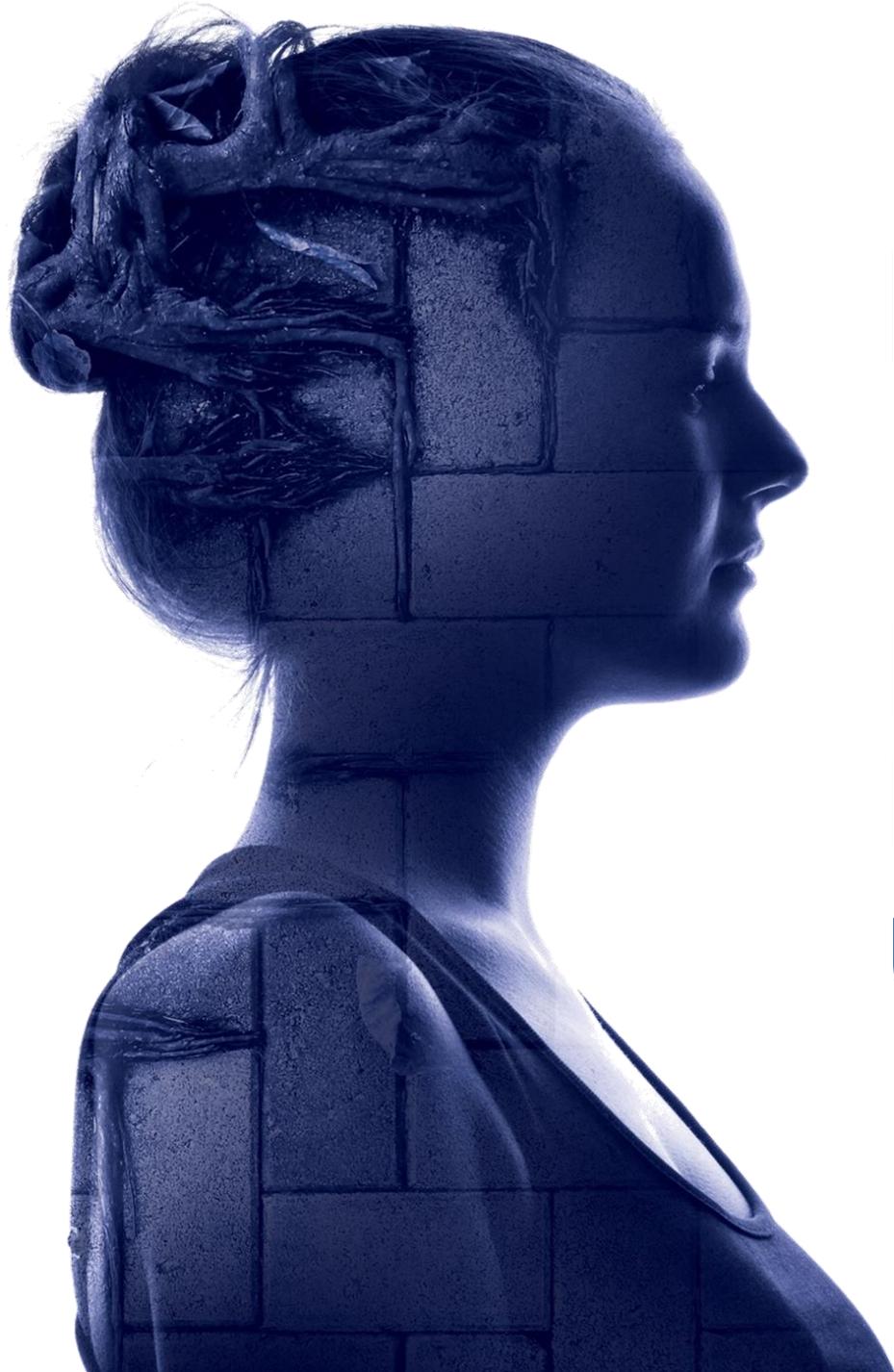


Introduction

**Professor Jeremy
Pritchard FRSB**

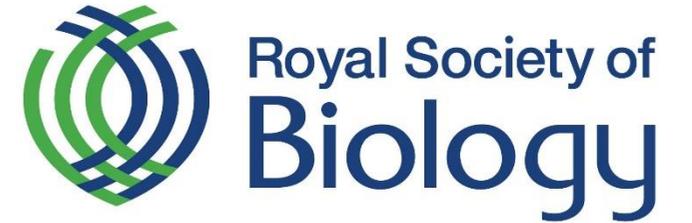
University of Birmingham

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Introduction

**Professor Heather
Widdows**

University of Birmingham

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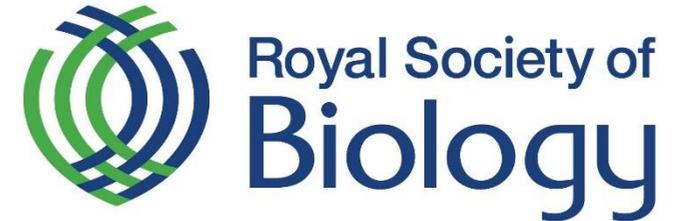
Engaging with local communities and hard to reach audiences



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Dr Sue Howarth FRSB
Royal Society of Biology
West Midlands branch

@RoyalSocBio | #BiosciencesForAll

Some Examples
of
Outreach Activities
for Non-scientists
That Worked Well

Dr Sue Howarth
Outreach and Engagement Symposium
University of Birmingham
14 November 2018



The Big Bang
UK Young Scientists & Engineers Fair

March 2018
NEC
Birmingham



**BIOCHEMICAL
SOCIETY**

Why did this work well?

- Interactive
- Made a noise
- Made a mess
- Fun
- Had a genuine scientific link
- Works at different levels – simple to complex

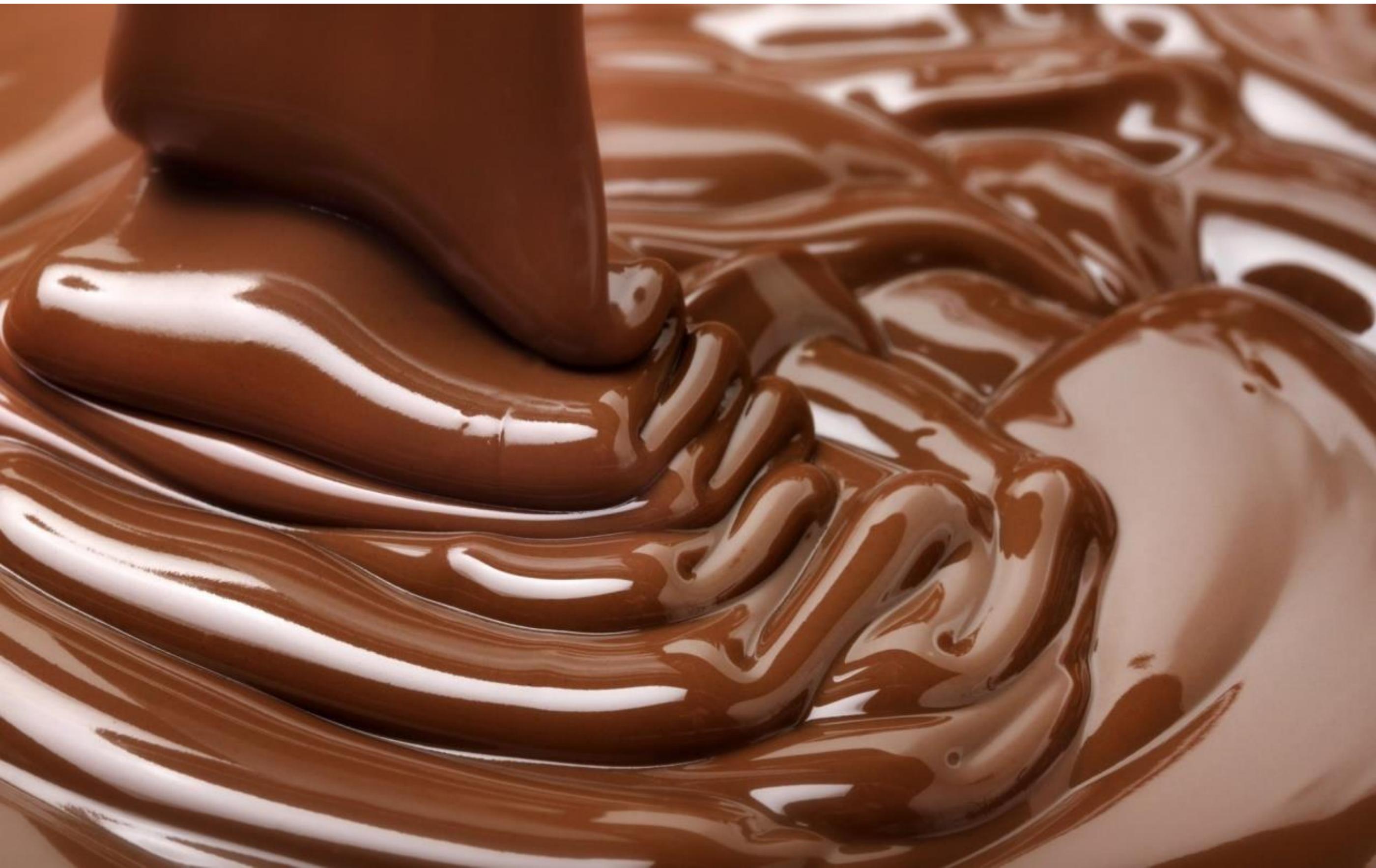
Mini chocolate Easter eggs



Libraries – to reach communities



Melting chocolate





Rubery Library
Easter 2018



Washut ni bbom



GRATNELL'S

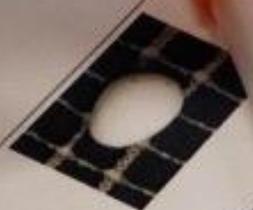




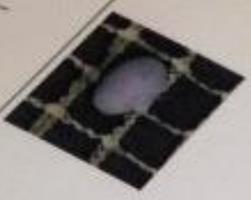
3.30

0.78g

Shiny



Micro Egg



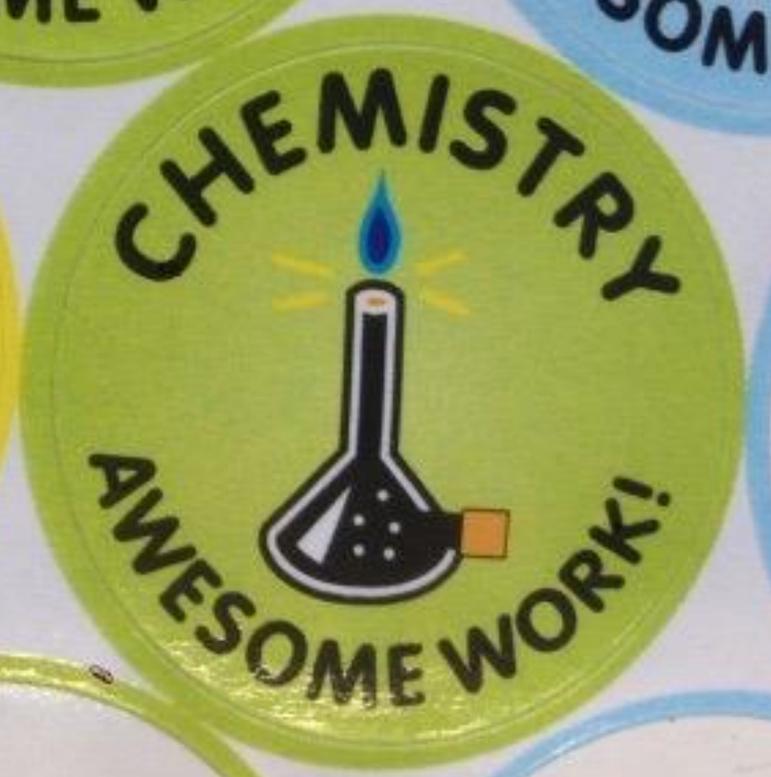
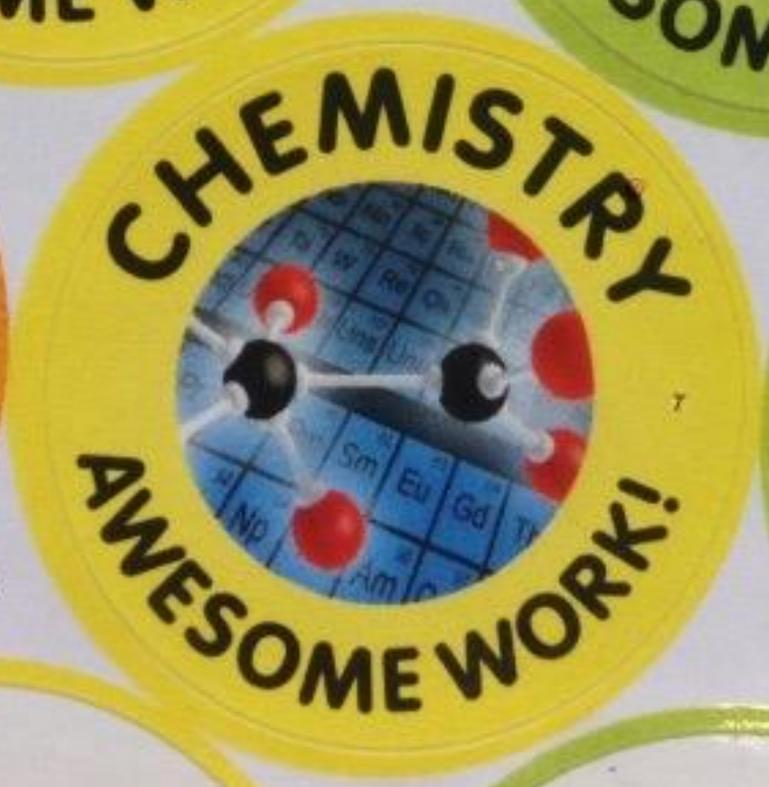
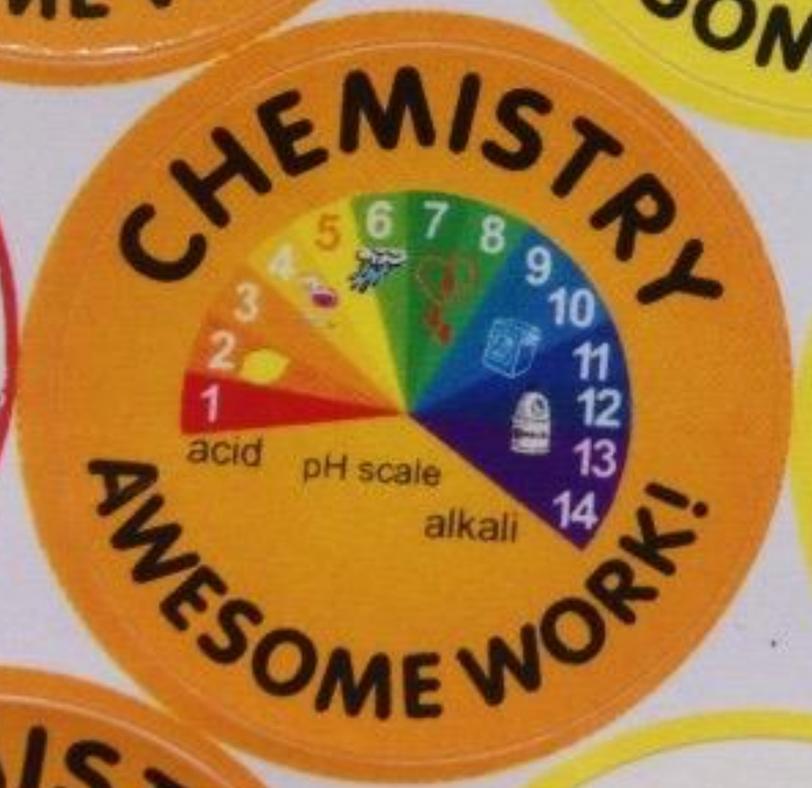
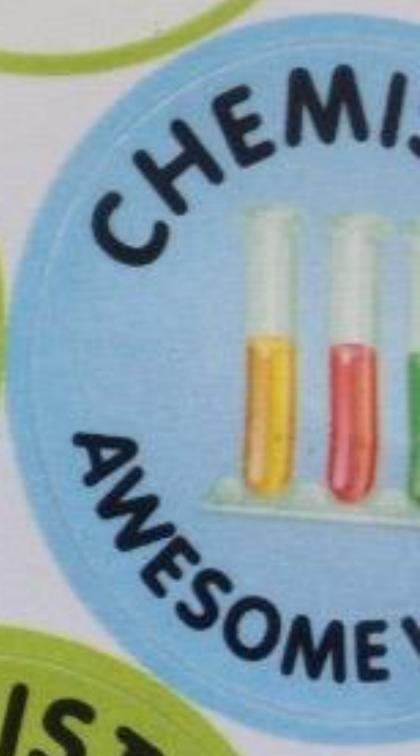
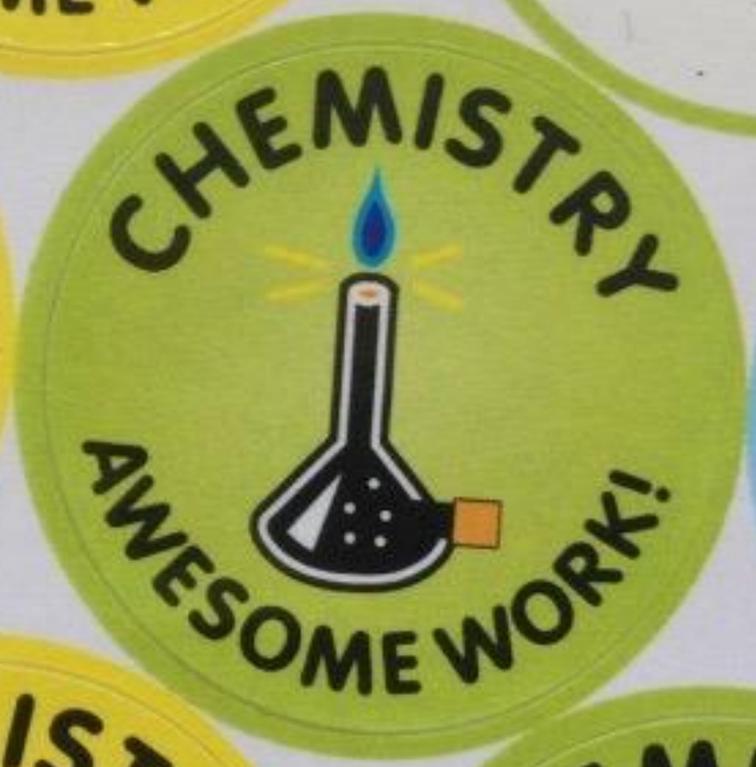
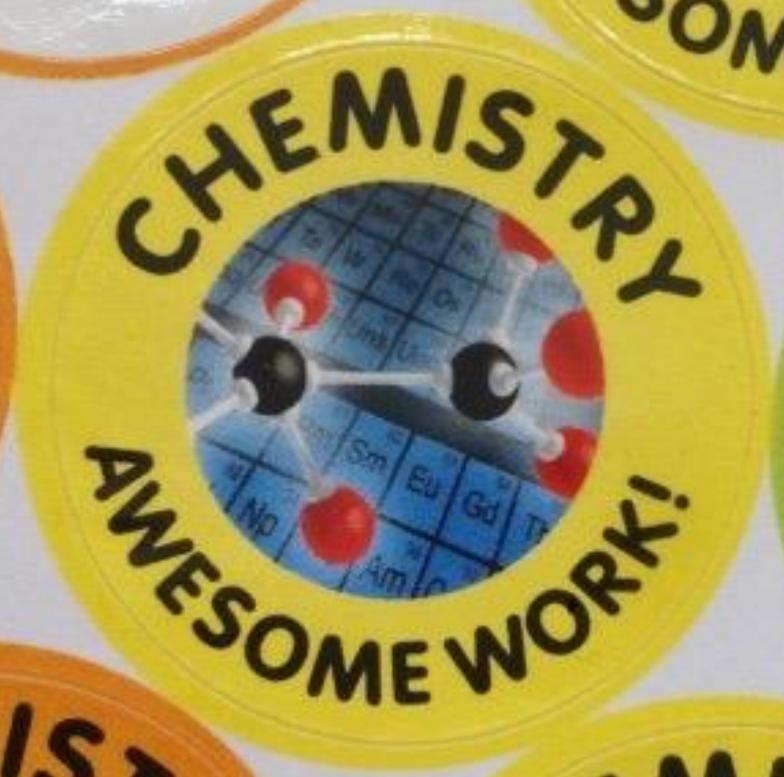
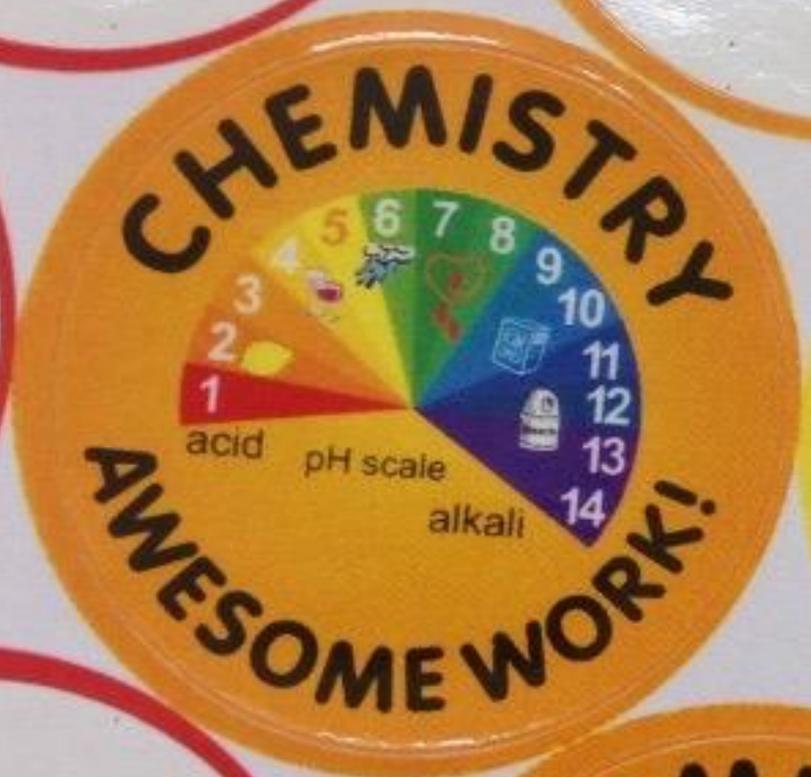
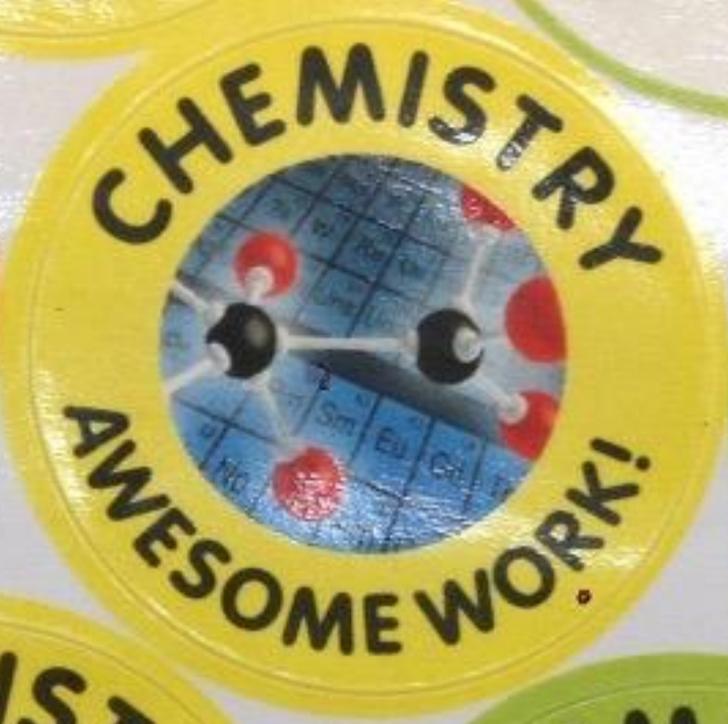
Micro Egg

Egg

nd feels like?

words useful:
ppers off the milk and(creme eggs!)





Why did this work well?

- Chocolate
- Free
- Heart of the community
- Fun
- See the science
- Local
- Stickers
- Inexpensive kit
- Chocolate

Cheltenham
Summer 2018



THE
CHEESE
& CHILLI
FESTIVAL



Beth Anderson
Education Coordinator, South West

Sandford Park, Cheltenham

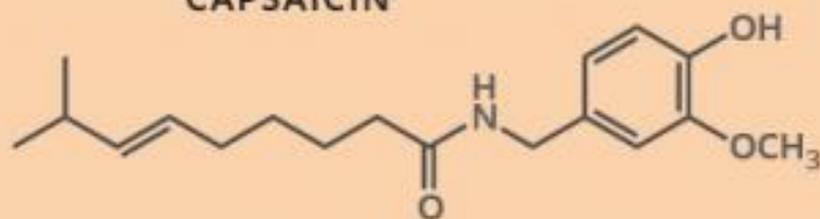




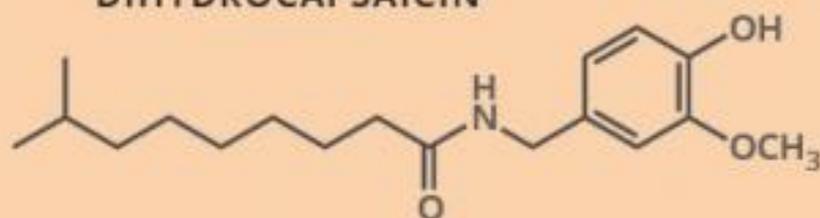
THE CHEMISTRY OF A CHILLI

CAPSAICINOIDS

CAPSAICIN



DIHYDROCAPSAICIN

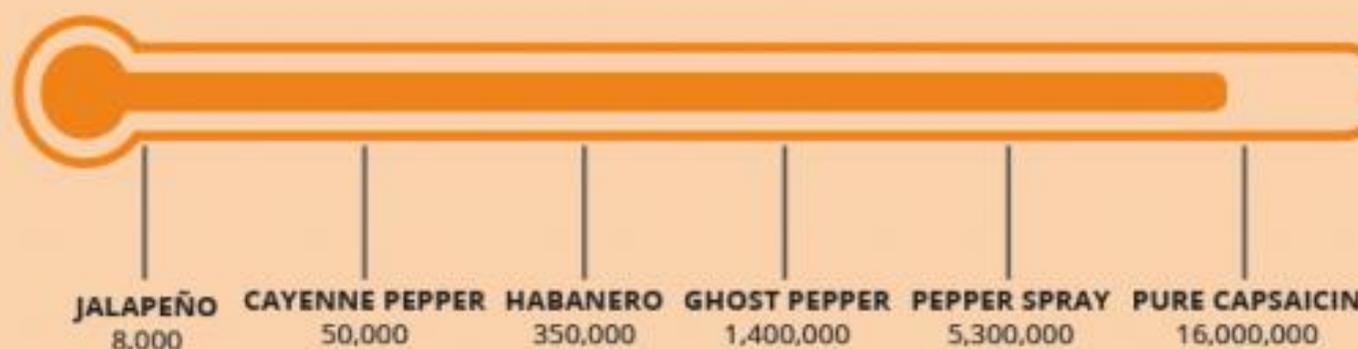


The spiciness of chillis is due to the presence of compounds called capsaicinoids. The two compounds above are the main capsaicinoids in chilli peppers. They cause a burning sensation when they come into contact with mucous membranes, due to their interaction with pain and heat sensing neurons.

Capsaicin is also used in some brands of pepper spray, and studies have shown it may be capable of killing prostate and lung cancer cells. It is toxic in large quantities.



THE SCOVILLE HEAT INDEX



The Scoville scale is a taste detection based method for rating the heat of chilli peppers. A measured amount of pepper extract has sugar added to it incrementally until the heat is undetectable through taste. Though it is an imprecise method, it has been estimated that 1 unit corresponds to 18 μ M.

Curds



Whey



Why did this work well?

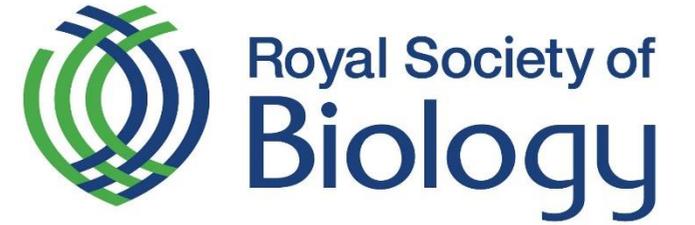
- Interactive
- Competitive
- Fun
- Appealed to all ages
- See the science
- Part of another event
- Encouraged use of scientific terms

To Make Outreach Work:

- Fun
- Interactive
- The science must be sound
- Ideas that people can relate to
- Going beyond science-related venues
- Extension / follow up material e.g. website on stickers



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Hannah Renshall

Foyer Federation

[@RoyalSocBio](#) | [#BiosciencesForAll](#)

PARTNERSHIP DECK 2018



Championing an **Advantaged Thinking** approach,
that focuses on young people's **potential, strengths and abilities.**

WHY DO WE EXIST?



Did you know

Over 85,000 young people could not live at home last year?

Well we

Inspire those young people to realise their power and purpose through our national network of Foyers where they Live.Learn.Work

OUR GOALS



Our Goals

That every young person can thrive with an opportunity to realise their power and purpose

To see young people's strengths, talent and value recognised by society

That all young people, especially those who can't live at home, get the same investment in their future as other young people

That the concept of Foyers are promoted and championed in the UK

That Foyers receive the support, quality assurance and accreditation they need to be sustainable entities and offer the best 'deal' to young people



THE FOYER MODEL



Young People

Are part of the Foyer Federation with their:

TALENTS that can provide solutions

EXPERIENCES to be drawn on

ENERGY that spark change

Foyers

Offer young people:

LIVE

A good place to live

LEARN

A learning offer that builds confidence and skills

WORK

Access to relevant work opportunities

Something
for
Something

Advantaged
Thinking

The Foyer Federation

Develops good practice and impactful services in Foyers through:

Innovation

Quality development

Creating tools and delivering training

Young People

Who could no longer live at home are:

Inspired, respected, involved and engaged

Progressing and moving on

Developing their talents, strengths and skills

YOUNG PEOPLE IN FOYERS

18%
2010

35%
2016

Suffered parental
abuse

10%
2010

20%
2016

Care leavers

11%
2010

23%
2016

History of school
exclusion

THE FOYER APPROACH

Provide a home
and moving on
support

Health: fitness,
food and mental
health

Financial
management support

Support Personal
development

Learning:
A wide range of learning
and life skill development.

Employment and enterprise
experiences, volunteer and
apprentice experiences.

Develop
Social Skills

OUR MEMBERS

Over 5,000 young people supported each year (45% are female)

70+ Foyer Across the UK



Ireland
Cork
Scotland
Aberdeen

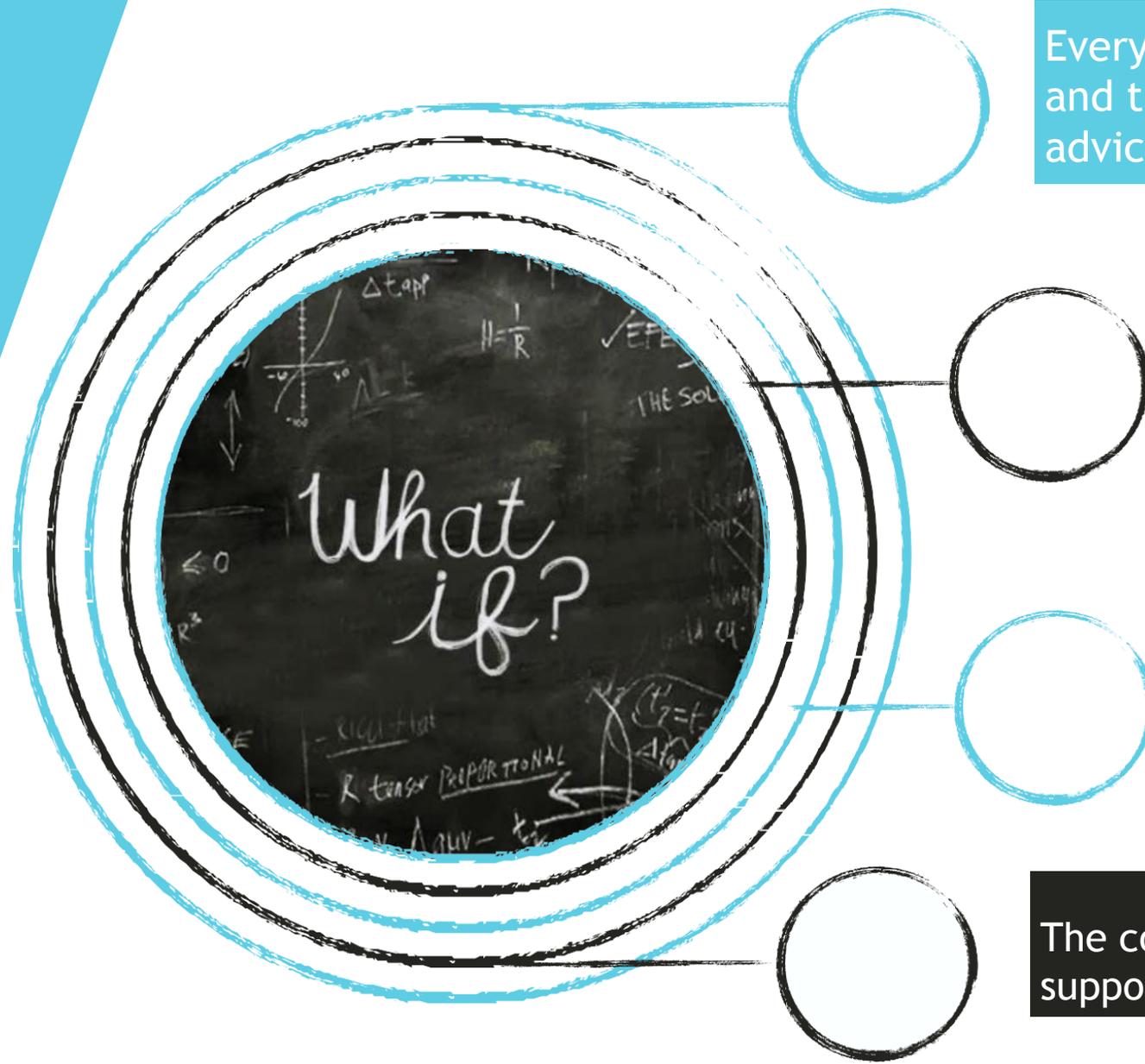
North West	
Birkenhead	Liverpool
Blackburn	Manchester
Chester	Salford
Crewe	Skelmersdale
Cumbria	Warrington
Birkenhead	Wigan

North East
Batley
Darlington
Doncaster
Grimsby
Halifax
Newcastle
Sheffield

Midlands
Banbury
Birmingham
Derby
Dudley
Hereford
Leominster
Ludlow
Ross

South East			South West	
Abingdon	Crouch End	Kent	Andover	Penzance
Aldershot	Croydon	London	Bath	Plymouth
Basildon	Enfield	Newhaven	Bodmin	Poole
Basingstoke	Epsom	Romford	Bridgwater	Redruth
Braintree	Gosport and Fareham	South Wimbledon	Bristol	Swindon
Brentwood	Hatfield	Wisbech	Cheltenham	Torbay
Brighton	Havant	Worthing	Exeter	Truro
Crawley	Huntingdon		Liskeard	Weston-Super-Mare

THE FUTURE OF FOYERS



Every Foyer had a youth-led business incorporated and the Foyer Federation provided business advice and enterprise tools

Foyers weren't seen as homeless projects anymore?

Foyers were interactive spaces for the local community?

The connecting thread for all Foyers was not supported housing but youth enterprise?

THE FUTURE OF FOYERS

Examples

Sanctuary housing work and life

St Basils Live & Work Scheme

Help Bristol's Homeless

Y:Cube

LIVE & WORK SCHEME

A HOME AND A JOB FOR YOUNG PEOPLE



St Basils
Works with young people

STBASILS.ORG.UK

NHS

Fourth Education West Midlands

Sandwell and West Birmingham Hospitals NHS

14th Floor

University Hospitals Birmingham NHS

14th Floor

THE FOYER FEDERATION FAMILY



CASE STUDY NATASHA

2017 inspiration award nominee

Natasha, age 28, Sheffield Foyer, North East England

Natasha got into some financial difficulty after a strained relationship with family and her mum had passed away from cancer when she was a teenager.

She started living in a Foyer in early 2013 and after telling a friend she wanted to start boxing, the Foyer helped her get the equipment she needed.

Natasha worked so hard at her boxing career that in less than 5 years she made it into the Great Britain Boxing Team.

Natasha's future

She has won numerous national titles, will represent Great Britain at the Commonwealth Games, Worlds and Olympics and is currently the female 75kg European Champion.



CASE STUDY KYLE

2017 inspiration award winner

Kyle, age 25, Quay foyer, South West England

After the relationship with his family broke down, Kyle came to Quay Foyer seeking independence and support to develop. Kyle left the Foyer after two years to join the army. After a while, Kyle left the army and his circumstances kept changing, with poor mental health resulting in suicide attempts and recurring homelessness.

He came back to the Foyer, knowing it to be a supportive place. After successfully moving on from the Foyer a second time, Kyle broke his collar bone, which led to him losing his job and becoming homeless.

Returning to the Foyer a third time, Kyle began working and rebuilding his independence with personalised support from staff, ultimately becoming a Foyer Ambassador by helping deliver activities and peer mentoring others.

Kyle's future

Now with his own flat, he visits the Foyer weekly, as part of his apprenticeship, meeting residents, providing 1-1 support and coordinating activities.



CASE STUDY AHMED

2017 unsung hero award winner

Ahmed, Weston Foyer, South West England

Ahmed came to the UK after fleeing Eritrea and moved into the Foyer in August 2016. The Foyer provided him with a sense of safety and stability where he has been able to build relationships and embrace opportunities to develop himself.

He quickly proved to be a considerate, giving and hard-working resident and has gone out of his way to support the three other asylum seekers living at the service. Despite the real struggles they have experienced, each of the resident asylum seekers are attending college and trying to make the most of the opportunity, whilst it is available to them, to improve their situation and build a future - a lot of this is thanks to Ahmed helping them integrate.

Ahmed's future

In July 2017 Ahmed learned his request for asylum has been granted, giving him security, stability and the chance to look to the future in a calmer environment. In September, Ahmed will start another year at Bristol College, where he studies IT, having already completed a course in English. To Ahmed the Foyer is his family.



**CONTACT
US**



To join more young people and us on
our journey, please contact:

Alieu Fofanah

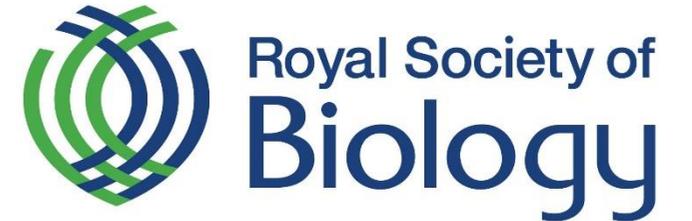
Head of Partnerships

Email: alieu@foyer.net

Mobile: 07940 309 843

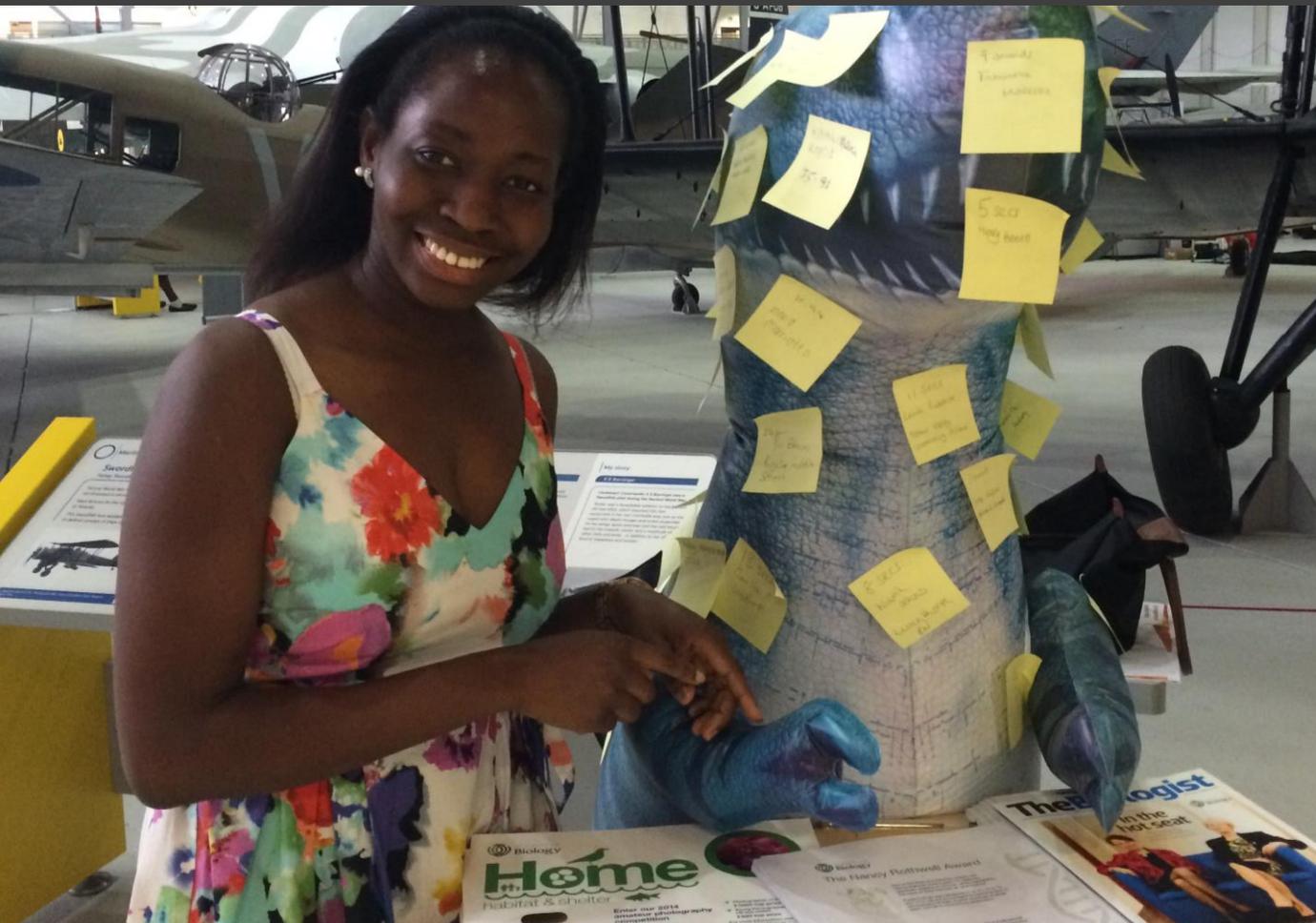


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Hephzi Tagoe MRSB
Royal Society of Biology
Beds, Essex and Herts
branch

@RoyalSocBio | #BiosciencesForAll



Basildon, Essex BME Community



Workshop and events for parents and kids

At least you will be pleased to know that you're making an impact on the kids! [redacted] has always been into Law but after yesterday said she's thinking about engineering!

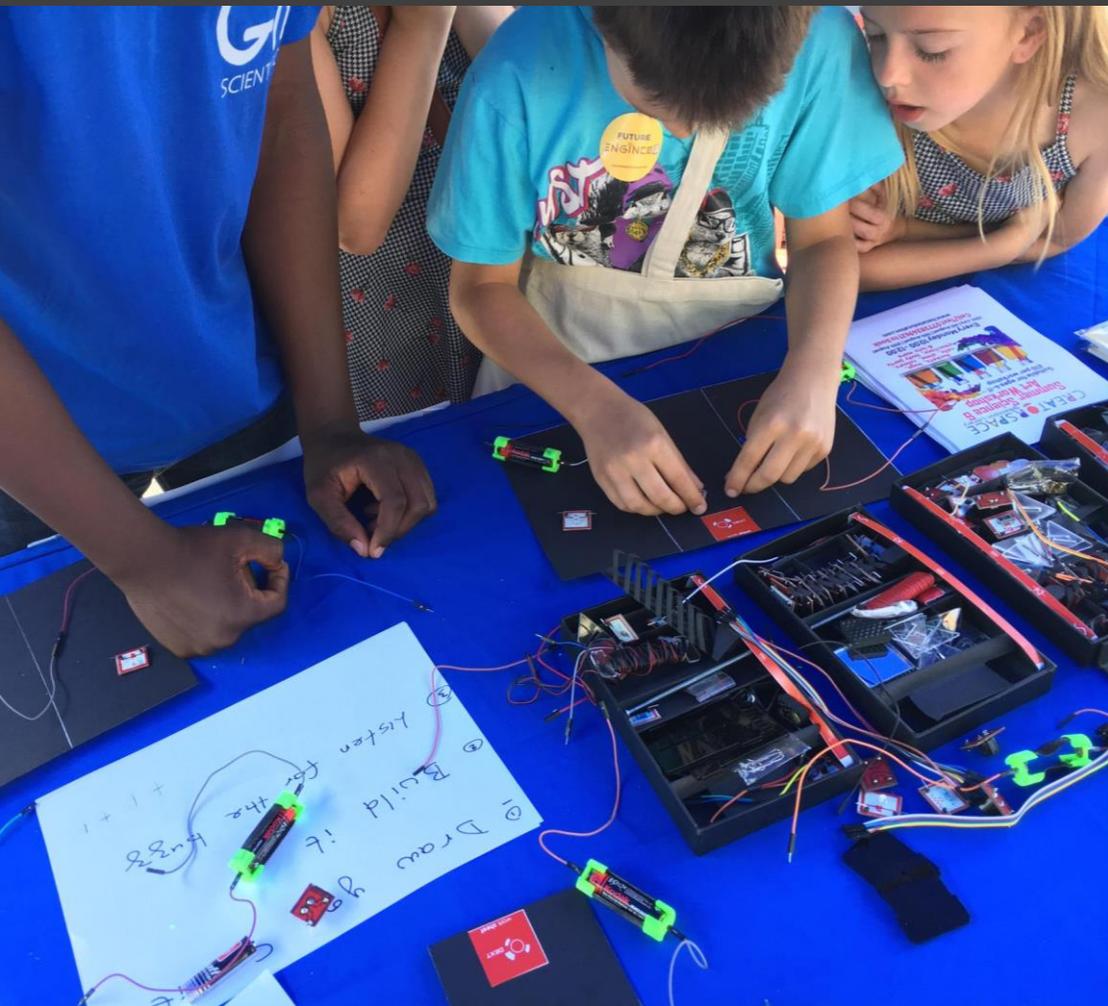
17:09

Thank you [redacted] said I should thank you because it was really good. And that was his first time on virgin train

22:02

The Big Bang Fair 2017





Finally something educational in Basildon 😊
HEAR! HEAR!
Great fun
+ over an

Mental and slow happy!
IE Rocks!

COMMUNITY EVENTS

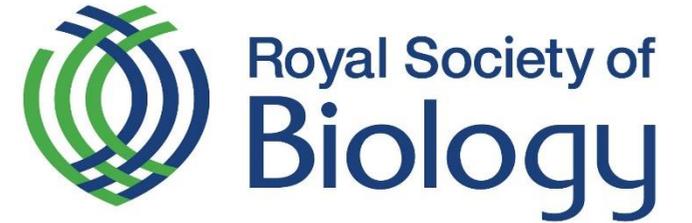
Hephzi Angela Tagoe

hephziangela@ghscientific.com

twitter/instagram: @hanat_akordor



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**Jean Wilson MBE CBiol
FRSB**

**Royal Society of Biology
North Western branch**

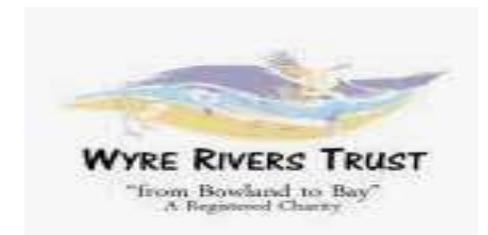
@RoyalSocBio | #BiosciencesForAll

Community Engagement North Western Branch

Jean Wilson MBE C.Biol FRSB



Partnership Engagement



ICI Hillhouse
Brinewatch
Churchtown Flood Action Group



Event Organisation

Funding:

- Royal Society of Biology
 - Additional Branch funding
- Wyre Council
- Wyre Rivers Trust
- Match Funding

Wyre Estuary
BioBlitz
Midday Friday 22nd June to midday Saturday 23rd June 2018

Join the experts for 24 hours of wildlife surveys and recording

10am-3pm Saturday 23rd June
Family activity sessions
Wyre Estuary Country Park,
River Road, Stanah FY5 5LR

For more information,
email: countryside@wyre.gov.uk
www.wyriverstrust.org
www.wyre.gov.uk

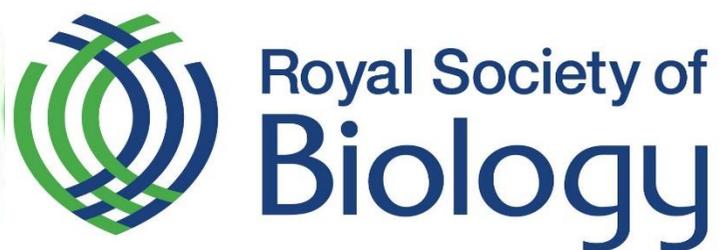
wyre council Wyre Rivers Trust Royal Society of Biology



The Specialists



Lancashire Environment Record Network





Marketing

Educational Engagement

BioBlitz: Friday June 22nd 2018. SCHOOLS' Timetable

Times \ Activities	10.45 ↓ 11.45	11.45 ↓ 12.30	12.30 ↓ 13.30	13.30 ↓ 14.30
RSB Owl Pellet Dissection	A	Open Ceremony and Lunch	C	E
Wood Craft Bird Boxes etc...	B		D	F
Painting from Nature	C		E	A
SEALIFE Sharks	D		F	B
Small Mammal Trapping and Wildlife Photography	E		A	C
Nature Walk	F		B	D

Six School Group A, B, C, D, E, F



Nature Walk



SeaLife Blackpool



Making Bug Hotels and Bird Boxes



Wildlife Photography



Owl Pellets



Painting from Nature



Community Engagement

24 hour Bioblitz Walks June 2018	Walk	Location	Leader	Co-leader	Co-leader
Friday 22nd					
11:00-14:30	School Activities in Marquee	Stanah	Jean Wilson	Amy Clayton	Keith Urwin and other groups
12:00-12:30	Opening Event	Stanah	Jean Wilson	Alison Boden	ALL
15:00-16:00	SaltMarsh Survey	Stanah	Jean Wilson	Jennifer Sharples	Kath Lowe
19:00-20:00	Evening Bird Walk	Stanah	Ian Coote	Mark Farrah	Amy Clayton
20:00-21:00	Retrieval of Fyke Nets	Stanah	Tom Myerscough & Steve Brown	Alison Boden	Kath Lowe
22:00-23:00	Bat Walk	Stanah	Charlie Pass	Karen Lawson	
23:00-23:30	Set up Moth Traps	Stanah	Karen Lawson	Charlie Pass	
Saturday 23rd					
10:00-15:00	Bioblitz Activities in Marquee	Stanah	All Exhibitors		
05:00-07:00	Early Morning Survey	Stanah	Josh Swales	Amy Clayton	Alison Boden
07:00-08:30	High Tide Bird Walk	Rossall Point	Ian Coote	Mark Farrah	
08:00 - 8.30	Moth trap checking	Stanah	Karen Lawson		
08:00 - 8.30	Mammal trap checking	Stanah - Outdoor Classroom	Alan Bedford		
9:30-12:00	Wildflower Survey	Stanah	Graeme Nuttall		
10:00-11:00	Woodland Bird Survey	Stanah	Ian Coote	Mark Farrah	Amy Clayton
11:00-12:00	Butterfly Survey	Stanah - Outdoor Classroom	Karen Lawson		
13:00- 14:00	Butterfly and Moth ID	Stanah	Karen Lawson	Charlie Pass	
13:00-14:00	Mud Rescue	Stanah	John Bradbury	Dave Eccles	
13:00-15:00	Small Mammals ID	Stanah - Outdoor Classroom	Mike Clapham	Alan Bedford	
15:00-15:30	Closing Ceremony	Stanah	Alison Boden	Jean Wilson	







Healthy Heroes & Health Checks



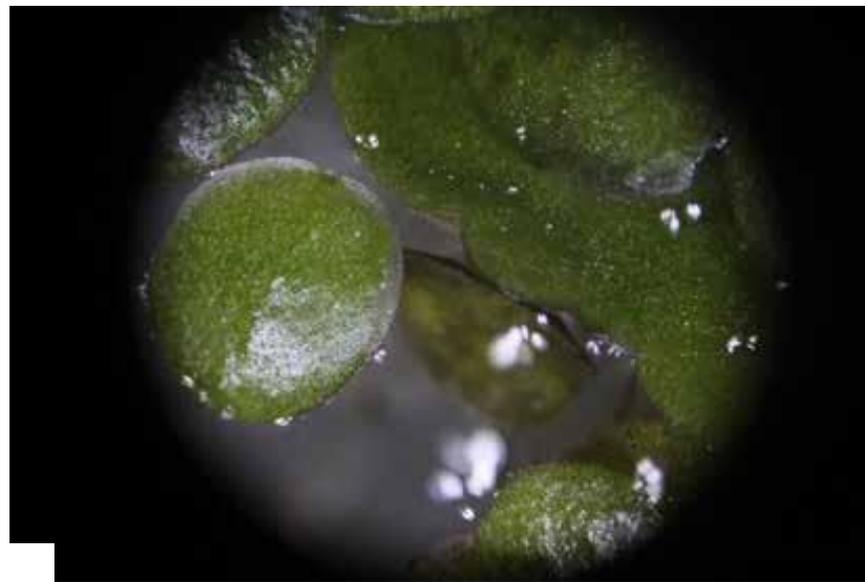
Nature Walks and Surveys



Nature and Art



Recordings and Surveys





Summary

- 700+ species identified and confirmed
- 100 Bird boxes and Bug hotels constructed
- 80 school children
- 1000+ visitors on 23/06/18



WYRE Estuary BioBlitz Friday 22 & Saturday 23 June 2018

BioBlitz Activity Registers

Date	Time	Where	Leader	Description	People	Duration Hrs	Time Total
22/06/2018	13.00	WECP	Charlie Pass	Beginners Wildlife	3	2	6
22/06/2018	15.00	WECP	Jean Wilson	Salt Marsh Survey	9	1	9
22/06/2018	19.00	WECP	Ian Coote	Evening Bird Walk	15	1	15
22/06/2018	20.00	WECP	Tom Myerscough	Retrieval of Fyke Nets	12	1	12
22/06/2018	20.00	WECP	Charlie Pass	Setting up Moth Traps	0	0	0
22/06/2018	22.00	WECP	Charlie Pass	Bat Walk	17	1	17
FRIDAY TOTAL					56		59
23/06/2018	05.00	WECP	Josh Swales	Early Morning Wildlife Survey	11	2	22
23/06/2018	07.00	Rossall	Ian Coote	High Tide Bird Walk	4	1.5	6
23/06/2018	08.00	Rossall	Emily Parr	Sea Watch	5	1	5
23/06/2018	08.00	WECP	Karen Lawson	Emptying Moth Traps	3	0.5	1.5
23/06/2018	08.00	WECP	Alan Bedford	Emptying Mammal Traps	3	0.5	1.5
23/06/2018	09.30	WECP	Graeme Nuttall	Wildflower Survey	8	2.50	20
23/06/2018	10.00	WECP	Ian Coote	Woodland Bird Survey	2	1	2
23/06/2018	11.00	WECP	Karen Wilson	Butterfly Survey	9	1	9
SATURDAY TOTAL					45		67
					101		126

Summary

		Attendance Registers			Walk Registers	
			People	Time Total	People	Time Total
14/06/2018	Thursday	Prep	5	37.5		
17/06/2018	Sunday	Prep	10	58		
18/06/2018	Monday	Prep	3	20.25		
19/06/2018	Tuesday	Prep	9	46		
20/06/2018	Wednesday	Prep	5	43.25		
21/06/2018	Thursday	Prep	6	48.5		
22/06/2018	Friday	Schools	86	308.75		
22/06/2018	Friday	BioBlitz	41	333.5	56	59
23/06/2018	Saturday	BioBlitz	39	314.5	45	67
			204	1210.25	101	126.00



The 'Jean' Pool

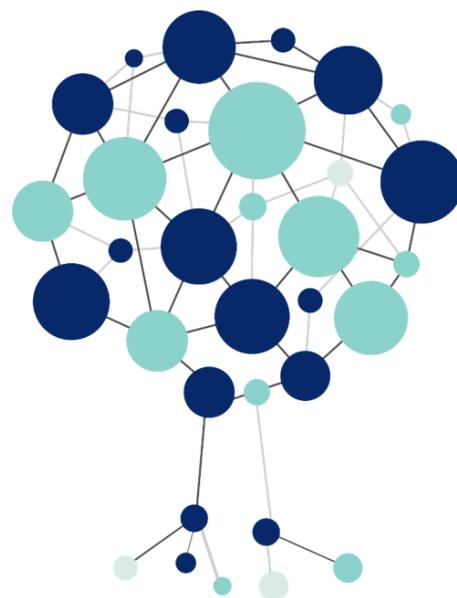




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Biology



biosciences
outreach & engagement
symposium

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