

Welcome to the June newsletter for STEM Ambassadors in the West of Scotland. It is nearly the end of term so the requests are a lot shorter this month but please do have a look and see if you can help out. There are 3 schools which need an Ambassador before the end of term so time is very short!

Thank you to all our STEM Ambassadors who have taken part in an activity, helped in a school, prepared resources, arranged events etc over the last academic year. Your input is invaluable to the schools and we get a tremendous amount of feedback from teachers on how effective Ambassadors are in schools and can influence young people's perception and understanding of STEM subjects.

We will be spending the summer getting ready for the new term starting in August so if you have any ideas of activities that you could develop to take into schools and need some help with, please let us know. Also if there is a local school you would like to work with next year, let us know and we can make the introductions before the end of this term to get up and running quickly in August.

This September, the Glasgow Science Centre will be celebrating the world-class innovation in science, engineering, technology and medicine that takes place across Scotland; bringing experts face to face with the public.



A crucial part of their month-long celebration will be facilitating experts in the delivery of engaging experiences that allow them to share their work with the general public.

### **'Meet the Expert' Opportunities**

The Science Centre is looking for experts from across Scotland to interact with visitors throughout weekends in September by engaging them in public spaces with 'Meet the Expert' sessions that bring to life the work that goes on in our colleges, universities, businesses and industry. Training on basic public engagement interaction techniques will be provided at a short workshop to be held in August.

### **'Research Exhibition Showcase' Opportunities**

The Science Centre is seeking ten of the best research teams from across Scotland to participate in a 4-day Research Exhibition Showcase event that imaginatively demonstrates to the public the cutting edge advances and applications of their expertise. Activity support: Awards of up to £1,500 are available to successful applicants to develop their 'Research Exhibition Showcase'. To assist with supporting the development of an engaging 'Research Exhibition Showcase', applicants will be assigned a mentor from Glasgow Science Centre and instructive training on basic public engagement interaction techniques will be provided at a short workshop to be held in August.

**Deadline for applications for both opportunities: 16th June 2010**

For more information visit [www.glasgowsciencecentre.org/sciencecelebration2010.aspx](http://www.glasgowsciencecentre.org/sciencecelebration2010.aspx)

## REQUESTS for HELP

The following requests have been made by schools and organisations. If you can help please email us at [ambassadors@physics.gla.ac.uk](mailto:ambassadors@physics.gla.ac.uk) or phone on 0141 330 6396 and we can liaise with the school on your behalf. **Burnside Primary is one that we really would like to fulfil before the end of term, so please do volunteer for this if it is suitable to you.**

SCHOOL / EVENT	DATE	REQUEST
Burnside Primary, Rutherglen	URGENT! Week beginning 14 <sup>th</sup> or 21 <sup>st</sup> June	Ambassadors to offer practical help with Thinking Science lessons
Carrick Academy, Maybole	As soon as possible	Ambassadors with links to forensic science, or windfarm industry
Knightswood Primary, Glasgow	As soon as possible	Help with Robotics Workshops using kits provided
Lenzie Academy	As soon as possible	Looking for Systems Analyst to talk about their job to Computing Science class. Also looking for companies to engage with Design, Engineering and Technology Dept.
Glasgow Science Centre	September 2010	Meet the Expert, Researcher Showcase (see prev page)
St Aloysius College, Glasgow	18 <sup>th</sup> October 2010	Chemistry related Ambassador to give careers talk on Chemistry

### Burnside Primary, Rutherglen

The P7 class at Burnside Primary is working with a programme called Thinking Science which is a set of 32 activities developed to promote high levels of thinking among pupils ( 8 lessons are done in P7, remaining in S1). They would like Ambassadors to help with some of the lessons, particularly in terms of carrying out experiments which the children are unable to do due to Health and Safety issues or time limitations. The school is short of some materials and props and would welcome the opportunity for the Ambassadors to bring equipment with them.

Lesson 2 - Two variables - height & weight (qualitative relationships where one goes up the other goes down)

Lesson 3 - What sort of relationship? - (quantitative ways of analysing relationships between variables). Plotting the data on graphs. Example of experiment: oil thickness versus temperature. Measure temperature of oil as it cools down versus time it takes to travel through a funnel. The school would require a funnel to be brought for this experiment.

Lesson 5 - Rollerball (working on controlling variables) - requires a track on which balls can roll (one steep end and one flat end). Scales to show heights from which ball is released and distance the target ball travels.

Level 6 – Classification. Including living and non living things, chemicals, store cupboard

Lesson 7 - More complex classification e.g. classifying birds or some other animal. The Ambassador would need to bring along some cards or examples of other things that can be classified in different ways.

If you are interested in being involved in any of the projects in Thinking Science please get in touch with us. **We have a copy of the lesson plans in relation to the projects and you are welcome to have a copy of these to see how you can help with the experimentation etc.**

### Carrick Academy, Maybole, South Ayrshire

Carrick Academy is keen to do more with STEM Ambassadors and have requested help in the following two areas:

- A forensic science link to address curriculum requirements.
- Whitelee windfarm link or local person in windfarm industry to address curriculum requirements

If you are able to help with either of these requests please get in touch with us.

### Knightswood Primary, Glasgow

The Primary 6 classes at Knightswood Primary are taking part in the Robokit Project. The teacher would like an Ambassador to talk to the children about robotics and/or support the classes in the build process. Afternoon visits would best suit the classes. Visit [www.robokit.org.uk](http://www.robokit.org.uk) for more information on the kits.

### Lenzie Academy

The Computing Department at Lenzie Academy is keen to have a Systems Analyst to visit classes to talk to/explain about the job requirements in this field.

The Design, Engineering and Technology Dept would like to liaise more closely with employers, bringing experience into the classroom. This can be in any field related to DET.

If you can help with either of these requests please get in touch with us.

### St Aloysius College, Glasgow

St Aloysius College in Glasgow is running a chemistry careers event for Highers students on 18th October, called "Look what Chemistry has done for me". They are looking for a STEM Ambassador with a background in chemistry (ideally an RSC member) who could come along and talk for about 20 minutes about their career in chemistry and what chemistry has done for them. The event will be in the evening from 7-9pm and they will have 3-4 different speakers.

Please get in touch with us if you are interested in being involved.

## Other information of interest to Ambassadors...

### Science Sunday – 13<sup>th</sup> June 2010, 10am- 4pm

Join the Glasgow Science Festival team for heaps of workshops, shows, displays and hands-on science in and around the University of Glasgow campus on Science Sunday. This great day out is part of the Glasgow Science Festival which runs from 20<sup>th</sup> May to 14<sup>th</sup> June.

Have a go at soldering, stretch your brain in engineering challenges, wander round the Hall of Illusions and fire rockets across the lawns. Meet the Birds of Prey, Sparks in Space puppet, Medical Mannequins and amazing gymnastics robot. Take part in workshops from CSI Forensics, the Clyde River Foundation and Froglife. Chat with scientists and engineers and find out about research at the University of Glasgow in 'People Behind the Breakthroughs'.

Get ready to be amazed! Activities are all FREE, No Booking Required



### Researchers in Residence

Researchers in Residence is an established and highly regarded placement scheme funded by the UK Research Councils and the Wellcome Trust that places leading PhD and post-doc researchers in schools for up to 24 hours of student contact time. The scheme is open to schools right across the UK and is completely free of charge. To become a Researcher in Residence you must be a PhD or post doctoral researcher funded directly or indirectly by one of the seven UK Research Councils or the Wellcome Trust.



Projects can be tailored to suit schools needs; for example, targeting gifted and talented students, students doing coursework or National Science and Engineering Week (which is next March). Placements can be flexible, including practical classroom activities, after-school club projects, lunchtime talks, careers advice or support for small groups.

Over 300 placements were organised in schools across the country in 2008/9. The feedback from teachers and their pupils was overwhelmingly positive. If you would like to be involved in Researchers in Residence and want to find out more visit [www.researchersinresidence.ac.uk](http://www.researchersinresidence.ac.uk) or call 0845 365 7470.

### Induction Training

If you have not already undertaken your induction training, the next session will be run on **Tuesday 22<sup>nd</sup> June at 3:00pm** in the University of Glasgow. If you would like to register for this induction please email or call us and we will reserve a place for you. The training will last around 2 hours and will enable you to complete your disclosure form also. The next training after this will be Tuesday 17<sup>th</sup> August 2010 at 3pm.

Thank you once again for all your efforts and please take a good look at the requests on offer and see where you can help out. Please remember to record your activity at [www.stemnet.org.uk](http://www.stemnet.org.uk)!!

I wish you all a happy (and warm!) summer and hope you are energised and ready to work in many, many schools next academic year!

Regards

