



Hot Stuff

Dr Samantha Terry

Top 3 tips

1. Be early with everything – RS deadlines are a great help if not annoying at the time
1. Create a large team to help
2. Enjoy the week

Early – key messages



Royal Society Summer Science Exhibition Form A

1. Please confirm the final title of your exhibit: this should be clear, simple and eye-catching (maximum of 10 words). *Hot Stuff: When is Radioactivity Good For You?*

Please note: The Royal Society has the final editorial control of the title.

2. Please provide the previous title of your exhibit, as submitted on your original application (if different from the above). *N/A*
3. Confirm the details of the person coordinating your exhibit. This will be the person that we contact regarding forms and logistics. *Samantha Terry*
4. Please tell us three key messages or your exhibit.
 1. *Radioactivity is all around.*
 2. *Radioactivity can image disease.*
 3. *Radioactivity can treat disease.*

January 2017

Early – budget

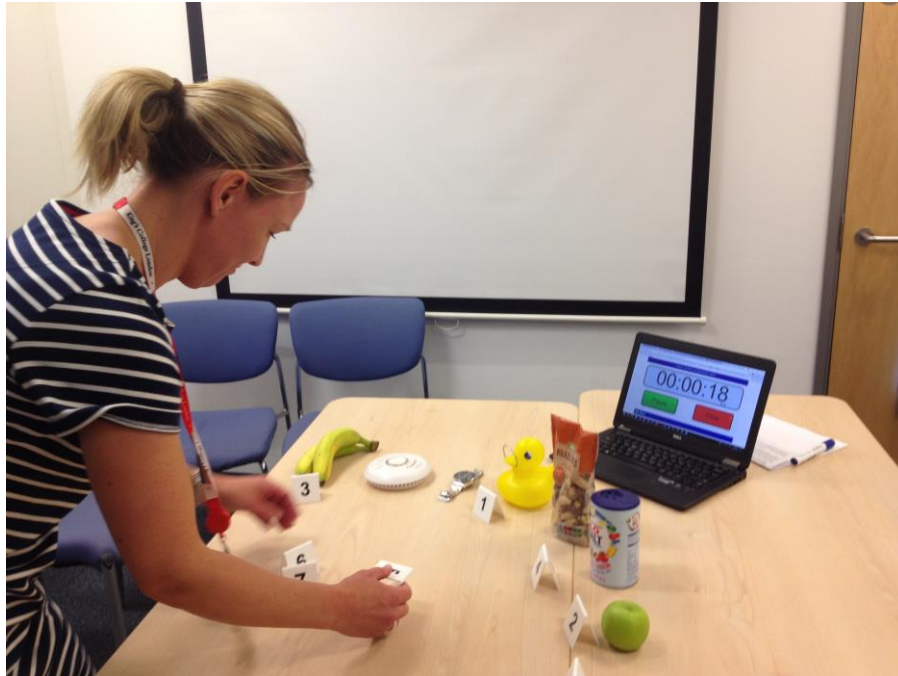
Expense	estimated
radioactive rocks x4 £30 each	£120
aprons x 8 £35 each	£280
printing leaflets	£500
branded t shirts	£500
rap song 6x £100 day rate	£600
radioactive elements	£400
promo video	£2,000
printing for pop up stand	£2,100
researcher travel during week	£700
electronic counter	£400
food during week	£400
sweets as freebies	£400
spare batteries	£100
catering at training session	£200
therapy game maker	£8,000
contingency fund	£1,800
subtotal	£18,500

	<i>In kind costs</i>	<i>approx cost</i>
Pop up stand		£2,000
Designer time		£300
radiation detectors		
Harli Instant Imager		
plasma screen		£500
leaflets from UAR/CRUK		
Training from UAR/CRUK		£500

Income	
CME funding	£20,000
Lunch money from the RS	£400
King's Small Grant PE	£725
subtotal	£21,125

Early – activities

Test out activities



RADIATION TIME TRIAL

CONTESTANT	TIME	Rules
Matt Allinson	44 (24+20) seconds	① DO NOT move/Touch objects, only the numbers ② TWO of the objects are 'non-radioactive' ③ A 5 second time penalty will be given for each incorrect answer
SAM TERRY	41 (16+25) seconds	
Maggie Cooper	40 (20+20) seconds	
Alice T-G	33 (23+10) seconds	for each incorrect answer Rack = piece of cornwall Watch = radium dial / watch
Azalia Khan	80 (60+20) seconds	
Josna B	41 (16+25) seconds	* = all correct order
Joe D	25 (15+10) seconds	
Michelle M	57 (26+28) seconds	
Alex R	24 (14+10) seconds	

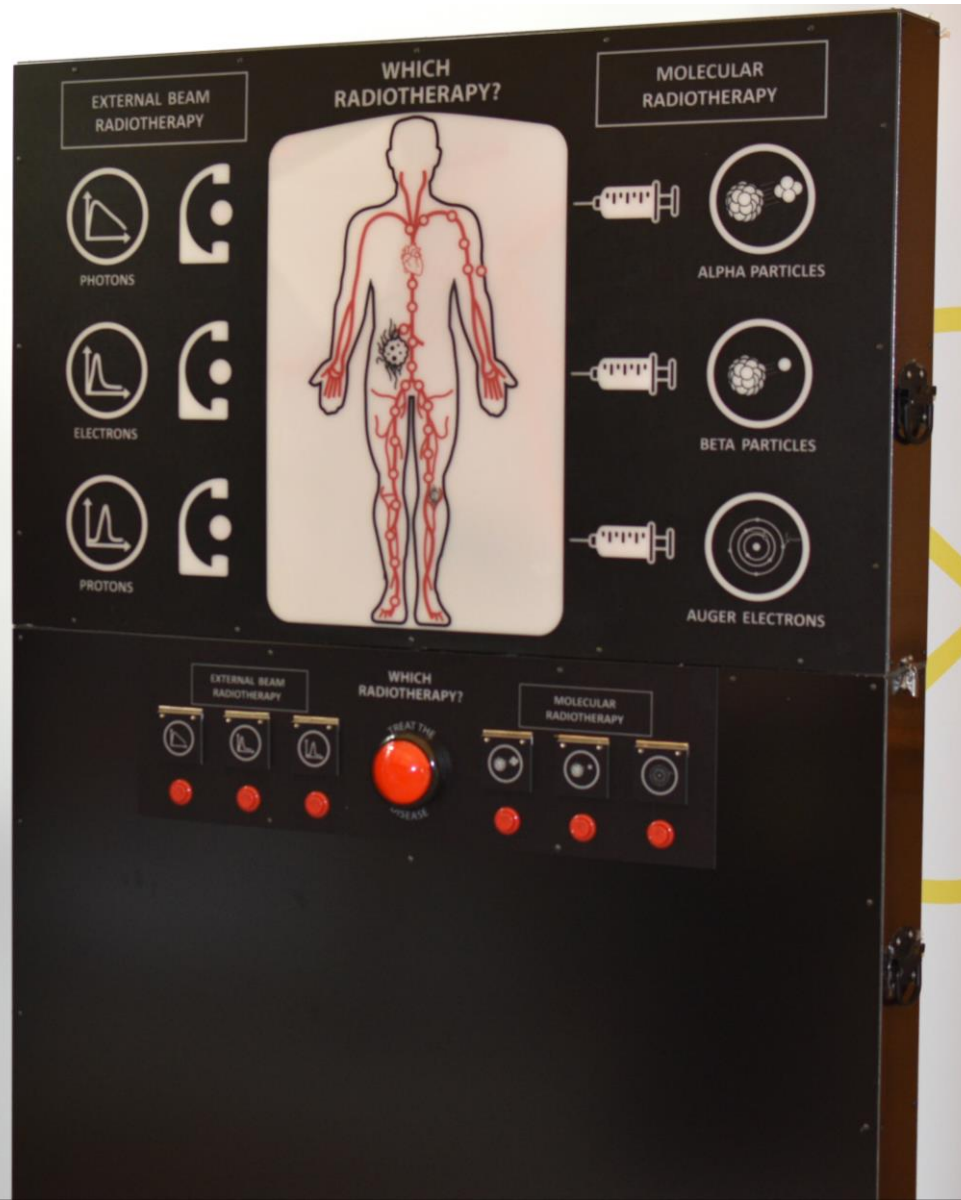
Test out activities



Test out activities



Left too late



Test space



Longevity of activities



KHP Summer School Imaging workshop

Thursday 26 July 2018

Governors' Hall, St Thomas' Hospital



Create large team

Max 3 hour shift

	Monday 2nd July		Tuesday 3rd July				Wednesday 4th July				Thursday 5th July			Friday 6th July			Sat 7th July			Sun 8th July			TOTAL					
	11.00-13.30	13.30-16.00	16.00-18.00	10.00-13.00	13.00-16.00	18.00-20.00	20.00-22.00	10.00-12.30	12.30-14.30	14.30-16.30	19.00-22.00	10.00-12.30	12.30-14.30	14.30-16.30	19.00-22.00	10.00-13.00	13.00-16.00	16.00-19.00	10.00-13.00	13.00-16.00	16.00-18.00	10.00-13.00	13.00-16.00	16.00-18.00 + breakdown til 7pm	13.00-16.00	Total sessions		
Samantha Terry	1	1			1		1				1				1	1					1	x	1		x	1	11	
Alice Taylor-Gee	1			1	x	x	1						1	x	1	1					1	1				1	9	
Matt Allinson	1	x	1	1	x	1	x		1	1			x	x	1		1	1	1						1	x	1	12
Sara Zia-Gharib	x	1	1	x	1		x	1	1				1	1	x		x	1	1	1	1	1	1	x	1	1	x	13
Afnan Darwesh				1	x		1						1	x			1	x									4	
Ahmed Younis	1	x							1				1							x		1					4	
Alex Hammers						1										1											2	
Alex Rigby	x				1								1														2	
Andrew Reader		1		x																							1	

3																TOTAL	
4		Monday 2nd July		Tuesday 3rd July		Wednesday 4 th July		Thursday 5 th July		Friday 6 th July		Sat 7 th July		Sun 8 th July	Total sessions		
6	Samantha Terry	1	1		1	x	1		1	1			1	1	11		
7	Alice Taylor-Gee	1		1	x	x	1		1	x	1	1		1	1	9	
8	Matt Allison	1	x	1	1	x	1	x		1	1	1	1		1	12	
9	Sara Zia-Ghant	x	1	1	x	1		x	1	1	x		x	1	1	13	
11	Ahnan Darwish			1	x		1			1	x		1	x		4	
12	Ahmed Younis	1	x					1		1			x	1		4	
13	Alex Hamman					1					1					2	
14	Alex Rigby	x			1				1							2	
15	Andrew Reader			1		x										1	
16	Azalea Khan	x	1		x	1			1	x				1		5	
17	Colin McGinnity			1	x	x	x		1	x				x	1	3	
18	Daniel Burnham										1					1	
19	David Pezzi	1	x				1									2	
20	Elie Vanger						1			1				1		3	
21	Ellen Viazut Lopez Perez	1			2				x	1	x		1		1	5	
22	Filipa Mora				1			x	1	x	x	x				2	
23	Francis Mar					1	x					1	x		1	3	
24	George Kewling				x	x	1	x	x	1	x					3	
25	Giovanna Nordio										x	1			1	2	
26	IB Hungnam	x	x	1	x	1		x	x	1		x	x	1		3	
27	Ives Corta														x	1	
28	Jan Young				1		x									1	
29	Jessica Jackson	1	x	x	2	x	x	1	x			x	x	1		3	
30	Joemon John											1				1	
31	Joseph Downey			x	1	x	1	x	x	1	x		1			5	
32	Julia Blower			x	1		1	x	x		1	x				3	
33	Kayitba Sunawee			1	x	x	1	x	1	x	x	1		1	x	1	8
34	Laura Penalta Pereira												1	1			1
35	Laura Stewart			x	x	1	x		x	1		x	1				3
36	Lucy Pike											x	1				1
37	Madeleine Jarvize	1	x	x		1	1										3
38	Maril Subersinghe											1					1
39	Mauricio De Silva Moraes														1		1
40	Megan Milton	x	1	x			x	x	x		x	1	x	1	x	x	4
41	Michelle Ma	x	x	1			1		x	x	1	x	x	x	x	1	6
42	Milou van Poppel													1			1
43	Petar Gavrilovic	1	x	x	1	x	1	x	x	1		1		x	1	x	8
44	Phil Blower	1	x		1	x	1	x	x	1	x	x	1	x	1	x	6
45	Ran Yan					1	x	1									2
46	Rhannon Evans	x	x						1	x	x		x	x	x	1	2
47	Rustan Casiri	x	1	x		1	x	x	1	x	1	x		x	x	1	7
48	Sally Barrington						1				1	x	x				3
49	Sara Verrini										1	x	x	1	x	1	4
50	Saul Cooper	x	x	1	x	x	1	x	1	x		1		x	1	1	3
51	Seb Durnell							1									1
52	Sti Yaakub														1	1	2
53	Tom Takah	x	x	1	x	1	x	x		1	1	x	x				5
54	Tong Zhang												x		1	1	1
55	Truc Pham	x	1		x			x	1		1	x	x	1	x	1	5
56	Veronika Zinmer												1	1			1
57	Vicky Goh												1	1			0
58	Vittorio De Santis	1	x	x			1	x	x								2
59																	
60																	
61																	
62	People on stand	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
63																	
64																	
65																	

Can only have 6 exhibitors for some nights



Create large team



Create large team

Including designer



Create large team

Including designer

RADIOACTIVITY
DETECTS DISEASE

F-18 sodium fluoride is injected into the blood stream for bone scan imaging. It is also used to check if cancer treatment is working.

RADIOACTIVITY
TREATS DISEASE

**MOLECULAR
RADIOTHERAPY**

Molecular radiotherapies are usually injected into the bloodstream of a patient via a vein in the arm. Different types of radioactivity, usually alpha or beta particles, can be attached to tumour-homing molecules, thereby delivering radiotherapy in a highly targeted fashion. This approach provides the ability to irradiate tumour cells that have spread throughout the body also. Damage to healthy tissues surrounding tumours is less than for external beam radiotherapy.

RADIOACTIVITY
IS ALL AROUND

Are you bananas?

Enjoy the week



Enjoy the week



#hotstuff @kingsimaging

RADIOACTIVITY DETECTS DISEASE

One way of using radioactivity to image disease is to attach radioactivity to a sugar molecule. This is injected into the blood system in the body where it is taken up in areas with high energy needs, such as cancer.

A scanner is able to detect the radiation energy from the radioactive sugar and produce an image of the body it goes to. The cancer is highlighted.



A scanner can be used to pick up the radiation energy from a radioactive sugar and image where the cancer is.

RADIOACTIVITY IS ALL AROUND

Radioactivity is not something we always need to be scared of.

It is in the food we eat, the buildings we live in, the ground that we stand on, and in the air we breathe.

Do you know where radioactivity is found? Come play our radiation time-trial ranking everyday items in order of their radioactivity.



F-18 sodium fluoride is injected in the blood stream for bone scan imaging. It is also used to check cancer treatment is working.

RADIOACTIVITY RAP SONG



Enjoy the week



Enjoy the week



Enjoy the week



Don't forget to evaluate

Last tips – increase your profile



Dr Samantha Terry, lecturer at King's College London, winner of the Established Researcher Award



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