# Scientist Briefing Notes



# l. The Event

I'm a Scientist, Get me out of Here! is a two week long science engagement event that takes place online. It's an Australian Idol-meets-Masterchefstyle competition for scientists, where up to 400 school students vote to decide who wins the \$1,000 prize in each zone.

The event gets teenagers talking to real scientists, online, to learn about real science. Students have fun, but also get beyond stereotypes, learn about how science relates to real life, develop their thinking and discussion skills and make connections with real

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scientists. The event is split into zones, and in each zone there are five scientists and around 400 students. The zones are either general (named after elements) or themed.

**Rationale:** The primary objective of the event is to change students' attitudes to science, and make them feel it's something they can relate to and discuss. Giving students some real power (i.e. deciding where the prize money goes) makes the event more real for them.

**What's involved?:** You interact online with young people (Year 5 – Year 12), answering their questions about science, research, and just about everything else. You also read students' opinions on science and get them thinking about how science affects their daily lives. All you need to take part is a computer with an internet connection.

In addition to your profile there are three sections to the site:



Students ASK you questions which you answer in your own time; sooner the better.



You CHAT with students online, answering their questions and hearing their opinions.



Students VOTE for the scientist in their zone they think should win a prize of \$1,000 to promote their work. Evictions take place in the second week of the event until the winner is announced on the Friday.

The winning scientist in each zone gets \$1,000 to be spent on a science communication project. Please think seriously about what you want to do with it. You will get a lot of questions about it! Some previous examples include:-

- Buying equipment to allow a research oceanography vessel to communicate with school students during expeditions.
- Funding a community open day for mothers and children involved in a medical research project to find out about the research and get health advice.
- Giving the money to a school in Uganda to pay for science kits and a projector to watch science films on.
- Organising an open day to Mt Stromlo Observatory for the Transit of Venus.
- Taking a group of school students to the zoo as part of their endangered species unit.
- Setting up a science writing competition for high school students.

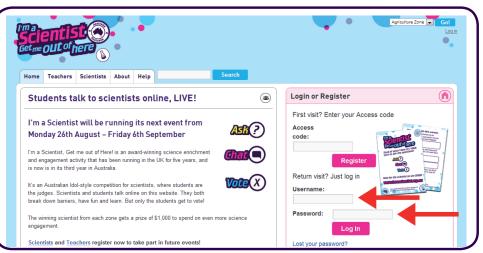
## 2. How to use the site

### a. Log in

Go to <u>www.imascientist.org.au</u> and enter your username as advised by email - this will usually be 'firstnamesurname' (e.g. joebloggs). In the password box enter the access code.

THERE IS NO NEED TO

**REGISTER** – this is just for teachers and students. As a scientist you have already been pre-registered.



### b. My profile

You have a profile including a photo of you, information about you and your work, and a set of 'interview' questions. Your profile enables the students to find out more about you and your research. Please ensure your profile is completed by the 16th August. Students will begin interacting with the site the following week.

Log in then click on the 'My Profile' tab.

**1. Click the 'Edit your profile' link at the top of the page.** A series of boxes will appear: you need to fill them in.

There are five sections to your profile.

For sections A-C you'll be asked for a one sentence summary, and then a longer version. The short versions are all displayed on one page with a 'read more' option underneath. This is because testing showed this makes it much easier for low literacy students, while it's easy for students who want to read more to access it.



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Don't feel you need to write loads for the longer versions - people reading online tend to prefer shorter texts.

#### A. Me and my work

This lets students find out more about you and your interests, and read about what you do in more detail.

#### B. My typical day

Writing about your typical day gives students a tangible sense of what working as a scientist is like.

#### C. What I'd do with the money

Students vote for the scientist they want to win, so they want to hear what you would do with the winning money.

#### D. CV

This shows students how you've got to where you are now.

#### E. The interview

These questions are here to show your personal side to students, who often feel that scientists are not like real people they can relate to.

2. When you have finished, click the 'Update Profile' button at the bottom. You can come back and edit your profile at any time.

	New Password	
		If you would like to change the password type a new one. Otherwise leave this blank.
		Type your new password again.
		Hint: The password should be at least seven characters long. To make it stronger, use upper and lower case letters, numbers and symbols like ! " ? \$ % ^ & ).
(	Update Profile	-
	View your profile	

#### 3. Adding images and other media

You can put photos or other images (for example, graphs or other images that illustrate your research) into sections A-C; 'Me and my work', 'My typical day' and 'What I'd do with the money'.

To do this, upload as many images as you wish to use in the 'my images' section at the end of the list. The site will then call these images myimage1, myimage2, etc.

MYIMAGE1	Please upload an image to use in your profile long answers. To insert a picture type [myimage1] or [myimage2] etc into the profile answer where you want the image to appear. You can align the image by using the following examples: [myimage3] [myimage1 left] [myimage2 align=right] [myimage3
	centre] The image will appear in your post at full size. We advise you crop your picture to 500px wide and keep the file size below 2Mb. Choose File INo file chosen
MYIMAGE2	Choose File No file chosen
MYIMAGE3	Choose File No file chosen
MYIMAGE4	Choose File No file chosen
MYIMAGE5	Choose File No file chosen
MYIMAGE6	Choose File No file chosen
MYIMAGE7	Choose File No file chosen

To insert these images into your text, type the name in square brackets where you wish it to appear. For example:-

Here's a picture of my cat [myimage1]

You can even embed videos into sections A-C by pasting in the embed code from YouTube or similar. However, do be aware that some school systems will block YouTube and many other video sites. This isn't necessarily a reason not to use video, as it can be very effective, but don't make understanding your profile dependent on viewing the video as it will leave out some students.

### c. Answering questions

You will be notified by email of all new questions. You can answer them in your own time, but the sooner the better.

- i. Log in
- ii. On your profile page you will see a 'My Unanswered Questions' box on the right hand side. The ten most recent unanswered questions will appear in this box as a clickable link.
- iii.To answer a question, click the link and type your answer. You will also be able to view other scientists' answers to the question.

To make it easier to find questions moderators will tag keywords in questions. The keywords are then used to list any similar questions in the 'Related Questions' box on the right hand side.

Status Update	(1)
Status:	
Update Your Status!	
My Answered Questions	
No questions to show	

It is up to you what answers to give and how much detail to go into. Don't be afraid to write a really long answer, but at the same time you don't need to write long answers.

Our advice is simple – be honest, straightforward and to the point in your answers.

#### d. Live chats

Live chats are consistently the most popular part of the event for students, teachers and scientists. They are MSN-style chats where students ask you questions and express their opinions on your work. Live chats are fun and give immediate contact between scientists and students, allowing students to relate to you. Many teachers tell us that the quieter students are more active in live chats than face to face, providing an interesting change to class dynamics.

#### i. You will be notified by email of when live chats will occur in your zone.

Please confirm whether you will take part in the live chat, by following the instructions in the email. This is really important for us to know if there are scientists taking part in every live chat.

### ii. Log in and click on the chat icon in the top right corner



#### iii. About 5 minutes before each chat booking, two chat boxes will appear on this page. The left hand one is for students, the right hand one is for scientists. Simply type in the entry box above the chat box and press return.



#### Tips for chat

- Chats can be very hectic, but also exhilarating. Enjoy the hurly-burly and don't worry too much about your spelling!
- Test it out and get your head round how it works by coming to the drop-in chat sessions (AEST) 11-11:30am Wednesday 21st August,
- 1-1:30pm Thursday 22nd August, and
- 2-2:30pm Friday 23rd August

Zone Home	My Profile	Scientists	⊙ global ⊚ zone	Search: ASK? Chate Vote X
Studen	ts	~		Scientist
				Admin
No one online. This box is for students			You type here	
		otadomo	No one online.	
				This box is for scientists

- Use @username to address your answer to a particular student. Otherwise they may not realise you've answered their question, and keep asking it.
- 'If you get behind on a chat room, it's better to skip a few questions and get back to the top of the screen
   otherwise you keep answering questions after the students have gone!'
  Moderators have had a lot of practice and they can repeat questions that have been missed.
- Be patient. Some young people's turn of phrase and use of language may be different from academic discourse. It may take you a little while to understand what they are trying to ask.
- Be tolerant. Sometimes young people can be over-exuberant online. Chat with them and they will calm down and engage with you.
- Don't take offence. Sometimes you will receive questions which seem quite blunt, but usually students don't mean to be offensive. The benefit of an online event is that they feel empowered to ask.

### e. Moderation of questions - our policy

All questions are moderated before they are sent to you. The moderators work very hard to strike a balance between making your lives easier as scientist participants, and giving the young people the chance to ask real questions. Remember students are aged between 9-16 years old. Most students will never have had the chance to talk to a scientist before.

**Duplicates:** We know you will get sent some very similar questions (believe us, the moderators wade through and weed out a lot more of them!). Moderators will take out duplicate questions, but allow through questions which may be similar, but make additional or slightly different points.

**Offensive questions:** Moderators will remove rude or offensive questions (there are generally very few) and anything which breaks the house rules. They will allow challenging questions. They will allow irreverent, but friendly, questions. There will always be a moderator in the chatroom to help things along. However, they are not miracle-workers, and from time to time there will be the odd chat that we cannot get on track. Bear with us, we're doing our best!

## 3. Six key things you need to know

1. This may take about 2 hours per day. In our Australian events so far, about half our scientists have spent 1.5-2 hours, a further third between 2-3 hours and others spent longer because they really got into it! Many scientists spend time in the evening answering questions.

The time involved depends, to an extent, on how busy your zone is, but also how long you spend on your answers. Classes vary on how much time the teacher spends on it and how much the kids get into it and we can't predict that beforehand. We try to even it out!

2. This is not a seminar for the super-smart scientists of the future. There will be a wide variation in the students taking part. There will be a big variation in ability. Some might be 'gifted' students, some will certainly not be. The point is to try to engage all students, not just the ones who might go on to study science at university.

Most teenagers won't grow up to be scientists, but they will all grow up to be people. As adults they'll have to make decisions about science and we are trying to help them develop the skills and confidence to do that. For some, 'Where do bogies come from?' or, 'Do you like your job?' may be the most pressing question they can think of. This event humanises science for young people – they realise that you are 'like normal people' who they can relate to.

- **3. Don't be afraid to say 'I don't know'.** You will be asked many questions which are not in your area. Answer what you can, but don't feel you have to reproduce Wikipedia or Google all evening to answer questions. Students should get an insight into why the way you think is just as important as what you know. They can learn that, for example, there's no reason why a psychologist should know about how much the moon weighs, but that they might be able to outline how they'd find out. You can be a scientist without being a genius who knows everything! That can be a liberating realisation for students.
- 4. Help us reward participation. A student in each zone will win an award for best question or conversation. Some scientists make a note of students who've participated well after every chat. Others reflect on the questions that really got them thinking, or a student that has commented a lot. It's up to you, but the more detail you provide the more feedback we can give and they really appreciate it!

We organisers appreciate the feedback too, so don't forget to fill in the feedback forms available at imascientist.org.au/feedback so we can continue to improve the event

5. Get your boss onside. We'd strongly advise you to tell your boss you are taking part in the event, and get their support, if you can. Several scientists said that this made a big difference. Questions on the website can be answered during the evening, but live chats have to be during the school day so during working hours.

Also, many scientists found themselves discussing some of the more intriguing questions with colleagues. This can be one of the most stimulating things about the event. Taking part in I'm a Scientist develops your communication skills.

*"I was actually complimented by my colleagues who thought I explained climate change in a much better way than I do when explaining it at work."* 

#### -David Post, CSIRO

6. Get your organisation onside. It's not just your boss that's important, your organisation matters too. Supporting a scientist guarantees a place in the program (selection is competitive!) and provides opportunities to promote courses, careers and projects to secondary school students and their communities.

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## 4. Advice on engagement

#### 1. Be yourself

Our best advice is to be yourself in your answers. You don't need to pretend to like *One Direction* or *Ellie Goulding* for young people to relate to you, being genuine is what's important.

#### 2. Be friendly

When we asked scientists what they would do differently if they did it again, one answer that summed up many was, 'I would be less formal and more personal from the start'.

#### 3. Simplify your language

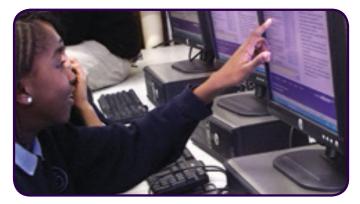
Even if you think you are using simple language, scientists work in an environment where there is a lot of jargon, and technical words are often used when simpler ones are available. It's easy not to realise when your language may be going over the heads of most 13 year olds.

Don't 'identify', 'find'. Don't 'utilize', 'use'. Don't 'investigate', 'look at'.

#### 4. Talk to us!

Please communicate with other scientists and the moderation team, as well as the students. We've occasionally had scientists finish the event and say in feedback that they were having technical problems, or were worried about particular questions, or similar. We'd much rather hear at the time so we can do something about it.

We use Twitter as a way to interact with scientists taking part in I'm a Scientist, amongst other things. It's a great way to communicate how the event's going, learn more about you, the scientists taking part, and ultimately keep in touch with scientists after the event. We strongly encourage you to get on board: get an account, follow us at @IASAus (<u>http://twitter.com/IASAus</u>) and keep an eye on tweets marked #IASAus at <u>http://twitter.com/#search?q=IASAus</u>



Timetable	
19 - 23 Aug	<b>Site online.</b> Students begin interacting with the site. Have your profile completed by 16th August (or you will be disadvantaged from the start).
26 - 30 Aug	Week 1: Getting to know you. You answer student questions online & in chats.
2 - 6 Sept	<b>Week 2: Evictions.</b> Students start to vote for their favourite scientist (they can still ask questions and chat). Evictions happen every day from Tuesday and the winner is announced on Friday.
9 - 13 Sept	Feedback. Evaluations and wrap up

# 5. Rationale behind the event

Your participation in I'm a Scientist matters.

The speed and scale of recent technological change and the big issues facing society have raised the importance of scientific literacy in public decision-making. A consensus has emerged that communication has to move from 'teaching the public more science' to becoming a two-way process.

It is also apparent that in order for citizens to meaningfully participate in scientific dialogue and make informed life decisions, an understanding of the scientific process is as crucial as understanding specific science facts. This could include understanding how peer review works, how hypotheses are tested and how scientific consensus emerges.

The changing perception of science in society has been reflected in the Australian National Science Curriculum with its emphasis on 'Science as a Human Endeavour". This topic covers how science knowledge can be changed with new evidence, explores ethical questions and looks at how research is shaped by social needs. It also acknowledges the contribution of many types of different people in science, and examines different careers paths so that students may start to picture themselves as scientists.



Government of South Australia

Department for Manufacturing, Innovation, Trade, Resources and Energy This event will feature three zones including a general Nitrogen Zone with scientists from a diverse range of scientific backgrounds. The Nitrogen is supported by the Department for Manufacturing, Innovation, Trade, Resources and Energy (DMITRE) (SA).

We are also excited to welcome the Waite Research Institute as a Scientist Sponsor of David Jeffery in our Nitrogen Zone.

Waite Research Institute



I'm a Scientist, Get me out of Here! Australia provides a way for teachers to meet the needs of their students and the curriculum as well as providing you with an avenue to engage in dialogue with a broader audience. Both Bridge8 and Gallomanor bring decades of experience in science education, science communication and other forms of youth engagement work.

See you online!

Contact If you need any help please email <u>admin@imascientist.org.au</u> or call 0410 442 629.

For further information please visit: <u>www.imascientist.org.au/scientists</u>



