Soapbox Science

www.soapboxscience.org





SOAPBOX SCIENCE



Soapbox Science was founded as a public outreach platform for promoting women scientists and their research. Now in its seventh year, Soapbox Science takes female scientists out of the lab and onto the streets, to talk to the passing, unsuspecting public about science. Using a format inspired by Hyde Park's famous Speaker's Corner in London, the researchers stand on soapboxes (up-turned crates), while enthralling children and adults alike with their latest scientific discoveries.

In this exclusive interview, we have had the pleasure of speaking with the two co-founders of Soapbox Science – Dr Seirian Sumner of University College London and Dr Nathalie Pettorelli of the Institute of Zoology. Here, the pair tell us about Soapbox Science's work in bringing science to the public, promoting women scientists, and encouraging girls to pursue STEM careers.



Alba Maiques-Diaz at Manchester in 2016. CREDIT: Joanne Pennock

'By giving female scientists a (literal) pedestal from which to talk about their science, they enjoy the exposure, media interest and confidence boost that we hope can make a real difference to their careers'



To begin, please tell us a bit about Soapbox Science's mission.

Nathalie: Our initiative has two missions. Firstly, Soapbox Science aims to bring science to the public who would not otherwise seek out, or have the inclination or opportunity, to meet a scientist and learn first-hand about their work. Our format embraces the idea of widening participation in science: influencing not only children, but also families and peers, such that they are encouraged and supported to go on to be a scientist. We particularly hope that our efforts will help generate a new generation of young women who have the courage, confidence and passion to follow science as a career, with no prejudice or bias in their way.

Secondly, it aims to raise the profile of our speakers and contribute to furthering their careers in STEM. It's early days yet, but we seem to be hitting our goal! Our speakers tell us how taking part in Soapbox has attracted invitations for committee memberships, plenary lecturers, ambassador roles, and promotions within their working environments. By giving female scientists a (literal) pedestal from which to talk about their science, they enjoy the exposure, media interest and confidence boost that we hope can make a real difference to their careers.

Both of you founded Soapbox Science back in 2010 – what gave you the idea to set up such an organisation?

Seirian: We were both sad to see our female peers disappear around us, as we progressed in our careers. As we grew up in the science community, we met fewer and fewer of our female colleagues and friends from our PhD or postdoc days, many of which we know left science altogether. At that point in time, we were lucky enough to be working in a relatively gender-balanced scientific institution (Institute of Zoology, ZSL), but we soon realised that we were in an unusual situation.

This realisation came into sharp focus when we both won L'Oreal For Women in Science Fellowships: these awards marked our achievements as early career women in science, giving us a confidence (and financial!) boost. These awards also made us wake up to the real issue of gender inequality in the science community.

We wanted to make a difference: we knew we couldn't move mountains. So, we settled for a cheap, no-frills, transportable solution that challenges the public's perceptions about gender equality issues in science and raises the profile of the female scientists we see around us.

As you mention, there are still much fewer women than men in top academic positions in the UK and internationally – what do you believe are the main reasons behind this?



Seirian: A lot of work has been done on exploring reasons for the lack of women in top academic positions. Part of the answer lies in the steadily declining number of women as you progress the career ladder, and part in the gender differences in the likelihood of being promoted. Research has started to focus on factors pushing women out of STEM, and it turns out that many of these factors (namely implicit bias, stereotypes and stereotypes threat) are also the ones driving gender bias in promotions. Ultimately, it's all about perceptions of women's roles and women's skills in the family unit, at work, and in society, and how these perceptions influence external decisions related to professional progression and individual women's confidence. As long as female scientists will be perceived as less competent, less hireable and less reliable than their male counterparts, we will struggle to achieve true parity in STEM.

Does Soapbox Science also engage with policy makers in the hope of increasing gender equality in the STEM workforce?

Nathalie: We are definitively working towards this goal. Last year, we were invited to a UK governmental select committee to provide evidence on science communication. The agenda was not explicitly about Gender, however, ensuring that the genders are equally represented and that the material is presented in a way that is equally appealing to both sexes is necessary when trying to improve the public's understanding of science, and the public's relationships with science and scientists. Our initiative was also mentioned in various governmental

reports on gender bias in STEM, and we regularly interact with learned societies and equality charters to share our experience and expertise with them.

Tell us about some of the events that you have planned for 2017, and what you are most excited about.

Nathalie: 2017 is our biggest year so far, with events taking place in Belfast, Newcastle, London, Exeter, Brighton, Hull, Milton-Keynes, Edinburgh, Bristol, Cardiff, Manchester and Swansea. This year we are also launching our Art and Science Soapbox events, which will combine artistic skills and scientific work to explore new ways of enthusing the general public with science. We will have four Art and Science events in the UK this year, including Leeds, London, Lincoln and Oxford. Finally, last year saw our first international event in Brisbane, Australia; this year, we've got new events springing up in Canada, Germany, Italy and Ireland! We are super excited to see Soapbox becoming more and more international every year, but we are similarly really excited to launch our new Art & Science events, which will help demystify the idea that Science and Arts are mutually exclusive. This year, it's difficult for us to know what we are the most excited about!

Finally, what do you see as the biggest challenges facing Soapbox Science's work over the next few years?

Seirian: Our biggest challenge is knowing how we will keep Soapbox going if and when the funding runs out. We've been blown away by the enthusiasm for Soapbox over the last

few years. Each new event is born from the motivation and drive of the local organiser, often a previous speaker, who approached us asking if we would support their event. Running a Soapbox event is a lot of work, and we've learned through trial and error what works and what doesn't. We have worked hard to ensure that each Soapbox event is of the very best quality. We encourage all events to conform to our tried and tested format, with appropriate use of branding and sponsor accreditation. So, we put a lot of effort into building capacity at each new location, such that they are equipped to run the best events year after year. To do this, we provide local organisers and speakers with training (in person or online); we make resources including how-to packs available to speakers, local organisers and volunteers; we organise the call for speakers and volunteers centrally, promote all events, speakers and team on our website, advertise each event and speaker via traditional and social media channels; we edit and host blogs written by speakers and local organisers; we produce umbrella press releases for local organisers to adapt; we provide a standardised evaluation procedure and produce event-specific evaluation reports... At the same time, we are full time academics/research scientists, and we are both mums!

We are very lucky at the moment to have secured funding from the Science Technology Research Council (STFC), which pays the salary for a full-time administrator, Isla Watton. She is our life line! Our constant worry is that one day we won't have this support. When Soapbox was just 1–4 events a year, the two of us could just about manage. But the appetite for the expansion of Soapbox, nationally and globally is overwhelming, and we cannot sustain this without administrative help. So, our biggest challenge for the future? Securing long term funding and financial security!

