Communication and outreach activities within the CLF

Helen Towrie

Central Laser Facility, STFC Rutherford Appleton Laboratory, Harwell Campus, Didcot, UK Email address: helen.towrie@stfc.ac.uk Website: www.clf.stfc.ac.uk Twitter: @CLF_STFC

The CLF's Communication Strategies

The role of the CLF's Impact and Engagement team is to promote CLF science and technology to some of our key audiences and share what we are capable of, to engage with our community and recruit new people. Different audiences require different types of interaction, and we have worked to develop and harness the tools needed to communicate with each effectively.

We are responsible for internal and external engagement functions, including: the CLF website and twitter for our general science audience, staff and user community; talks, tours and activities for our general and next gen audiences; and a fortnightly newsletter for staff.

In 2020/21, the COVID-19 pandemic restricted almost all of our usual operations. Despite this, the team achieved substantial communications projects, campaigns and successes, as summarised below.

Social Media:

Social media continues to be a key part of how we share our stories directly with users and the public. The CLF twitter, which was created in 2018, now has 850 followers and we regularly use it to interact with Pls, users and staff.

We are pleased to see that the amount of new followers we gained almost doubled this year compared to last year, as our efforts have been focused on growing a larger following.

2019/20 587 (187 more than the year before)
2020/21 850 (263 more than the year before)

This year, the Impact and Engagement team has held monthly meetings to analyse the CLF twitter's growth, looking in particular at what tweets worked, what did not, and who is following or interacting with us. This analysis has proved invaluable, as it has allowed us to make informed decisions to help grow the twitter's followers.



One of our larger campaigns was to celebrate the Octopus Laser Facility's 10 year anniversary in late 2020. With lockdowns preventing in-person events, we relied on social media more than ever to share milestones like this. With the help of Octopus staff, we published a series of tweets highlighting some of Octopus' many successes over the years. To help boost this campaign, we also created an illustration to show Octopus' diverse set of labs and applications.

Pictured here is Phil Rice with the Ventilator

Another campaign that we had the privilege of reporting on during lockdown was the Ventilator Challenge. Engineers at the CLF along with other departments at RAL helped lead the way towards the production of new ventilators, easing the national ventilator shortage. Applying their expertise in this way was a huge act of selflessness, and CLF engineer Phil Rice ended up on BBC South Today!

We continue to keep in close contact with the STFC twitter and Instagram team, through whom we can reach a more general public audience as opposed to the general scientific audience that the CLF twitter aims to attract. To aid these discussions and others, a CLF representative attends a monthly Social Media meeting where all the departments can communicate new ideas, campaigns and best practices.



The CLF website: Summary Financial Year: 2020/21



As we expected, due to the COVID-19 pandemic, we have had fewer people visiting our website (32,000 in 2019/20). This could be due to a number of prohibiting factors, such as lockdowns halting experiments and users (our main audience) being furloughed.

It is, however, good to see that we have had more people coming from twitter (935 in 2019/20). This suggests that the growth of our twitter is also leading more people to our website through this channel.

Attracting a wider audience

And maintaining all avenues of communication

This year has stifled our opportunities to connect faceto-face, but it has given us an opportunity to embark on innovative new ways to engage with virtual audiences.

A small, but not unimportant, contribution from the CLF happened right at the beginning of lockdowns, when it became clear that children from underserved communities may not have the same computer access as others. Through the STFC's Wonder Initiative, the CLF Impact and Engagement team contributed science-focused illustrations to colour in for "Wonder Packs", which were posted physically to underserved communities in the most socioeconomically-deprived areas of the UK.

We also debuted our first CLF "story", based on the creation of a Supernova using the Vulcan Laser. Designed for young audiences, this story was first told at RAL Stargazing, and has been retold multiple times since by popular demand. The story was also featured amongst other talks at a virtual event organised by the CLF to celebrate International Day of Light.



International Day of Light From the feedback (about a quarter of people completed the feedback): 30% of the audience were 8-14 year olds people joined the event were from Wonder audiences (in the 40% most deprived areas of the country, by the indices of multiple deprivation) 4.9/5 Average satisfaction rating Comments: "This is the first of your events that I have connected to and, as an amateur astronomer who has taken

"This is the first of your events that I have connected to and, as an amateur astronomer who has taken images of the residue from Black Hole formation, I was especially intrigued with your simulation just down the road from where I live!!"

"Even with the technical problems it was a well thought and delivered webinar, all speakers explained everything In a way we all could understand."

"Excellent thanks - I learnt lots of things about lasers that I didn't know I didn't know!"

"Fantastic inspiring range speakers and wonderful science. Speakers were able to respond to children's questions clearly and with ease."

"I loved being able to join from the U.S. My kids attend school online on Fridays and they had just finished their lesson so this was a great thing for them to watch. They were both interested! Thanks for inviting us!"

Public Engagement Overview:

Overall, the CLF has taken part in multiple events, despite lockdowns. These events have been well attended and we have engaged with a key audience – 8-14 year olds. This is the age where children are starting to think about their future careers, and is also around the age when many young girls unfortunately decide that science and engineering is not for them. The headline stats for 2020/21 Public Engagement relating to the CLF include:

- Total people engaged via public engagement programme: 1156, of which:
 - 1063 public (family audiences, so estimate ~30% were age 8-14, a key target)
 - 17 secondary school (teachers and students) at school events
 - 9 confirmed work experience placements placements did not go ahead, but students attended a series of webinars instead
- This was at 9 events, plus work experience students placed with CLF
- 9 CLF staff volunteered at least once (note that some staff volunteered at non-CLF events)

COVID-19 Response:

As we all know, 2020/21 was hit by worldwide lockdowns due to the novel virus COVID-19. From day one, the Impact and Engagement team worked to keep the website up to date with guidelines for users and other key information.

As no tours or face-to-face events have been possible, we have focused our efforts on connecting with the public digitally, which has included creating a story about an experiment, having people live broadcast a tour of their labs, and even 'hosting' a full virtual event to celebrate International Day of Light.

Our dedicated CLF in.brief that began during lockdown blossomed into a fantastic way to share light-hearted news and updates to all CLF staff. This has not only helped us share important updates and information with staff, but it has also enabled us to maintain the community feel and the personal connections between staff, despite the majority of staff working remotely during this time.



