

Communication and outreach activities within the CLF

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CLF's Communication Strategies

The CLF recognises the importance of communication with our current and potential users, STFC, UKRI and other funders, new industry partners, the wider scientific community, and the general public. Outreach activities raise the profile of our world-class research and may inspire the next generation, while communication activities help to publicise the high-impact and inspiring science that the CLF delivers.

Over the past year, the CLF has embarked on several exciting projects to help achieve its strategy of finding new and innovative ways to communicate what we do. This has involved working directly with STFC communications team members, hosting and involving ourselves in events that increase our visibility, and exploring new media as a vessel for communication.

Most notably in 2019/2020, we have helped with public engagement and communication surrounding our new science lab, the Extreme Photonics Applications Centre (EPAC), the details of which are outlined in the EPAC section of this article.

Exploiting social media

Social media continues to play a key role in how we share our stories directly with users and the public. The CLF Twitter, which was created in 2018, now has 587 followers (187 more than last year) and we regularly use it to interact with Principal Investigators, users and staff.

We continue to keep in close contact with the STFC Twitter and Instagram team, where we can reach a more general public audience as opposed to the more scientific audience that the CLF Twitter aims to

attract. More recently, we have started looking into LinkedIn, which could allow us to reach an audience of professionals who may be looking to work at a place like the CLF. To aid these discussions and others, a CLF representative attends a monthly Social Media meeting where all the departments communicate new ideas, campaigns and best practices.

Over the past 12 months, the CLF website has attracted over 32,000 users, with almost 100,000 unique page views. Excluding approximately 3,000 users based at Harwell, this corresponds to 80 external users per day. This is 9,000 more users than last year and 24 more users a day. Out of the 32,000 users, 935 came from Twitter, 257 from Facebook, 9 from YouTube, 83 from LinkedIn and 5 from Instagram.

In the previous year, we had just under 23,000 users, with almost 102,000 unique page views. Excluding approximately 2,500 users based at Harwell, this corresponded to 56 external users per day. Out of the 23,000 users, 693 came from Twitter, 214 from Facebook, 53 from YouTube and 20 from LinkedIn.



Established YouTuber Primrose Kitten on her visit to the CLF.

We are pleased to see that our daily users are up, and that our efforts on Twitter are gaining tangible traction. Our speculation as to why there were so many total users in 2019/2020, but slightly fewer unique page views than in 2018/2019, is that perhaps more people may have come to the website to look only at the new, single pages related to EPAC and the UK XFEL. This supposition is backed up by the fact that there were 2,216 unique views of the UK XFEL Science Case page, and 1,504 of the EPAC introduction page – a high number of views for single pages on the CLF website.

Attracting a wider audience

We have continued to explore the idea of working with established YouTubers to get our science out to new audiences. In January 2020, we invited Primrose Kitten (Jen) to visit the CLF. Jen is a YouTuber with 144k subscribers who are mostly GCSE-student age. This is the age at which children are deciding on what they would like their future career to be, and is often the pivotal moment for young girls to decide for or against science as their future career. As we know, the decision is unfortunately more often against.

During Jen's visit in January, she interviewed and had lab tours from three female scientists and technicians who shared their interesting and relatable journeys. The videos she created were designed to show girls that labs are not intimidating places, and that you can carve out a life very happily at a place like the CLF. The videos, although gaining a lower view count than most of her other videos (which is unsurprising due to the fact that most other videos are about GCSE revision, a priority for most viewers), generated upliftingly positive comments: "Wow. That is some professional work you guys are doing", "She's clearly extremely intelligent and very passionate. Great interview!!", "Omg she came for a lecture in our school."



Primrose Kitten (left) visit with Simon Clark and Ceri Brenner.



Octopus still from the professional videographer footage.

Additionally, our work with videographer Raquel Taylor continued; a highlight being a big update to our B roll footage. This was conducted by an external professional videographer and organised by Raquel, and we are very thankful to the staff who put up with the disruption caused by this video shoot. After visiting in March 2019, we have now received the footage and stills, which have been used throughout the year for social media, the CLF website, various presentations, and by RAL and STFC. We expect to continue to be able to use this fantastic footage for years to come for the benefit of the labs.

Finally, in March 2019, one of our target fabricators, Donna Wyatt, went on BBC Radio Oxford to talk about her job. We were very excited by this opportunity, because it not only showed off the incredible work Donna can and does do, but also her relatable background story showed young people that a science degree and PhD is not the only way to get into science. BBC Radio Oxford had 84,000 listeners per week from July 2019 to December 2019, many of whom would be people the CLF could never normally reach.



Ultra still from the professional videographer footage.



DiPOLE still from the professional videographer footage.

Organising user events

A highlight of 2019 was the Event for UNESCO's International Day of Light. Organised by Prof Bob Bingham, talks were given by CLF director Prof John Collier, CLF Impact and Engagement Officer Helen Towrie and closing with Prof Sir Jim Hough (University of Glasgow), whose research focusses on gravitational wave detection. Opening remarks were by a representative of UNESCO. The event not only aimed to show the science surrounding light, but also light from an artistic perspective, and how the two may seem like opposite ends of a scale but are actually closely intertwined.

This year, the annual Target Area Operator (TAO) training weeks ran for their 20th year! Organised by Dr David Carroll, the latest session took place in the summer of 2019. To celebrate the 20th Anniversary, the Communications Team shared the news on the CLF Twitter.



TAO training weeks celebrated their 20th year in 2019.

Given that many laser and plasma scientists from the UK and around the world will be users of our facility during their careers, we conduct training weeks on various techniques and safety aspects to ensure experiments will be as successful as possible. Although these courses are tailored to meet the needs of the CLF's High Power Laser (HPL) facilities, they help to develop skills and knowledge that are applicable to experiments at other laser facilities, and also provide an opportunity for the attending scientists to network with each other.

In December 2019, the CLF once again ran the annual HPL Christmas Conference. This was a brilliant opportunity for the high power laser community to come together to share new ideas, and to hear talks from scientists both senior and at the beginning of their careers. One of the highlights of the three-day conference is always the PhD and University student poster competition. This event gives young scientists with budding careers a chance to share their ideas, be involved in new discussions, and make valuable connections.

This year, CLF Director Prof John Collier opened the conference with exciting announcements about EPAC, EPIC and a celebration of two decades of cooperation with 33 European laser infrastructures from 16 countries.



International Day of Light 2019.

Maintaining all avenues of communication

While we are always looking for new ways to engage the public, we also work to maintain our usual avenues of communication. This includes tours, newsletters, events, and articles.

Over the past 12 months, 25 articles have been shared on the CLF news section of the website, averaging around two per month. These articles have covered a wide range of topics, from recent papers, to events, to staff achievements.

We also continue to give tours in collaboration with the efforts of the RAL Public Engagement Team. Here are some headline stats from 2019/2020 for the CLF:

- 11 events held, plus work experience students placed in the CLF, and tours for work experience students
- Total people engaged via public engagement programme: 1247, of which:
 - 1063 public (family audiences, so estimate ~30% were age 8-14, a key target)
 - 175 secondary school (teachers and students) at school events and as work experience students
 - 9 teachers at teacher-training events
- 17 CLF staff volunteered at least once

The biggest events this year were Stargazing and Black Panther. The CLF once again hosted the RAL Stargazing event in its Visitor Centre, as it is a great indoor space for families with inquisitive children.

Feedback collected by the RAL Public Engagement Team showed that 42% of the audience at Stargazing was 'new-to-RAL'.

The Black Panther event was attended by CLF Impact and Engagement Officer Helen Towrie and Communications student Vynn Chander, where they showed off RAL's interactive displays and demos. The event was held in a part of the county that is considered an area of higher deprivation.

Finally, just as this financial year drew to a close, we made a major change to our e-newsletter in response to the lockdown brought on by the COVID-19 pandemic and lockdown. Instead of a bi-monthly CLF in.brief, we shared a weekly newsletter that has been short, punchy and filled with personal touches to help staff feel connected to each other and the facility. New features have included a Director's Message – a message from John Collier about current happenings – and a 'Sweet of the Week' – a play on our 'Tweet of the Week' – in which we have featured a cute staff baby or pet with a short caption. We hope this newsletter has added a light-hearted and perhaps comical touch to the weekly updates during the 'new normal'.

EPAC

This year, there has been a particular effort to create content ready for the announcement and Ground Breaking Ceremony of the Extreme Photonics Applications Centre (EPAC). For the CLF Communications Team, this project required both careful foreplanning and spontaneity when needed.

Recruitment: Recruitment efforts for EPAC have involved creating a bespoke leaflet to engage new recruits, designing a collection of images, gifs and videos for social media and the website, supporting HR with EPAC recruitment drives, and constructing a set of webpages with sections designed to appeal to a general audience, as well as more knowledgeable science and industry readers.

General Support: One of the first jobs our team needed to do was to create 'elevator pitches' for EPAC – these are short, punchy captions to summarise EPAC.

Since their creation, these have been used countless times to describe EPAC in presentations, on social media and on the website. We also produced multiple EPAC posters aimed at different audiences. We provided a poster for the local community evening, an event in Parliament, and for an STFC staff drop-in session co-ordinated with the construction company, Mace.

The most important moment for EPAC (and arguably the highlight of the year) was the Ground Breaking Ceremony in February. Nobel Prize winner Prof Donna Strickland and the Science Minister at the time Chris Skidmore were our guests for the day. The CLF Communications Team was present throughout and ready to help if needed, and in the meantime we took photos and live tweeted. Post event, we shared a summary of the EPAC Ground Breaking Ceremony on the CLF website.

This event was extremely exciting for the CLF for many reasons. Not only were we able to formally announce

the Extreme Photonics Applications Centre, but we were able to do it with two important and influential people. During her visit, Prof Donna Strickland also attended a RAL WiSTEM meeting, which meant a lot as she is such an influential woman in STEM. She then finished off the day with a fantastic talk on the invention that advanced lasers worldwide and won her a Nobel Prize alongside Prof Gérard Mourou.

CLF Comms COVID-19 Response

As we all know, the end of this financial year marked the beginning of the worldwide lockdowns due to the novel virus COVID-19. In the early days, the CLF Communications Team worked with senior staff to make sure that key information was shared with the staff and users who needed it. This included a rapid call to access from Octopus, inviting users to utilise the imaging facility in the fight against COVID, and updating the website to reflect site shut-downs and new policies. As the pandemic continues, we plan to prioritise getting information of this nature out to our audiences quickly and efficiently. All the Communications Team have been able to work from home efficiently. With the suspension of tours and face-to-face events, we have focussed our efforts on connecting with the public digitally, and continue to keep up a dialogue with RAL Public Engagement as they assess what types of digital interactions would be effective in lieu of tours.

As mentioned earlier in this article, we have started a weekly CLF in.brief, replacing our old bi-monthly in.brief. This e-newsletter intends to keep staff up to date with happenings and inject a light-hearted feel to the end of the week.



Extreme Photonics Applications Centre: Ground Breaking Ceremony.