



The ESO Science Communication Internship

Impact and lessons learnt

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Abstract. The ESO Science Communication Internship has been successfully running for almost 20 years. Interns play a very active role in the entire lifecycle of ESO's news production, from evaluating papers to drafting press releases, interviewing scientists, brainstorming about audiovisual content, and engaging with our online audiences. They also get to hone their writing and editing skills in various formats and styles, from releases to long-form blog posts and video scripts. As a result, over their internship they build a very complete and diverse portfolio that prepares them well for a wide variety of jobs in science communication. Implementing and running such a programme does pose some challenges. In this paper we discuss the structure of the internship, showcase the subsequent career paths of some of our past interns, and discuss best practices for those who wish to implement similar programmes at their institutions.

1. Introduction

Training the next generation of science communicators is not an easy task. The landscape of science communication is changing rapidly, with audiences now more fragmented than ever and traditional media outlets coexisting and even competing with social media platforms (Jamison, 2022).

The term 'science communicator' has thus evolved accordingly, and is now a rather broad umbrella that encompasses vastly different jobs, from press officer to freelance writer, social media manager or even online content creator. A successful science communication internship must therefore provide participants with a comprehensive set of skills that pre-

pares them for the breadth of challenges awaiting them. The ESO Science Communication internship started almost 20 years ago; it was originally called the ESO Science Journalism Internship. During that period we have trained about 70 interns and learned many lessons along the way, fine-tuning the programme accordingly. In the following sections we describe the layout of the internship and share best practices for those communication professionals that may want build on this experience.

2. ESO's Department of Communication

To better understand the role and tasks of our Science Communication interns we must

first briefly outline the structure of ESO's Department of Communication. Departments at other institutions can use this as a benchmark to assess what aspects of ESO's internship can be adapted to their own needs, based on their resources. The department has been restructured several times — it was originally called ESO's Public Affairs Department and later ESO's education and Public Outreach Department. This paper focuses on the work on the interns in ESO's Department of Communication as is at present, not its previous incarnations.

The department currently comprises about 20 people distributed in different teams, based in Garching (Germany) and in Santiago (Chile):

- Media Relations Team, which liaises between scientists, journalists and the general public, and leads the production of press releases and other communication products related to ESO's discoveries and activities. The Media Relations team includes our Social Media Team, which develops ESO's social media strategy and manages our various channels.
- Internal Communications, handling communications within ESO.
- A team based in Chile, which interacts with the local Chilean press and develops content and activities tailored to Chilean audiences. This team also organises visits to our observing sites for the media and general public.
- Creative Team, in charge of producing audiovisual material such as astronomical images, artist's impressions and outreach videos, as well as merchandise and printed products, to mention a few.
- Webteam, which develops and maintains the public ESO websites.

Interns work primarily within the Media Relations team, under the supervision of the Media Manager and Media Officer, but they routinely interact with members of the other teams.

3. The ESO Science Communication Internship

The internship brings aspiring science communicators to ESO's headquarters in Garching. The programme provides a monthly allowance —currently 800 euros— to cover living expenses. In addition, accommodation is also provided free of charge, and we pay for a return trip from/to the interns' home destination. ESO is publicly funded via the contributions from its member states, and the funding for the Science Communication Internship comes directly from ESO's budget.

Having a funded internship programme has several advantages. First, unpaid or unfairly paid internships tend to be attractive only to people with more economic means or support networks, leaving out applicants from underprivileged backgrounds. Secondly, our science communication interns play an integral role in the daily operations of the department, as described in the subsections below. Finally, this makes our programme more competitive, helping us attract talent.

The internship lasts for 6 months, with a full-time working schedule of 40 hours per week. At any given time we normally host two interns, with their stays shifted by 1-3 months so that newer interns always overlap with more experienced ones.

Interns play a very active role in the production of a wide variety of communication products, some of which are described in the sections below.

3.1. Press releases

Press releases¹ communicate to the press and the broader public the latest scientific discoveries enabled by ESO's facilities, and they are one of the core products of the Department of Communication. When a team of scientists pitches a paper to us, our department's collective of scientists and science communicators evaluates it for both its potential public appeal and scientific relevance. Even at this early

¹ <https://www.eso.org/public/news/>
Retrieved: 2024-02-05

stage, interns actively contribute their insights, helping us shape our decision on how to proceed.

If we decide to move forward with a press release, interns write a first draft based on the scientific paper and a set of questions answered by the authors. This allows them to improve their skills in distilling complex information into an accessible story for journalists and the general public.

Once an intern has completed a first draft of the release, the other intern will edit it. The same is true for other ESO communication products: we always encourage interns to edit the texts written by their peers, as this will be an invaluable skill for them in the future.

The release text is then further edited by the Media Manager and the Media Officer, at which stage it can still suffer significant changes. This usually involves live editing sessions with the interns, where they can better understand how to write a press release and provide valuable input on the draft. For instance, they learn how to follow the so-called inverted pyramid structure, placing the most important information in the opening paragraph and then slowly building up the level of complexity and detail. This structure is widely used by journalists to ensure that readers will always understand a story regardless of where they leave it, and it is thus a valuable writing technique for our communication interns.

Interns also join the discussions with our creative team where we brainstorm about how to illustrate a press release, thus learning how text and audiovisual material can complement each other to better tell a story.

The final text and visuals go through further checks, including by the authors themselves. Once a press release is published, the interns help us monitor its coverage in the press using dedicated media software. In particular, they summarise the most relevant media coverage in internal announcements that are then circulated within ESO. Besides feeling rewarded upon seeing media outlets reporting on releases they have worked on, this is also another important skill that will serve them later on.

3.2. Video scripts

Our press releases are usually accompanied by one-minute-long videos² conveying the gist of the corresponding scientific result. Interns are tasked with drafting the scripts of these videos, which are then further edited by other members of the team.

Here interns hone skills very different from those required to write a press release, namely, condensing a very complex story into no more than four or five sentences, aimed at an audience that prefers a visual format over a written text. This often proves to be as challenging as writing the release itself.

These short videos lack a narrator, but we have recently started producing a new series of hosted videos called ‘Chasing Starlight’³. These are longer videos, 5 to 10 minutes long, explaining different astronomical concepts based on ESO’s results. Interns can propose topics to be featured in upcoming videos, and they are in charge of researching most episodes and drafting a script that our host then builds upon.

3.3. ESO blog posts

The ESO blog⁴ features long-form articles with behind-the-scenes stories about ESO’s people, science and technology. As opposed to press releases, which follow a somewhat strict format dictated by their primary audience—the press—, in the ESO blog interns get to explore and develop a more personal and creative writing style. The ESO blog has in fact evolved quite significantly in this sense in the last few years, going from a relatively simple Q&A format to featuring highly storied content, thus giving interns more freedom to express themselves creatively.

² https://www.youtube.com/playlist?list=PLSZ2Jv0bEZHw186EuftZr_vsoedqP0Kmg
Retrieved: 2024-02-05

³ <https://www.youtube.com/playlist?list=PLSZ2Jv0bEZHvSx0Qdx-tY96Qx2-1AHAN>
Retrieved: 2024-02-05

⁴ <https://www.eso.org/public/blog/>
Retrieved: 2024-02-05

The ESO blog explores complex stories in more detail than what other formats allow, and this often entails interviewing different stakeholders —yet another skill that interns get to develop.

3.4. Pictures of the Week

Every Monday we publish a new Picture of the Week⁵. Some of these images display one of our observing sites in Chile; others feature an astronomical object, often in the context of a recent scientific discovery.

Interns draft extended captions for these pictures, explaining in just two or three paragraphs what the images show. Much like the ESO blog, Pictures of the Week have a more free-form style than press releases, which interns often exploit creatively.

3.5. Social media monitoring

Interns help us with the daily monitoring of our different social media channels. Besides allowing us to respond quickly to questions by our followers, this also gives them a first-hand view of the different audiences that interact with an institutional account like ours.

3.6. Intern-led products

Besides contributing to ESO's regular communication products, interns are also encouraged to propose and lead their own activities, thus getting hands-on experience in seeing projects all the way through completion.

As an example in 2022 one of our interns led a full campaign to celebrate the International Day of Women and Girls in Science which included, among other things,

⁵ <https://www.eso.org/public/images/potw/> Retrieved: 2024-02-05

extensive interviews⁶⁷ with ESO staff in our blog.

4. Impact

After finishing their stay with us, our interns go on to take a variety of communication jobs. Some became press officers at the Square Kilometre Array, the European Geosciences Union or the medical journal *The Lancet*; others work as science writers at institutions like CERN, or as social media editors at the European Space Agency; several others work as freelance writers. Some even returned to ESO: the current Head of the Department of Communication and the Media Manager were both previous ESO interns. This further highlights the value of such an internship programme, which can bring talented and already-trained hires into the organisation later on.

Many of our interns are in the process of completing their Master's or PhD degrees, and some choose to remain in academia after finishing their internship. We also consider these as successful examples, as the internship is meant to provide participants with a solid foundation in science communication but without completely conditioning their subsequent career path.

We recently interviewed some of our past interns, who have since then followed different professional trajectories both within and outside of the world of science communication. In this ESO blog post⁸ they shared with us their views on the internship and how it helped them in their professional journey. One of them, currently a press officer, mentioned she was relieved to learn that the process to evaluate papers in her new job was similar to the way she learnt to do it at ESO. Another one, who continued her academic path towards a PhD in as-

⁶ <https://www.eso.org/public/blog/celebrating-women-in-science-day-2022/> Retrieved: 2024-02-05

⁷ <https://www.eso.org/public/blog/celebrating-women-in-science-day-2022-2/> Retrieved: 2024-02-05

⁸ <https://www.eso.org/public/blog/communicating-science-at-eso/> Retrieved: 2024-02-05

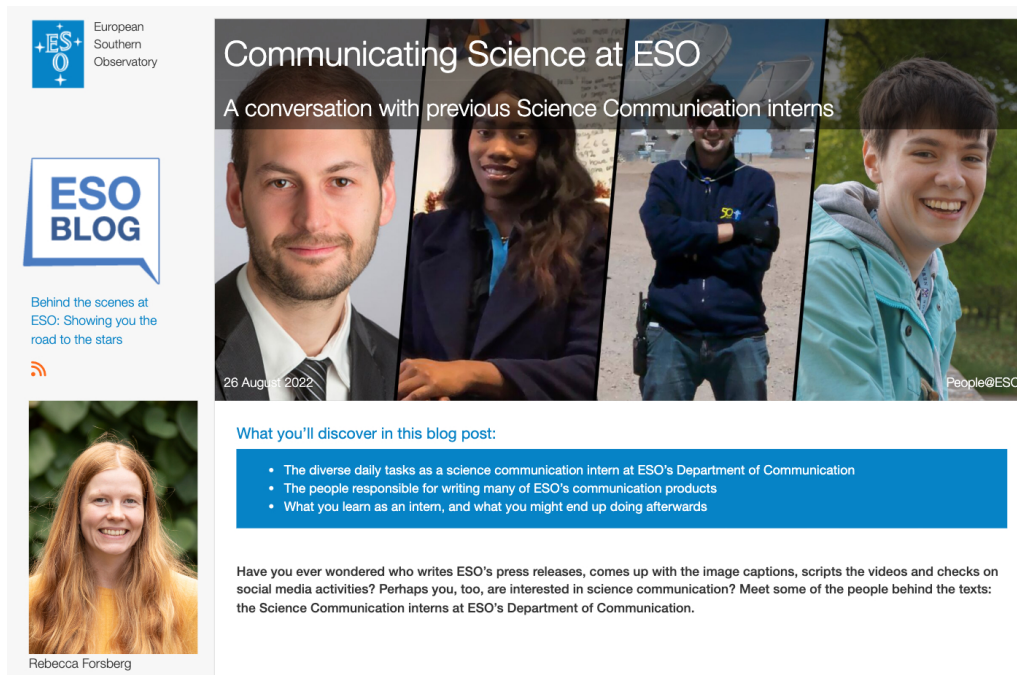


Fig. 1. An article in the ESO blog describing the experiences of four past ESO Science Communication interns.

tronomy, became more independent as an intern, improving her writing and time management. And they all benefited from the lively scientific atmosphere at ESO.

5. Conclusions and lessons learnt

After having run our Science Communication internship for almost two decades we have learnt and implemented several valuable lessons:

1. The optimal duration of the internship is about 6 months. Given the wide variety of communication products that our interns participate in, a shorter period is usually not long enough to properly train them. On the other hand, after 6 months interns have already seen in detail the full lifecycle of all our products.
2. Have interns overlap by a few months, so that the more senior intern can help the newer one. In addition to the support and guidance provided by their supervisors, we
3. Mix interns with astronomical and non-astronomical backgrounds. While it can be tempting to mostly hire applicants with formal training in astronomy, in our experience those who come from other fields often bring in fresh ideas and writing styles. We welcome this diversity, and whenever possible we try to pair these interns with those that do have an astronomy degree, so that their skills and backgrounds complement each other.
4. Gather interns' feedback shortly after the beginning of their stay, and then again towards the end. Has the programme met their expectations? Is their workload adequate? Do they prefer a different supervision style? Over the years, this has resulted in several changes in the way interns work, including:

have found this mutual training between interns to be highly effective.

- Relocating interns to another office to allow for closer interactions with other members of the Department.
 - Encouraging interns to do more virtual interviews (as opposed to email) when writing blog posts, to allow for a closer and more dynamic interaction between interns and scientists.
 - Have interns evaluate papers pitched to us, so that they are involved in the process from the very beginning.
 - Introducing the one-writer-one-editor scheme where interns edit each other's drafts, thus developing their editing skills.
 - Having two weekly meetings between the interns and their supervisors instead of just one.
5. Document all relevant procedures. Over the years we have developed a living document that compiles useful information not only about our different workflows, but also practical tips about working at ESO and living in Germany. This helps enormously during the induction of new interns.
 6. Include interns in the science and social life of your institution. Interns at ESO are encouraged to attend (and give) talks, which gives them a more complete view of ESO's activities. They also regularly participate in social activities, especially together with students and postdocs.

Such an internship programme would not be possible without a well-structured mentoring strategy. Interns work under the direct supervision of the Media Manager, with additional support from the Media Officer. As mentioned above, we conduct two weekly meet-

ings between the interns and their supervisors to help them prioritise their tasks, check on their progress, and provide them with the resources they need. Given the integral part that interns play in the activities of the Department of Communication, the entire group benefits from this investment of mentoring time.

The department also benefits from having a diverse set of interns, who bring unique perspectives and experiences. Diversity operates along different axes, each with its own challenges and possible solutions. As we mentioned above, the fact that the internship is funded contributes to level the playing field in terms of economic background. Given the nature of this position, interns are required to have a very good command of English, which may sometimes favour native speakers or applicants who have had easier access to English education. While we cannot provide English tutoring during the short duration of the internship, we do try to support non-native speakers by pairing them with a more proficient English speaker, as well as tailoring the way we edit their texts. We use a similar pairing strategy to mix interns with and without an astronomy background whenever possible.

While we recognise that different communication departments have different staffing and funding resources, we nevertheless hope that these best practices are useful for other communication professionals that may want to establish similar training programs at their institutions.

References

- Jamison, H. 2022, *The Changing Role of Science Press Officers*