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MCAA
MARIE CURIE ALUMNI ASSOCIATION

Marie Curie Alumni Association

Newsletter

Science Communication: Making Research Accessible

Guest-edited by Srishti Goyal *and* Joana Magalhães

Image by MidJourney, prompt Fabrizio Martina

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Maria Romano


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Dear MCAA Members,

As we approach the end of the year, let us reflect on our shared achievements and look forward to the milestones ahead. With this letter, we wish to bring together updates that highlight the strength, growth, and dynamism of our global community.

This Special Issue is dedicated to science communication, offering considerations, best practices, and personal insights from our members. Sharing knowledge with broader audiences strengthens the relationship between science and society, building trust and fostering an open dialogue. In a rapidly changing world, researchers are continually called to adapt their communication strategies to connect with diverse communities, support informed decision-making, and inspire positive change. Among the many initiatives that support this mission, we would like to highlight the **MSCA Fellow of the Month series**, a joint initiative between the European Commission's MSCA Unit, the European Research Executive Agency (REA), and the MCAA, showcasing MSCA fellows' achievements, experiences, and societal impact every month, as well as our partnership with the Mediterranean Researchers' Night (**MEDNIGHT**), a festival that gathers Mediterranean countries together to celebrate research and engage local communities. As part of this initiative, **Science Speaks summer school on science communication** was held in Valencia on 5–6 September, co-organised by MEDNIGHT, the MCAA Communication Working Group, and the MCAA Spain–Portugal Chapter. This two-day programme provided researchers with hands-on training to strengthen their storytelling, enhance the clarity of their messages, and engage more effectively with diverse audiences.

A new era for the MCAA

In the last quarter of 2025, **we launched our new brand and website**, a momentous occasion we recognise as the beginning of a new era for our Association. On behalf of the entire Board, we are proud to celebrate this milestone, one that reflects our Association's growth and vision for the future, as encapsulated in the "Bridging minds, building futures" motto. We invite you to explore the new website and make use of its enhanced features, designed to support our members inclusively, strengthen our community, and increase our visibility.

As part of this broader transformation, the MCAA Newsletter will also evolve, transitioning to a subscription-based format distributed directly via email. Starting next year, the new format of the **MCAA Newsletter** will offer a combination of timely updates from across the MCAA and in-depth articles curated by our Editorial Board, which will also be featured on our new website to ensure broader visibility and easier access for all readers. The new format will be issued more frequently. We invite you to subscribe to the MCAA Newsletter to receive the latest news and activities from our community via this link.

Image by MidJourney, prompt by Fabrizio Martina

News from our community

With the establishment of a new MCAA Chapter in Canada, the former North America Chapter has officially become the **MCAA United States of America (USA) Chapter**, carrying forward its long-standing commitment to regional collaboration and engagement.

Different MCAA Chapters have continued to offer their members excellent opportunities to get together and expand their professional networks. The **MCAA Switzerland Chapter** joined the annual Basel Postdoc Network meeting at the beginning of October; the **MCAA China Chapter** organised a meet-up between members based in Cambridge, the UK, at the end of October, while the **MCAA Ireland Chapter** held its first Researcher ramble, combining networking with scenic walks, on 1 November.

We are pleased to see how numerous MCAA local Chapters and Working Groups pooled resources and collaborated to develop and deliver insightful events for the community. The **MCAA France Chapter** and the **MCAA Bridging Science and Business Working Group** led a side event on the intersecting topic of career paths in industry and academia and mental health during the Australia-France Network of Doctoral Excellence (AUFRANDE) annual gathering on 3–7 November. On 6–7 November, the **MCAA USA and Canada Chapters** co-hosted the **first MCAA North America regional meeting** at the Field Museum in Chicago, and our Chair, Gian Maria Greco, was in attendance. The event commemorated the 100th anniversary of Marie Curie's visit to Chicago and brought together members of the wider MSCA community, fostering transatlantic collaboration. On 7–8 November, the **MCAA Switzerland Chapter**, together with the **France**, **Germany**, and **Italy Chapters and the Communication Working Group**, organised the two-day "The Art of Personal Branding" workshop in Basel, Switzerland. This brought together MCAA members to explore how researchers can effectively communicate their strengths, values, and professional identity. Two different grant-writing workshops were organised by the MCAA Communication Working Group (as part of the Around the World Webinar Series) and the MCAA Italy Chapter on 14 November and 18 November, respectively; the former having a particular focus on the European Research Council (ERC) Starting Grant applications. Also, on 14 November, the **MCAA BeNeLux Chapter** joined forces with the **MCAA Policy Working Group** for a science diplomacy workshop in Amsterdam, the Netherlands.

Finally, several **MCAA Chapters are currently in the process of electing their new Chair and Vice-Chair**, with the formal transition and

handover period taking place in January 2026. This remains an excellent opportunity, which we hope many members from the selected Chapters have decided to take on to experience leadership roles and contribute to shaping the future of our Association.

Recent engagements and representations

Our **MCAA Academy mentoring platform** continues its activities through the General Mentoring programme and Forums, while also gathering insights from the recently concluded six-month thematic programme "Careers in the Public Sector." Since its launch in summer 2025, this pilot initiative has supported participants in exploring career pathways toward the public sector through tailored sessions, including two online webinars held in October.

Our Peer-Exchange Platform for Narrative-Style CVs (PEP-CV) was the topic of the latest **ORCID in the Wild webinar series**. On 29 October, our Executive Director, Mostafa Moonir Shawrav, Board Member Irene Castellano Pellicena, and Community Manager Pooja Khurana gave an overview of the successful integration of PEP-CV mentoring activities into ORCID.

On 3–4 November, our Chair, Gian Maria Greco, and Board member Ornela Bardhi participated in the **AI in Science Summit 2025** held in Copenhagen, an event dedicated to exploring the growing impact of Artificial Intelligence (AI) on scientific discovery. Organised under the auspices of the Danish EU Presidency, in collaboration with the European Commission and the University of Copenhagen, the summit also marked the official launch of the Resource for AI Science in Europe (RAISE), a new virtual institute aimed at advancing the development and application of AI across scientific domains.

On 11–12 November, Mostafa Moonir Shawrav participated in a panel discussion titled "Designing Alumni Communities: Governance, Strategy, and Connection" as part of a seminar on alumni relations, organised by the Network of Universities from the Capitals of Europe (UNICA) at the Bucharest University of Economic Studies, Romania.

On 4 December, we held the first **MCAA Policy Forum 2025 in Brussels** and online, Member of the European Parliament (MEP) Christian Ehler. We thank MEPs Ehler, Lina Gálvez Muñoz, Ivars Ijabs, and René Repasi, as well as Minister Counsellor Jimmy Bruun Felthaus of the Permanent Representation of Denmark to the European Union, and Claire Morel, Head of the MSCA Unit, for their participation as speakers. The event featured the presentation of our new report on the impact of the Marie Skłodowska-Curie Actions (MSCA), and brought participants together to discuss how its findings could translate into concrete policy recommendations to maximise the MSCA's contribution to the European Research Area (ERA).

Closing words of thanks

This edition marks the conclusion of the traditional MCAA Newsletter as we know it, with this being the last message from the Board. A heartfelt acknowledgement goes to this issue's Guest Editors, Srishti Goyal and Joana Magalhães, and to the rest of the fantastic Editorial Board, led by Eliška Koňaříková and Polat Goktas, for the time and effort put into the Newsletter up until now, and for the cooperation during this transition. We really look forward to continuing to work together to keep our wider community engaged and well-informed!

On behalf of the MCAA Board,

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Editorial

Making science make sense

Science loses its power when it loses its audience. For too long, complexity has been mistaken for depth and jargon for mastery. The ability to make others understand is not a lesser skill. It is the mark of true expertise. Speaking clearly across disciplines, sectors, and societies is how science fulfils its purpose.

Every researcher has faced the challenge of explaining their work to someone outside their field. Yet that act of translation is where impact truly begins.

This Special Issue is dedicated to science communication, **not as a decorative add-on** to research but as an **essential act of connection**. In an age where algorithms amplify noise faster than truth, clarity is a form of integrity. Communicating well is how **we build trust**, how **we make evidence matter**, and how we remind the world that science is not only what we know but how **we share it**.

Joana Magalhães

Srishti Goyal

Science communication in Europe – Where do we stand

In recent years, Europe has faced overlapping crises that have tested the relationship between science, policy, and the public. Geopolitical tensions, misinformation, and growing distrust have shown that knowledge alone is not enough. How it is shared and discussed matters deeply. Openly engaging citizens in research and innovation is key to strengthening democracy and rebuilding trust in scientific institutions.

The inclusion of **enhancing trust in science through citizen participation, engagement, and science communication** among the **European Research Area (ERA)** structural policy priorities for 2025–2027 signals a renewed political commitment to these goals. Yet commitment on paper must be matched by sustained action and long-term support.

The European Commission has, for decades, invested in initiatives to bring science closer to society, from **Researchers at Schools** and **European Researchers' Night** to the newly launched **Science comes to town**, which will debut across three European cities in 2026. These efforts aim to make science a visible, daily presence in people's lives.

At the same time, the landscape of public engagement is evolving. Projects such as

Image by MidJourney, prompt by Fabrizio Martina

European Citizen Science (ECS), **IMPETUS**, **Coordinated Opportunities for Advanced Leadership and Engagement in Science Communication in Europe (COALESCE)** and **Responsible tErritories and Institutions eNable and Foster Open Research and inClusive Innovation for traNsitions Governance (REinforcing)**, many building on the legacy of the **Science with and for Society (SwafS)** programme, are shaping a new era of participation and collaboration. Discussions at recent European Research Executive Agency events have echoed the same message: **science communication must become a recognised and resourced part of research itself**, not an optional extension.

Despite this progress, the **field still lacks a dedicated framework** for science communicators. Embedding science communication training in research and higher education systems would help strengthen Europe's scientific excellence, improve public trust, and equip researchers with the skills they need to engage effectively. The planned **European Competence Centre for Science Communication** represents an important step towards centralising resources, sharing good practices, and developing guidance for communication in times of uncertainty or crisis.

Making science communication a daily, structural part of research will require bold governance decisions. That means recognising and supporting science communicators as key professionals in the research ecosystem, ensuring ethical and evidence-based practice, promoting participatory formats that invite citizens into decision-making, and integrating communication more closely with science-for-policy efforts. Initiatives such as the **Mutual Learning Exercise in Science Communication in R&I**, led by the **COALESCE project** and several Member States, mark promising movement in this direction.

Inside this issue

This issue explores science communication in all its forms, from creativity to policy, from digital accessibility to in-person dialogue. Across the contributions, a common thread emerges: the way science is communicated often shapes how far it travels and who it ultimately reaches.

The conversations that follow illustrate this clearly. **Salva Ferré** of **Eduscopi** reflects on creativity and impact, showing how in-person experiences, from museum exhibits to jazz-hall talks, can reach people more deeply than social media metrics ever could. **Ruben Riosa** and **Ashish Avasthi** revisit the origins of the **Around the World Webinar Series**, showing how a simple idea to connect MCAA members has grown into a vibrant global exchange. From the **European Commission's Booster** team, we hear how structured mentoring and exploitation support can help research reach audiences beyond academia. The **COALESCE project** adds another voice, showing how co-creation and training are shaping the foundation of the future European Competence Centre for Science Communication.

Across the articles, creativity and reflection take centre stage. Authors explore how art, poetry, storytelling, and data visualisation transform

information into understanding. Others show how communication becomes stronger when it is built into research from the start. Projects such as **Eco2Wine**, **Mediterranean Researchers' Night (MEDNIGHT)**, and **Storytelling for data stewards** remind us that communication is not an afterthought but a way of doing science that values participation and transparency. Together, they demonstrate that creativity is not an embellishment to science but one of its most powerful tools for connection.

This issue also confronts the challenge of visibility and credibility in an age of misinformation. Included are articles focusing on the use of **social media in science communication and language models to help with dyslexia**, which illustrate how accessibility and accuracy must evolve together. Communicating online is not about being louder. It is about being more thoughtful, inclusive, and precise. Beyond the digital realm, several contributors highlight how trust also grows through human connection.

Science communication matters most when it meets people where they are. This issue's articles also explore how **communication can empower health** and how a global science week could turn research into a shared experience through engagement. Moreover, an article by the **MCAA Policy Working Group** highlights the importance of dialogue between science and governance. Together, these contributions show that good communication enables knowledge to shape society.

Building trust through action

Other articles in this issue highlight the **Science Speaks Summer School**, organised under the MEDNIGHT project, which equipped early-career researchers with practical tools to tell their stories with clarity and confidence, and the **Elevate Your Identity** workshop, organised by the MCAA Communication Working Group with the Switzerland, Germany, Italy, and France Chapters, which invited participants to reflect on presence, authenticity and the courage to speak up. The **Bridging Minds, Building Futures – MCAA Central European Meeting 2025** in Warsaw brought together researchers, policymakers, and science advocates to discuss mobility, widening participation, and the role of science diplomacy in connecting research with society. Together, these initiatives remind us that trust in science is not built by facts alone but through empathy, openness, and listening, qualities that turn communication into understanding.

Science communication, especially in its most participatory forms, builds on this same foundation. It should be seen as an opportunity to practise active listening and to learn from those who can most benefit from scientific progress but may also face its unintended impacts. Understanding these lived experiences helps us rethink how we design and communicate research, and how we position ourselves as researchers and as citizens.

These practices are not just ethical; they drive positive change. They help to address bias, co-create responses to societal challenges, inform evidence-based policymaking, and strengthen democratic values. When we listen, learn, and share with integrity, innovation and competitiveness follow naturally.

Science that listens, learns, and speaks clearly is the science that lasts.

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Image by MidJourney, prompt by Fabrizio Martina

Conversations on science communication

Conversations on science communication

Connecting the world, one webinar at a time

Ruben Riosa and **Ashish Avasthi** share how a simple idea to connect MCAA members has evolved into a long-running global exchange of ideas. What began as a way to bring Working Groups and Chapters together has grown into a vibrant, inclusive space where researchers across disciplines and continents share insights, build connections, and keep the MCAA spirit of collaboration alive.

For readers who may not be familiar, could you introduce the MCAA Around the World Webinar (ATWW) Series?

Ruben: The MCAA Around the World Webinar Series began about four years ago with the goal of connecting all the MCAA Working Groups (WGs) and Chapters to share knowledge on a variety of topics of interest, such as policy, science communication, research development, and much more. The scope of this series was to organise relevant events on a monthly basis as a way to showcase all the activities and knowledge that the MCAA has and that could potentially inspire other members and help the Association connect with an external audience.

Ruben Riosa is the former Chair of the MCAA Communication Working Group and former MCAA Communication Manager. He currently works as a Medical Communications Manager at Excerpta Medica, a full-service medical communications agency serving the global pharmaceutical industry through healthcare strategy consultancy and communication programmes.

Ashish Avasthi is the current Chair of the MCAA Communication Working Group. He works as an Associate Consultant at Nordic Innovators, supporting EU funding initiatives in the healthcare sector.

How did the idea for the series come about, and what goals did the Communication WG hope to achieve when it was first launched?

Ruben: The idea started back in 2021 when I was the Chair of the Communication WG. We were trying to find ways to connect even more closely with our members. Around that period, there was a feeling that many events were already taking place, but there was not always strong collaboration between the different Chapters and WGs. For this reason, during one of the MCAA Board meetings, together with the then Vice-Chair Gledson Emidio, who was focusing on the management of the Chapters and WGs, we decided to create something that would connect our members and showcase all the areas of interest of the MCAA.

From that moment, we started organising monthly webinars (available on YouTube) covering a huge variety of topics. Our end goal was to create further connection and engagement between the different Chapters and WGs. And now, four years later, I can really see how beneficial this series has been, as I keep seeing more and more events being developed through collaboration between one or more groups.

The series has been running since 2021 and continues to attract a global audience. What factors do you think have contributed to its success and longevity?

Ruben: The main factor has probably been the variety of topics and the great speakers that we have managed to invite throughout the years. Being part of an Association of more than 23,000 members makes it easier to find experts on topics of shared interest. Secondly, the enthusiasm of the Chairs of the other Chapters and WGs towards the series, combined with the support from the Communication WG in setting up and promoting the webinars, helped greatly when busy schedules were always a challenge.

Ashish: After seeing its initial success, I decided to continue this great initiative. I also owe its success to the hard work that Ruben put into it in the first years, without which I wouldn't have had the foundation to continue. Now, of course, providing support and building relationships

Image by Ashish Avasthi

A series of Around the World webinars held between 2021 and 2025, highlighting the MCAA Communication WG's collaborations across Chapters and WGs.

Image by MidJourney, prompt by Fabrizio Martina

with all the speakers, Chapters, and WGs is important, but I think the sense of shared ownership is also very crucial, and that is why it has been so successful. Moreover, consistency also matters: maintaining a clear format and regular rhythm has helped the series become a familiar, reliable space for learning and connection across continents.

Could you share a few memorable moments or episodes that best capture the spirit and impact of the series?

Ruben: I think that there is no specific episode or moment that could really capture the impact of the series. For me, what summarises the spirit of the ATWW Series is the connections I made with all the other MCAA Chairs at the time. We were working together, creating something meaningful, which also helped us get to know each other much better. I can happily say that I became friends with a lot of them! This is the real impact, and what the MCAA is really about: Connecting people from all around the world who would have probably never had the chance to meet otherwise.

Ashish: I completely agree with Ruben. The spirit of the series has always been about connection. For me as well, some of the most memorable moments are not tied to a single webinar, but to the sense of global community that emerges when a speaker in one corner of the world engages live questions from members thousands of kilometres away. I also think of the sessions where early-career researchers presented alongside senior experts, and that is the essence of the MCAA: cross-generational exchanges, representing openness, mentorship, and shared curiosity. I admire how these webinars sometimes lead to something beyond the screen, such as new collaborations, joint proposals, or

even local meetups that started from a chat in the Q&A box. Those moments remind me that the real value of the series isn't only the talks themselves, but the networks and friendships that continue to grow from them.

In your view, how has the ATWW Series influenced science communication within the MCAA, and how do you see it contributing more broadly to research visibility and global engagement?

Ruben: The series has been and continues to greatly contribute to research visibility and global engagement. In fact, through these webinars, we were always capable of covering a multitude of different topics, with relevant speakers who can inspire and drive younger generations into this world. The fact that these webinars are online and available on YouTube for free allows many people to access and gain knowledge on topics that are sometimes only available through paid events, making accessibility one of the strongest points.

Ashish: The openness and accessibility of the series have been central to its impact. From my point of view, its influence goes beyond visibility. Since these webinars are not restricted to the MCAA community and are open to anyone interested, they not only enhance outreach but also create networking opportunities for everyone. Sometimes, our speakers have been early-stage researchers, which has helped their peers gain confidence in sharing their research in clear, engaging ways. Broadly, the series has positioned the MCAA as a truly international platform for dialogue, where research from different disciplines and regions can reach audiences that traditional conferences might not.

Finally, what does science communication mean to you both, and why do you think it matters now more than ever?

Ruben: Science communication, and communication in general, is everything. It allows us to exchange ideas, share concepts, and engage with others. Within the MCAA, communication is extremely important because it connects members and helps share all the fantastic activities being carried out. As Anne Roe said, "Nothing in science has any value to society if it is not communicated."

Ashish: True, science communication is at the heart of how science serves society. For me, it is about building understanding and trust. It's not only about translating complex research into simpler language but also about showing the human side of science — the curiosity, uncertainty, and collaboration that drive discovery. It matters now because we're living in an age where information is abundant but trust can be fragile. When scientists learn to communicate clearly and listen actively, we help strengthen that trust and keep science anchored in public life. In that sense, good communication isn't just a skill; it's a responsibility. As we move forward, I see it continuing to play a role in fostering openness and mutual understanding between scientists, policymakers, and the public, showing how an alumni network can contribute to a more connected and communicative global research culture.

Interviewees

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Conversations on science communication

Bringing science into everyday spaces

From turning classrooms into escape rooms to bringing science to market stalls and music venues, **Salva Ferré** has spent over a decade finding creative ways to connect research with people's daily lives. As Co-founder of **Eduscopi** and Co-director of the **UVic–Eduscopi** postgraduate programme in science communication at the University of Vic - Central University of Catalonia, he shares his reflections on what makes communication meaningful, why face-to-face encounters often create a deeper impact than online reach, and how curiosity remains at the heart of every good story.

What methods work best for reaching different audiences?

At Eduscopi, we use a wide range of formats, including books, videos, podcasts, museum exhibits, escape rooms, and citizen science projects. The key is not the medium itself but understanding which format best suits each audience and objective.

Lately, I have been reflecting on how we often confuse reach with real impact, particularly on social media. A large number of followers does not necessarily mean meaningful engagement. In contrast, what we call 'on-life' communication, which involves direct and proximity-based activities, often leaves a stronger and more lasting impression. When you can look people in the eye, talk and listen, that exchange stays with them.

Salva Ferré is a biologist with a PhD in Biochemistry and Molecular Biology. During his PhD, he realised he loved science so much that he couldn't focus on just one specific research area: He wanted to learn more and, most importantly, explain science to others. This led him to a career in science communication, outreach, and education, where his work includes writing and editing books and articles, scripting videos and animations, and developing exhibitions and escape rooms. Ten years ago, he co-founded Eduscopi and created the UVic-Eduscopi postgraduate programme in science communication.

Image captured by Mercat de Ciència. Pop-ups de ciència. by Torre Barrina. Experiències d'Innovació Social

The 'Science Market' booth

For example, when designing the Strategic Scientific Communication Plan for L'Hospitalet de Llobregat in Catalonia, Spain, we brought science to unexpected places such as market stalls, the underground and even as opening acts for blues and jazz concerts. This approach invited dialogue with people who might never attend a science talk. Similarly, our museum exhibits and citizen science projects in schools have shown how participatory experiences can genuinely change perceptions about science.

This idea of measuring real impact, rather than just visibility, reminded me of the book **Science with Impact** by Anne Helen Toomey, which offers insightful reflections on how communication and research can make a tangible difference. I highly recommend it.

How do you use storytelling and creative formats in your work?

Even before Eduscopi was founded ten years ago, we were already using applied creativity techniques to develop new ideas for formats, narratives, examples, and metaphors. We often draw on resources such as Neuronilla, which help us to explore creative thinking and discover original approaches, especially for educational materials.

Unfortunately, the stereotype of science explained as a simple list of facts still persists. Too often, lessons focus on memorising rather than understanding, reinforcing the idea that science is just a collection of truths to be recalled when asked. But science is much more than that. It is a way of interpreting the world that everyone, by nature, is equipped with. Every person asks questions, observes, experiments, and draws conclusions, often without realising they are applying scientific thinking.

For decades, science communicators have worked to move away from this cold and distant image. **Cosmos**, by Carl Sagan and Ann Druyan, remains a landmark example of how storytelling can make science emotional, philosophical, and deeply human. When we go beyond asking only 'what' to also explore 'who', 'how', 'when', 'where,' and 'why', we open a richer world of communication, one that helps people see themselves as part of the story of science.

How do you deal with misinformation and build public trust, especially now that AI tools amplify the problem?

Misinformation and mistrust existed long before the internet, but digital platforms have given them extremely fertile ground. Today, false information spreads like an uncontrolled wildfire, and AI is fuelling the flames even further. A recent Kurzgesagt video captures this perfectly. We are seeing more and more bot-generated comments and low-quality content. That content then trains new AIs, which produce even more misinformation, creating a feedback loop that erodes trust.

At Eduscopi, we don't engage in reactive debunking, which often amplifies the very ideas we are trying to counter. Instead, we focus on two complementary strategies: **proximity-based communication** and **high-quality online resources**.

Proximity and experiential learning: We find that in-person, experiential communication has the greatest impact. It moves science away from a distant, elitist image and shows it as a human endeavour made by and for people. For example, we are launching a project with older adults, beginning with open, non-judgmental dialogue sessions where we simply ask what they want to know. We listen first, then design communication activities based directly on their real concerns and interests.

Reliable online resources: Social media is not always the best battlefield. Platforms follow opaque rules and rarely favour evidence-based content. This does not mean abandoning online communication, but rethinking where we place our efforts. Universities and scientific institutions should offer trustworthy, well-written and accessible material that can genuinely compete in search results. Good search engine optimisation (SEO) for high-quality information is essential.

Institutions such as Berkeley's **Understanding Evolution** or the **Portal Clínic** from Hospital Clínic de Barcelona are strong examples. A more local example is our Catalan science-popularisation podcast **Ciència imprescindible** (2021), in which we answered questions submitted by users of the Barcelona Public Library Network.

This combination of proximity-based engagement and reliable online resources allows us to build trust without feeding the cycle of misinformation.

How do you evaluate your science communication projects' effectiveness?

Evaluation is fundamental, as Craig Cormick emphasises in **The Science of Communicating Science**, where he devotes an entire chapter to it. Each project needs its own indicators and methodologies, which we define on a case-by-case basis. This has been especially important in

Image by Midjourney, prompt by Fabrizio Martina

our citizen science projects and in the strategic communication plans we prepare for universities and public administrations.

In L'Hospitalet, for example, we analysed three years of previous activity and created indicators that later shaped the city's five-year objectives. These same indicators also became creative tools, helping us design new actions that already take metrics into account.

We use a mixed-methods approach, combining quantitative and qualitative evidence. Beyond basic numbers like attendance, we focus on what we call **significant engagement**: meaningful questions, thoughtful conversations, or people shifting from passive presence to active involvement. A large event may generate only a few such moments, while a small action in a public market can produce dozens.

For some activities, such as museum exhibitions, we also track the number and type of questions received, which we later answer on a webpage. This gives us both engagement data and insight into what genuinely interests people.

We complement this with qualitative input from open-ended questionnaires or focus groups to understand changes in attitudes or understanding.

Time constraints mean we cannot publish everything we learn, but even so, I have produced more scientific publications at Eduscopi than during my entire PhD.

What advice would you give researchers who want to improve their science communication skills, especially when engaging broader publics or policy audiences?

I believe there are two simple yet powerful tools:

Seek inspiration: This is perhaps the most important one. Consume a lot of science communication and outreach, both within your specific field of research and, crucially, from more distant fields. Actively analyse it: What do I like, what don't I like, how do they keep my attention? Do this across all possible formats, including books, articles, podcasts, and videos. Craft your own communication voice.

Define your message: Honestly ask yourself what your main message, primary objective, and specific audience are. If you ask yourself these questions, you shouldn't get the same answers when you think about a scientific article, a poster for a conference, or a visit to an elementary school. The creation of the communication should take all three contexts into account.

Beyond that, dare to try, test, analyse, play, and have fun! If you find a format interesting, launch a few pieces of content to gain experience. However, if you gain this experience by generating content or giving talks for other people or organisations, you should charge for it. Your training and experience enable you to create that content, and that has a price. Unlike other human disciplines, like economics and law, researchers often communicate too freely or solely out of a sense of responsibility. Science communication is a profession.

And if we can help you with any training or consulting, we're here! Feel free to contact us.

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Conversations on science communication

Boosting science beyond the lab

Research has the power to shape society, but too often, promising results remain within academic circles. The European Commission's Booster initiative, implemented by META Group, helps bridge this gap by turning research outputs into practical outcomes that benefit people, businesses, and policymakers. In this interview, Coordinator Alessia Melasecche Germini and Project Manager Rosellina Di Santo share how the Booster supports EU-funded projects in transforming their findings into lasting impact, strengthening visibility, innovation, and trust in science.

What is Booster, and how does it support EU-funded projects?

Booster is an initiative of the European Commission's Directorate-General for Research and Innovation, created to maximise the impact of EU-funded projects and to support in turning research results into tangible benefits for society and the economy. It provides free-of-charge services that help projects strengthen their dissemination and exploitation activities.

Alessia Melasecche Germini is the Coordinator of the Booster initiative, implemented by META Group on behalf of the European Commission's Directorate-General for Research and Innovation (DG RTD). She is also the CEO of META Group. Since 2012, she has coordinated several DG RTD initiatives supporting the impact of EU-funded research and facilitating the market uptake of innovative products and solutions. Alessia holds a PhD in the Internationalisation of Small and Medium-sized Enterprises (SMEs) and an academic background in Economics and Business. She previously served as a Professor of Marketing at the University of Perugia, Italy.

Rosellina Di Santo is the Project Manager of the Booster initiative at META Group, which delivers support services on behalf of the European Commission's DG RTD. She has been involved in EU-funded projects since 2012, including collaborations with DG RTD and DG GROW, and has over a decade of experience in strategic project management and international stakeholder coordination. Rosellina holds a Master's degree in Strategic Studies from the University of Turin, Italy, and has completed specialised courses, including an Academic English programme at Kaplan International, Washington, D.C., and a Strategy Execution specialisation at Harvard Business School Online.

Turn ideas into impact through the Booster's Go-to-Market Support

Image by Booster

The initiative addresses a long-standing challenge in research: many excellent projects stop at publication and never reach the people, industries, or policymakers who could use them. Booster helps bridge this gap by supporting both the **dissemination** of results (how they are shared) and their **exploitation** (how they are applied or used) so that knowledge can create real societal and economic value.

Booster offers tailored dissemination and go-to-market support, guided by dedicated mentors who help project teams identify and combine the most relevant services to enhance impact.

What are the main updates introduced in 2024 in Booster?

In 2024, Horizon Results Booster was rebranded and upgraded as Booster, introducing a redesigned structure and expanded services to better meet the needs of EU-funded research projects. The update reflects a more user-centred, flexible, and impact-oriented approach.

One of the key improvements is the structured **Booster journey**, which starts with an initial consultation session to assess each project's needs. A new follow-up phase ensures continued support after service delivery, helping teams put recommendations into practice.

The updated Booster also introduced a wider range of Add-on Services, including Networking, Portfolio Analysis, Intellectual Assets Management, Coaching for Public Speaking, and Audio-Visual Support. These allow research teams to access more specialised, targeted guidance depending on their project's maturity and goals.

Together, these enhancements make Booster more adaptive and comprehensive, enabling projects to strengthen both their technical capacity and strategic vision for long-term impact.

How can Booster help MSCA fellows and smaller projects reach wider audiences?

MSCA projects often produce high-quality research at an early stage but may lack the tools or experience to move beyond academia. Booster addresses this gap through tailored, hands-on support that helps researchers turn their results into outcomes with societal, economic, or policy relevance. So far, 47 MSCA projects have benefited from these services.

Through Dissemination Support and Add-on Services, Booster helps researchers promote their results beyond publications by identifying key assets, defining target audiences, and developing strategies for visibility and stakeholder engagement.

The Go-to-Market service builds research teams' capacity to explore exploitation paths. Even when results are not yet ready for commercialisation, it guides how to plan for the next steps and identify potential partners for further development. Acting as a bridge between academic excellence and real-world application, Booster gives projects the strategic guidance and tools to ensure their work achieves lasting impact.

Could you share examples where Booster made a clear difference?

There are already several examples of how Booster has helped projects move closer to impact. For instance, projects such as **Mediterranean Practitioners' Network Capacity Building for Effective Response to Emerging Security Challenges (MEDEA)** and **Towards a More Automated and Optimised Maintenance, Renewal and Upgrade of Roads by Means of Robotised Technologies and Intelligent Decision Support Tools (OMICRON)** successfully applied Booster tools and methodologies during their service delivery.

MEDEA works with networks of security practitioners in the Mediterranean and Black Sea regions to address challenges such as migration, border management, cross-border crime, and natural disasters. Booster supported the project to identify exploitation paths and implementation gaps. Following its completion, MEDEA's network continued to collaborate and contributed to updating the Mediterranean Security Research and Innovation Agenda, directly influencing policy.

OMICRON used the Booster's Go-to-Market support to develop a more robust strategy for bringing its innovations to market. Through market analysis and exploitation planning, the team identified a clear niche and refined its approach to align with stakeholder needs. The support improved the project's readiness for real-world application and long-term sustainability.

How does Booster measure the effectiveness of its support?

Booster continuously monitors and evaluates its effectiveness through a structured mentoring and feedback process. Each applicant works with a dedicated mentor who oversees the service delivery, ensuring quality and timely implementation.

Progress is tracked through Service Roadmaps, while beneficiaries can provide structured feedback via anonymous satisfaction questionnaires, rating service quality and expert performance, and offering suggestions for improvement.

A follow-up phase is also conducted after delivery to assess progress in implementing exploitation strategies, using standardised checklists and questionnaires. This combination of expert monitoring and direct beneficiary feedback ensures that Booster's impact remains measurable, transparent, and aligned with project needs.

What lies ahead for Booster in a changing research landscape?

Looking ahead, Booster is well-positioned to evolve alongside key trends shaping research and innovation in Europe. By supporting dissemination and exploitation, it helps build a more impact-oriented research culture.

Its tailored services not only address the varied needs of project teams but also strengthen their capacity to embed impact-driven thinking into research from the outset. This approach will deepen in the coming years, reinforcing the importance of generating tangible societal value from research.

Booster's multidisciplinary perspective and emphasis on long-term societal and environmental benefits will continue to grow, contributing to the EU's vision of open, inclusive, and responsible research that serves both people and the planet.

Interviewees

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Conversations on science communication

Co-creating the future of science communication in Europe

How do we build a research ecosystem where science communication is recognised, supported and genuinely integrated into everyday scientific work? To explore this, we spoke with **Joana Magalhães** from Science for Change, **Ilda Mannino** from Venice International University and **Emma Weitkamp** from the University of the West of England, who are leading the development of the European Competence Centre for Science Communication and training, respectively, through the Coordinated Opportunities for Advanced Leadership and Engagement in Science Communication in Europe (COALESCE) project.

Image by MidJourney, prompt by Fabrizio Martina

Could you introduce COALESCE and explain what the European Competence Centre for Science Communication will offer?

COALESCE brings together the lessons of eight European science-communication projects to build a long-term European Competence Centre for Science Communication. The goal is to bridge the gap between science and society by **improving trust, supporting evidence-based communication**, and helping researchers and practitioners work together more effectively.

The Competence Centre will operate through a virtual platform linked to national and regional hubs. An initial version launched in 2024, offering shared principles and quality standards for science communication resources. A major update planned for 2026 will invite users to create profiles, projects and opportunities through a matchmaking tool to find communication partners or journalists, and curated collections on topics such as inclusion, trust, misinformation and impact assessment.

COALESCE is also developing a training portfolio aligned with European Competence Frameworks, covering topics such as engaging policymakers and working with media. Some of this training has already been piloted at the Science Speaks Summer School.

MCAA members are invited to **join the project's Community of Practice** and subscribe to a newsletter to be invited to participate in multiple

co-creation activities, which can lead to ready-to-use resources such as a crisis navigator and guidelines for acting in times of crisis.

What barriers do researchers face in science communication, and what solutions does COALESCE propose?

Researchers across disciplines report similar obstacles, including limited time and resources, lack of recognition, difficulty engaging colleagues, and insufficient training. For those working in politicised or controversial areas, concerns about harassment, misrepresentation or conflicts between objectivity and advocacy add further complexity.

Formal recognition of science communication **would make a significant difference**. Many funding schemes still treat dissemination as a minor requirement, which can unintentionally signal that communication is secondary to other

Joana Magalhães is the Science Communication Area Leader in Science for Change. She holds a PhD in Biochemistry and Molecular Biology, obtained under an MSCA Doctoral Networks in 2008. She is the scientific coordinator of COALESCE. Her science communication research and practice focus on citizen science, co-creation, gender perspective, health and life sciences communication, and the collaboration between art and science. She received the Science on Stage award in the Media category in 2017, honourable mentions at the EU SCI-DOC film festival in the Women in Science and New Media categories in 2018, and was a finalist at the Medea Awards for Creativity in Educational Media in 2017.

Ilda Mannino is the Scientific Coordinator of the Thematic Environmental Networks (TEN) Program on Sustainability of the Venice International University. She was the scientific coordinator of the QUEST project and now co-leads the development of training of the European Competence Centre for Science Communication. Her research focuses on defining the skill needs in science communication for scientists.

Emma Weitkamp is Professor of Science Communication and Deputy Director of the Science Communication Unit at the University of the West of England, Bristol, where she teaches in the MSc programme in Science Communication and a range of professional short courses. Her research focuses on understanding the motivations of science communicators, scientists, journalists and those working with the arts.

academic work. COALESCE's policy report proposes strategies to improve institutional support, while an analysis of educational needs forms the basis of the Competence Centre's training offer. Ensuring that training is structured rather than ad hoc is essential to helping researchers develop confidence and skills.

How is COALESCE responding to the growing emphasis on science communication in EU Competence Frameworks?

Recent frameworks for researchers and research managers highlight science communication as a key competence, but they still cover a limited range of practices and do not fully reflect the role of science communication professionals. Training pathways remain fragmented and vary significantly between institutions and countries, which hinders the professionalisation of the field.

COALESCE is developing a European Competence Framework for Science Communicators that will encompass a wider group of practitioners, from communication officers to museum staff. The training portfolio will include **online workshops, summer schools, peer learning activities** and **case clinics** on topics such as tackling misinformation, navigating crises, impact evaluation and public engagement. These activities will be tested throughout 2026, and COALESCE welcomes collaboration from researchers and organisations interested in shaping this next phase.

How can the impact of science communication be measured? What tools do you recommend?

Measuring impact is challenging because meaningful change takes time, and it rarely results from a single activity. A science communication event can inform or inspire, but its long-term effects are difficult to isolate. In reality, **impact is often cumulative**. We hope that each person reached through one activity is also reached

Image by MidJourney, prompt by Fabrizio Martina

by many others, which helps strengthen the relationship between science and society over time.

In practical terms, the only immediate information we can collect comes from short questionnaires or feedback forms that capture participants' thoughts about a specific event. These are useful for understanding what worked, but they offer very little insight into longer-term impact. For more sustained forms of engagement, such as a researcher working closely with a school, it may be possible to track outcomes like changes in pupils' subject choices. However, this requires considerable time and is not always straightforward.

Economic or policy impact can be even harder to attribute. Occasionally, **patents or spin-out** companies provide concrete indicators, but these cases are rare. For many researchers, societal value is reflected through policy influence, yet it is very difficult to link a specific communication activity to a particular policy change, aside from tracking citations in documents or funding calls.

Several useful tools support evaluation efforts. These include resources from the UK National Coordinating Centre for Public Engagement, the Research to Action engagement toolkit and the NIHR Applied Research Collaboration materials on assessing public involvement in health research. The Falling Walls Impact Planning Tool also provides a practical structure for planning and reflection. Within the Competence Centre, COALESCE is developing a dedicated collection on impact assessment and a self-assessment tool created together with stakeholders.

How do you see the field advancing, particularly in terms of recognition and professionalisation?

Recognition and professionalisation are major priorities. COALESCE is coordinating a Mutual Learning Exercise in Science Communication with nine European Research Area member states to support policy development, institutionalisation and dedicated funding. The project is also working with university alliances, the Coalition for Advancing Research Assessment (CoARA) and the Declaration on Research Assessment (DORA) to help put these policies into practice.

Across Europe, there is growing interest in identifying the **competences science communicators need**. A recognised framework will help individuals document their skills and support educators in structuring postgraduate programmes to enhance employability. There is considerable debate as to whether we need a professional body or other formal recognition for science communicators; that may come in time. But certainly, the ongoing work around competences will benefit the field in terms of recognition and quality of the work delivered.

Interviewees

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Special Issue. Science communication:
Making research accessible

Interactive science communication: A case study from a dental exhibition

Tired of online misinformation?

Take a good look and find out how an interactive exhibition, blending physical displays with digital content, was used to better connect science with everyone.

Health misinformation requires a shift in how research is communicated. We present a case study on an interactive strategy used during an MSCA fellowship.

We set up the "Open Wide: Feeling like a dentist" exhibition in the University of Birmingham Dental Hospital entrance lobby. We aimed to turn research on common dental myths into an accessible, engaging public experience. The approach blended physical displays with videos and digital quizzing to provide an interactive experience that highlighted issues related to dental misinformation.

Here, we outline how to use an exhibition to create an interactive communication tool for public engagement actions.

The challenge and the innovation

Traditional academic outputs often fail to engage the general public. This creates a knowledge vacuum, allowing misinformation to thrive. Our challenge was to directly address

Marco Antonio Dias da Silva is an Associate Professor of Oral Biology/Teledentistry. He completed an MSCA fellowship at the University of Birmingham in (2017–2019), researching digital tools for education. Keen on using emerging technologies, he is currently an MSCA fellow at the Universities of Oulu and Brescia (from 2024), researching digital health applications. His research involves using AI to improve learning in the classroom and clinical settings.

the MSCA fellowship's goals, evaluate new technologies in dental education, and provide practical guidance on tackling digital fake news. For this, we used a multi-platform exhibition.

We made the clinical world tangible by displaying dental equipment and historical patient record forms, aiming to demystify and contextualise clinical practice. We then introduced engaging digital elements, including tablets with targeted quizzes. The idea was to use a combined approach to overcome the barrier to passive learning.

The display gave the audience the opportunity to actively engage with the content. The digital content proved to be an important, structured tool to measure their interaction with the display.

Implementation and process

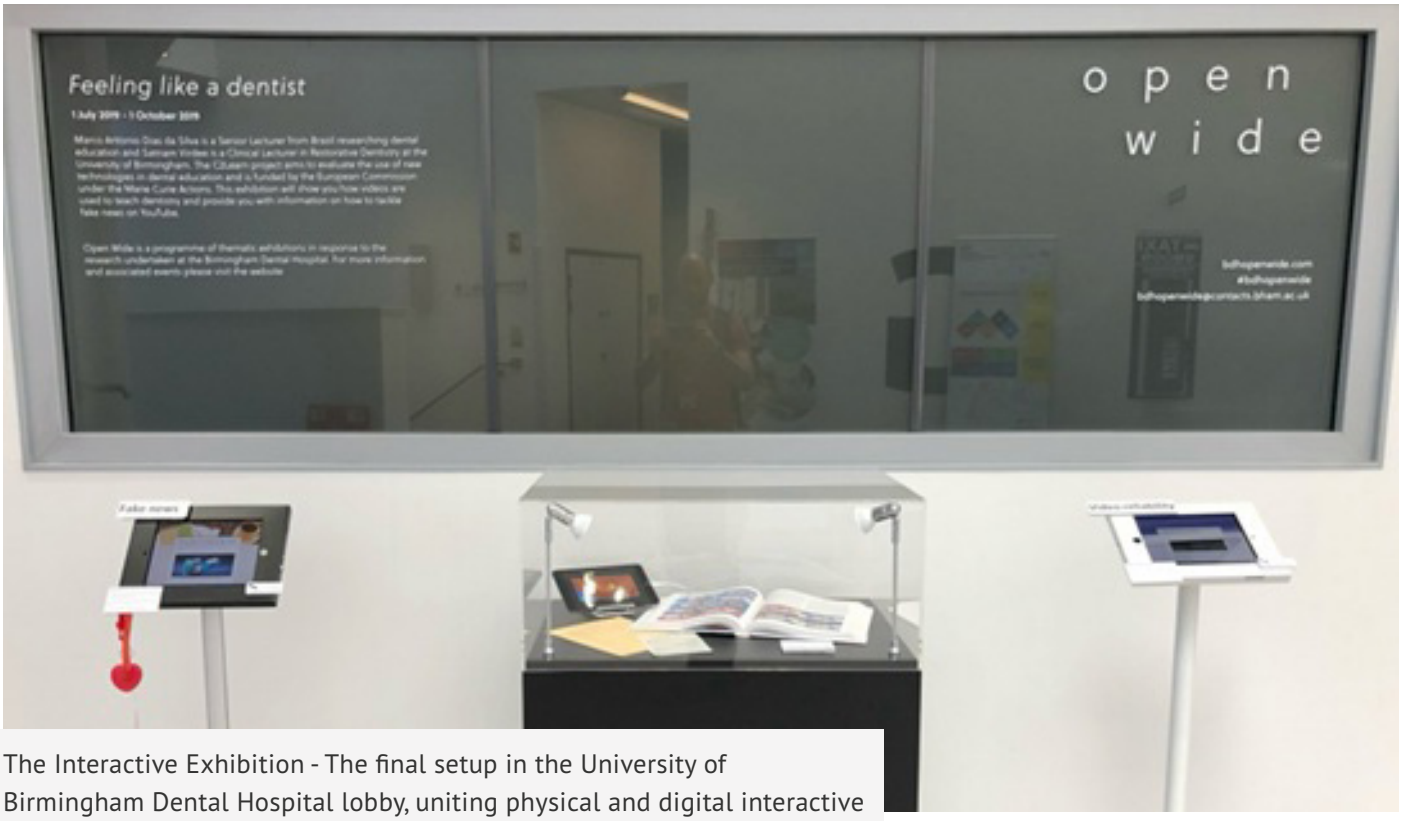
Melissa Grant organised and curated the exhibition, strategically positioned near the lifts. The digital stations drew interest, attracting users to test their knowledge from July to October 2019.

The Fake News quiz was popular, using provocative questions about teeth whitening with lemon juice, charcoal toothpaste, and bleaching. The fake-or-true quiz comprised three yes-or-no questions. Using evidence-based information and providing immediate feedback. We recognised that the instant correction mechanism is an important aspect for fighting misinformation.

Collaborations with other researchers supported the tangible elements. These included a clinical demonstration video recorded by Satnam Virdee and the ideas of my MSCA supervisor, Professor Damien Walmsley. This ensured that the content was innovative and clinically reliable.

Take-home messages

The project's success confirms the power of two-way communication. The instant feedback was an effective tool for correcting common misinformation. By blending a physical, contextual setting with targeted digital interaction, we created an effective and easily replicable model. Our strategy helped us understand our patients' beliefs



The Interactive Exhibition - The final setup in the University of Birmingham Dental Hospital lobby, uniting physical and digital interactive stations. [Dias da Silva, Virdee, Grant, Walmsley] (CC BY 4.0).

and misconceptions, which was fundamental in helping to write the final report of the fellowship.

We encourage other researchers to use similar approaches to move beyond traditional dissemination. The integration of digital tools, historical context, and current-day myths worked particularly well, enhancing the impact of public engagement. We recommend focusing on the immediate feedback loop and user experience as the key drivers of measurable public engagement. Giving users a second opportunity to test their knowledge also boosted confidence and reinforced learning.

What has changed since then...

Today, it is much easier to produce different types of content. Engagement actions like that could benefit a bit more from social media integration. Most visitors would prefer to use their own devices instead of the provided tablet. QR codes can be placed in strategically visible areas with impactful phrases to drive attention and direct access.

But misinformation is now much more well-organised, and some subjects may draw a potentially polarised audience. Attention should also be given to AI-generated content, its association with deepfake technologies, and data privacy-related issues.

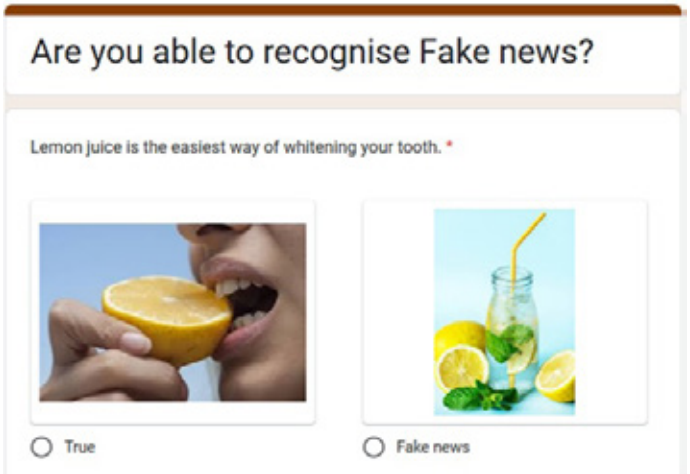
Nevertheless, a captivating in-person interactive exhibition still draws lots of attention, and each participant is also a potential promoter of the whole experience.

Conclusion

The Open Wide Exhibition successfully converted research on dental misinformation into an accessible, engaging, and effective educational tool. By using an interactive exhibition to tackle public dental myths, we helped empower visitors to become more critical consumers of information. Our work demonstrates a viable strategy for researchers willing to publicly bridge the gap between science and society.

Acknowledgement

Marco Antonio Dias da Silva is an MSCA COFUND fellow. He receives funding from the European Union's Horizon Europe research and innovation programme (MSCA grant 2430429511).



The Lemon Quiz Photo, fighting Dental Myths. A screen capture from the interactive quiz demonstrating common pieces of health misinformation. [Dias da Silva, Walmsley] (CC BY 4.0).

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Special Issue. Science communication:
Making research accessible

Data stories *to open up* science

The words we use to reach our audiences matter. The Varthai – Data Stories website uses art, poetry, and data visualisation to spark curiosity and increase the accessibility of research by finding words that speak to different groups. Digging deeper into these data stories, audiences can explore the methods used to draw insights from the data.

Academia, official statistics, and back again

I left academia in 2013 to become a methodologist in official statistics. Here, I learned how deeply public trust hinges on more than just precise numbers. To ensure that data were relevant and usable for policymakers and communities alike, national statistics offices implemented practices grounded in key data quality dimensions: accessibility, relevance, consistency, accuracy, interpretability, and timeliness (Brackstone, 2008).

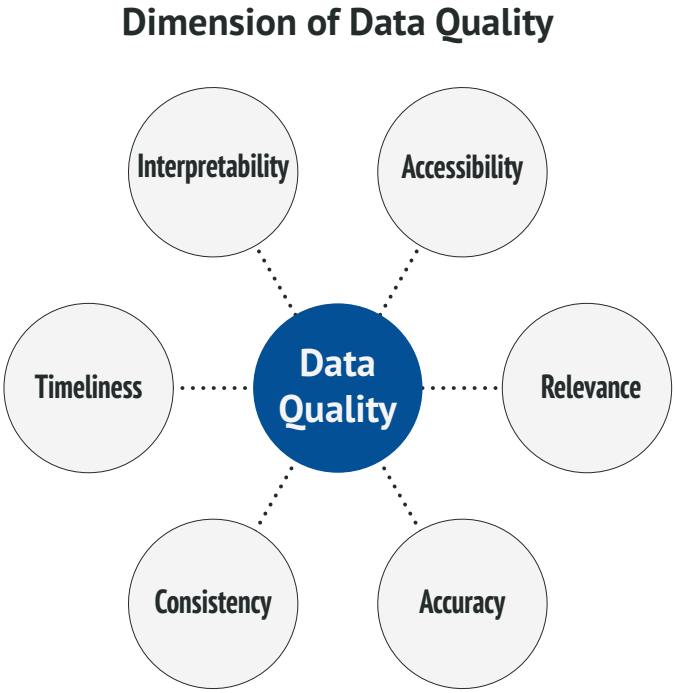


Image by United Nations Statistics Division

Vinayak Anand Kumar is a behavioural scientist and statistician with a background in health psychology and official statistics. As a Marie Skłodowska-Curie Actions fellow with the Health CASCADE network, he studied the use of co-creation in designing, building, and evaluating digital health interventions. His current research interests focus on open science and combining methodological rigour with creative science communication. Originally from India and raised in Aotearoa New Zealand, Vinayak now lives in Germany and is a Guest Researcher at Constructor University.

The six key dimensions of data quality define how trustworthy and usable data is in practice. These principles, widely used in official statistics, highlight the multidimensional nature of data quality.

This meant more than publishing reports; it involved press releases, interactive visualisations, open APIs, and collaboration with community representatives to ensure outputs served real needs. Importantly, methods and decisions behind the numbers were documented and shared, helping people understand **not just what the data said, but how it came to be**.

Returning to academia and behaviour change research, I saw it adopt a number of things I valued in official statistics: **from contact the author** footnotes **to full transparency** through platforms like the Open Science Framework (OSF), GitHub, and Zenodo. As well as a shift from a top-down mentality to one of **co-creation** and **public engagement** in collecting, managing, and releasing data.

Moreover, the Findable, Accessible, Interoperable, Reusable (FAIR) principles echoed what I had seen in official statistics, a recognition that the process matters just as much as the product (Wilkinson et al., 2016).

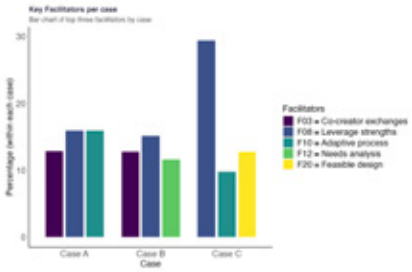
The more open we are with our work, the more voices are included in the discourse, which in turn can help us ensure our work remains fit for purpose, while also creating an opportunity for us to converge towards an empirical truth.

Upon completing my PhD, I was inspired to share my work with people outside academia, my friends, family, and the curious. My goal was to open up my work to new audiences and invite questions and critique.

We are in an era where people feel more empowered to question and more willing to challenge long-standing authorities on a topic. This presents us with a new challenge: something to push us, for us to grow beyond just informing. To build trust in our research and bridge the gap between academia and the communities we are trying to reach, **we have to look for ways to connect with meaningful language that provokes questions and invites critique**.

Varthai is a personal website, presenting my research through art, poetry, and data visualisation. The word Varthai comes from the Tamil language, meaning word. **I wanted to use different words, in the metaphorical sense, to**

The Varthai – Data Stories layout, where each study is presented through artwork, a poem and a data visualisation, allowing audiences to explore the format most meaningful to them.



Screen capture by Vinayak Anand Kumar

Co-creating digital health interventions

speak to my audience; to draw them into my work. My goal is to present every study using an art piece, a poem, and a series of data visuals.

People can start with the dissemination method that they find most engaging and then go deeper. For example, clicking **Art** reveals the full art piece and directs viewers to a Wikimedia Commons page that presents the topics covered in the study.

The audience is also presented with the **first word of a poem**. When clicking it, they are shown the full poem with a link to the publication.

Finally, a **data visualisation** is presented to the user, which, when clicked, reveals either a larger version or a full range of the data visualisation, as well as a link to the OSF repository with details of the methods used to collect, process and analyse data, along with corresponding syntax.

Varthai exists to both share my work and invite critique. It aligns with the **principles of co-creation**, developed by Health CASCADE (Chastin et al., 2025), namely those of **open access** and **transparency**, providing open links to my OSF repository and using free tools, such as RStudio, Quarto, and Netlify, to construct the site. This allows others to explore the full data generation process and adapt the model for their own work. I aim to balance creativity with credibility, and welcome feedback on both the research and the platform.

Going forward, I hope to integrate more co-creation by collaborating with study participants and co-authors to develop artwork or write poems, extending the principle of **recognised contribution** into the dissemination phase. I also aim to further support the principle of **plural evidence** by exploring different ways of sharing insights, and use Binder (Jupyter et al., 2018) to increase transparency by letting users interact directly with my data processing and analysis pipelines.

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Special Issue. Science communication:
Making research accessible

Knowledge visualisation in science communication: Personal insights from an MSCA Postdoctoral Fellow in social sciences

"A picture is worth a thousand words," as the saying goes. Yet creating a picture that achieves this requires just as much thought, skill, and dedication as writing an impactful thousand words about your research. Still, in many national academic accreditation systems, it counts for nothing. A personal reflection with practical tips on visual science communication from a former MSCA fellow – and a plea that it truly is worth it.

Loosening the imagination

When preparing my MSCA Postdoctoral Fellowship (PF) proposal, I paused when I read that Horizon Europe not only encourages science communication but makes it a contractual obligation. That night, I was brave and rewrote the third objective of my research proposal with research objective 3 (RO3) applied, i.e. increasing the impact of social science and humanities through visual (digital) science communication.

My inclination towards visualisation predates my academic trajectory, but it was certainly brave to combine research on policing and EU security with creating digital images. My proposal was successful. Through the fellowship,

Monika Weissensteiner recently completed her MSCA-PF LEmobAB: Law Enforcement Mobilities Across Borders. She holds a PhD in Cultural and Global Criminology and has a background in Social Anthropology. She frequently integrates visualisations and writing in outputs for academic and non-academic audiences and teaches 'drawing as a method' workshops. In her free time, she enjoys climbing, hiking, crafts, and all things artsy that are not work-related.

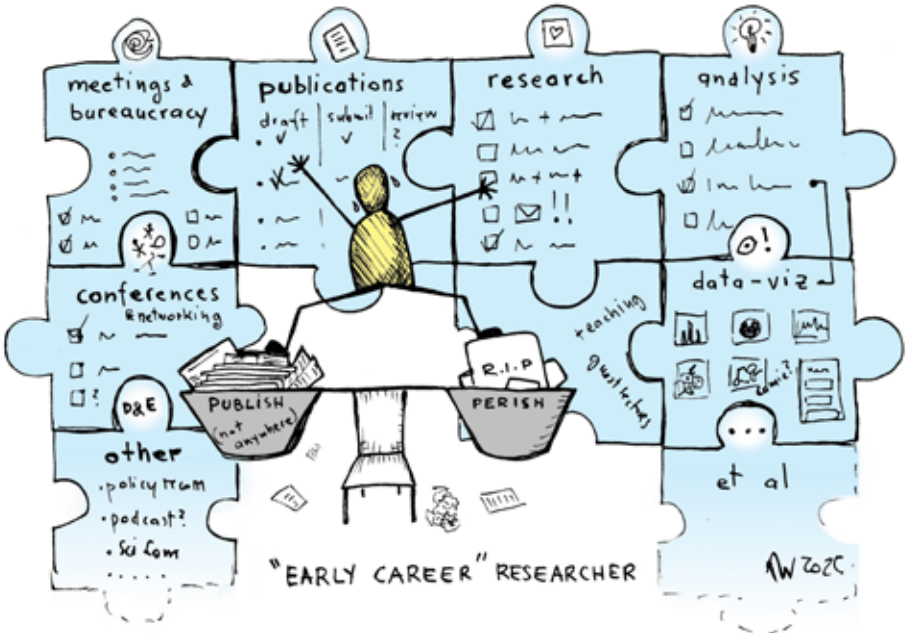

Image by Monika Weissensteiner

Balancing the countless tasks of an early-career researcher – from research to publishing, teaching to networking, and beyond.

I could legitimately invest time in visual work, coupled with opportunities to train new skills. I was a newbie in science communication, digital visualisation, and quantitative data visualisation. The MCAA blogging workshop held in 2023 was my first introduction to the science communication challenge of defining one's audience and message. After a day-long online training, preparation and peer-review, my first-ever blog post emerged: a comic strip and short text launching my study.

Two years later: some of the lessons learnt

Many image types, often integrating visuals and words, are used to convey scientific complexities through visual communication. Visuals are also increasingly employed to capture responses when scrolling online: for readers to stop, view, read, remember – and, if you are lucky, jackpot: they follow a link to your work. Importantly, visualisations are powerful tools in visual thinking, note-taking, data analysis, academic articles, posters, presentations, and reports.

Visual literacy: The ability to create and make sense of visuals. You may be used to reading charts, don't underestimate your visual literacy. I struggle to make sense of certain chart types myself. Keep it simple, especially when your target audience is less familiar with data visualisation, and integrate words effectively. Why? Because you want your audience to engage with the story. For many purposes, the more accessible and immediate, the better.

What chart, infographic, or other multimedia output suits what type of data or story? The linked guidelines are a great way to start! However, visual storytelling isn't merely, nor necessarily, numerical data visualisation – it's about finding a visual metaphor and, most of all, telling a research-based story that connects with your audience.

Clarity and accessibility: Content, form, but also colours! Clarity in visual terms also means using a few colours per image and maintaining a consistent palette across visuals. Empty space isn't a waste. Did you know that not everybody sees colours the same way? When we use colour to create contrast, for example, to differentiate between visual or data elements, or text and background, we need to make sure that the contrast is visible to everyone. Some colours that you can distinguish may appear identical to others, or vice versa, due to colour vision deficiencies. Inclusivity matters: contrast-check!

Free DIY resources: For data visualisation, Flourish, Datawrapper, and Rawgraph have free versions. To work collectively on a specific output, Canva is a great tool that provides templates and icons. Additionally, check out CC0 image repositories, for example, Icon Library or Arcadia for life sciences.

Inviting academia, funders, and researchers to support, recognise and embrace visual science communication.

Visual communication is a vibrant community, especially in STEM. My favourite tip: pick up a pen and draw your own visual vocabulary! Besides costly professional software, free programmes suffice to draw or compose digitally, or to finalise scanned analogue illustrations. My two visuals shared here were drawn on paper, scanned, and coloured in Paint.NET. Finally, something I learnt the hard way: always check what image resolution and format the publishing portal requires to ensure the output is sharp and not fuzzy or stretched.

Professional support and collaborations: You may have little interest in DIY or engaging in more complex visual communication, such as scrollytelling or animation. More elaborate visual storytelling requires specific professional know-how, time, and financial resources. Reach out to professionals – perhaps even at your university.

Hind and foresight

During my fellowship, I worked on multiple visualisations, several of which are still to be finalised or published. Not everything was doable within the fellowship period, or with my DIY skill level. But I am proud of what I managed. I also met specialised professionals, thanks to the MSCA secondment and training, and I saw others' results of collaborations. Importantly, I met many colleagues with amazing research projects and publicly relevant knowledge beyond their specialist focus. Yet science communication often isn't part of their job. Visual communication often remains beyond imagination or financial reach. Such skills are rarely part of academic training, nor is the output typically recognised as academic labour.

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Special Issue. Science communication:
Making research accessible

There is plenty of room *in the panels*

Julie Nekola Nováková is a science communicator at the Institute of Physics (FZU), Czech Academy of Sciences, and an evolutionary biologist at the Faculty of Science, Charles University. She likes connecting science communication with art, having produced several science outreach anthologies, an exhibition, science communication theatre days, educational comic books, and more.

How do you convey abstract scientific topics, such as the not-quite-intuitive world on the nanoscale, its diminutive dimensions and enormous possibilities, to children? Comic book narratives might be the answer!

Show and tell: Visuals and stories

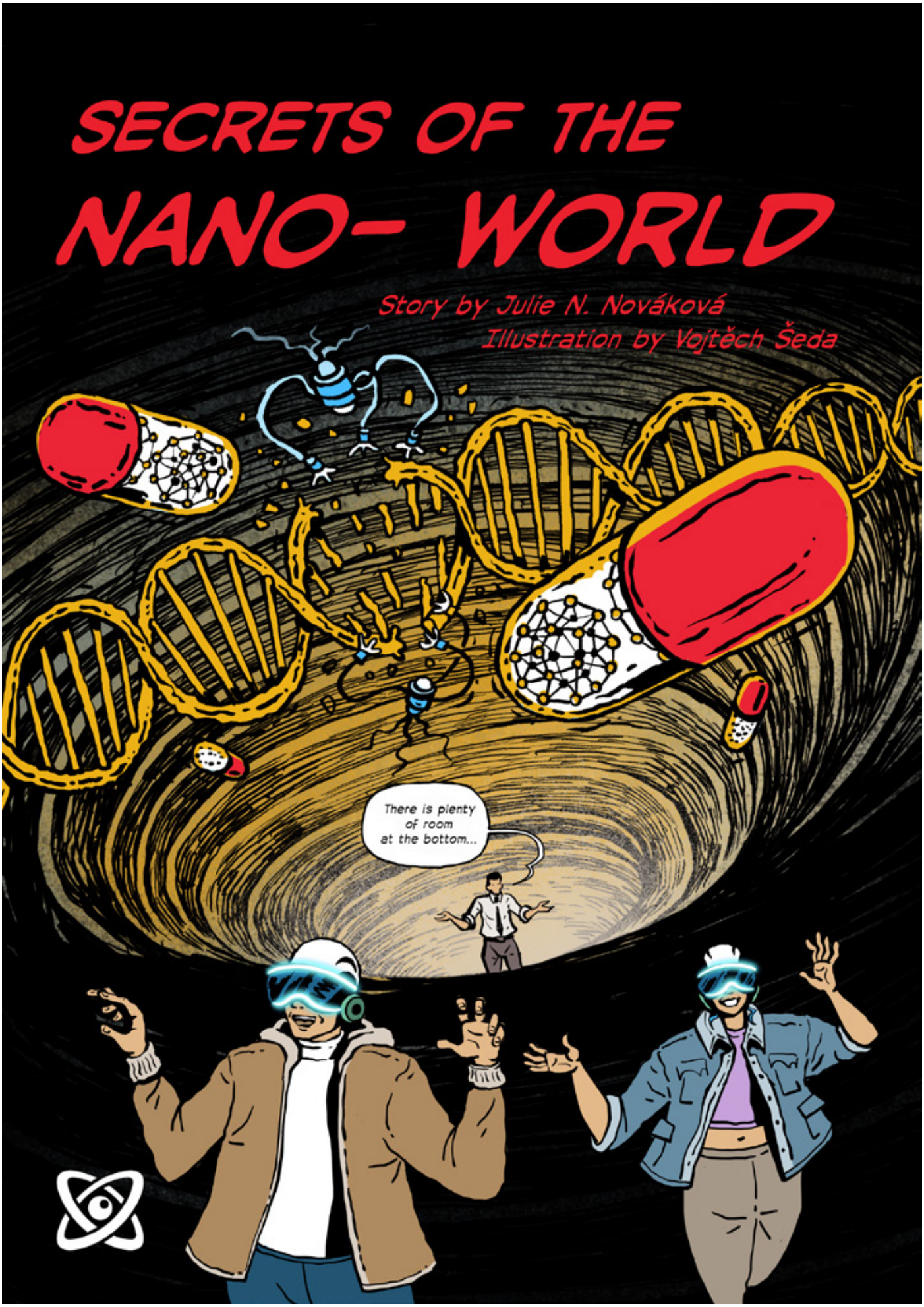
How many nanometres does your hand measure? How does fullerene, a molecular soccer ball, compare to an actual soccer ball in size? And why does nothing in the nano-world stay still?

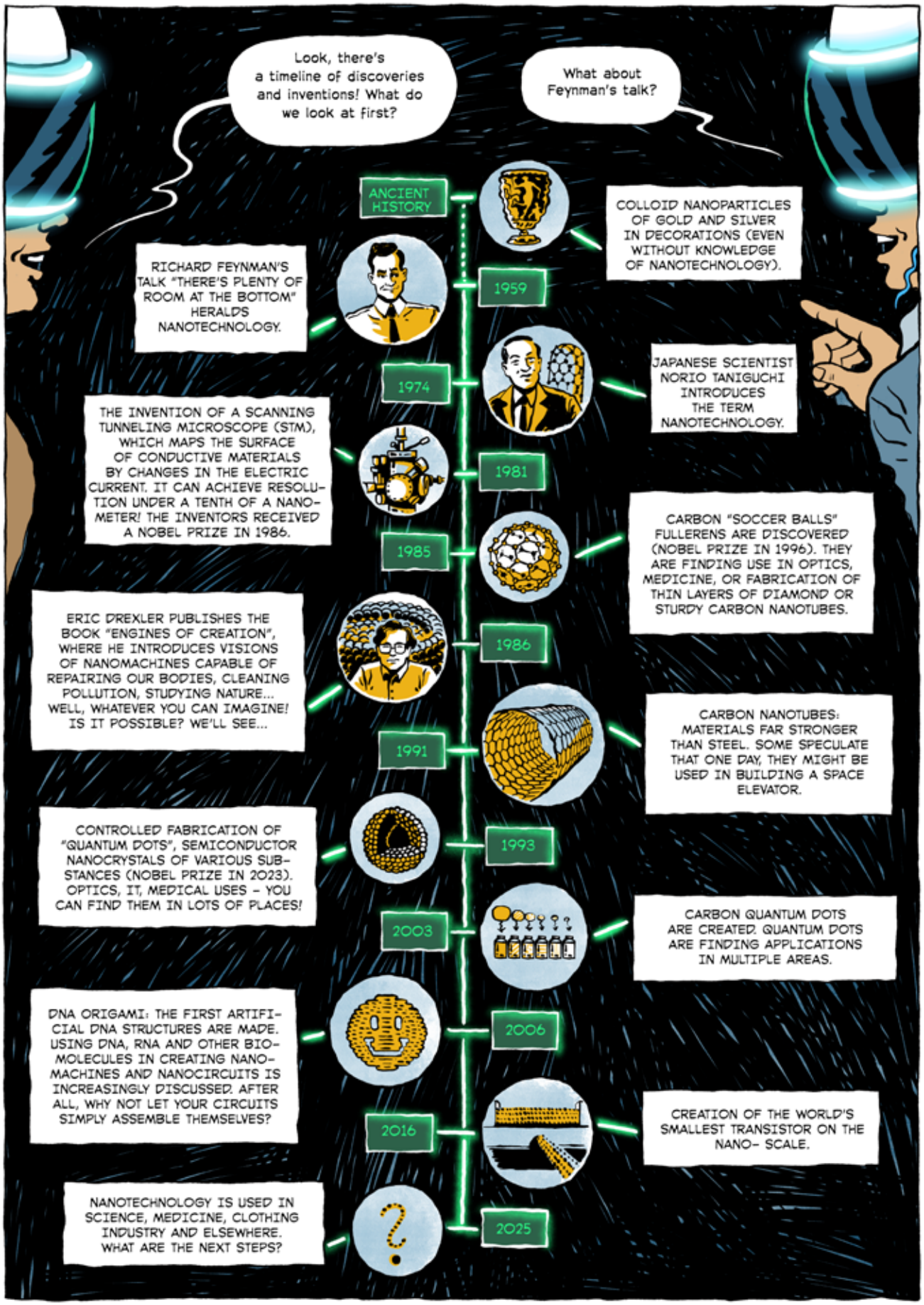
Answers to these questions are difficult to explain merely in words; the scales and behaviour of particles are just too far away from the world we normally think of. That's where visuals come in. However, to create interest in the visuals and drive curiosity, something more is needed: a story.

At the Institute of Physics of the Czech Academy of Sciences, we pondered how to communicate the nanoscale world to children and students. We naturally gravitated to the comic book: a story they can relate to, with high-schoolers as protagonists discovering how the nano-world works, what nanotechnology is and its history.

Another story character, the Nobel Prize-winning physicist Richard Feynman, whose "there is plenty of room in the bottom" speech ignited interest in the budding – not yet named – field of nanotechnology, acted as their guide. Thus, Secrets of The Nano-World was born.

Adding a worksheet for classroom use and creating several pages in a way that can be used as standalone infographics helped us create a toolkit of educational resources on nanotechnology.





The popularity of science comic books is on the rise

In some contexts, narratives and visuals can increase learning motivation, memory and understanding, and science communication and education professionals are increasingly interested in the potential of comic books. Nowadays, many excellent comic book resources are available in these fields.

To name just a few, there are wonderful science comics by neuroscientist and artist Matteo Farinella, "When The Earth..." trilogy of geophysical comic books, and countless graphic novel adaptations of events from science history, scientists' lives and seminal works, including "Logicomix," "Darwin: An Exceptional Voyage," "Charles Darwin's On the Origin of Species," the "It's Her Story" series (such as the volume about Rosalind Franklin) and many more.

Not all have been necessarily created with the goal of educating in mind, but they are mostly doing a wonderful job.

Coupling comics and hands-on learning

In our case, we didn't want to stop at just creating the comic book and worksheet. Early on, we decided to make all materials freely available under the CC-BY-SA license, so that they can be adapted, for example, translated or abbreviated for use in specific learning environments.

Finally, to couple it with hands-on learning, we developed an experimental setting, a glovebox containing LEGO bricks, enabling children to try out an exercise in the comic book, inspired by one of the "DIY Nano Book" activities using LEGO and kitchen mitts to illustrate in an analogy how the world on the nano-scale works.

The glovebox toured a couple of science fairs and local library workshops so far, eliciting much enthusiasm from children. After all, it's one thing to merely read or hear about the "fat fingers, sticky fingers" problem of creating molecular machines; it's another to try an analogical procedure in the macroscopic world with your own hands!

Our approach shows that not only do comics have a place in science communication and education, but when paired with other strategies, they can have a considerably greater impact. Despite its increasingly popular use, there is still much untapped potential of comics for science communicators and educators.

Questions yet to answer – hopefully soon

The next step for us is to create another volume of the comic book, this time smoothly transitioning from the theme of nanotechnology, including topics such as DNA origami, to biophysics. A related worksheet is a must; in addition, we will run a workshop in our institute's biophysics lab to enable interested students to gain hands-on experience on the discussed science and technology.

However, this is a single step by a single institution. How can we tap more of the science communication potential of comics, collaborate, and conduct more research on the effectiveness, benefits and potential pitfalls of using it in outreach and education? Hopefully, a new COST Action, ., may help bring together creators, researchers, communicators and educators across the world to explore these questions.

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Special Issue. Science communication:
Making research accessible

Science meets art: *A story of* curiosity *and* collaboration

Toni Fröhlich is an experimental physicist, the co-founder of SciArt, and a long-standing MCAA member. After completing his PhD at the University of Basel he became interested in collaborations with artists. He has presented these interdisciplinary projects in Germany, Spain, Australia, and Switzerland.

Jill Scott is a professor emeritus at the Zurich School of the Arts, the co-founder of SciArt, founder of the Artists-in-Lab programme, and director of the LASER talks in Zurich. She has exhibited her work in numerous international exhibitions and published several books on art and science with Springer and De Gruyter Press.

Artists can not only help present scientific research in a novel way but also encourage deeper and more reflective responses from the public. At Papiliorama, more than 3,000 visitors experienced interactive installations, and the response was both exciting and thought-provoking. Yes, science and art can go together very well!

SciArt is a non-profit organisation in Switzerland devoted to the fusion of discovery and creativity, founded in 2024. We had many ideas and a history of science–art collaborations behind us, and wanted to explore more novel ideas around science communication and public engagement. Over the last year, our plans for new projects have become increasingly concrete, and we have started collaborations with environmental scientists and biologists as well as with researchers in the physical sciences. Apart from looking for funding, we also began to consider possible exhibition venues.

Toni Fröhlich, co-founder of SciArt, first contacted Papiliorama, a small science centre with a zoo and botanical garden housing a large collection of tropical butterflies just west of Bern. The centre might be unknown to international audiences, but in Switzerland it is popular among families and the wider public. The centre was keen to collaborate with us at

Jill and Toni present the interactive installation Worried Wings, in which dragonfly sculptures float in water.

Photo by Jill Scott

SciArt, as biodiversity is one of its core areas of interest and closely aligns with our project. Using different electronic media and interactive installations, such as those in Jill Scott's works, was also new for them. Moreover, the centre had just constructed a new building that could host our exhibition **Water Stories**.

Different backgrounds, one goal

Toni has a background in nanoscience and the laboratory manufacturing of nanostructures. He is especially interested in structural colours, a way of creating colours without pigments. It entails engraving nanostructures into a surface, which creates light interferences depending on the wavelength and angle of incidence.

Jill's interests are very broad. With over 40 years of experience in the transdisciplinary field of art, science and technology, she has explored close collaborations between artists and scientists. As an artist, she draws inspiration from scientists to create artworks. She believes that scientists require unique forms of communication and that translating their research into media art can lead to new ways of thinking.

Realising a project together

As a starting point, Jill developed a project called **Worried Wings** to bridge scientific and artistic disciplines. The dragonfly is one of the main species used to study the fragile biodiversity of ponds and the human impact on freshwater systems. Their wings can show structural colours, further emphasising the beauty of this insect. We planned to mimic these colours on dragonfly sculptures using nanolithography techniques, but have not yet been able to do so due to a lack of funding. This new work, along with others, like Jelleyes about the Great Barrier Reef and **LikeWater**, a VR game designed by the start-up Somebodyelse were shown as part of Water Stories.

In Brisbane, we presented our plans for the Worried Wings project at ISEA 2024, theInternational Symposium for Electronic Art. The presentation was included in the academic

symposium of the festival. It attracted a lot of interest and provided us with valuable suggestions for the next steps in our journey.

For Toni, the project was an adventurous journey to see how science can be interpreted through artistic works. It was fascinating to see how an idea evolved into a creative work and finally a public exhibition. SciArt develops new methods to help visitors, many of whom have no scientific background, become more curious about science.

How to involve visitors actively

Beyond the show, SciArt also engages the public directly through field-based citizen science. During the exhibition, we held a citizen science hiking workshop in a landscape conservation area with several small lakes. Participants, accompanied by experts, collected water and soil samples, and listened to underwater and subsoil sounds. Auried is situated right next to the Saane river and is famous for its birdlife, one of the largest Swiss populations of frogs, dragonflies and water species.

Kristy Deiner, another founding member of SciArt, later analysed the samples for environmental DNA (eDNA) in her company, SimplexDNA. We also had hydrologists teaching participants water observation and artists performing sensory exercises. The results from our hiking workshops were featured in the exhibition.

Another highlight of the exhibition programme was a series of LASER talks, part of the International Society for Arts, Sciences, and Technology Leonardo International. Here, scientists and artists give short presentations about their work, followed by a discussion in which everyone can participate.

Overall, our special exhibition was a success. Papiliorama was delighted to host Water Stories, which brought them valuable experiences that will continue to benefit them in the future. We are now developing a new project on atmospheric physics, Atmosphere One, continuing our mission to connect science and art.

Art–science collaborations open doors to audiences who might never engage with research otherwise, making scientific ideas more relatable, intuitive and memorable.

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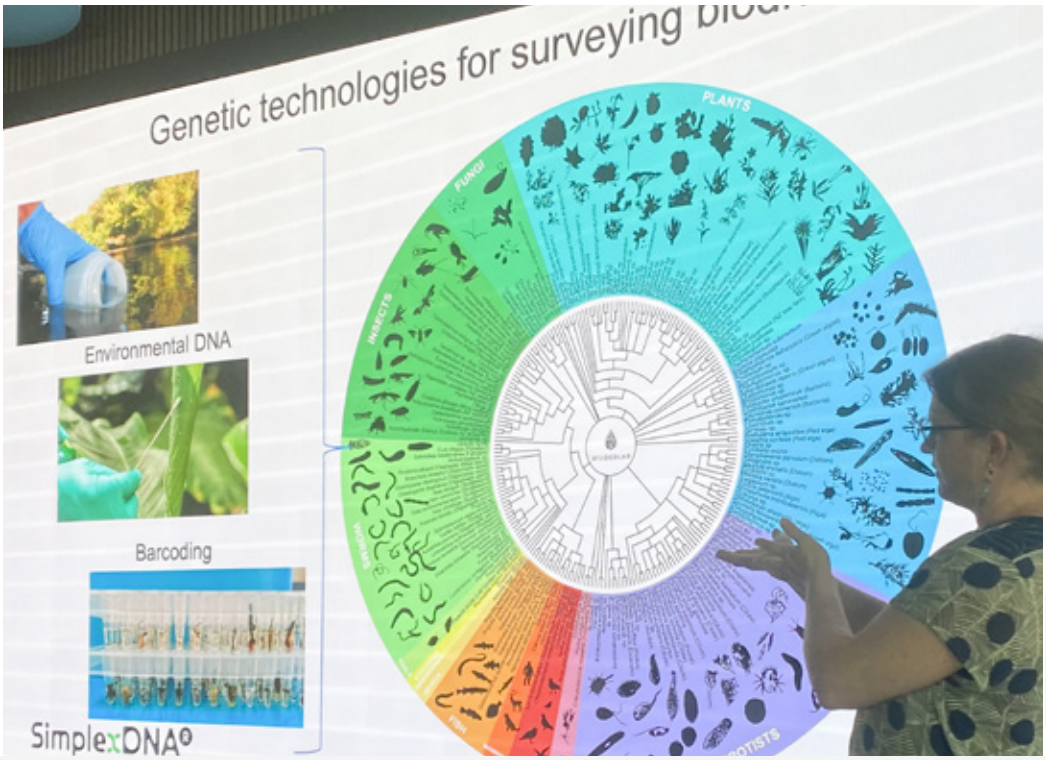

Kristy Deiner explains DNA methods for monitoring biodiversity in a LASER talk.

Special Issue. Science communication:
Making research accessible

Storytelling *brings* data stewards *to* light

When the new profession of data steward emerged in science, even experts struggled to define it. The European Open Science Cloud (EOSC CZ) has used storytelling to make these hidden professionals visible – turning data stewardship into a relatable story about people, collaboration, and the future of Open Science.

A new role in science

Data has accompanied humanity for centuries, from carved symbols and handwritten records to digital spreadsheets stored in the cloud or forgotten on old drives. Today, the challenge is to care for modern research data. But who should ensure this care?

Researchers are often overwhelmed by their projects and the growing volume of data they produce. To help them manage, share, and preserve this data effectively, a new group of professionals has emerged, people who understand both the scientific process and data management. They are known as **data stewards**: experts who organise, secure, and prepare research data for reuse.

To help researchers and institutions understand why data stewardship matters and how this role can transform scientific practice, **EOSC CZ** decided to take a creative route. Instead of publishing another technical guide, the team launched a **six-episode web series called Data Guardians: Mission FAIR**. Using humour, narrative, and visual storytelling, the series brought this new profession to life and showed its real value for modern research.

Lucie Skřičková is a communications specialist at the Institute of Computer Science, Masaryk University, and an EOSC CZ communications team member. She focuses on science communication, open science, and research data management. Her work connects storytelling with community building to make complex research topics accessible and engaging for diverse audiences.

Image by Zuzana Morkesová

Graphic for the fifth episode of the campaign for sharing on social networks.

Why storytelling works

Each episode of the series explored a different part of data stewardship, using short illustrated stories to make complex ideas easy to grasp. The series showed how these experts establish their roles and connect research with everyday practice. Later episodes highlighted tools, training, and community building, introduced the **national map of data stewards**, and demonstrated that good data management enables science to be repeatable, verifiable, and open.

"We wanted to show what data stewards actually do and why their work is vital," says **Pavlína Špringerová**, UX designer and co-author of the campaign. "Storytelling gave us a way to connect with researchers on a human level and make them care about data."

A fictional university

The series takes place in a **fictional university**, with characters facing problems familiar to any researcher, from preparing a grant proposal to choosing tools or setting up repositories. The model setting allowed the team to combine humour and realism while avoiding institutional sensitivities.

Zuzana Morkesová, illustrator of the series, explains: "Fiction helped us make the role universal. Each story reflects real challenges — collaboration, communication, and curiosity. And it was fun to make."

The illustrated format also made the campaign visually appealing, helping it to reach audiences beyond the research community through social media and university channels.

Mapping the community

Alongside the campaign, EOSC CZ developed a **national interactive map of data stewards**, a practical tool that turned awareness into action. It helps researchers find local support and allows stewards to connect, exchange experiences, and build recognition within their institutions.

"For many stewards, the map proved they are not alone," says **Martin Dvořák**, data analyst and author of the map. "Every new dot on the map confirms that this profession is becoming recognised."

The initiative shows that science communication can bring tangible infrastructure improvements,

not just awareness. What began as a creative outreach campaign evolved into a functional national network and a model for others to follow.

Impact and lessons

The campaign raised awareness of who data stewards are and why their role matters, helped professionals gain confidence and visibility, and offered practical tools, such as the national map for researchers seeking support. Most importantly, **it showed that science communication can mix creativity with real impact**.

From the EOSC CZ experience, several lessons emerge: use stories to make expertise visible, combine narrative with practical tools to turn awareness into action, show real dilemmas rather than only successes, and add humour and empathy to build trust. These principles can apply to any communication effort aimed at changing research culture.

A fun and serious message

Data Guardians: Mission FAIR proves that **science communication does not need to be dry to be effective**. By turning a complex institutional change into an engaging story, the campaign helped legitimise a new profession and build a stronger open-science community.

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Graphic for the first episode of the campaign for sharing on social networks.

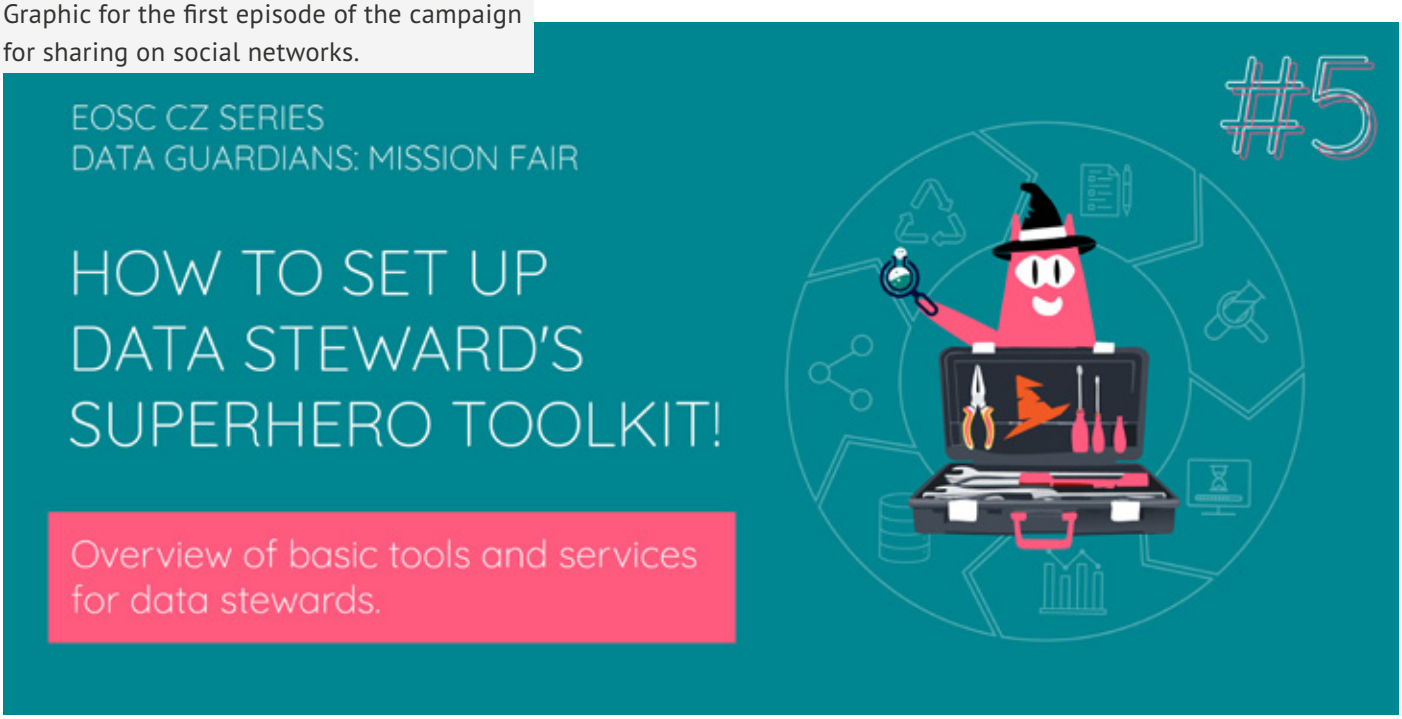

Image by Zuzana Morkesová

Special Issue. Science communication:
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Integrating science communication *in a natural sciences project*: Reflections *from* Eco2Wine

While science communication is increasingly acknowledged as important, it remains peripheral in many natural sciences projects. The MSCA Doctoral Network Eco2Wine takes a different approach, positioning science communication as a core research and training objective. As the project nears its halfway point, Eco2Wine offers early lessons on what the meaningful integration of science communication looks like in practice.

In natural science projects, science communication is often treated as an afterthought, with, for example, a press release or newsletter article once the research is done and published. The MSCA Doctoral Network Eco2Wine is taking a different approach. In this project about investigating microbial interactions for sustainable winemaking (Grant Agreement 101119480), science communication is an integral component from the outset, embedded into its research, training and practice.

Following a recent trend of MSCA Doctoral Networks in the natural sciences formally integrating science communication as a core competency, Eco2Wine can serve as a case study for how communication can be embedded within research objectives, including a reflection on the benefits and challenges associated with this approach. The project is now nearing its halfway

Katherine Rabik is an MSCA Doctoral Candidate with the Eco2Wine project and Senior Research Assistant at the Public Engagement Lab at the Centre for Research on Evaluation, Science and Technology (CREST) at Stellenbosch University, South Africa. Katherine's research focuses on the relationship between wine producers and wine researchers and how to best support their communication and collaboration. She holds an MSc in Science Communication and Public Engagement from the University of Edinburgh and additional degrees in engineering and education, approaching her research with a transdisciplinary perspective and always looking for opportunities for collaboration and co-creation both within and outside academia.

Photo by Petro Kotze

Eco2Wine DC Katherine Rabik provided an overview of science communication theory during the training week hosted by South Africa Wine in October 2024.

point, and this article reflects on the motivations behind this approach, how it has been implemented, and emerging insights thus far.

A priority from the beginning

Eco2Wine brings together ten doctoral candidates (DCs), beneficiary institutions and associated partners in a consortium that spans seven countries: Spain, France, Germany, Italy, Slovenia, Georgia, and South Africa. The interdisciplinary nature of the project, combined with strong industry partnerships, creates a research context where a focus on communication is essential.

From the beginning, the project leaders recognised that traditional dissemination models would be insufficient for addressing the complex, applied, and highly localised nature of knowledge exchange in the wine sector. Instead, communication was embedded into the design of the project, with DCs receiving training in science communication alongside their research. While eight of the ten DCs work on technical aspects, one DC focuses exclusively on communication between scientists and wine producers, and another focuses on communication and marketing with wine consumers. This integration of science communication was a deliberate attempt to equip the young researchers with the skills and experience needed to engage meaningfully with diverse stakeholders across linguistic, cultural, and disciplinary boundaries.

What it looks like in practice

All Eco2Wine doctoral candidates are trained in science communication and take part in the communication and dissemination activities related to the project. In small groups, they rotate through managing and contributing to relevant social media channels and write popular articles shared on the website. While together in South Africa in October 2024, they worked with a professional media company and a local journalist to film short videos explaining their research projects and write blog posts reflecting on their PhD journey so far.

This approach has strengthened not only their skills in communicating to audiences outside of academia, but it has also supported communication within the project consortium. With researchers spanning multiple disciplines, including microbiology, biotechnology, economics, and marketing and science

communication, being able to communicate one's research clearly with colleagues is a key professional skill.

Nonetheless, challenges persist. All researchers entered the project with different comfort levels with science communication, and in some contexts, communication is still viewed as secondary to other scientific work. Navigating these cultural and epistemological differences takes time, patience, and institutional support.

Challenges and opportunities

While the integration of science communication into Eco2Wine has created value for the project, it has also presented some challenges. MSCA Doctoral Networks are rigorous and demanding programmes, requiring the completion of a PhD in only three years. Therefore, the DCs' time is already stretched across their own research and scientific training requirements. Investing time in forms of communication that do not lead to traditional academic outputs can feel at odds with publishing demands and other research metrics.

That being said, the benefits so far are notable. The DCs have been encouraged to reflect on the relevance and impact of their research as they work to communicate it in accessible and engaging ways. Many DCs have also noticed their confidence increasing in communicating both in academic and non-academic settings as they have begun to build a portfolio of science communication experiences and outputs that will continue to serve them post-PhD.

From output to practice

Eco2Wine offers one model for embedding science communication as practice in a large research project, ensuring meaningful connections between science and its publics. For other MSCA networks, particularly in the natural sciences, lessons from Eco2Wine can provide insights into how to incorporate science communication as a core competency and commitment. This shift aligns with the broader goals of the MSCA: to produce researchers who can engage across sectors, cultures, and communities.

Follow along with Eco2Wine on our project website, LinkedIn and Instagram pages.

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Photo by Petro Kotze

DCs participating in science communication training, hosted by the Eco2Wine Associated Partner South Africa Wine in Paarl, South Africa, in October 2024.

Special Issue. Science communication:
Making research accessible

Empowering researchers *through* experiential training: Lessons *from the* MEDNIGHT–MCAA collaboration

In a world where science is more important than ever, why are researchers still unprepared to communicate their work to the public? The Mediterranean Researchers' Night (MEDNIGHT)–MCAA partnership is changing the game by empowering scientists to connect, inspire, and engage beyond academia. Discover how this collaboration is reshaping science outreach for the 21st century.

What good is groundbreaking research if no one understands it, or even knows it exists? In an era where misinformation spreads faster than facts, the ability of researchers to communicate clearly and connect with society is becoming a must. Public trust in science shapes everything from vaccine uptake to climate action, and yet, most researchers are rarely trained to engage beyond their academic circles.

The need for science outreach

Scientific outreach is more than popularisation: it is a bridge between research and society. It helps the public understand, question, and value scientific endeavours and even participate in the creation of knowledge, showing researchers the broader meaning of their work.

Today's audiences are diverse: teenagers seeking answers, citizens looking for evidence-based solutions, policymakers who rely on science

Ricardo Domínguez Jover is a Telecommunication Engineer with Advanced Studies in Science and Culture. CEO of El Caleidoscopio since 2013, he promoted the implementation of the European Researchers' Night project in the Valencian Region in Spain in 2017, which led him to create in 2020 the MEDNIGHT initiative and coordinate it as a project in 2021 with MSCA funding the **Mednight – Mediterranean Researchers' Night**. Moreover, Ricardo is currently a Board Member and Treasurer of the European Science Film Association.

Photo by University of Messina

Researchers getting ready to be involved in MEDNIGHT

to make informed decisions, and communities wishing to understand how research affects their lives. To communicate effectively with these groups, one must combine knowledge, empathy, creativity, and a diverse set of appropriate skills; however, many researchers feel unprepared. Academic training still emphasises publication over participation, and outreach is often treated as optional within research careers.

MEDNIGHT: A project for connection

MEDNIGHT aims to bridge science and society. What makes it distinctive is its double focus on promoting women in research and on its shared Mediterranean identity, highlighting common environmental, cultural, and social challenges, and promoting science as a unifying force. The partnership with the MCAA has strengthened this mission, bringing thousands of researchers with experience in the Marie Skłodowska-Curie Actions to this purpose. Together, MEDNIGHT and the MCAA are creating opportunities for researchers to share best practices, co-create activities, and develop their communication skills through structured, hands-on training. It has also amplified Mediterranean research on the European stage, showing how science can serve as a common language across cultures.

Preparing researchers for outreach

Through this partnership, MEDNIGHT launched two online training sessions designed to equip researchers with practical skills in science communication. Held in September 2024 and April 2025, more than 100 MCAA members and a total of 300 researchers registered for these half-day workshops, which combined theoretical insights with interactive exercises focused on identifying audiences, tailoring messages, and transforming research into compelling stories. Among the speakers was Pooja Khurana, MCAA Career Development Manager, who shared strategies for engaging youth and schools through citizen science projects, demonstrating how research can directly inspire curiosity and participation among students.

Building on the success of these virtual events, the partnership expanded in 2025 with **Science Speaks: A Summer School for Science Communication**, held in September 2025 in Valencia. The programme was coordinated by the MCAA Communication Working Group, the MCAA Spain-Portugal Chapter, and El Caleidoscopio within the MEDNIGHT framework. **Joana Magalhães** from Science for Change joined the facilitator team, led by the MCAA Communication

WG Chair **Ashish Avasthi**, alongside other experienced communicators, who guided participants through immersive sessions on storytelling, TED-style public speaking, and media engagement.

Many participants in these trainings later took part in face-to-face school-based outreach meetings across the Mediterranean, events organised to celebrate the International Day of Women and Girls in Science on 11 February, the online Young Researchers Meeting with Schools and the European Researchers' Night, putting their new skills into practice and strengthening the bridge between research and society in over a dozen countries at a time with the participation of thousands of students and citizens, showcasing the tangible impact of the partnership between MEDNIGHT and the MCAA.

Lessons learned and future plans

The experience confirmed the need for training that allows researchers to engage directly with real audiences. Future editions should strengthen this hands-on approach and build collaborations with other outreach initiatives to create a sound international training programme for researchers. Based on these lessons, the MEDNIGHT–MCAA partnership has laid the foundations for the next phase: a continuous training scheme envisioned for 2026–2027, under the coordination of the MCAA and involving other European Researchers' Nights, and an international recognition system for excellence in science communication.

While these initiatives are part of ongoing planning and future proposals, they reflect a shared commitment to sustain and expand the impact of current activities, where outreach training evolves into a long-term, collaborative effort across the research community.

Researchers of the 21st century will inevitably have a strong social communication component, capable of engaging with citizens, educators, and policymakers, ensuring that science is understood, trusted, and truly serves society. But communication remains insufficiently valued in researchers' careers. Until science policies incorporate outreach as a key component of research excellence, initiatives like MEDNIGHT must continue to find creative ways to motivate scientists to share and co-create knowledge with society.

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Image by Joana Magalhães

Special Issue. Science communication:
Making research accessible

Language models *for* dyslexia accessibility: *The* good *and the* ugly

In a recent study, we found that language models can assist readers with dyslexia. However, their outputs pose several risks. The paper, nominated for the Best Paper Award at the 26th International Conference on Artificial Intelligence in Education (AIED 2025), broadens our understanding of AI's ability to generate dyslexia-friendly text.

Eleni Ilkou is a researcher in AI and education affiliated with the Leibniz Information Centre for Science and Technology in Hannover, Germany. She has a decade of experience in education, and her research lies at the intersection of the Semantic Web, Knowledge Graphs and Language Models, with applications in collaborative and self-regulated e-learning and smart learning environments. Her work has appeared in top-tier venues. Beyond research, she is actively involved in the academic and research community, serving on organising committees for Semantic Web conferences, leading Task 1.3 within the GOBLIN COST Action, and contributing to science communication and community outreach through the MCAA.

Roughly 10% of people in the general population are affected by dyslexia (Roitsch & Watson, 2019), estimates suggest the figure may reach as high as 20% (Phillips & Odegard, 2017), making it one of the leading causes of learning challenges. While assistive technologies have long been used to improve reading accessibility, no research has yet systematically assessed how effectively language models (LMs) can produce dyslexia-friendly text that follows recognised accessibility standards. This article summarises findings from our recent study (Ilkou et al., 2025) and explores their broader significance, examining both the potential benefits and risks of AI-generated text. It discusses how such tools could foster more inclusive, evidence-based communication and education for millions of readers.

What is dyslexia accessibility in text?

A text is considered dyslexia-accessible when its design and formatting facilitate easier reading and comprehension. This accessibility is typically achieved by adhering to established guidelines that promote readability for individuals with

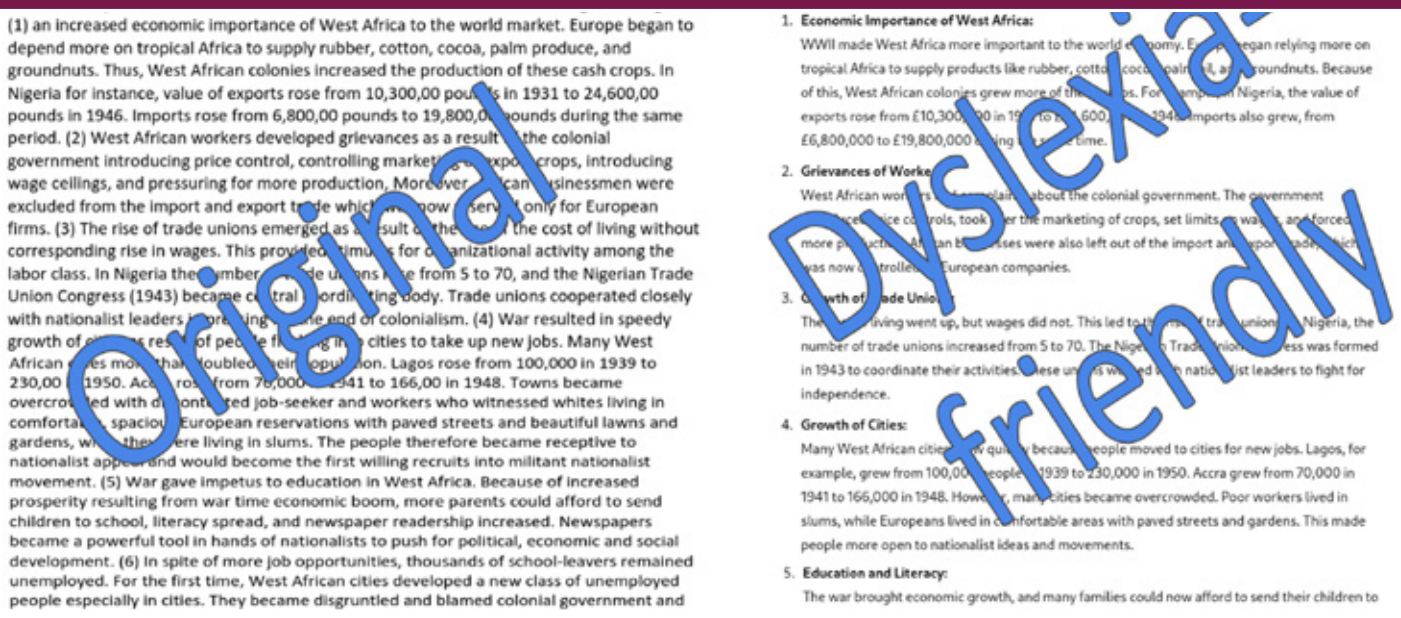


Image by Eleni Ilkou

Comparison between the original text from the West African Senior School Certificate Examination history textbook and ChatGPT's dyslexia-friendly version

dyslexia. Organisations such as the United Nations, the World Wide Web Consortium (W3C) and Inclusion Europe with the support of the European Commission have developed accessibility principles that address the needs of people with dyslexia. Although there is no single, universally accepted standard for dyslexia-friendly text, publicly available and well-defined recommendations can be found in the **Dyslexia Style Guide** published by the British Dyslexia Association (BDA, 2022).

Below are two examples: On the left, the original text from a history textbook (West African Senior School Certificate Examination), and on the right, ChatGPT's transformed dyslexia-friendly version of the same passage.

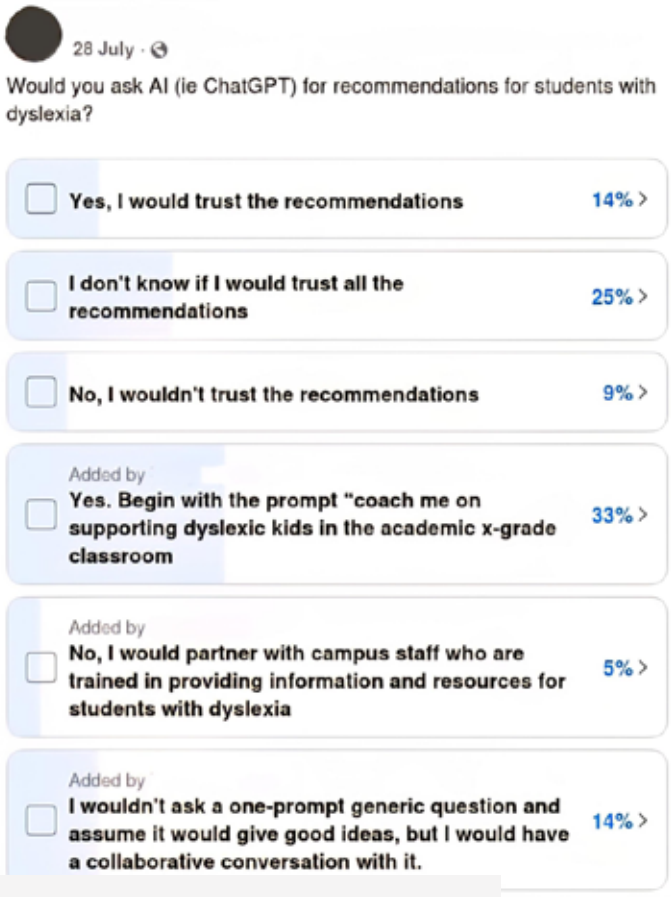
Can we trust AI on dyslexia accessibility for text?

A Facebook poll of 122 users in the **AI for Teachers** group revealed strong interest in using LMs to obtain accessibility guidance, as shown below. Most participants indicated that they would use AI tools, such as ChatGPT, to receive recommendations when working with students with dyslexia. However, our findings indicate that the responses provided by the LMs require careful verification.

While some of the recommendations generated by the models could help mitigate potential risks, they must be applied with caution. For instance, the suggestion to 'use positive language and encouraging messages' may have unintended consequences if not paired with specific, constructive feedback (Lipnevich et al., 2023). This is particularly relevant for students with low self-esteem, for whom overly generic encouragement can be counterproductive (Graf-König & Puca, 2024).

Similarly, the advice to 'imagine you are reading the text from the perspective of someone with dyslexia' may appear empathetic but could inadvertently reinforce labelling or lead to unintentional discrimination (Tunmer & Chapman, 2012).

On the positive side, all LMs showed statistically significant improvements compared with the original texts. The results indicate that the examined LMs consistently perform better when prompted with text-only criteria alongside the corresponding chapter, suggesting that structured input helps optimise their ability to generate accessible content. This broadens our understanding of what we can achieve with AI tools in education, opening new possibilities for generating accessible material for millions of readers worldwide.



Screen capture by Eleni Ilkou

Facebook poll in the 'AI for Teachers' group.

However, when generating texts, findings also revealed a lack of sensitivity in language and tone. More critically, some problematic responses appeared in sections discussing colonialism and slavery generated by GPT-4-turbo. Even when considered individually, such incidents underscore the need to assess generated content not just for technical adherence to guidelines, but also for its accuracy and contextual appropriateness.

Final words

Special education continues to face stigma and societal prejudices about what individuals with learning disabilities, such as dyslexia, can achieve. Moving forward, the difference will lie in how the content is delivered, and we should normalise offering varied learning formats to suit different needs – just as we do with different kinds of cheese or chocolate.

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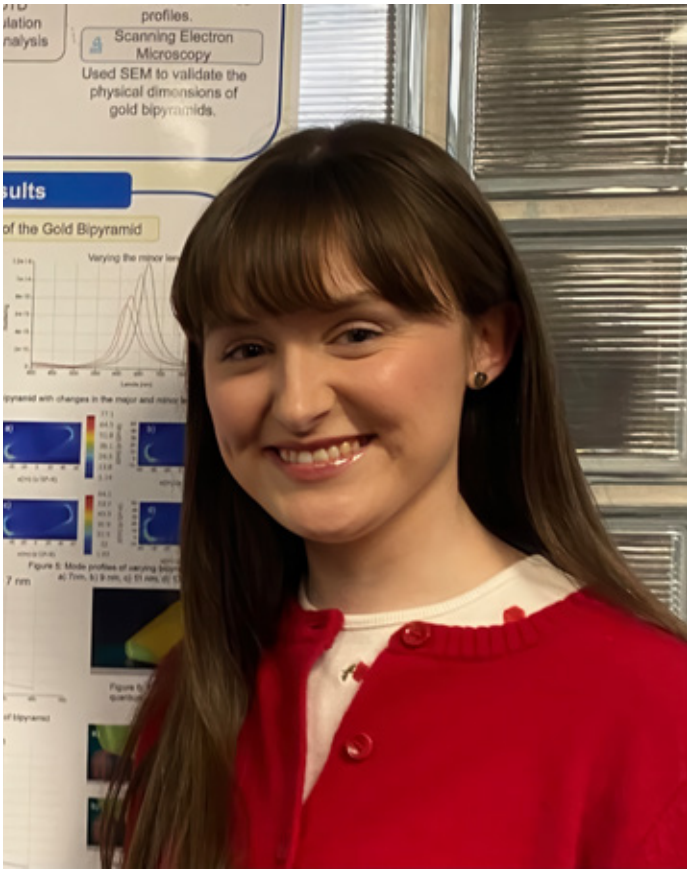
Special Issue. Science communication: Making research accessible

From TikTok *to* trust: Rethinking science communication *in the age of* algorithms



Hannah Killeen is a master's student in Science and Health Communication at Dublin City University. She holds a Bachelor's Degree in Nanoscience from Trinity College Dublin. She is passionate about making science accessible and engaging for all, with a focus on transparent communication, public engagement, and translating complex research into clear insights.

In a world of viral videos and endless scrolling, scientists are learning to tell their stories in new ways. But can they keep their messages honest and clear in the race for clicks and views?

The attention challenge in the digital age

In a world where a 30-second video can shape beliefs and public opinion, scientists are competing with viral content for both attention and trust. The digital age has opened new doors for researchers to creatively expand their public outreach, but has blurred the line between information and entertainment. A 2020 article in Frontiers in Communication by Pavelle and Wilkinson explored how platforms like Instagram and YouTube are reshaping science communication, becoming the new arenas for communicating science. We are continuously learning how these platforms influence a new, informal way of engaging with science. While they play a valuable role in making science more accessible and engaging for diverse audiences, researchers face the challenge of adopting a more humanistic approach to communication, as presenting raw data and complex figures is no longer sufficient. Instead, researchers are encouraged to translate their findings into stories that connect scientific knowledge with

everyday experience and emotion. Yet, this is no easy task. How can researchers balance accessibility, nuance, and trust in an algorithm-driven world?

From journals to feeds

Digital platforms have transformed how people encounter science. From static journal pages to scrollable, shareable content, science is more accessible than ever before. Social media not only connects people across the world, but also enables scientific ideas to reach audiences that traditional academia rarely engages. These amplified voices are creating a more diverse picture of the scientific community, empowering early-career researchers, women, and underrepresented groups to share their own stories. For many younger audiences immersed in digital media, this can be their first introduction to real-world science, whether through a podcast clip or YouTube video. This shift invites scientists to become storytellers and adapt their communication strategy to suit the nature of each platform.

One of the most effective strategies for digital science communication is using a narrative tone to give scientific ideas a human voice. Neuroscientist Samantha Yammine has mastered this approach on Instagram and TikTok. Through conversational reels, she explores a range of topics from brain plasticity to the sounds sharks make, using plain language and a friendly tone. By drawing on her own lab experiences and curiosity, she turns complex topics into relatable narratives and engaging educational videos.

The European Space Agency's (ESA) Instagram presence offers another model. Through breathtaking satellite images, mission updates, and astronaut perspectives aboard the International Space Station, ESA transforms abstract space science into visual carousel posts that spark wonder and lively discussions in the comment sections. Each post connects data to emotion, reminding audiences that space exploration is not only a technological pursuit but a shared human adventure for the benefit of humankind.

Successful science communicators avoid jargon and build emotional connections with their audiences through visual and narrative cues native to their chosen social media platform. TikTok rewards humour and immediacy while

A researcher records a short science communication video using a smartphone

Photo by RDNE Stock project via Pexels

Instagram thrives on aesthetics and consistency. Effective communication is not about diluting the science, but about matching message and medium.

When algorithms meet ethics

The tools of communication that expand reach can also create ethical tensions. Algorithms amplify what is engaging, not necessarily what is accurate. In this environment, there is a temptation to oversimplify, dramatise or create clickbait content. Scientists should walk a careful line between accessibility and rigour, and between entertainment and credibility. Ethical and responsible science communication involves transparency and accountability. Citing sources, acknowledging uncertainty when it is warranted, and being transparent about the limits of current knowledge are all methods that contribute to building a credible reputation. A fast-paced, eye-catching video might attract attention, but trust is built when researchers show humility and honesty about their work. As astrophysicist Becky Smethurst notes, admitting what we don't yet know can strengthen credibility rather than weaken it. Scientists on digital platforms are not just content creators; they are custodians of credibility in an oversaturated information landscape.

Digital science communication democratises access to knowledge, but it also risks distortion when engagement becomes the only goal. The most effective communicators recognise that creativity and responsibility must go hand in hand. By embracing storytelling, visual aesthetics and dialogue, researchers can make their work resonate far beyond academia. Communicating research is no longer an optional activity, but an essential step in ensuring that knowledge serves society.

In an age where algorithms shape what we see, the future of science depends not only on what we discover but on how we tell its story.

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Screenshot of an ESA Instagram post, Image credits: @europeanspaceagency / @hubbleesa & @NASA, F. Belfiore, D. Calzetti; @creativecommons BY 4.0

The European Space Agency (ESA)'s Instagram shares breathtaking satellite images of our universe

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Special Issue. Science communication:
Making research accessible

Empowerment *of* health *through* communication: Active living *and* mental well-being

Kimete Canaj is a Professor of Linguistics, Psycholinguistics, and Digital Education, currently active in teaching and research on multilingualism, language policy, and digital learning. A former Vice Rector of the "Fehmi Agani" University in Gjakova and national coordinator for Higher Education Reform Experts (HERE), she has shaped higher education policy in Kosovo. Educated in Prishtina, Heidelberg, Graz, and Vienna, she has held academic posts in Kosovo, Austria, and Germany. Kimete is the author of numerous publications, and she serves on international editorial boards and research networks, contributing to European projects on language, education, and social inclusion.

Empowerment of Health through Communication: Active Living and Mental Wellbeing is a project that grew from a simple idea: to help people in living better, healthier lives. We saw that many in our communities needed more support for the well-being of both their minds and bodies. Our goal became reaching out with understanding, encouraging people to get moving, and creating open, honest spaces to talk about health. By listening, sharing, and coming together, we hoped everyone could start to feel better and happier.

Towards well-being

We carried out the project in three Balkan countries: Kosovo, Albania, and North Macedonia, over the course of a year between 2024 and 2025. More than 1,200 people, aged 15–65, from a mix of urban and rural communities, took part. These countries share similar cultures and health challenges: low activity, mental health-related stigma, and struggles to find trustworthy health information. By connecting people across borders, we aimed to celebrate our diversity and learn from each other.

The project employed a multi-pronged approach combining health education, digital outreach, community workshops, and peer-led initiatives. Its core objectives were to:

- Increase awareness about the benefits of active living and mental well-being.
- Reduce stigma surrounding mental health.
- Improve self-efficacy in adopting healthy behaviours.
- Evaluate the impact of communication strategies on behavioural change.

Baseline surveys conducted across the participating countries revealed that only 38% of individuals engaged in regular physical activity, and 62% reported experiencing moderate to high levels of stress or anxiety. Additionally, 47% lacked access to reliable mental health resources. These findings underscored the urgency of the intervention and informed the design of the communication strategy, which was built around three pillars: clarity, inclusivity, and engagement.

Through science communication to a better life

Educational materials were developed in multiple languages and formats, including infographics, short videos, and interactive webinars. Social media platforms played a pivotal role in dissemination, reaching over 25,000 users across the region with an average engagement rate of 18%. Community ambassadors were trained in each country to facilitate in-person sessions, creating safe spaces for dialogue, peer support, and shared learning.

Post-intervention evaluations demonstrated significant improvements. Physical activity levels rose to 71%. Mental well-being indicators improved: 58% of participants reported reduced stress, and 42% noted better sleep quality. Additionally, 76% of respondents expressed increased confidence in discussing mental health issues with peers or professionals. Qualitative feedback emphasised the value of storytelling and peer-led discussions in breaking down stigma and fostering empathy. One participant from North Macedonia shared, “Hearing others talk about their struggles made me feel less alone. It gave me the courage to seek help.”

Lasting impact via community

The project also fostered collaboration with local health providers, schools, and NGOs, resulting in the establishment of three permanent wellness hubs, one in each participating country, offering free counselling,

Image by MidJourney, prompt by Fabrizio Martina

fitness classes, and educational resources. These hubs have continued to operate beyond the project timeline, demonstrating sustainability, community ownership, and long-term impact.

Challenges encountered during implementation included cultural resistance to discussions about mental health, limited digital literacy among older participants, and logistical constraints in rural outreach. These were mitigated through adaptive strategies, including printed materials, radio broadcasts, and mobile outreach units, ensuring inclusivity and accessibility.

Communication as a catalyst for change

In conclusion, the project demonstrated that strategic and empathetic communication can significantly influence health behaviours and attitudes. By integrating active living and mental well-being into a unified framework and implementing the project across the Balkan region, the initiative not only improved individual outcomes but also strengthened regional cooperation and community resilience.

The success of this initiative underscores the importance of participatory approaches, culturally sensitive messaging, and sustained engagement in health promotion efforts.

Future directions include scaling the model to additional regions, integrating digital health tools for personalised support, and conducting longitudinal studies to assess long-term impact. The project serves as a replicable blueprint for health empowerment through communication, where words, stories, and shared experiences become catalysts for change.

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Special Issue. Science communication:
Making research accessible

Science week *for all*: Expanding the spirit *of the long night of science*

Swayam Prakash is a Marie Skłodowska-Curie Actions (MSCA) fellow and award-winning scientist recognised with the MSCA Seal of Excellence, Adolf Martens Fellowship, and Water Advanced Research and Innovation (WARI) Fellowship. He was also a participant at the prestigious 74th Lindau Nobel Laureate Meeting in Chemistry. Passionate about water research and sustainable solutions, Swayam strives to bring science out of the lab and make it meaningful for society.

In a world where discoveries stay hidden behind lab doors, imagine a global science week for all, where labs welcome communities, students meet scientists across borders, and big ideas break free from notebooks. Science isn't locked away; it's celebrated by everyone. A movement to bring science closer to people, where knowledge truly belongs to all.

Science that serves society

As a young scientist at the 74th Lindau Nobel Laureate Meeting in Chemistry in 2025, I will vividly remember this first personal encounter with Nobel Laureates. At that moment, one of them said to us, "**Tell your story – let science come out of the lab and reach the people.**" Those words stayed with me. They reminded me that the real strength of science lies not only in experiments, but in its power to connect with people, empower communities, and solve real-world problems. Sharing the story behind an innovation is not only outreach; it is a scientific responsibility.

Science communication is often referred to as the bridge between research and society. But for this bridge to hold strong, it must rest on visibility, inclusivity, and public trust. Across the world, researchers work hard to tackle pressing challenges from clean water and renewable energy to health and climate action. Yet their stories rarely reach ordinary people. In an age when misinformation spreads faster than facts,

journals and conferences alone are not enough. We need shared spaces that celebrate science as a public good.

Germany's **Long Night of Science** is a powerful example. For one night a year, universities and research centres open their doors to the public. Families, students and curious citizens walk through laboratories, speak directly with scientists, and see firsthand how curiosity becomes innovation. But this idea remains mostly local. Why should the celebration of knowledge be limited to one night or one continent?

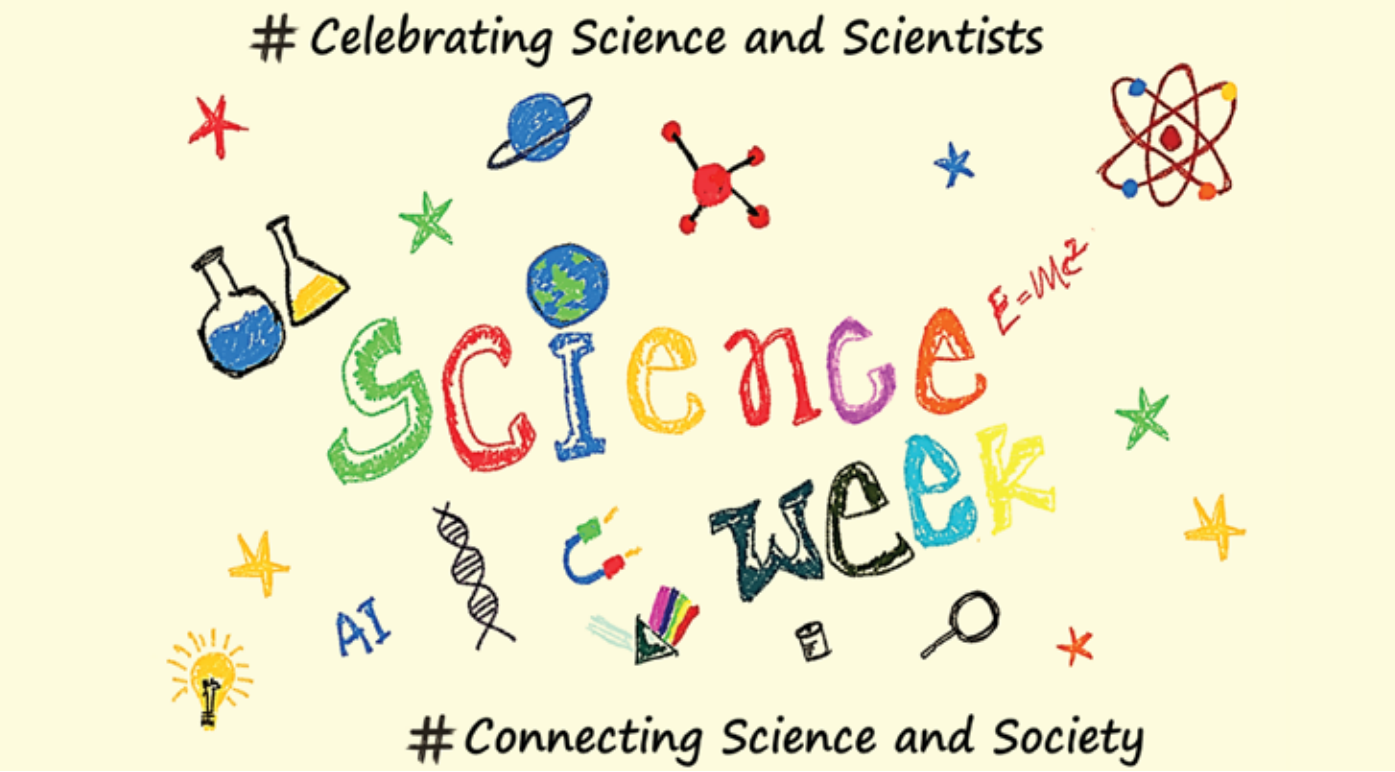
The **European Researchers' Night**, supported by the MSCA under Horizon Europe and local partners, takes this concept further. It is a pan-European initiative, with events in over 25 countries and 460 cities. Activities occur on flexible dates, bringing research into parks, libraries, schools, and prisons. Pre-events and outreach activities run throughout the year, preparing communities for the Night and fostering meaningful dialogue between scientists and citizens.

Now, it is time to imagine a **global science week for all**, a movement that brings this spirit to the world, across languages, disciplines and borders. Its purpose would be more than showcasing research; it would reaffirm the value of science itself at a time when scepticism, underfunding and political polarisation threaten its progress.

Standing for scientists and celebrating science

All over the world, many scientists work with limited money, delayed funding, and uncertain careers. In some countries, budget cuts may slow down important research. In many developing countries, the situation is even tougher; labs have little support, old equipment, and fewer opportunities.

Even with these struggles, we still rely on science to solve big problems like climate change, protecting nature, finding new medicines, and creating clean energy. The COVID-19 pandemic showed how quickly science can save lives when researchers work together, developing vaccines and treatments in record time. That is why it is important to support and



celebrate all scientists, not just Nobel Prize winners, but also young researchers, teachers, and technicians who keep science alive and moving forward.

From inspiration to policy

Celebrations alone cannot create lasting change, but they can start important conversations. A citizen-driven science week could encourage governments and institutions to provide steady research funding, fair opportunities, and proper recognition for scientists. It could also promote open access, ethical research, and inclusion of underrepresented voices in science. Popular activities include urban biodiversity surveys in London, UK, where citizens map local flora and fauna, and astronomy nights in Rome, Italy, bringing communities together under the stars to engage with researchers.

In Europe, science is celebrated everywhere, even in street names. In Germany, you can walk down Einsteinstrasse or Planckstrasse; France honours Rue Pasteur and Rue Curie; Italy celebrates Via Galileo Galilei; and Poland proudly marks ul. Kopernika. These streets are a quiet reminder that knowledge shapes nations.

Beyond events: Communication as inclusion

A week-long science celebration should be more than press releases or exhibitions. It should mix art, storytelling, and technology to make science easy to understand and exciting. Imagine students connecting with researchers across continents, or local communities hosting science activities in their own language, showing how research touches everyday life.

Digital tools could bring experiments to life; live streams, podcasts, and interactive apps, letting people explore environmental monitoring in real time. The goal isn't just for scientists to talk, but also for them to listen. Science grows when it is seen, supported, and celebrated. Let's open the doors and make science a shared, living experience for everyone!

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Special Issue. Science communication:
Making research accessible

The role of science communication *in* policymaking: *Why it matters for* the MCAA Policy Working Group

Theodota Lagouri is the Chair of the MCAA Policy Working Group and Senior Research Scientist at CERN, affiliated with Yale University. With extensive experience in particle physics and high-energy collider experiments, she has significantly contributed to scientific research and international collaborations. As an active member of the MCAA and the EU Science Diplomacy Alliance, she advocates for science policy and diplomacy, fostering responsible research and inclusive innovation worldwide.

Good science relies on effective communication. Without clear messages, research stays within academia instead of shaping real decisions. This article explores how the MCAA Policy Working Group supports researchers in building the communication skills and networks to connect science with policy and diplomacy, turning evidence into impact for more inclusive and forward-looking policymaking.

Science communication is no longer a nice-to-have skill. It has become a cornerstone of evidence-informed policymaking. In a world facing climate change, health crises, and digital transformation, policymakers rely on clear, reliable, and prompt scientific insights.

For researchers, this means going beyond publications to translate complex findings into concise, actionable messages that inform decisions. The MCAA Policy Working Group (WG) embraces this mission by helping researchers, especially early-career scientists, develop the confidence and communication skills to engage effectively at the science-policy-diplomacy interface.

Why science communication matters in policymaking

Evidence alone does not shape policy. Policymakers work within environments

influenced by priorities, public expectations, and time constraints. For science to inform policy, communication must be both accessible and actionable:

- Accessible communication translates research into clear, jargon-free language without sacrificing accuracy.
- Actionable communication connects findings to policy needs, offering evidence-based options.

As the European Commission (EC) Guide on Writing Impactful Policy Briefs emphasises, effective communication answers three questions: What is the issue? Why does it matter now? What should be done? Without this framing, even robust evidence risks being overlooked.

Linking science communication, policy, and diplomacy

Science communication, policy, and diplomacy are mutually reinforcing. Science policy shapes how research is funded and governed; communication ensures that these frameworks stay transparent, inclusive, and responsive to society. This approach aligns with the Joint Research Centre's Science for Policy Competence Framework, which defines communication as a core skill for evidence-informed policymaking.

Communication is also at the heart of science diplomacy, turning complex data into dialogue that crosses borders. Institutions and global frameworks such as the European Commission, UNESCO, CERN and the EU Science Diplomacy Alliance recognise communication as a strategic instrument for diplomacy, building visibility, trust, and shared understanding.

The European Framework for Science Diplomacy (2025) calls for embedding science within diplomatic services and strengthening training for scientists and policymakers. Likewise, CERN, founded under UNESCO in 1954, embodies science diplomacy in practice. CERN's Science Gateway, inaugurated in 2023, serves as a global hub for education and dialogue, illustrating how open communication can advance knowledge and peace.

For the MCAA Policy WG, these frameworks inspire practical action, empowering researchers to act as trusted intermediaries who connect evidence with policy-diplomacy and societal progress.

The role of the MCAA Policy WG

The Policy WG places science communication at the centre of its mission. Through webinars, workshops, and mentoring, it builds bridges between researchers and policymakers on topics

such as sustainable research careers, open science, and science diplomacy.

Its two new Task Forces advance this vision:

- **Science Policy Task Force** on Research Careers focuses on improving research-career frameworks and strengthening advocacy and communication skills.
- **Science Diplomacy Task Force** on Capacity Building offers training and mentoring for researchers to operate confidently at the science–policy–diplomacy interface.

Together, these initiatives promote communication as both a skill and a shared responsibility, enabling researchers to transform scientific insight into policy impact.

Digital communication: opportunities and ethics

The digital era has transformed how science reaches society and policymakers. Social media and online platforms create new spaces for visibility and engagement, but also risks, misinformation, oversimplification, and unequal access. The Policy WG advocates for the responsible and ethical use of digital communication tools, empowering researchers to engage strategically, preserve accuracy, and maintain public trust in science.

Looking Ahead

Science communication is not an add-on. It is the bridge between research and impact. For the MCAA community, this means preparing researchers to engage confidently with policymakers, journalists, and the public.

Through its events, collaborations, and task forces, the Policy WG is encouraging the new generation of scientists to see communication not only as outreach but as participation, working together to ensure that scientific evidence and researcher voices go hand in hand in shaping the policies that define our collective future.

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News from the MCAA

Bridging Minds, Building Futures: The MCAA Central European Event 2025

The MCAA Central European Event 2025, held in Warsaw on 26–27 September under the motto Bridging Minds, Building Futures, brought together researchers, policymakers, and science advocates from across the region to address pressing challenges and opportunities in research, policy, and mobility.

Building capacity and connecting science with society

The event opened on Friday, September 26, with welcoming remarks from **Gian Maria Greco**, MCAA Chair; **Michał Karpiński**, MCAA Poland Chapter Vice-Chair; **Bela Fiser**, MCAA Hungary

Michael Nones is the Chair of the MCAA Poland Chapter and has contributed to connecting MCAA with Polish institutions such as NAWA, as well as international organisations like ALLEA. He is an Associate Professor in the Hydrology and Hydrodynamics Department at the Institute of Geophysics, Polish Academy of Sciences in Warsaw, Poland. He is an expert on fluvial morphodynamics and geomorphology.

Béla Fiser is the Chair of the MCAA Hungary Chapter. He currently works at the Department of Physical Chemistry, University of Lodz in Poland and at the Institute of Chemistry, University of Miskolc in Hungary. He received his first PhD in chemistry from the University of the Basque Country in Spain. He is a keen supporter of science communication and believes that science is for everyone.

Chapter Chair; and **Marta Muter** from the Polish National Agency for Academic Exchange. **Michael Nones**, Chair of the MCAA Poland Chapter, moderated the opening session.

Research funding and the widening participation agenda

A session moderated by **Roxana Radu** and **Andrada Lazea Stoyanova** from the MCAA Romania Chapter highlighted best practices for leveraging funding opportunities in widening countries. Speakers emphasised both the untapped potential of the Central and Eastern Europe (CEE) region and the persistent challenges of underfunding and bureaucracy. The session concluded with a strong call to increase scientific capacity and improve administrative support, drawing on successful regional models.

Science diplomacy and policy in Central and Eastern Europe

Split into three segments, another session of the event explored the role of scientists in shaping policy, building trust in science, and promoting mobility across disciplines, sectors, and borders. Contributions ranged from **Paweł Rowiński** from All European Academies (ALLEA) and the Polish Academy of Sciences (PAN) and **Jean-Christophe Mauduit** from University College London (UCL) and the EU Science Diplomacy Alliance to experts in AI policy and young researcher networks across the region.

A recurring theme was the need for scientists to play a more active role in policymaking, especially in fast-evolving fields such as AI. Speakers illustrated how mobility and networking can serve as practical tools of science diplomacy, connecting research with society.

The first day concluded with a networking dinner, where participants continued discussions in an informal setting, strengthening cross-border collaboration within the CEE scientific community.

Brain drain, brain gain, and brain circulation

On Saturday, 27 September, the focus shifted to mobility and talent flows with a single, but

highly interactive, session moderated by **James Jennings**, MCAA Austria Chapter Chair.

The panel, including representatives from doctoral associations, research institutions, and the MCAA, debated the pressing issue of brain drain from CEE countries. While acknowledging the challenges, the session emphasised the concept of brain circulation, where mobility creates lasting networks and collaborations that benefit both sending and receiving countries. Speakers stressed that addressing brain drain is not just about retention, but about building ecosystems that encourage return, reintegration, and long-term connections.

Beyond the sessions: Exhibitions and cultural engagement

Throughout the event, attendees explored the exhibition **The Marie Curies of the Mediterranean**, which celebrated women in research through the lens of the MSCA fellowships. On Saturday, posters from the exhibition were also displayed during the Polish Science Festival at the University of Warsaw, engaging the public and expanding the event's reach.

To close the event, participants enjoyed free entry to the Maria Skłodowska-Curie Museum, a symbolic visit that connected the discussions on mobility, science diplomacy, and gender in science to the legacy of one of the most influential scientists in history.

Looking ahead

The MCAA Central European Event 2025 highlighted the importance of collaboration, mobility, and dialogue in strengthening the role of Central and Eastern Europe in global research. By focusing on widening participation, science diplomacy, and brain circulation, the event not only tackled regional challenges but also underscored the shared responsibility of researchers, policymakers, and institutions in shaping a sustainable scientific future.

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Photo by

News from the MCAA

Science Speaks, *but sometimes it needs* researchers' help

Communicating science is now as essential as producing it, yet few researchers are ever trained to do it well. Science Speaks: Summer School for Science Communication stepped in to close that gap, bringing early-career scientists together for two days of hands-on training designed to help them make their work heard, understood, and trusted.

Ashish Avasthi is the Chair of the Communication Working Group. He works as an Associate Consultant at Nordic Innovators, supporting EU funding initiatives in the healthcare sector.

In an era where public trust in science cannot be taken for granted, science communication has become an essential part of a researcher's work. Explaining complex ideas clearly, engaging with non-specialists, and connecting scientific discovery to everyday life are now key skills for any scientist. Yet, these are skills that are rarely taught in formal academic training. Even the Science|Business media outlet recently published an article about it. Recognising this gap, the idea of **Science Speaks: Summer School for Science Communication** was conceived to give researchers the confidence and practical tools to share their work beyond journals and conferences.

Held on 5–6 September 2025 at the Colomina Palace at CEU Cardinal Herrera University, in Valencia, Spain, the summer school brought together 30 early-career researchers from across Europe for two intensive days focused on one goal: learning how to make science heard, understood, and trusted.

Organised by the MCAA Communication Working Group, the MCAA Spain-Portugal Chapter, and El Caleidoscopio, under the Mediterranean Researchers' Night (MEDNIGHT) project, the school combined expert lectures with hands-on workshops to strengthen the communication skills scientists increasingly need. Trainers from The Conversation, COALESCE, and the MCAA guided participants through different topics ranging from the need for science communication, TED-style talks, writing for general audiences, preparing policy briefs,

Photo by TUCH-CEU event photographer

engaging with media, and developing confidence in public speaking.

The programme blended concise, focused talks with highly interactive sessions. Participants drafted lay summaries, recorded short science pitches, and took part in role-playing games. A select group of 30 researchers ensured direct feedback, enabling each participant to leave with tangible outcomes tailored to their research area.

Beyond the classroom, the summer school became a genuine meeting point for researchers from diverse disciplines. Informal conversations over coffee and evening tapas evolved into discussions on collaboration, outreach, and the wider social responsibility of science.

The aim was to give researchers not just communication tools, but a mindset. Participants were encouraged to see science communication as part of doing excellent science, not an extra task.

As the final session closed, participants agreed on a shared insight: simplicity, clarity, empathy, and openness are as essential to research as data and methodology. Many are already drafting public articles, outreach pieces, and school talks inspired by the training.

The success of this year's edition reaffirms a simple truth: **science speaks loudest when scientists learn to tell their own stories.**

Thanks to the excellent feedback and praise received from the participants, we are looking forward to organising the summer school in 2026.

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News from the MCAA

The art of personal branding: *Important* to master, *yet easy* to ignore

In the academic bubble, we are automatically self-branded through the accumulation of citations and references. Yet very few of us apply models from the established world of marketing to intentionally build and communicate our personal brand. The Elevate Your Identity workshop was created to address exactly this gap, offering researchers the space and tools to purposefully shape how they present themselves and advance their careers.

The **MCAA Switzerland Chapter** and the **MCAA Communication Working Group** collaborated to brainstorm ideas for a joint event. We came across the issue of personal branding and reached out to Basel-based instructor **Petra Wüst** to benefit MCAA members at different career stages. Petra has a PhD in Economics, with over 20 years of experience in personal branding, communication, and leadership. Through several books and training course curricula, Petra has developed the Self Branding Model®, which serves as the basis for the workshops and individual coaching sessions that her consultancy company offers across Switzerland and online.

Almost all scientists tend to be humble and modest during their careers, and do not often share too much about their successes. In the academic environment, this behaviour is usually considered the norm, but outside academia it can become a problem. When we talk about science communication, we focus mainly on presenting our own publications and work achievements. However, we rarely talk about our

Photo by Ashish Avasthi

Participants of the workshop, including instructor Petra Wüst, wearing a red item of clothing as an example of a self-brand visual

Petra Wüst explaining how to develop a personal mantra with examples

Photo by Toni Fröhlich

personality and values, and often understate our roles as contributors. Of course, our reputation is highly linked to our research paths, but, as individuals, we are much more than our work. We usually forget that people outside academia are often curious to learn what drives our passion for science and what keeps us engaged with a topic for so many years. Sharing these motivations should come naturally, and we simply need to feel encouraged and confident to do so.

Considering the relevance of the topic, we decided to join forces with neighbouring MCAA Chapters from Italy, Germany and France. The event was scheduled for **7–8 November 2025**, to coincide with **Basel's Herbstmesse**, a historic annual fair that fills the city with a vibrant atmosphere.

While the workshop stretched over two days of intense work, preparations began well before arriving in Basel. All participants were invited to access an online platform that provided explanations about the workshop, introductory videos, and a preparatory task: to survey our peers' perceptions of our professional brand.

But when we all met on the morning of Friday, 7 November, the real work began. First, we were asked to select an image from a group. Later, Petra revealed that picking an image without any information allows the subconscious to take the driving seat and let our identities shine. Then, the task was to refine that identity into a **personal mantra**: a short sentence or phrase that encapsulates one's most important values and strengths and, at the same time, evokes positive and motivating emotions in oneself. Together with our peers, we brainstormed ideas and iteratively shaped our thoughts until we could express our essence in a few powerful words. This personal mantra stands at the centre of the Self Branding Model®, surrounded by 12 other puzzle pieces that together form a complete picture of one's personal brand.

In the following exercises, we explored each piece of the puzzle in depth. One key element was learning **how to develop and optimise our professional network, identifying who might be important for our immediate next career step and future long-term goals**. Another important element of the model focused on viewing our professional achievements from a marketing perspective. We explored four fields that help assess whether the expectations for our work are high or low and whether our efforts can generate bonus points. The goal, from a marketing perspective, is to create as

much added value for our stakeholders as possible, meeting their high expectations while going beyond them. This is how we can gain recognition and truly shine in our professional environment.

At the end of the workshop, **we gave a three-minute elevator pitch about one of our biggest achievements over the past few weeks**. This exercise was a good training to practice speaking confidently about our achievements and to reflect on how others respond to the way we present ourselves. Most of the participants rated their pitch more positively than the listeners did, highlighting that what we often consider as boasting may simply be perceived by others as sharing information.

The workshop ended, but the work was not yet done. Petra gave us homework to practise praising ourselves each day in front of other people and to keep a journal of writing positive things that happened to us.

Overall, the face-to-face workshop was very well received, and all participants were keen to develop their personal brand. It was a unique and relatively unfamiliar experience, one that inspired many to rethink how they present themselves and left them wishing they had discovered it much earlier in their careers.

The event was topped off with social activities, including a traditional Swiss Apéro, a cosy Raclette, a drink of Feuerzangenbowle and time to enjoy the Basel Herbstmesse. We learnt about ourselves and had the chance to connect with other MCAA members from different Chapters, sharing ideas on how to develop and express our professional self-brand as we continue to advance in our careers.

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Workshop attendees enjoying the Herbstmesse in Basel

Photo by Ashish Avasthi

News from the MCAA

Furan-based polymers *for a sustainable future*

Johan Stanley's journey through polymer chemistry, from Tindivanam to Thessaloniki and Utrecht, reflects a consistent focus on developing sustainable materials. His research on furan-based polymers, carried out under the Marie Skłodowska-Curie Actions programme, aims to replace conventional fossil-based plastics with bio-based and recyclable alternatives that support a circular and environmentally responsible future.

Early academic focus

Growing up in Tamil Nadu, in the southern part of India, I often observed food being served or packaged in plastic materials. This led me to question the safety and environmental impact of such products. Could the plastics or colourants contaminate the food or pose any health risks? This curiosity sparked my interest in polymer science.

During my master's studies in polymer science and engineering, I deepened my understanding of polymers, their processing methods, properties, toxicity, and biodegradation. I also realised that most plastics used in food packaging are derived from fossil-based sources, which are harmful to both health and the environment. This awareness motivated me to pursue research on bio-based plastics made from renewable biomass, aiming for safer and more sustainable materials for the future.

Crossing borders for doctoral research

In 2021, I started my PhD at the Aristotle University of Thessaloniki in Greece, with a Marie Skłodowska-Curie Actions Innovative Training Networks (MSCA-ITN) fellowship, FoodTraNet. My research focused on the synthesis of smart biopolymer materials based on 2,5-furan dicarboxylic acid with nanostructured surfaces with biocompatible and antimicrobial properties.

Johan Stanley Samuel Jayakaran is a postdoctoral researcher at the Institute for Sustainable and Circular Chemistry at Utrecht University in the Netherlands. A former Marie Skłodowska-Curie fellow within the FoodTraNet ITN, he earned his PhD in Polymer Chemistry from the Aristotle University of Thessaloniki in Greece. His research focuses on synthesising bio-based polymers and nano composites for circular economy initiatives.

Performing aerobic biodegradation studies of polymers in soil at ISCC, Utrecht University.

Why furanic polymers? They come from renewable biomass and offer excellent mechanical strength, heat resistance, and gas-barrier properties, outperforming many petroleum-based plastics like polyethylene terephthalate (PET). However, obtaining high-molecular-weight polymers, such as polyethylene furanoate (PEF) required persistent experimentation (Stanley et al., 2023a, 2024).

One limitation of PEF is its lack of antimicrobial properties. To overcome this, we incorporated active agents to improve microbial resistance and also co-polymerised PEF with flexible biopolymers to reduce brittleness (Stanley et al., 2023b, 2025). Even though its biodegradability is limited, PEF is a recyclable polyester, making it a promising material for food packaging.

The Marie Skłodowska-Curie experience

The MSCA-ITN fellowship provided me with far more than financial support. It offered a structured environment that combined research training with international exposure. As part of the programme, I completed two academic and one industrial secondment, which helped me experience different research settings, develop new technical skills, and strengthen my ability to adapt and think creatively.

International summer schools, workshops, and conferences strengthen networking and communication, essential qualities for a scientific career. Being part of this network showed me how sustainable materials research can bridge science, society, and industry.

Tips for Early-Stage Researchers

If you are considering a research career, it is important to define a clear area of interest and establish connections with research groups and laboratories that share similar goals. When relocating for research, plan ahead to secure visas, accommodation, and insurance before arrival. Once settled, network actively within both academic and local communities. Understanding your host country's research culture helps you collaborate effectively.

Equally important is maintaining your mental well-being. Living far from home can be isolating, but joining social or cultural groups provides support. Remember that your research journey is as much about building confidence and resilience as it is about scientific discovery.

Continuing the journey at Utrecht

Today, as a Postdoctoral Researcher at Utrecht University, I continue exploring the synthesis of sustainable semi-aromatic polyesters from lignin-derived bicyclic monomers. The foundation built during my MSCA-ITN experience continues to guide me in synthesising bio-based polymers.

Every experiment reminds me that the pursuit of sustainable materials begins with curiosity but thrives through persistence, commitment, and teamwork.

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With my supervisor, Prof. Dimitrios Bikiaris during an international polymer-science conference in India.

Accessibility Statement

The MCAA believes in a society based on diversity. A society where diversity is the norm, not a deviation. A society where diversity is a strength, not a weakness. Access barriers are created by a society that does not acknowledge the value of diversity. Diversity and access are foundational elements of the flourishing of the research endeavour.

As a community of researchers, the MCAA is committed to increase the accessibility of its products, services, and events. Under the leadership of the Editorial Team of the Communication Working Group, with the support of other Working Groups and the MCAA Board, the MCAA has been promoting a series of actions aimed at increasing the inclusivity of its community and reducing access barriers.

Since the June 2021 issue, the MCAA Newsletter has a new layout. The new design should make the reading experience more accessible by reducing a number of barriers our readers may face.

The new layout complies with many requirements of major print and digital accessibility standards and guidelines. For example, background and foreground colours were selected and paired so as to fulfil the AAA level requirements for colour contrast devised by the Web Content Accessibility Guidelines (WCAG 2.1). Colour selection and pairing also complies with requirements for colour blindness. The text is not justified in order to keep the spacing between words consistent and regular in the entire text. Line spacing and font size were revised and increased too. Each macro-section is identified by a different colour so as to provide the reader with a map of content organisation. Last but not least, the PDF file now complies with PDF accessibility requirements and can be used by screen readers.

Editorial information

About

The MCAA Newsletter is the main communication channel for and about the MCAA community. It is a publication venue for science communication and public outreach. Its main aim is the dissemination of information about past and current MSCA projects, as well as activities of MCAA Chapters and Working Groups, events, and members' achievements.

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