From Lab to News: Introduction to Science Journalism for Scientists

Introduction to science journalism

- Nico Pitrelli

IR0000032 – ITINERIS, Italian Integrated Environmental Research Infrastructures System
(D.D. n. 130/2022 - CUP B53C22002150006) Funded by EU - Next Generation EU PNRR-Mission 4 “Education and Research” - Component 2: “From research to business” - Investment 3.1: “Fund for the realisation of an integrated system of research and innovation infrastructures”

Finanziato dall'Unione europea NextGenerationEU
Ministero dell'Università e della Ricerca
Italiadomani

Main Current Difficulties in Science Journalism

- Economic crises and job insecurity.
- Disintermediation and confusion between information and PR.
- **Difficulty communicating uncertainty** (*especially relevant for environmental research, which often involves complex models and projections).*
- Adapting to new media landscape
- Complex relationship with scientists.

Do you recognise these challenges in your experience or perception, particularly the difficulty of communicationg uncertainty or the relationship with the media?

What Distinguishes Science Journalism: Sources

- Academic literature (papers, preprints – with caution).
- General science journals.
- Web portals and news agencies.
- Press releases (need critical analysis).
- Science prizes, scientific events.

Finding Reliable Scientific Sources

- Understand how knowledge is produced.
- Distinguish between **primary** (papers) and **secondary** socurces (press releases, popular articles).
- Verify source reialability.
- Mantain a critical and analytical attitude.

You are **primary sources**. Your role is very important to provide clear and verifiable information.

What Distinguishes Science Journalism: Newsworthiness

- Not all scientific findings are news.
- **Newsworthy Science Topics**: New/unknown results, significant advancements, **impact on daily life**, link to current events, surprising/contrary to common sense.
- **Non-Newsworthy Science Topics**: incremental development, confirmation, already reported.

Newsworthiness Exercise

"Global Decline of Pollinators Puts Food Security at Risk"

Brief Summary:

- Recent studies reveal that pollinator populations, including bees and butterflies, are declining globally due to pesticide use, habitat destruction, and climate change. This decline is threatening food crops that depend on pollination, potentially disrupting food systems worldwide.

"Plastic Pollution: 8 Million Tons Enter Oceans Every Year"

Brief Summary:

- A new report highlights that 8 million tons of plastic waste end up in the world's oceans every year, causing harm to marine life and entering the food chain. Environmental organizations are calling for global policies to curb plastic production and waste.

Final Comparison:

Criteria	Pollinators Example	Plastic Pollution Example
New/Unknown Results	New focus on **food security risks** tied to pollinators.	New figure of **8 million tons** of plastic entering oceans.
Significant Advancements	Ongoing research linking pollinator decline to food security.	Continual findings of **long-term effects** on health & ecosystems.
Impact on Daily Life	**High**—affects agriculture, food security, and economy.	**High**—microplastics in food, water, and health implications.
Link to Current Events	Tied to global conversations on **climate change** and **biodiversity loss**.	Directly linked to **plastic bans**, **waste reduction** policies.
Surprising/Contrary to Common Sense	Surprising that pollinators are **so critical** for food systems.	Surprising scale of **plastic waste** entering oceans annually.

How Researchers Can Interact Effectively with Science Journalists

- Be prepared to explain your research clearly and simply, avoiding jargon.
- Understand **newsworthiness**: Help journalists identify the “hook” or public impact of your findings.
- Be available and responsive for interviews (like participating in events).
- Provide access to reliable sources (papers, data, images).
- Understand media deadlines.
- Be transparent about limitations or uncertainties in your research.

What do you think is your biggest challenges in interacting with journalists?

Summary

- The importance of science journalism.
- The challenges it faces
- Key characteristics like sources and newsworthiness
- How understanding the characteristics of science journalism help researchers interact with media

Bibliographical references

- Angler M. W. (2017), *Science journalism. An Introduction*, Routledge, London and New York;
- Dunwoody, S. (2019), *Science journalism*, in A. Leßmöllmann, M. Dascal, T. Gloning (eds.), *Science communication*, De Gruyter Mouton, Berlin/Munich/Boston, pp. 417-438;
- Pitrelli, N. (2021), *Il giornalismo scientifico*, Carocci, Roma.

THANKS!

IR0000032 – ITINERIS, Italian Integrated Environmental Research Infrastructures System
(D.D. n. 130/2022 - CUP B53C22002150006) Funded by EU - Next Generation EU PNRR-Mission 4 “Education and Research” - Component 2: “From research to business” - Investment 3.1: “Fund for the realisation of an integrated system of research and innovation infrastructures”

Finanziato dall'Unione europea NextGenerationEU
Ministero dell'Università e della Ricerca
Italiadomani