

APPENDIX A: List of consulted experts (in alphabetical order) and model contact letter

We identified candidate journalists to be interviewed based on our contextual knowledge and of consultations with the following experts:

1. Brigitte Alfter, Founder and Director of Arena for Journalism for Europe
2. Diego Arguedas Ortiz, Costa Rican environment journalist
3. Florencia Ballarino, editor at Chequeado (Argentina)
4. Lonni Besançon, professor of visualization at Linköping University (Sweden) and science sleuth
5. Federico Bianchini, Argentinian journalist
6. Celeste Biever, Chief News and Features Editor at Nature
7. Elisabeth Bik, microbiologist and science sleuth
8. Nicolás Bustamante, Colombian science journalist
9. Ben Deighton, Director of SciDevNet
10. Sofia de Palma, Director of Divergente (Portugal)
11. Martin Enserink, Editor at Science
12. Antonio Granado, researcher in science communication at the New University of Lisbon (Portugal)
13. Stephane Horel, French investigative journalist
14. David Malakoff, International Editor at Science
15. Luisa Massarani, science journalist and researcher at Fiocruz (Brazil)
16. Thiago Medaglia, founder of Ambientalmedia (Brazil)
17. Vera Novais, Portuguese freelance journalist
18. Ivan Oransky, Director of Retraction Watch
19. Rodrigo Pérez Ortega, Science Journalist at Science
20. Debbie Ponchner, editor of Knowable Español (Costa Rica)
21. Raimundo Roberts, expert in science communication at the National Library of Chile
22. Mike Rossner, science sleuth
23. Aleida Rueda, Journalist and Co-founder of the Mexican Network of Science Journalism
24. Elisabetta Tola, Journalist and director of Formicablu (Italy)
25. Traci Watson, Locum Bureau Chief Americas at Nature
26. Lauren Wolf, Bureau Chief Americas at Nature

These experts were contacted via email using this model contact letter (slight formal adaptations not affecting the core content were made, depending on the profile of the recipient):

“Dear [...],

I hope this email finds you well. [Self-presentation depending on the degree of familiarity with the expert]

Together with colleague Luis Peres, cc, we are working on a paper on watchdog science journalism in Iberoamerica, whose abstract has been provisionally accepted by the open access journal Media and Communication.

We are using a range of different methods to identify profiles of science journalists that have carried out high-profile investigative work, in order to interview them and analyze the challenges and opportunities in their work. Among other methods, we are consulting a selection of expert scholars and practitioners, among which you are included.

We would be most grateful if you could kindly name any journalist or piece of journalism that you know, that may qualify as outstanding investigative science journalism, related to Iberoamerican topics (that is, regarding Spain, Portugal, and Latin American countries). We are especially interested in work focused on "watchdogging" science (e.g. uncovering fraud, plagiarism, abuse, conflict of interests, corporate or political manipulation, hype, and other ethical breaches). We are also interested in broader investigative efforts (e.g. science journalism aimed at debunking pseudoscience, uncovering abuse, revealing environmental or health damage, etc.). We are looking for profiles independently of their nationality, language used, and location of their media outlet, as long as they cover Iberoamerican topics (including science, health, environment, and technology).

We are not asking you to carry out any searching, but only to kindly share any name that you already know [including your own work]. Your invaluable advice would contribute to a more complete mapping of the issue and, hopefully, to promote watchdog science journalism in the region, in the long run. We would be extremely grateful for your help and, of course, we would acknowledge your help in the outcomes of our research and keep you posted on them.

I hope you find some interest in this proposal. Please, don't hesitate to write back with any doubt or question you may have.

We thank you in advance for your kind attention.

Best regards,

APPENDIX B: Inclusion/exclusion criteria for the sample

A short-list of 15 journalists was extracted from the 54 identified candidates applying the following criteria:

Criteria	Description of decision
Nature of work	Inclusion required watchdog science journalism on science, health, environment, or technology, consistent with our working definition; we excluded investigative reporting in these domains lacking evidence of scientific misconduct (e.g., environmental disasters without misconduct).
Investigative contribution	Inclusion required original journalistic research generating new findings; we excluded work primarily compiling already-public facts
Geographical scope	Inclusion required Ibero-American watchdog topics regardless of nationality, residence, language (including English), or outlet location (including outside the region). We excluded “digital nomad” profiles (Ibero-American journalists acovering non-Ibero-American topics) and, as an a priori exception, “special correspondents” covering Ibero-America without Ibero-American nationality while residing outside the region and reporting for a non-Ibero-American outlet; neither profile emerged in practice.
Geographical spread	We prioritized diversity of covered countries, excluding otherwise-eligible candidates to avoid over-representing countries already well covered.
Co-authorship	For co-authored investigations, we interviewed only one co-author per work.
Partisan/dated coverage	We excluded one journalist whose reporting appeared politically motivated and another whose relevant work was old and who had left journalism over a decade earlier.
Methodological coherence	We excluded candidates identified via the abandoned misconduct-case tracing strategy: we initially attempted to identify candidates by tracing coverage of major science misconduct cases, but abandoned this approach because defining a coherent, representative set of cases proved conceptually difficult (as explains the previous literature), and screening the extensive media fallout of some cases was impractical.
Non-participation	We excluded candidates who did not reply or declined interviews (one due to involvement in an ongoing lawsuit).

Source: Authors

APPENDIX C: Summary of the profiles of the interviewed journalists

The sample is predominantly female (11 women and four men). In terms of education, journalism-oriented training outweighs scientific training at both undergraduate and postgraduate levels: 11 interviewees hold bachelor's degrees in journalism or communication (vs. four in scientific fields), and postgraduate credentials are concentrated in journalism/communication, humanities, and law (ten titles, including five master's degrees in science journalism), whereas only one postgraduate degree is in a scientific discipline.

Overall, interviewees are mid-career and experienced. Seven are in their forties, six in their thirties, and one in her twenties (one age could not be verified). Professional tenure also indicates substantial experience: six have worked in journalism for over 20 years, six for 10 to 20 years, and three for less than 10 years.

Self-identification does not map purely onto "science journalism." Seven interviewees describe themselves as science journalists (one also identifies as a fact-checker), and two as health journalists. By contrast, five identify primarily as investigative journalists (two with a health focus, one with a science focus, and one with an education focus), and one as a data journalist.

Most journalists produced the analyzed watchdog work while employed by a media outlet (12 of 15), including one outlet director and one journalist contracted via a publishing house; three were freelancers (one became an intern during the investigation). At the time of the interview, two had recently left journalism for academia.

Analysis of the journalists' published work shows broad geographic coverage across Ibero-America: Spain (four journalists), Argentina (two), Peru (two; one also produced Latin America-wide work), Portugal (two), and Bolivia, Brazil, Colombia, Mexico, and Venezuela (one each). These countries have a variety of different political systems, from full democracies to systems with illiberal or authoritarian practices. Reporting languages were mainly Spanish (11), followed by Portuguese (two), English (two), and Catalan (one); one journalist published in both Spanish and English. Most watchdog work dates from 2018 to 2025, with one case going back to 2011.

Publication venues span legacy and newer formats: newspapers (six, including one online newspaper), native digital outlets (four), magazines (four), television (one), and a publishing house (one case, alongside a digital publication). Most outlets are generalist and national (13, including two regional newspapers and one fact-checking site). One case appeared in a national medical outlet, and two in US-based international science-specialist outlets.

Thematic scope is evenly split between science and health, with limited technology and no environmental investigations in the sample: science (five), health (five), both science and health (four), and technology (one). The most common watchdog topics concern questionable research practices and misconduct—especially hyperpublishing, affiliation manipulation, intellectual property breaches, plagiarism, and CV fabrication—followed by corporate manipulation and

conflicts of interest (notably involving pharmaceutical and tobacco companies), sexual harassment, and misinformation (mostly related to COVID-19). Some investigations also addressed workplace abuse, questionable management practices, unethical patient treatment, and laboratory safety breaches.

The following is a summarized view of the profiles of the interviewed journalists.

JOURNA LIST	OUTLET (Country)	WATCHDOG SCIENCE JOURNALISM STORIES' TITLES	YEARS RANGE
Manuel Ansedé	El País (Spain)	"Saudi Arabia pays Spanish scientists to cheat in the world's best university rankings" "One of the world's most cited scientists, Spaniard Rafael Luque, has been suspended from his job and salary for 13 years" "The Mossos [Catalan police] are investigating the death of the scientist who was studying a lethal disease in Barcelona" "The collapse of a major scientific journal exposes the speculative bubble of publishers in science"	2023-2025
Florencia Ballarino	Perfil (Argentina)	"Harassment at CONICET: "My thesis advisor was on top of me all the time" "Conicet: the number of reports of gender-based violence has tripled"	2019
Rui Barros	Público (Portugal)	"A team of experts is analyzing the "legal impacts" of Amália's use of data"	2025
Angela Bernardo	Civio (Spain) Next Door publishers (Spain)	"Payment to doctor" series Bernardo Álvarez, Á. (2021). Acoso. #MeToo en la ciencia española	2018-2021
Pablo Correa	El Espectador (Colombia)	"Colombian astronomer accused of plagiarism" "Jorge Reynolds, the man who didn't invent the pacemaker" "The war for biotechnology drugs in Colombia" "The Minister of Science and her dubious promise against cancer" "What Lady Noriega didn't say about plastic surgery" "The elusive promise of Dr. Patarroyo"	2011-2020
Lara Guerrero	EldiarioAR (Argentina)	"The government says there is "no money" but is withholding US\$53 million in international loans earmarked for science" ""There's no manual on how to respond to a teacher who's touching my breast"	2024
José Miguel Hidalgo	Latina Noticias (Peru)	"The fake scientists' farm: teachers pay for co-authorship of studies abroad" "Two professors from César Vallejo University involved in fake scientific publications"	2023
Lucas Illanes	Chequeabolivia (Bolivia)	"Where did the study that says vaping is 95% less harmful than smoking come from?" "Bolivians implicated in a viral WhatsApp message that reached Spain and Argentina: It is false that a "scientific study" proved that chlorine dioxide cures COVID-19" "It is false that chlorine dioxide cures COVID-19, as a WhatsApp message claims."	2024
Mariana Lenharo	Undark (USA) - covering Brazil	"To Study Zika, They Offered Their Kids. Then They Were Forgotten"	2021
Patricia Marcano	Armando.info (Venezuela)	"A controversial vaccine tarnishes the legacy of Jacinto Convit"	2018-2020

Vera Novais	Observador (Portugal)	"FCT competition. Contradictory evaluations, swapped projects and research groups that may have to end" "If there's more money in science, why are researchers unhappy?" "Doctor "for the Truth" shares recipe for potentially infected individuals to test negative for coronavirus." "Egas Moniz doctor who opposes masks issues statements so patients don't have to wear them." "Doctors for Truth." Order opens proceedings against movement that denies the seriousness of Covid-19" "Medical students in the Algarve say they are being "coerced." The course director denies this and resigns. The rector doesn't want to resign."	2018-2022
Beatriz Pérez	El Periódico de Catalunya (Spain)	"The director of the Catalan Institute of Oncology received undeclared payments from pharmaceutical companies."	2024
Rodrigo Pérez Ortega	Science (USA) - covering Mexico Nexos (Mexico)	"Top neuroscientist leaves Mexican university as former trainees allege sexual harassment" "Harassment at sea and on land: stories from UNAM"	
Cristina Sáez	Ara (Spain)	"Money transfers, impersonations and a climate of "terror": reconstruction of the departure of Manel Esteller from the Josep Carreras Institute"	2025
Fabiola Torres	Salud con Lupa (Peru)	"The network of doctors and academics at the service of vaping" "The Misinformants"	2021-2024

Source: Authors

APPENDIX D: Expanded list of interviewed journalists

The following table includes the expanded list of interviewed journalists, including the criteria that were used to characterize the sample (see next page)

NAME	AGE	PROFESSORIAL AGE	GEN	COVERED COUNTRY	LANGUAGE	EDUCATION	EMPLOYMENT STATUS (AT THE TIME OF THE STORIES)	SELF-IDENTIFICATION	OUTLET (country)	OUTLET FORMAT	OUTLET TARGET	OUTLET SCOPE	AREA	WORK SAMPLES	WATCHDOG TOPICS	YEAR OF THE WORK SAMPLE	SUGGESTED BY/FOUND ON
Manuel Ansede	46	22	M	Spain	Spanish	Degree: Veterinary degree Master: Journalism and Communication of Science, Technology, and Environment (not completed)	Staff	Science Journalist	El País (Spain)	Newspaper	Generalist	National	Science	Sauditas Luque Science of the total environment Creutzfeldt	questionable scientific practices, misconduct, breaches of lab safety	2023, 2025	M.C., Ivan Oransky, Traci Watson
Angela Bernardo	37	12	F	Spain	Spanish	Degree: Biotechnology Master: Pharmaceutical Industry Expert: Press offices PhD: Law	Staff/Contract with a publishing house	Investigative journalist with an interest in health	Civio (Spain)	Native digital, Publishing house	Generalist / Specialized (science)	National	Health	Pagos a médicos Acoso	corporate manipulation, conflicts of interest, sexual harassment	2018, 2021	M.C.
Cristina Sáez	48	23	F	Spain	Catalan	Degree: translation, journalism Master: documentary	Freelancer	Science Journalist	Ara (Spain)	Newspaper	Generalist	Regional	Science/Health	UJC investigation	questionable scientific practices, misconduct, abuse	2025	M.C.
Rui Barros	31	9	M	Portugal	Portuguese	Degree: Communication	Staff	Data journalist	Público (Portugal)	Newspaper	Generalist	National	Technology	Amália	questionable scientific practices	2025	M.C.
Beatriz Pérez	37	14	F	Spain	Spanish	Degree: Journalism, Literary theory and Comparative Literature Licenciada en Periodismo y en Teoría de la Literatura y Literatura Comparada	Staff	Health journalist	El Periódico (Spain)	Newspaper	Generalist	Regional	Health	ICO	corporate manipulation, conflicts of interest	2024	M.C.
Fabiola Torres	43	24	F	Peru/LatAm	Spanish	Degree: Social Communication	Founder and director of the outlet	Investigative journalist, devoted to public health	Salud con Lupa (Peru)	Native digital	Specialized (Health)	International (Latin American)	Health	Académicos vapeo Desinformantes	corporate manipulation, conflicts of interest, misinformation spreading	2021, 2024	M.C., Elisabetta Tola
Lucas Illanes	27	5	M	Bolivia	Spanish	Degree: Social Communication Master: Science Journalism	Staff	fact-checker and science journalists	Chequeaboliv a (Bolivia)	Native digital	Specialized (Fact-checking)	National	Health	Paper vapeo Depredadora covid 1 Depredadora covid 2	corporate manipulation, conflicts of interest	2024	Elisabetta Tola
Mariana Lenharo	Not available	15 (estimated from a web search)	F	Brasil	English	Degree: Journalism Master: Science Journalism	Staff	Health journalist	Undark (US)	Magazine	Specialized (science)	International (US)	Science	Zika	unethical treatment of patients	2021	M.C.
Patricia Marciano	40	20	F	Venezuela	Spanish	Degree: Journalism	Staff	Investigative journalist with an interest in health	Armando Info (Venezuela)	Native digital	Generalist	National	Health	Una vacuna en entredicho empafia el legado de Jacinto Corvi	questionable scientific practices, misinformation spreading	2018	M.C., Elisabetta Tola
Lara Guerrero	31	4	F	Argentina	Spanish	Degree: journalism and social communication	Freelance	Investigative Journalist	EldiarioAR (Argentina)	Native digital	Generalist	National	Science	Argentinian science funds Nota sobre abusos en facultad de odontología	questionable scientific management, sexual abuse	2023 , 2024	Elisabetta Tola
José Miguel Hidalgo	36	17	M	Peru	Spanish	Degree: Communication Master: Political Communication and Marketing	Staff	investigative Journalist specialized in education	Latina Noticias (Peru)	Television channel	Generalist	National	Science	La granja 1 La granja 2	questional scientific practices, misconduct	2023	Aleida Rueda (indirectly - see Pablo Corso)
Florencia Ballarino	45	25	F	Argentina	Spanish	Degree: Journalism	Staff	Science journalist, Data journalist	Perfil (Argentina)	Magazine	Generalist	National	Science, Health	Acoso CONICET 1 , Acoso CONICET 2 .	sexual harassment, corporate manipulation, conflict of interest, questionable scientific practices	2019	Florencia Ballarino
Rodrigo Pérez Ortega	33	10	F/M	Mexico	English, Spanish	Degree: Basic biophysics Master: Science Communication	Freelance (Nexos)/ Freelance + Intern (Science)	Science Journalist	Science (USA) Nexos (Mexico)	Magazine, Magazine	Specialized / Generalist	International / National	Science	Romo Trujillo Acoso en mar y tierra, historias de la UNAM	sexual abuse	2020	Aleida Rueda
Vera Novais	44	12	F	Portugal	Portuguese	Degree: Biology Master: Science Communication	Staff	Science journalist	Observador (Portugal)	Online newspaper	Generalist	National	Science, Health	FCT1 FCT 2 Médicos 1 Médicos 2 Médicos 3 Medicina Algarve	questionable scientific management, questionable scientific practices, misinformation spreading	2018, 2020, 2022	Vera Novais
Pablo Correa	47	21	M	Colombia	Spanish	Some studies in Medicine Degree: Social Communication, Literary studies Master: History	Staff	Science journalist	El Espectador (Colombia)	Newspaper	Generalist	National	Science, Health	Plagio Marcapasos Medicamentos biotech Ministra Ciencia Cirugía estética Patarroyo	questionable scientific practices, misconduct, misinformation spreading, unethical treatment of patients	2011, 2012, 2016, 2020	Pablo Correa

APPENDIX E: Interviews' procedure, analysis, and script

All the interviews were conducted by either Author 1 or Author 2 from December 12, 2025, to January 16, 2026. Each interviewer chose the language (Spanish, Portuguese, or English) according to their preference, and the interview lasted 30 to 60 minutes. Although we designed a script, we omitted questions if their topics had already been touched upon in previous answers. Assuming the nature of the in-depth interviews, we also changed the order of the questions or added some points, based on the specificities of each journalist's work. Interviews were recorded and transcribed for analysis, with the support of an automatic transcription software. Live notes were also taken during the interviews, as a complementary source. In accordance with "The Code of Good Practices in Research" from [University], the risks and benefits of participating were explained to all interviewers. Their consent was given, and, when applicable, some direct quotations exposed in the Results section identify the source using their initial name and family name. We provide the script of our interview below, in this Appendix.

All interviews were fully coded by one of the authors. Following the previously described script and adopting a qualitative, in-depth approach, a tree taxonomy emerged from the discourses produced, considering actors' views on WSJ and their specific experiences and work on the ground. This taxonomy was organized into three clusters. The first considered the set of practices in science watchdog reporting (sources, selection of topics to investigate, journalistic methodology, and the time and frequency of investigations). The second grouped the diverse range of values and thoughts expressed through motivations and impacts of their reporting. The third focused on barriers, threats, and risks mentioned during interviews, as well as enabling factors and opportunities for WSJ.

Interview script:

Part 1 - Introductory questions

–Double-check the information contained or missing in the table: nationality, residence, employment status, and whether they consider themselves science/health/environment/technology journalists. Ask for the age and the professional age (how long they have been doing journalism).

–Can you tell us a bit about your trajectory in journalism?

–What is the role of your employment status in doing watchdog science journalism?

--How do you get paid (or got paid specifically for this/ese watchdog science journalism story/ies) and does that play a role in you doing watchdog science journalism?

–What is the role of the nature of the media outlet where you published watchdog science journalism stories in making them possible?

Part 2 - Investigative science journalism - Screening and topics

–When is a subject really watchdog journalism and when is it business as usual, in your opinion?

–How much watchdog science journalism do you do, as compared to “business-as-usual”? Do you strike some balance?

—What makes for a good watchdog science journalism story (in the sense of what gives it a journalistic value or not, and how you decide to undertake or drop it)?

Part 3- Investigative journalism - Sources and process

–What was the source of your story/ies?

–What methods do you use to carry out this work?

–Do you deploy a strategy in terms of how to release your work to make it interesting, attractive and impactful?

–How was your work received? Did it raise interest in the audience? Was it worth the effort? How do the public perceive, receive, and approve/disapprove of watchdog science journalism?

–How did the scientific community receive your watchdog science journalism work?

--What was the practical impact of your story/ies? (wide circulation, people being fired, officials resigning, news codes of conduct, parliamentary debate, laws changed...)

–How do you approach the issue of trust in science within the framework of your work?

–Time invested from beginning to end in the work/s object of the interview.

Part 4 - Threats and challenges

–What are barriers in carrying out your watchdog science journalism work? What factors hinder science journalists’ ability to perform a watchdog role?

–What aspects of the context of your country are favourable/disfavourable to it?

–Are editors open to this sort of stories? Was this story / Were these stories your initiative or where they proposed by an editor? If your initiative, is it easy or hard to convince editors to accept these sort of stories? Are editors open to them?

–What are the risks of this work? How do you protect yourself from them?

–Have you suffered interferences, and attempts to derail your work, or harassment (before or after publication)?

--How do you feel doing this work? Does it pose extra-challenges in terms of emotional toll or mental health, with respect to other types of journalism?

--Is it worth the effort in terms of journalistic (or other kind) of impact?

--What factors facilitate science journalists' ability to perform a watchdog role, both in your case and in general?

--Who/ What inspired you to do your investigative scientific journalistic work?

--What motivates you to keep doing this work?