



Principles for EMBO investigations of research misconduct

Approved by EMBO Council on 25 April 2019

Research integrity

EMBO as a scientific organization values scientific integrity. EMBO as an institute and the individuals who work at EMBO are expected to uphold the highest standards of research integrity. EMBO's elected Members and awardees are expected to conduct their research responsibly, to adhere to these standards, and to instil them in those whom they guide and train.

EMBO accepts a number of responsibilities in carrying out its own programmes. EMBO helps to assure that our community adheres to principles of research integrity and responsible conduct of research by, for example, requiring research integrity training, and by helping the community achieve openness and transparency with respect to research results. Further, EMBO expects that all who benefit from the EMBO programmes or from being associated with EMBO will adhere to these principles. Not to do so would be inconsistent with membership or receiving funding from EMBO.

While EMBO focuses on the positive and aspirational aspects of research integrity, every act of misconduct undermines both the value of the scientific record and of researchers' standing in society. Thus, EMBO has a responsibility to investigate possible scientific misconduct by those who benefit directly from the organization.

General information

This document was drafted in response to a request from the EMBO Council for documentation of misconduct investigation procedures. The document is informed

by the current environment for oversight of research misconduct, particularly in biomedical sciences, and by EMBO's roles and remits.

EMBO recognizes that an accusation of misconduct is among the most serious that can be brought against a scientist. While all such accusations must be investigated thoroughly, EMBO does not presume misconduct on the part of the accused. EMBO will protect the individual throughout the investigation and if found guilty of misconduct, will help the individual to deal with the repercussions of the finding. At the same time, the person(s) reporting the potential misconduct may feel they are putting themselves at risk. If the person reporting the potential misconduct is not anonymous and the accusations were made in good faith, EMBO will do everything possible to protect the accuser from any institutional or individual reprisals.

EMBO does not have the investigatory power of an individual's home institution. For example, we can request, but not demand, access to notebooks; we cannot interview associated laboratory personnel; etc.

EMBO does have power with respect to awards given by EMBO and can withhold or recall monetary awards from those whom we have determined to have committed misconduct.

Institutes such as universities and research organizations are ultimately responsible for a complete investigation of an accused researcher. It is important where possible for EMBO to assist home institutes in assuring any investigations are as thorough as possible. To this end, findings from prior investigations will be shared upon request from the institute unless there are legal reasons that preclude this.

Without a specific request to the Director, EMBO will not initiate investigations of its Members or awardees for potential misconduct outside of its remit regarding awards or election to membership.

With respect to Members specifically: if a request is received from elected Members, as outlined in the EMBO Statutes and Rules, to remove a Member for such conduct, EMBO will conduct an investigation only to assure that the accusation is legitimate before placing the matter to the General Assembly (i.e., the Membership) for a vote for removal.

This document does not address post-investigation actions. Decisions about whether award funding will be recovered, or whether the person who committed misconduct would be allowed to apply for EMBO awards in the future and under what circumstances are currently decided case-by-case. To date, sanctions that have been imposed include the revocation of a Gold Medal, the withdrawal of an active Installation Grant, and the withdrawal of an offer of a Young Investigator Award.

To assure that researchers in our community have relevant knowledge and tools to conduct research in a responsible manner, we require training in the principles of responsible conduct of research for our Fellows and Young Investigators. The current training package is a 6-hour online course that was co-developed by EMBO

and is provided at no cost to the Fellows and Young Investigators. Additionally, EMBO makes the course available, also with no charge, to its Members, personnel in the direct laboratories of Members and Young Investigators, enrollees in Lab Leadership courses, and to EMBO's own staff.

This document will be updated as needed and all versions of the document will be publicly available.

Principles

I. Decision to investigate

The first decision in the process of investigation is whether the investigation will be carried out at all. The procedures below include notes on making this decision as part of a formal process. EMBO's position is to take all allegations seriously: every allegation will be looked at by the Director at a minimum. This does not necessarily mean that every review of an allegation will escalate to a full investigation.

Neither the EMBO Director nor EMBO Council can unilaterally remove elected members for any reason and thus EMBO will not carry out investigations for that purpose. However, as noted above, the EMBO Statutes contain a mechanism for the General Assembly of members to do so and the EMBO office will assist in providing information for that process.

A. ALLEGATIONS

– Allegations may come to EMBO's attention through any number of routes, for example through emails or calls; or, as part of internal due diligence procedures before selecting candidates for awards; or informally (someone approaching a staff member, etc.).

– All allegations are to be taken seriously and reported directly to the EMBO Director. Only the Director or Secretary General will have further contacts either with the person expressing concern or with the person accused of misconduct. Anonymous allegations are taken just as seriously as those reported non-anonymously; the only difference is that not knowing the identity of the accuser may make it more difficult or impossible to come to conclusions in the investigation.

– If the allegation regards potential misconduct only in a paper published by EMBO Press, the Head of Scientific Publishing should be alerted and he or she would be the only person who would contact the person expressing concerns or the person accused of misconduct.

B. DETERMINATION OF NEED FOR FORMAL INVESTIGATION

– Every allegation will be taken seriously, but not every allegation requires a formal investigation.

– Allegations can arise from simple misunderstandings (for example, an error exists in a paper but has otherwise been corrected in the literature) or as misinterpretation of bona fide scientific disputes. Some allegations are malicious and without foundation. It is incumbent on the EMBO Director to determine if any of these possibilities apply, potentially with the assistance of a small number of experts.

– Initiating a formal investigation can be requested by Council, or it can be the decision of the Director, who may seek advice from EMBO managers, Council Chair, EMBC President, and the EMBO Secretary General.

– Formal investigations are initiated when:

- irregularities in a published work or data associated with a publication give reasonable cause to believe that gross misconduct in the form of negligence or deliberate manipulation may have occurred
- the researcher appears to have violated a human subjects protocol
- the researcher appears to have violated principles of animal care
- award expenditures may have been misreported
- an undeclared conflict of interest of a selection committee member is discovered post-award

This list is not comprehensive. Any potential misconduct will be investigated, even if it does not appear on this list.

II. Investigations

A. GENERAL

– EMBO will not maintain a standing committee for investigations: the nature of the investigation will depend on the context of the specific allegation. For example, a concern about a Gold Medal winner may result in an investigation requested by Council and carried out by the EMBO Director; an Installation Grant may require a joint undertaking between EMBO and EMBC; a Fellowship investigation may come at the request of the EMBO Director to the head of the Committee; etc. Note also this means that a Chair will need to be appointed for each investigation committee; this will be done by consultation of the EMBO Director and EMBO Secretary General.

– Each investigation committee should include *ex officio* the EMBO Director and Secretary General. Others may be included by request of the committee chair. EMBO managers or other relevant staff may be asked by the committee chair or the EMBO Director to serve as observers or coordinators, or to provide information.

– The committee may need to include subject matter experts ad hoc.

– The committee may request information directly from the person under investigation. However, there are potential legal issues (particularly with respect to national labour laws) that may make such interactions problematic and the request may need to involve labour or legal experts for all parties.

– The identities of the committee members will be disclosed to the person under investigation upon request, taking into account EMBO’s obligation of duty of care to the committee members as well as the person under investigation.

– Conflicts of interest of investigation committee members are not necessarily exclusionary. However, any conflict (real, potential, or perceived) needs to be declared. This type of conflict could include, for example, that the researcher under investigation is from the same institute as the committee member. It is the responsibility of the EMBO Director to assure all potential and real conflicts are declared, and the Director may dismiss a committee member if the conflict cannot be resolved by declaration.

– Requesting information from other institutions to supplement EMBO investigations

- Such requests can be made by the EMBO Director to the head or designated responsible official of the other institution.
- Information from other institutions should not be counted on as a basis for the investigation. Most EMBO misconduct proceedings will be related to decisions that were made on the basis of publicly available materials such as published papers, and from files submitted by the person under investigation during the application process for awards, and related. Whether to solicit information from other institutions will depend on the individual case. We recognize that, given the mobility of researchers, in many cases more than one institution may be involved. As noted above, this may also require the involvement of labour or legal experts.

B. TRANSPARENCY AND CONFIDENTIALITY

One purpose of misconduct investigations is to constructively advance science. This includes making the literature more reliable, understanding why misconduct happens and working to prevent it in the future, and protecting human subjects, among other important values. However, investigations ending in findings of misconduct are generally destructive to the accused person’s career and, in many instances, can be personally devastating to the individual. Thus, EMBO is very sensitive both to the important value of transparency and, equally, the need for confidentiality in many aspects of misconduct investigations.

– The fact that an investigation is taking place must be kept confidential between the accused person and any relevant EMBO personnel prior to the conclusion of the investigation.

– Information regarding the scope of the investigation should be made available to

the person under investigation. It is expected that in some cases EMBO could discuss the information with the host institution

– The person under investigation may reasonably expect answers to the following questions: On what grounds does EMBO have authority to carry out the investigation? Who were the members of investigation committee and why were they chosen? Whom did EMBO call on as experts? Who will see the final report?

– In general, the identity(s) of the person(s) making the accusation would not be shared with the accused person, although in some cases this may be necessary in the process of determining whether the accusations are legitimate.

– Some form of public reporting will always be necessary, but the details of the investigation do not need to be made public. See below under “Reporting”.

– In some circumstances, the identities of the individuals who served on an investigation committee may need to be made publicly available, as there is no standing committee. Further, committee members may wish to make themselves publicly known. In all of these cases, the members of such committees should sign a non-disclosure agreement.

C. FOCUS OF INVESTIGATIONS AND RECEIPT OF NEW INFORMATION DURING INVESTIGATIONS

– It is incumbent on the investigators, particularly the chair of the group, to keep the investigation focused on the accusations of specific acts of scientific misrepresentation or other misconduct as initially presented.

– The committee may receive unsolicited additional information during the investigation. In general, this type of information should be taken into account. If the information is not directly relevant to the investigation at hand but is of the sort that otherwise would be reported to the EMBO Director for consideration of an investigation, the EMBO Director should treat that information exactly as any other received accusation.

– If information is received that the person committed criminal acts, whether or not related to the actual misconduct investigation, it is incumbent on the committee to report these to appropriate authorities. This should be carried out in consultation with legal experts.

D. COMPLETENESS AND ACCURACY

– Institutions and organizations including EMBO are subject to pressure to initiate, complete, and report investigations quickly, and there are good reasons to move investigations as quickly as possible. At the same time, the findings and the

presentation of conclusions must be above reproach and prepared with the greatest care, allowing sufficient time to analyze all the evidence, reach a decision, and communicate that decision to relevant audiences.

– Thus, it is the responsibility of the investigatory group, particularly the chair, to employ measures to assure accuracy, even if the conclusion of the investigation is significantly delayed because of the need for additional measures, and even if this comes at a financial cost. Such measures may include, for example, discussions with the accused person to clarify details; consulting additional experts to look at technical issues; and soliciting external reviewers of the report. (All additional experts or reviewers will sign non-disclosure agreements.)

E. PROTECTION OF THE RESEARCHER UNDER INVESTIGATION

– As noted above, investigations are damaging to a researcher who is accused of having committed misconduct. It is incumbent on EMBO and the investigation committee to provide a level of care to the researcher. Each case will be different; minimally, the EMBO Director or Secretary General should be in contact with the researcher prior to the start of a full investigation and prior to any announcement of the outcome of the investigation.

– Beyond this minimal obligation, experts who study responsible conduct of research have not come to a singular agreement regarding best practices. Ethics, law, and medicine all have different understandings of duty of care; in general, duty of care amounts to a moral, legal, or professional obligation to ensure the safety, security, or well-being of others. EMBO follows closely discussions regarding institutional duties to individuals under investigation and is committed to the highest level of care for the person under investigation at all steps of the process. The Director and Secretary General will need to evaluate any steps that may need to be taken to help the researcher during or after the investigation.

III. Implementation

A. DECISIONS

– Decisions are specific to each case; that is, there is no fixed formula to determine the appropriate penalty in particular instances of misconduct.

– Unless decided otherwise, the decision is delegated to the investigation committee. The Director and the Secretary General in their *ex officio* roles on the committee participate in the decisions; however, the chair of the committee may argue to exclude them due to real, potential, or perceived conflicts of interest. Any decision to exclude the Director or Secretary General from the decision step would be made by the committee.

- Note this is absent of any conflicts of interest of the Director or Secretary General; as above, those must be declared and dealt with as any conflict of interest of any committee member would be.

– Managing appeals: it is the decision of the EMBO Director, in consultation with the Secretary General, whether any information received in an appeal should be brought to the investigation committee for reconsideration of the decision. This consideration by the Director is only to assure that the appeals are substantive. Appeals addressing concerns about scientific interpretations or the committee’s process should be considered by the committee and responded to.

– Any revocation of an award is independent of recovery of the financial part of the award. Following revocation, EMBO will work to recover as much of the financial part of the award as possible. Minimally, the processes for initiation of payment or deposit of any installments of the award will be terminated as soon as possible. This may require consultation with a lawyer.

B. REPORTING

– Interactions with other institutions and EMBO representatives: EMBO should only share information with other institutions that are conducting investigations of the same case (i.e., of the same individual or laboratory and the same allegations), or with EMBO Council members or EMBC representatives as relevant.

- Sharing information with other institutions requires a confidentiality agreement.
- In principle, reports should only be released in hard copy, not by electronic communication, though it is unlikely this restriction can be maintained. If reports are to be emailed, they should be password protected.
- For Council members and EMBC representatives: all information given to these individuals is already in confidence. A general reminder to this effect will be issued prior to communication of any reports.
- Note that the standards for reporting are evolving; specifically, there is a growing expectation that such reports will be made easily available to the public. As noted below, currently only the revocation of an award is noted publicly.

– There is no standard reporting template. In some cases, EMBO may need to issue formal reports; in others, a statement of a removal of an award may be sufficient. EMBO will document the reporting process used in each case for future reference.

– Information about the committee process should only be communicated by the EMBO Director or the Secretary General and details of the committee process should not be shared.

- This contradicts principles of transparency, but with good reason: although the investigations can be seen as generating “objective scientific facts” there are several levels of normative reasoning that out of the context of the committee discussions may be read as aspersions on the

researcher under investigation. Treating the details of the outcome as confidential is part of EMBO's responsibility to the researcher, described above as duty of care. As noted above, as much information as possible regarding investigations will be shared publicly, but this must be balanced against possible harm to the person under investigation.

– The reporting from joint investigations may raise issues both with regard to autonomy and to confidentiality. As noted above, joint investigations and joint reporting may be necessary, but will require, among other additional steps, legal advice for all parties.

Summary for reporting:

– The findings of the committee's work will be made available to the subject of the investigation.

– The conclusions of the committee's work may in some instances be made available publicly.

– The ultimate action, for example, removal of an award, will be noted by the removal of that person's name from relevant materials such as the EMBO web site.