

### **GOOD PRACTICE IN RESEARCHER EVALUATION.** RECOMMENDATION FOR THE RESPONSIBLE EVALUATION OF A RESEARCHER IN FINLAND

#### **RESPONSIBLE RESEARCH SERIES**

Responsible Research Series publishes declarations, policies, studies, recommendations and other documents relating to the openness, responsibility and accessibility of science and research. Publications also cover science communication and science-society interactions. The publication series is not a scientific peer-reviewed publication. The series is published by the Committee for Public Information (TJNK) and the Federation of Finnish Learned Societies (TSV)

Good practice in researcher evaluation. Recommendation for the responsible evaluation of a researcher in Finland

Available also in other languages:

Tutkijanarvioinnin hyvät käytännöt. Vastuullisen tutkijanarvioinnin kansallinen suositus

God praxis inom utvärdering av forskare. Nationell rekommendation för ansvarsfull utvärdering

Responsible Research Series 7:2020

2nd volume

Author: Working group for responsible evaluation of a researcher

Publisher: The Committee for Public Information (TJNK) and Federation of Finnish Learned Societies (TSV)

Helsinki, 2020

ISSN 2670-062X ISBN 978-952-5995-28-2 DOI https://doi.org/10.23847/isbn.9789525995282



### **GOOD PRACTICE IN RESEARCHER EVALUATION.** RECOMMENDATION FOR THE RESPONSIBLE EVALUATION OF A RESEARCHER IN FINLAND



Prepared by a working group set up by The Federation of Finnish Learned Societies. Adopted on 4.2.2020.

## **CONTENTS**

To the reader	1
Introduction	2
General principles of researcher evaluation	5
Good practice in researcher evaluation	6
A. Building the evaluation process	6
B. Evaluation of research	7
C. Diversity of activities	7
D. Researcher's role in the evaluation process	
Explanations of researcher evaluation practices	9
A. Building the evaluation process	9
B. Evaluation of research	11
C. Diversity of activities	
D. Researcher's role in the evaluation process	
Implementation plan	16
Annex	20
Notes	23
Previously published in English	24

## **TO THE READER**

This is a recommendation for the responsible evaluation of a researcher. In this context, a researcher is a person who is a member of the teaching and research staff of a Finnish university or research institute or is primarily engaged in research or applying for research funding.

This recommendation has been drafted from the point of view of an individual researcher evaluation. The same principles should be followed when evaluating research organizations, research units, and research in a broader context. The recommendation is recommended to use in conjunction with The Finnish Advisory Board on Research Integrity's (TENK) template for a researcher's curriculum vitae.

This recommendation was accepted on 4th of February, 2020, by a working group set up by the Federation of Finnish Learned Societies (TSV) in October 2018. The following members of the research community are represented in the working group:

- Academy of Finland / Annika Raitala
- Advisory Board on Research Ethics / Krista Varantola
- Arene / Mervi Friman
- Association of Finnish Foundations / Kalle Korhonen
- Finnish Union of University Professors / Jaana Hallamaa
- Finnish Union of University Researchers and Teachers / Maija S. Peltola
- FUN / Johanna Lahikainen
- National Library of Finland / Kristiina Hormia-Poutanen
- TSV, Open Science / Henriikka Mustajoki, chair of the working group
- TSV, Publication Forum / Janne Pölönen
- TUHA network / Anu Juslin
- Tulanet / Nina Peuhkuri
- UNIFI / Eeva Nyrövaara
- Young Academy Finland / Tommi Himberg

The Recommendation for responsible evaluation of a researcher also includes recommendations from the responsible metrics working group within the Finn-Arma network.

### **INTRODUCTION**

Researcher evaluation shapes and directs research. The entire research community should take responsibility for the principles and practices of researcher evaluation. This recommendation for the responsible evaluation of a researcher provides the basis for a functioning, diverse and flourishing research community.

Evaluation influences the work of the researcher. It significantly steers the direction of research through funding, merit accumulation, and research organisations. The work of individual researchers is evaluated especially in recruitment and when deciding on career progression, personal performance and remuneration. Researchers are also evaluated as individuals or as members of a research team when international and national funders decide on project funding or other grants. A researcher's work is also considered as part of a broader context when research organisations carry out a comprehensive research evaluation or distribute funding between units.

New forms of sharing research information, changes in research processes, multidisciplinary research and new phenomenon-based research methods, as well as digitalisation, are changing the way researchers work. These are important factors to also keep in mind in evaluation.

Responsibility of the evaluation process is a central issue in increasing transparency in research. The development of researcher evaluation requires the cooperation of the different stakeholders - researchers, research organisations and research funders.

In addition to a qualitative expert review, the use of research metrics has become more common in researcher evaluation. This recommendation for the responsible evaluation of a researcher is linked to the international debate on researcher evaluation and responsible research metrics. Previously published policies include the Dora Declaration, the Leiden Manifesto, the Metric Tide and the Hong Kong Manifesto.<sup>1</sup> These international statements have criticised the increasing use of, among other things, the Journal Impact Factor and the H-index in evaluating researchers and research. A guide on responsible use of the Publication Forum classification has been previously published in Finland.<sup>2</sup>

The international debate is based on the idea that responsible use of research metrics can be part of a holistic evaluation, where different methods complement each other. If metrics are used, they should also be more diverse than they are currently to better reflect research work. However, metrics must never replace qualitative research evaluation, which is the basis for comprehensive evaluation.

A qualitative expert review may also be skewed due to the subjectivity, bias, (unconscious) attitudes and values of the evaluator, the area of expertise and the non-transparency of the evaluation process. These factors must also be taken into account when planning the evaluation process.

Researcher evaluation requires decisions that involve criteria, methods, experts, and data. When making these decisions, we must address the technical and ethical issues relevant to the subject matter and objectives of the evaluation. This includes determining the appropriateness of the evaluation. Responsible conduct of research and procedures for handling allegations of misconduct in *Finland* or the RCR guidelines focus on the presentation of good scientific practice in research. These ethical guidelines can be applied to responsible evaluation practices, including when criteria for disgualification, conflict of interest and dishonesty are being defined. This Recommendation for the responsible evaluation of a researcher describes in more detail what responsibility and ethics mean when evaluating researchers' work and supplements previous guidance and its application.

The research context and the field of research affect responsible evaluation of a researcher. For these reasons, this Recommendation focuses primarily on the structures and processes of research evaluation. These reflect the principles of the design and implementation of evaluation. The goal is a responsible evaluation process from start to finish. The evaluator must take into account the requirements of collective agreements and legislation in the evaluation process. Such laws include the Administrative Procedure Act, the Non-discrimination Act, the Act on Equality between Women and Men, the Act on the Protection of Privacy in Working Life, Medical Researcg Act and the European Union General Data Protection Regulation (GDPR), and the Data Protection Act.

### **GENERAL PRINCIPLES OF RESEARCHER EVALUATION**

**Transparency.** The objectives, methods, materials and interpretation of the results must be known to everyone involved in the evaluation. The evaluation must be conducted in a manner that is understood by all parties involved. The evaluation process and all its stages must be clearly and transparently described. The party responsible for the evaluation must ensure that the choices made in the evaluation work are properly reasoned and the evaluation documented in a reliable manner.

**Integrity.** Evaluation must be conducted in accordance with practices recognized by the research community, such as integrity, diligence, and accuracy.

**Fairness.** All those subject to evaluation must be treated equally and impartially. Evaluation must take into account only relevant factors that have been brought to the attention of all parties concerned. Characteristics or circumstances associated with persons being evaluated or people close to them that are irrelevant to the objective of the evaluation must not be used as evaluation criteria.

**Competence.** Evaluators must have the necessary substantive competence and knowledge of the objectives and methods of the evaluation process and with the principles and practices of responsible evaluation of a researcher. In addition to their qualifications, evaluators must not have a conflict of interest and their collective expertise should be diverse.

**Diversity.** Evaluation must take into account the diversity of research and outputs.

These principles apply to each good practice identified in the recommendation.

## **GOOD PRACTICE IN RESEARCHER EVALUATION**

### **A. BUILDING THE EVALUATION PROCESS**

- 1. Objectives and criteria of the evaluation: The objectives and criteria of the evaluation are openly available to all parties. Objectives and criteria must be formulated so that they are relevant to both the individuals being evaluated and the research community. Evaluation stages and the conclusions, including their reasoning, must be documented.
- 2. Evidence used in the evaluation: Any evidence used in the evaluation must be as comprehensive as possible and allow a fair comparison between evaluated individuals. Any evidence must be used appropriately for the purpose of the evaluation. The evaluation must take into account the limitations of any evidence and methods used.
- 3. Selection of evaluators and evaluation guidelines: Evaluator selection must consider any possible conflict of interest between evaluator and those being evaluated. Diversity of evaluators should be promoted. Evaluators should understand the implications of their own assumptions and opinions for the evaluation. The evaluation guidelines should be made available to the evaluators well in advance of the evaluation.
- **4. Ensuring equality:** In the selection of criteria, methods, evaluation evidence, and experts, it must be ensured that the selection is not discriminatory in terms of gender equality or impartiality.<sup>3</sup>



### **B. EVALUATION OF RESEARCH**

- 5. Evaluation of scientific quality: Evaluation of scientific quality is primarily carried out by examining the scientific output of the research. Research metrics may also be used to support the overall evaluation when relevant to the researcher's field of study.
- 6. Open access to research Researchers' activities to promote open access to research outputs will be considered as part of the evaluation. Promoting open access is seen as part of the realisation of the fundamental values of research, societal impact, and the promotion of research.
- 7. **Research ethics:** The evaluation takes into account compliance with the ethical principles of research at all stages of research. In Finland the principles of research ethics are defined in *The Code of Good Scientific Practice and the Handling of Suspected Infringements in Finland*. In addition to this, researchers must follow discipline specific ethical guidelines and laws guiding research practice.



#### **C. DIVERSITY OF ACTIVITIES**

- 8. Researcher as teacher and supervisor: Teaching and supervisory activities, as well as the skills and merits accumulated in them, are seen as an integral part of a researcher's work. The evaluation shall take into account that different researchers have different opportunities for teaching and supervision.
- **9. Societal impact and interaction:** Societal interaction is expected of researchers. To evaluate societal impact and interaction, it is necessary to first define their meaning and to determine the evidence used to examine them and their relative significance with regard to the scientific quality of the research and other work roles.



- **10.** Activity in research and other communities: Researchers' activities in research and other communities are to be considered in the evaluation. Researchers' contribution in various roles and the significance of this contribution to the researchers' own work and the research community should be considered.
- **11. Considering the characteristics of research fields:** In relation to the goals of the evaluation, researchers are evaluated as representatives of their field of research.

## D. RESEARCHER'S ROLE IN THE EVALUATION PROCESS

- **12. Researcher self-evaluation:** The researcher's self-evaluation is combined with the evaluation by giving an opportunity to express an understanding of the objectives, significance and effectiveness of their work.
- **13. Benefits of evaluation for researcher:** The evaluation is designed to also benefit the researcher. The work they have done for the purpose of the evaluation and/or the feedback they have received should enable them to improve their own work.



## **EXPLANATIONS OF RESEARCHER EVALUATION PRACTICES**

# A. BUILDING THE EVALUATION PROCESS

 Objectives and criteria of the evaluation: All evaluation activities must have clearly formulated justification and well-established objectives. Criteria and objectives defined prior to starting any evaluation are used to evaluate skills, expertise and suitability, as well as excellence or ranking of the persons in question.

> Choice of evaluation objectives and criteria should consider any possible unwanted impact they may have for example on motivation, work atmosphere, and publishing practices. The selected criteria is be consistently applied throughout the evaluation process and is applied equally to all persons being evaluated.

The objectives and criteria will be made public in such a way that they are known to the persons being evaluated before the evaluation begins. If a person is recruited for a research assignment that involves an evaluation during the employment relationship (e.g. tenure track), it is appropriate to announce the objectives and criteria when possible in the advert or at the latest during the recruitment process. The evaluation criteria and their possible weighting is clearly communicated to those being evaluated. Any evaluation criteria is formulated so that they meet the objectives of the evaluation.

2. Evidence used in the evaluation: Any evidence used in the evaluation must be as comprehensive as possible and allow a fair comparison between evaluated individuals. In this context, evidence refers to any material, which is used in the evaluation process. Persons being evaluated have the right to know what this material covers and to check the information concerning them.

> To increase the quality of the evaluation, all evidence collected should provide as equal comparison between the persons being evaluated as possible. In order to ensure comprehensiveness and comparability of the evaluation, the organiser of the evaluation must transparently provide clear guidance on how to submit the evidence. For this purpose, it is possible to use. for example, the Finnish National Board on Research Integrity (TENK) researcher CV template or other similar documents.

Any evidence must be used appropriately for the purpose of the evaluation. Practices specific to the field of research must be taken into account and the steps of the evaluation and the conclusions and iustifications thereof must be documented. The persons being evaluated have the opportunity to view these documents, unless there is a justified reason to denv access. Such a reason may arise, for example, when a document contains personal data, sensitive information or confidential information concerning someone other than the person being evaluated. The limitations of the materials and methods used as evidence shall be taken into account in the evaluation.

3. Selection of evaluators and evaluation guidelines: According to the Responsible conduct of research and procedures for handling allegations of misconduct in Finland (2012), "researchers refrain from all research-related evaluation and decision-making situations when there is reason to suspect they are disqualified". This also applies to researchers when they are teachers, supervisors or experts (p. 31). Grounds for disgualification are defined in section 28 of the Administrative Procedure Act.

> In order to achieve fairness in the selection of evaluators, sufficient diversity must be sought to make it more likely that different perspectives are taken into consideration. Sufficient diversity depends on the context. Depending on the evaluation process,

sufficient diversity may mean, for example, that there are evaluators from both Finland and abroad, that gender distribution is as diverse and even as possible, or that there are evaluators at different stages of their careers or from different research fields. In each evaluation process it is important to define and justify what is sufficient in terms of evaluator diversity. Furthermore over a longer period, it is the responsibility of the organiser of the evaluation processes to ensure that the evaluation responsibilities are fairly distributed.

Evaluators' assumptions, attitudes, and opinions may colour their judgment. To avoid this, the organiser of the evaluation process provides the evaluators with the sufficient guidance on how to take into account their own biases and mitigate the impact of bias on the evaluation.

Evaluators should be familiarised with the practices of this recommendation as well as organisation's own guidelines for responsible evaluation, if there are such guidelines.

4. Ensuring equality: The selection of criteria, methods, experts, and used evidence must guaranteed to be non-discrimanatory. All eva-luation activities must comply with existing legislation, including law for equality and non-discrimination laws.<sup>3</sup>

Funders and other organisations commit to improve their own practices so they ensure equality and non-discrimination in evaluation and that no-one is discriminated on the basis of gender or its diversity, age, origin, nationality, language, religion, belief, convictions, opinion, political activity, trade union activity, family relations, state of health, disability, sexual orientation, or other personal reason. This can be facilitated, for example, by training evaluators to take account of discriminatory structures and to identify their own biases and prejudices.

Evaluation process takes into account career breaks, such as parental leave. To ensure the non-discrimination, researchers should not be unfairly discriminated against on the basis of their field of research, multidisciplinary status, or career stage.

### **B. EVALUATION OF RESEARCH**

**Evaluation of scientific** 5. quality: Scientific quality is the most important evaluation criterion of research. Researchers are evaluated by making an overall assessment of the scientific quality of their activities and outputs. The evaluation will widely consider research output in different formats and languages (see The Template for researcher's curriculum vitae of the Finnish Advisory Board on Research Integrity).<sup>4</sup> The characteristics of scientific quality include the appropriate methods, data and theoretical frameworks, and the relevance of the research

to the development of the discipline. Experts can evaluate these aspects qualitatively by studying the scientific content produced by the researcher complemented by different research metrics. Research metrics include indicators of the number of scientific publications and their impact, measured by references, as well as indicators of the impact or status of the relevant publication channels in the research community.

Both qualitative evaluation and research metrics involve challenges such as transparency, objectivity, comparability and equity. Consequently, the various methods often complement each other. In particular, individual researchers are evaluated primarily by looking at the content of their scientific output. Research metrics may also be used to support the overall assessment, provided that they are relevant to the current scientific practice of the researcher's discipline. However, they must not replace evaluation of the content of the research.<sup>5</sup> Possible exceptions are situations where the number of researchers and publications being evaluated is so high that the evaluation of content would be unduly burdensome. If metrics are used to support evaluation, experts will be asked to clearly state in their textual statements the importance they attach to quantitative indicators in their overall evaluation, both relative to each other and to substantive considerations.

### Recommendations for responsible use of research metrics<sup>6</sup>:

- a) Quantitative indicators can be used to support qualitative peer review of scientific activity. Peer review should be the primary approach for evaluating individual researchers.
- b) Publication metrics should be based on data that is relevant for the unit of assessment. The known limitations of the data should always be disclosed.
- c) Being as open and transparent as possible in data collection, analytical processes and results is necessary. Those being evaluated should, as far as possible, be able to check both the data used and the results of the analysis.
- d) Disciplinary differences and interdisciplinarity should be taken into account in the application of publication metrics.
- e) The indicators used in assessment should be chosen to support the aims of the evaluation.

- f) Results should be reported with an accuracy relevant for the unit of assessment, methods and the data. Inapplicable indicators should not be reported.
- g) Specific expertise is needed in the production and interpretation of publication metrics.
- h) Organisations committed to this recommendation should provide sufficient resources and expertise needed for producing and interpreting publication metrics. Organisations should offer training for responsible use of publication metrics for their faculty and staff.
- Organisations committed to this recommendation should name the responsible party in their organisation who can be contacted in cases of irresponsible use of publication metrics.

The national recommendation for responsible use of publication metrics has been prepared by a multidisciplinary working group. The group initiated its work in September 2018 and the recommendation was finalised in February 2020.

The working group was set up as part of the network for research management TUHA and was also part of the Open Science Coordination in Finland through the expert panel in Culture for Open Scholarship. 6. **Open access to research:** Researchers' activities to promote open access to research outputs is considered as part of the evaluation. Promoting open access to research is seen as part of the realisation of the fundamental values of research, societal interaction and the promotion of research. The starting point is the intrinsic value of open access to research where there is no justified reason to limit access. A transparent description of the research process is part of open access to research. Thus, promoting open access is part of a researcher's job.

> Providing open access to research outputs often requires both time and other resources. The evaluation process promotes open access by recognising it as in integral part of everyday research work.

7. Research ethics: The evaluation takes into account compliance with the ethical principles of research at all stages of the research. The guide *Responsible conduct of research and procedures for handling allegations of misconduct in Finland* defines the key principles of research ethics for researchers. In addition to this, researchers must follow discipline specific ethical guidelines and laws guiding research practice.

> Researchers must reflect on research ethics throughout their career in research. The ethical principles of integrity, meticulousness and accuracy must be taken into account when evaluating research.

Key ethical issues include authorship and ownership, necessary ethical approvals and evaluations, consents from research subjects, preservation of materials, and transparent and responsible communication of research.

### **C. DIVERSITY OF ACTIVITIES**

8 Researcher as teacher and supervisor: Teaching and supervisory duties, as well as the knowledge and merit accumulated in them, are considered to be an integral part of a researcher's work. A researcher's work as a teacher or supervisor is taken into account in the evaluation based on the nature of the tasks and the distinctive characteristics of the organisation in question. There are already well-established models and criteria for the evaluation of teaching and supervision. The weighting given to teaching in evaluation is determined by the researcher's career path, funding being considered or the task itself.

#### 9. Societal interaction and

**impact:** In addition to scientific quality, societal interaction and its impact are important qualitative attributes of research. Societal interaction and impact can be evaluated qualitatively by looking at the content of activities and outputs. Quantitatively these can be evaluated by using various metric tools, such as altmetrics. However, the evaluation of societal impact and interaction evaluation is not as established as the evaluation of scientific quality in respect to used methods, data and indicators.

There is a significant diversity in the ways societal interaction and impact are realised in different disciplines. This makes comparison between researchers difficult. Differences can be found in forms of science communication. opportunities for commercialisation of research, ability to provide open access to output, or engaging in citizen science. Consequently, the meaning of societal interaction and impact is carefully explained in the evaluation process. This explanation should cover what data and materials are used to and how societal interaction and impact are weighted in relation to the quality of the research work and other work roles. The Finnish Advisory Board on Research Integrity provide a Template for researcher's curriculum vitae, which will assist in this work.

**10.** Researcher's activities in research and other communities: Researchers' activities in research and other communities are an integral part of their work. Evaluation should clearly define how activity in the research community and experience in other sectors of society is taken into account and how it supports the development of the researcher, the organisation and science in general.

The evaluation process appreciates the diversity of activities for the research- and other communities. The impact of different community-based responsibilities is evaluated in terms of personal skill development and the ability to manage these tasks. It is important to enable diverse work and community positions as part of researchers' careers. Inclusion of work done for the research community is thus included in the overall evaluation in addition to research quality and societal interaction. For details on factors that may be taken into account, see Annex 1.

- 11. Characteristics of research fields: Researchers always work as part of the national and international research community in their field of research. Researchers are evaluated in the context of their research field. The special characteristics of fields of research, research questions and the various researcher responsibilities are taken into account, for example by considering the following:
  - a) differences in publishing practices in terms of metrics, different evaluation models and transparency;
  - b) different forms of research output (e.g. research methods, software and artistic output);
  - c) the prevailing size of research teams in the research field and the division of labour among

researchers and their interdependence in research work;

- d) principles defining authorship;
- e) international penetration of the research field and opportunities for international research cooperation;
- f) different evaluation practices within interdisciplinary and multidisciplinary projects and the tensions between them;
- g) forms of societal interaction;
- h) opportunities and requirements for commercial cooperation; and
- i) the role of co-development and civic science in research.

# D. RESEARCHER'S ROLE IN THE EVALUATION PROCESS

12. Researcher self-evaluation: Researcher self-evaluation refers to an opportunity for researchers to evaluate the objectives, significance and impact of their research work and to express their opinion on them. If self-evaluation is used, the organiser of the evaluation must provide in advance clear and uniform guidance, and how the self-evaluation is weighted in the evaluation process. In self-evaluation, researchers can, for example, justify the decisions they have made in their work, such as

choice of publication channels, participating in editorial work or working groups, organising meetings, and submitting funding applications. Self-evaluation gives researchers an opportunity to describe their skills from their own perspective. In evaluation, attention must be paid to fair treatment of self-evaluations.

#### 13. Benefits of researcher

evaluation: Evaluation should be planned so that the persons being evaluated will benefit from the work they have done for the evaluation and/or from the feedback they receive. For example, the person being evaluated gains benefit through feedback on the outcome of the evaluation and from the material the person has prepared or, in open peer review, through open access to the opinions of the reviewers. It must also be ensured that the amount of work required to prepare materials for evaluation is reasonable and that. after the evaluation, the person being evaluated will receive, where possible, feedback on the outcome of the evaluation and on the material the person has prepared. Evaluation feedback helps the subject of the evaluation to develop the evaluation materials and may assist the evaluator in developing the evaluation process.

## **IMPLEMENTATION PLAN**

1. Developing an organisational measure for capability and maturity in evaluation.

Responsible party: TSV

The capability and maturity level of the evaluation of organisations is reported at regular intervals. The capability and maturity level reporting provides organisations with feedback on evaluation practices and supports their improvement. The capability maturity level reporting is based on the same values and principles, where applicable, as the responsible evaluation of a researcher. This means that:

- a) a purpose of the report is to benefit the organisation through both self-reflection in the reporting process itself and feedback from the report.
- b) Organisations are not ranked so that the maturity level reporting supports collaboration between organisations.
- c) In addition to the Recommendation for the responsible evaluation of a researcher and its principles, the capability and maturity level reporting is based on the organisations' own view of their goals and the significance and impact of their work both in the research world and in the society at large.
- d) Organisations are primarily evaluated qualitatively and any quantitative metrics are used only to support qualitative evaluation.
- e) Where practicable, the capability and maturity level reporting uses an organisation's own self-evaluation processes, such as those related to quality systems, and their results in order to make the assessment processes as easy as possible for the organisations.

2. Each research organisation and funder committed to the recommendation creates its own guidelines for implementing the recommendations for the responsible evaluation of a researcher and monitors their implementation.

Responsible parties: research organisations and funders

Research organisations and funders must draw up clear guidelines on the methodology to be used in evaluation and how the evaluation can be carried out in a way that is appropriate and responsible for everyone involved in accordance with the recommendation, and that its results are comparable.

Research organisations and funders will determine who can be contacted by the researcher should there be shortcomings in the responsibility of the evaluation. This responsibility may be added to the duties of an existing body.

3. A researcher portfolio model (e.g. Acumen ) and a portfolio portal compatible with the TENK curriculum vitae model will be developed and implemented nationally.

Responsible party: TSV and CSC (development and portal maintenance), research organisations and funders (dep-loyment and orientation)

The purpose of the portfolio model is to make researcher evaluation more fair and to improve its quality, while taking into account the differences between research fields. The portfolio model also lightens the workload of preparing for evaluation. Evaluators should be trained in portfolio evaluation.

# 4. At national level, a sufficiently diverse research knowledge base will be developed to support evaluation.

Responsible party: TSV and CSC

Sufficiently diverse information is needed to fully evaluate researchers' work. In addition to existing information resources, a knowledge base will be developed on issues such as:

- a) open access to scholarly publications;
- b) open access to and quality and impact of research data;
- c) societal interaction;
- d) open access to and the quality of information content, educational quality and impact of research-based educational materials;
- e) merits in research-based teaching, supervision and development of teaching and supervision; and
- f) researcher's activities in research and other communities.

#### 5. Adequate guidance and instruction on responsible evaluation is provided at national and organisational levels.

Responsible party: TSV, research organisations and funders

National guidelines are being drawn up for the development of the responsible evaluation of researchers. In addition, training on responsible evaluation will be organised on a national level, in particular for evaluation organisers and evaluators, but also for the researchers being evaluated.

Each organisation committed to the recommendation should, where necessary, refine its guidelines and provide internal training on responsible evaluation.

## 6. Recognition of evaluation carried out by experts and the resources required are guaranteed in all evaluation work.

Responsible party: Research organisations and funders

Recognition gained from expert evaluation encourages experts to do evaluation work. Recognition is demonstrated by taking into account researchers' evaluation work when they are being evaluated (recommendation 10). In addition, where appropriate, awards and honours may be used to demonstrate recognition.

An organisation committed to the recommendation must ensure that there is sufficient expertise on the relevant disciplines in each researcher evaluation process and that evaluators have sufficient time for evaluation. Over the longer term, the organisation should ensure that evaluation responsibilities are fairly distributed. In addition, sufficient resources should be provided for metrics expertise.

# 7. The Recommendation for the responsible evaluation of a researcher is updated and its implementation monitored

Responsible party: TSV

A permanent steering group will be set and its composition will be based on that of the working group that drafted the recommendation. The composition of the steering group will be reviewed annually and it must be sufficiently diverse. Members must be from different fields of research and career stages and the group should be as diverse as possible in terms of age, sex, ethnic origin and other factors. The steering group will be convened by the TSV. The steering group will convene at least once a year. The group will assess the need to update the recommendation. The group will also monitor and promote the implementation of the executive plan.

### ANNEX

## Annex 1 Factors to consider when evaluating researcher performance in research and non-re-search communities (Objectives 9–11)

It is not possible or expedient to evaluate all of the activities listed below in all evaluations but when planning evaluation, ensure that a researcher's skills and role in the research community are taken into account in a sufficiently broad manner. This can be achieved by evaluating some of the key positions or responsibilities in the research area or organisation in question. Persons being evaluated must be made aware of emphases and subjects of evaluation openly and in advance. The following list is based on the breakdown of the TENK Template for researcher's curriculum vitae:

a) Research funding and research supervision and leadership experience

- i. leadership in the research community (e.g. department head or research team leader)
- ii. duties in the administration or working groups of universities and research organisations
- iii. significant research funding (applications made and funding received)
- iv. mentoring of post-doc researchers
- v. acting as an officially designated instructor for undergraduate and postgraduate students

b) Teaching merits and experience

- i. design and implementation of education and training
- ii. development of teaching methods
- iii. supervision of theses
- iv. recognitions in teaching
- v. preparation and further development of educational resources
- vi. open sharing of educational resources and/or teaching methods
- vii. peer review of educational resources and/or teaching methods

#### c) Awards and honours

- i. awards and honours for scientific, artistic or research merits or on the basis of academic career
- d) Assessment of scientific and academic merit
  - i. referee duties for scientific journals
  - ii. acting as a pre-examiner or opponent of a dissertation; membership of doctoral dissertation boards (abroad)
  - iii. evaluation of scientific / artistic competence (e.g. title of docent)
  - iv. participation in the national or international peer review of funding applications as an expert

e) Scientific and academic networking and community development

- i. memberships and elected positions in scientific communities such as learned societies and academies
- ii. membership in a national or international expert, evaluation or steering group and other expert duties
- iii. participation in scientific editorial work (e.g. membership of scientific publication series' and journals' editorial boards and editorial positions, including editor-in-chief)
- iv. major international invitation lectures
- v. willingness and ability to work in diverse groups and work communities
- vi. activities and positions promoting and encouraging research cooperation

f) Scientific and societal impact of research work

- i. merits in producing and sharing research and information materials
- ii. merits in utilising research results
- iii. invention announcements, patents, and other merits in promoting commercialisation (e.g. spin-offs and trademarks)
- iv. merits in science communication and performing as an expert in the media
- v. principal public positions of trust, expert positions and assignments (including research-based policy-advice duties)
- vi. duties as an invited scientific expert
- vii. collaborative projects with major research actors including applied research projects

### **NOTES**

1 San Francisco Declaration of Research Assessment: https://sfdora.org; Hicks, D., Wouters, P.F., Waltman, L., de Rijcke, S., & Rafols, I. (2015). The Leiden Manifesto for research metrics, Nature 520, 429-431. https://doi. org/10.1038/520429a; Wilsdon, J. et al. (2015). The Metric Tide. Report on the Independent Review of the Role of Metrics in Research Assessment and Management, HEFCE. https://doi.org/10.13140/RG.2.1.4929.1363; Hong Kong Manifesto: https://www.wcri2019.org/uploads/ files/2019/Hong\_Kong\_Manifesto\_v9.pdf.

2 User guide for the Publication Forum classification system 2019: http://www.julkaisufoorumi.fi/fi/kaytto.

3 Act on Equality Between Women and Men 609/1986; Non-discrimination Act 1325/2014.

4 International diversity initiatives in research publications include: https://jussieucall.org/jussieu-call/ and www.helsinki-initiative.org.

5 Instructions and recommendations for the evaluation of research work have been prepared by for example: DORA, Leiden, Metric Tide, JUFO (see references 1 and 2).

6 Recommendations on responsible metrics have been developed by the working group on responsible metrics within the TUHA network.

## **PREVIOUSLY PUBLISHED IN ENGLISH**

Good practice in researcher evaluation. Recommendation for the responsible evaluation of a researcher in Finland. Responsible Research Series 7:2020. Open Science Coordination in Finland. TSV & TJNK: Helsinki.

Declaration for Open Science and Research (Finland) 2020-2025. Responsible Research Series 3:2020. Open Science Coordination in Finland. TSV & TJNK: Helsinki.

Open access to scholarly publications – National policy and executive plan by the research community in Finland for 2020-2025: Policy component for open access to journal and conference articles. Responsible Research Series 3:2019. Open Science Coordination in Finland. TSV & TJNK: Helsinki.



