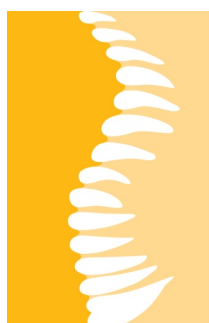


PROTOCOL FOR THE EVALUATION, INTERNAL PROMOTION AND RECRUITMENT OF RESEARCHERS AND TECHNICIANS



ICP^R

Institut Català de Paleontologia
Miquel Crusafont

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HR EXCELLENCE IN RESEARCH

PROTOCOL FOR THE EVALUATION, INTERNAL PROMOTION AND RECRUITMENT OF RESEARCHERS AND TECHNICIANS

INSTITUT CATALÀ DE PALEONTOLOGIA MIQUEL CRUSAFONT



**Generalitat
de Catalunya**



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INTRODUCTION

Preamble

This document has been elaborated by the ICP Director (Dr. David M. Alba), in collaboration with other members of the ICP Steering Committee (Enric Menéndez, General Manager and Head of the Management & Human Resources Dept.; Pere Figuerola, Head of the Outreach & Communication Dept.; and Dr. Josep Fortuny, Head of the Research Support & External Services Dept.), and with additional input from the Researchers Commission and the Non-Discrimination Committee of the ICP.

An earlier version of this document was approved by the Steering Committee on 26 February 2019, being emailed to all of the ICP personnel and posted on the ICP Transparency webpage with effect on 1 March 2019. The definitive version of this document was approved with amendments by the ICP Board of Trustees on 17 May 2019, the revised version being posted on the ICP Transparency webpage with immediate effect. Future amendments will be possible upon approval by the Steering Committee and the subsequent ratification by the Board of Trustees.

Background

Open, transparent and merit-based recruitment (OTM-R) aims to ensure that the best person for a job is recruited. This is beneficial for researchers, research institutions and a country's research system alike, by guaranteeing equal opportunities and facilitating mobility, thus making research careers more attractive overall. Therefore, OTM-R is an essential pillar of the European Charter for Researchers and, in particular, of the Code of Conduct for the Recruitment of Researchers—and hence an essential component of the European Union's Human Resources Strategy for Researchers (HRS4R) overall, which supports research performing organizations to put the policies and principles of the Charter & Code into practice.

In late 2016, the ICP endorsed the principles of the Charter & Code, and throughout 2017 the institution elaborated the required documents to start the implementation of HRS4R and apply to the HR Excellence in Research Award of the EU. These documents (a Gap Analysis and the corresponding Action Plan), elaborated by the HRS4R Committee & Working Group of the ICP, were submitted to the EU in October 2017. The implementation of the Action Plan (which is publicly accessible at <http://hrs4r.icp.cat/>) started immediately without awaiting for the aforementioned award, which was granted to the ICP in March 2018. Currently, the implementation of the HRS4R Action Plan at the ICP is being overseen by the HRS4R Implementation Committee & Working Group, with the collaboration of the Researchers Commission and under the supervision of the Steering Committee.

The HRS4R Gap Analysis performed in 2017 at the ICP concluded that the Charter & Code principles related to recruitment and selection required urgent attention—with some of them being correctly applied in spite of lacking any explicit protocol in this regard, and others being only partially or even insufficiently implemented. All in all, it was concluded that more transparent mechanisms and explicit evaluation criteria were required, particularly when recruiting researchers with funds from the ICP basal budget (i.e., without the intervention of external funding agencies, which have OTM-R mechanisms of their own). To fulfill these aims, the HRS4R Action Plan included the elaboration of a publicly

accessible “ICP Protocol for the Evaluation, Internal Promotion and Recruitment of Researchers and Technicians” (Action 14) as the most important action related with recruitment policy. The SWOT analysis performed by the ICP Director in late 2017 also recognized as a weakness the lack of an explicit OTM-R policy—not only for selecting the best possible candidate for a given job, but also to minimize potential biases (either gender-related or otherwise). Therefore, the new Strategic Plan (2018-2021), issued in February 2018 and based on the aforementioned SWOT analysis, included among its strategic goals the need to “improve the effectiveness and internationalization of researchers’ recruitment by developing and implementing OTM-R policies” at the ICP. The present document therefore fulfills the aims of both the HRS4R Action Plan and the Strategic Plan (2018-2021) of the ICP.

Aims and scope

To get the best possible person for a given job, recruitment must be open, transparent and merit-based, thereby ensuring that both internal and external candidates have equal opportunities to occupy a new or a vacant position. Because of these reasons, an explicit OTM-R policy is a key element for implementing HRS4R at the ICP, particularly as regards to the Charter & Code principles related to the recruitment of researchers in years to come. The protocol has been elaborated by using the “Open, Transparent and Merit-based Recruitment of Researchers” (OTM-R) Package of the EU as a guide, and it aims to regulate, based on OTM-R principles, the steps that must be followed at the ICP during the recruitment of researchers when a vacant position arises or when a new post is created. The OTM-R toolkit provided within the aforementioned package distinguishes three main phases of recruitment (advertising and application; evaluation; and appointment); however, a fourth, preliminary phase (approval) has been added to the ICP protocol provided below, so as to better describe the whole recruitment process at our institution.

The protocol is mandatory for the recruitment of researchers when a vacant or newly established research position is offered at the ICP, except when any of the derogations specified later in this document apply. With modifications, the protocol also regulates the recruitment of technicians (in a broad sense, including not only research support staff but also administration and services personnel) at the ICP. Similarly, the protocol and associated derogations further specify the rules that apply to career progression of researchers and technicians at the ICP (i.e., internal promotion), which must be transparent and merit-based even it cannot be open by definition.

Finally, this document also includes a set of metrics to evaluate the individual performance of ICP researchers through time on the basis of research outputs. These metrics are mainly intended to informally monitor the performance of each researcher—in the understanding that they strongly rely on scientific productivity at the expense of other academic duties (teaching burdens, executive and managerial responsibilities, etc.) and is also modulated by both personal and professional circumstances. Nevertheless, the recruitment protocol relies on such metrics to shortlist candidates to internal promotion.

PROTOCOL FOR THE RECRUITMENT OF RESEARCHERS AND TECHNICIANS

Phases of the recruitment process

0. Approval phase:

0.a. Approval of the position:

- ✓ The creation of a new position or the filling of a vacant position must be approved by the Steering Committee in a formally constituted meeting (either regular or extraordinary), including:
 - The explicit approval of the Director regarding the need of the position in relation to the scientific strategic aims of the ICP.
 - The explicit approval of the General Manager regarding budget availability and compliance with replacement rates and other applicable legal requirements.

0.b. Drafting, review and approval of the job announcement and description:

- ✓ The specific research and/or technical profile of the position will be determined by the (Scientific) Director based on input received from the corresponding head of research group or department.
- ✓ The Steering Committee will elaborate a draft of the job announcement, in compliance with the requirements specified in [section 1.a](#) below.
- ✓ In the case of research positions, the Director will also elaborate a draft of a more detailed description of the position, including details on research aims and scope, supervisory responsibilities, and/or teaching duties (if any).
- ✓ In the case of research positions, the Researchers Commission will review the drafts of the job announcement and position's description in the light of the provisions specified in this protocol, and eventually suggest changes or additions to the Steering Committee. This step will have to be performed not later than 4 weeks after the receipt of the drafts.
- ✓ The Non-Discrimination Committee will review the job announcement in the light of ICP non-discrimination policies and practices, and in further compliance with the present protocol and the Charter & Code principles related to non-discrimination, in order to propose as many amendments as required (if any). This step will have to be performed not later than 4 weeks after the receipt of the draft.
- ✓ In particular, the Non-Discrimination Committee will have to guarantee that a declaration of intent statement to boost gender parity (e.g., by means of encouraging female applicants) is included in the job announcement, as well as to try to prevent any kind of discrimination (by reason of gender, sexual preference, language, ethnicity, geographic origin, functional diversity, or any other reason unrelated to the scientificotechnical merits specified later in this protocol).
- ✓ The Steering Committee will discuss and, when appropriate, incorporate the amendments from the Non-Discrimination Committee as well as the suggestions from the Researchers Commission (if any), and eventually approve the definitive versions of the job announcement (and position's description, in the case of a researcher position).



- ✓ Discussion of the job announcement by the relevant committees and commissions of the ICP, and its approval by the Steering Committee, will not require formally constituted meetings, but may be performed utilizing telematic means such as emails. However, the relevant dates of document receipts, submission of amendment proposals, and/or approval of the job announcement (in the case of the Steering Committee) will have to be recorded on the minutes of the next regular meeting of each committee and commission.

0.c. Designation of the Selection Committee:

- ✓ Once the job announcement (and the position's description, if appropriate) are approved, the Steering Committee will propose an ad hoc Selection Committee for the position(s) offered, in compliance with the requirements specified in **section 2.a** below.
- ✓ The proposed composition of the Selection Committee will always be reviewed by Non-Discrimination Committee, and also by the Researchers Commission (in the case of researcher positions), so as to ensure that the provisions specified in this protocol are fulfilled.
- ✓ The Non-Discrimination Committee, and also the Researchers Commission (in the case of researcher positions), will have to formally approve the composition of the Selection Committee, or else request amendments, not later than 4 weeks after being informed of the proposal by the Steering Committee.
- ✓ The Steering Committee will discuss and, when appropriate, incorporate the amendments from the Non-Discrimination Committee and/or the Researchers Commission (if any), and eventually approve the definitive composition of the Selection Committee.
- ✓ Discussion and approvals of the Selection Committee by the relevant committees and commissions of the ICP will not require formally constituted meetings, but may be performed utilizing telematic means such as emails. However, the relevant dates of document receipts, submission of amendment proposals, and/or approval of the Selection Committee will have to be recorded on the minutes of the next regular meeting of each committee and commission.

1. Advertising and application phase:

1.a. Advertising the post:

- ✓ The job announcement, originally drafted and subsequently approved by the Steering Committee after being reviewed by the Non-Discrimination Committee and, when appropriate, the Researchers Commission must be as concise as possible (1-2 pages) and include links to the present protocol and additional information (if any). In the case of researcher positions, additional information will include at least the position's description.
- ✓ At least, the information detailed below should be included (in the following order) in the job announcement:
 - Full name and logo of the ICP as the recruiting institution, a succinct description of the ICP that mentions CERCA and the two patrons of the institution, as well as a link to ICP website.
 - Number of positions offered as well as job title (including research or technical profile) and reference for each of the positions.



- Professional category (EU researcher career profile or ICP technician profile) for each of the positions, in agreement with the provisions stated in the ICP organization chart and salary scale documents.
 - ICP Research Group or Area & Department (note that some technicians may exceptionally be ascribed to research groups, and that some researchers may also be assigned to technical areas), as well as workplace (ICP-ICTA building at the UAB university campus, or ICP Museum in Sabadell).
 - Expected starting date.
 - Minimum requirements and desirable competences (clearly distinguished from one another) as regards to academic degrees, languages, past experience, skills and expertise, official licenses, etc.
 - Weighted selection criteria (see [section 2.d](#) below).
 - Base salary range and wage supplements (if any), in compliance with the ICP salary scale for each position and professional category.
 - Type of contract (permanent, tenure-track, or fixed-term, in the two last cases including duration) and explicit reference to the law on which it is based (note that the Spanish Statute of Workers regulates generalized fixed-term and permanent contracts, as well as work and service contracts, whereas the Spanish Law of Science, Technology and Innovation further recognizes predoctoral contracts, contracts for research personnel in training, contract of access to the Spanish System of Science, Technology and Innovation, and distinguished researcher contracts).
 - Other relevant details on working conditions, including at least annual working hours, and also (when appropriate) the duration of probationary period, teleworking opportunities and other measures to reconcile family and professional life, etc.
 - A short and explicit statement about ICP non-discrimination policy and its commitment to promote gender parity and equality.
 - Request to communicate any career breaks (due to parental and medical leaves, unemployment, part-time contracts, etc.) that could be relevant to the evaluation process according to the present protocol.
 - Career progression prospects (professional development opportunities), if any, especially for tenure-track positions.
 - Application procedure and deadline (≥ 3 months after the publication of the job advertisement).
 - Link to additional information about the position (if any) and about ICP recruitment policy (i.e., the present protocol).
 - A statement on personal data confidentiality, assuring that the information provided by the candidate will be solely used in the selection process.
 - Contact details (name, position, email address, and phone number) of the person to whom the application should be submitted.
- ✓ Minimum requirements for each type of researcher (R) and technician (T) position with regard to academic background and academic experience will depend on the corresponding professional category (several possibilities are detailed for technician professional categories, but it will be the Steering



Committee's prerogative to decide whether all or only some of them apply to a particular position):

- R1 (Predoctoral Researcher): Bachelor's, licentiate's, or master's degree, or equivalent; enrollment in a master's degree (in the case of bachelors) and in a doctoral program (in all instances) at the time of the application, or else commitment to do so as soon as possible, are mandatory.
 - R2 (Postdoctoral Researcher): Doctor's degree (PhD or equivalent).
 - R3 (Researcher): Doctor's degree (PhD or equivalent) and four years of postdoctoral experience.
 - R4 (Senior Researcher): Doctor's degree (PhD or equivalent) and eight years of postdoctoral experience, of which at least half as an R3 researcher.
 - T1 (Lower-Level Technician): Advanced or intermediate vocational/professional training, or secondary school and one year of working experience, or primary school (school certificate) and three years of working experience.
 - T2 (Middle-Level Technician): Master's, licentiate's, or bachelor's degree, advanced vocational/professional training, or intermediate vocational/professional training and two years of working experience.
 - T3 (Higher-Level Technician): Doctor's degree (PhD or equivalent), master's degree and three years of working experience, or licentiate's or bachelor's degree and five years of working experience.
- ✓ Other minimum requirements as well as desirable competences for each type of position will be at the discretion of the Steering Committee, which will consider the corresponding professional category but also the specificities of each position.
- ✓ The job announcement should be publicized in both Catalan and English at least on the ICP website and social networks (Facebook and Twitter), as well as, in the case of research positions, the online pan-European Researcher's Mobility Portal (EURAXESS), with the aim to attain maximal diffusion at the international level. The announcement will also be publicized through proper distribution lists and online platforms when appropriate. The Outreach & Communication Department will be in charge of publicizing the job announcement.

1.b. Keeping the administrative burden to a minimum:

- ✓ The following documents will be required to apply for the job:
- A motivation letter explaining the interest for the job (mandatory).
 - An extended curriculum vitae (CV; mandatory).
 - Up to two reference letters (at the discretion of the Steering Committee).
- ✓ In the case of researcher positions, all the aforementioned documents will have to be obligatorily in English. For technician positions, both Catalan and Spanish will also be acceptable, except when English proficiency is a minimum requirement of the position.
- ✓ The Selection Committee reserves the right to request additional documentation to the applicants in order to justify the merits stated on their CVs during the whole application and selection process.

- ✓ A copy of the relevant academic titles and social security's occupational history (or, if the latter is unavailable, copy of previous relevant work contracts) will have to be provided by the selected candidate before formalizing the contract.
- ✓ All the documents will be submitted in electronic form (PDF) by email to the person and corresponding email address indicated in the job announcement, unless alternate electronic means are explicitly indicated.

1.c. Acknowledging receipt and providing additional information:

- ✓ Not later than two weeks after the receipt of each application, all applicants will receive an email from the Management & Human Resources Department acknowledging the correct receipt of the documents, or else noting what documents are missing or require amendments.
- ✓ The above-mentioned email from the Management & Human Resources Department will include additional information on the recruitment process, basically consisting of an indicative timetable with estimated dates for the main steps of the selection process: shortlisting, interview (if required), and appointment.
- ✓ Significant delays in any step of the selection process will be communicated to the applicants by email, including an updated timetable for the remaining steps.

2. Evaluation and selection phase:

2.a. Composition of the Selection Committee:

- ✓ The Selection Committee must be composed of 3 members (for positions corresponding to R1-R2 and T1-T2 professional categories) or 5 members (for positions corresponding to R3-R4, T3, and responsible positions irrespective of professional category). One of the members will be designated as President, and another one as Rapporteur.
- ✓ At least one member of the Selection Committee will have to be external to the ICP (i.e., ICP staff as well as research associates are excluded), except for R3-R4 positions, in which two external members are mandatory. Members of the Scientific Advisory Board of the ICP will count as external and their presence in the Selection Committee is strongly encouraged for R3-R4 positions, although not mandatory (depending on their availability and gender parity requirements).
- ✓ Members of the Selection Committee will have to declare in written form whether they have any conflict of interests with any of the applicants (understood as any personal circumstances leading to secondary interests that might compromise the professional evaluation of applicants in the primary interest of the ICP). Conflicts of interest between members of the Selection Committee and applicants (such as business, family or sentimental relationships) will have to be explicitly disclosed at the beginning of the evaluation phase and will automatically imply the exclusion of that member from the evaluation of that particular applicant. In case of doubt about particular circumstances that might potentially constitute a conflict of interest, these will have to be declared and the rest of the Evaluation Commission will have to decide whether exclusion from the evaluation is warranted. A priori, professional relationships within academia (research collaborations, coauthorship of papers, working in the same institution, etc.) will not be considered to represent a conflict of interests.



However, members of the Selection Committee will be able to refrain from evaluating particular candidates if they consider that their close academic relationship precludes them from providing an objective evaluation.

- ✓ Gender parity must be respected in the composition of the Selection Committee. It will imply at least 1 member each gender in 3-people committees, and at least 2 members of each gender in 5-people committees. A majority of women over men will be favored when possible, given other provisions below.
- ✓ For positions ascribed to a given research group, the following additional criteria are mandatory for selecting the composition of the Selection Committee:
 - The Director (or Scientific Director, if any) will be the President of the Selection Committee.
 - The Research Group Head will be the Rapporteur of the Selection Committee.
 - If the Research Group Head is the same person as the Director, and there is no Scientific Director, another experienced researcher (R3 or R4, preferably from the same Research Group) will be the Rapporteur of the Selection Committee.
 - Another researcher (R2 to R4), preferably from another research group, will be a member of the Selection Committee when the latter is composed of 5 members.
 - One (for 3-member committees) or two (for 5-member committees) external experienced researchers (R3 or R4) will be included as members of the Selection Committee. Their expertise should fit as much as possible with the profile of the offered position.
 - For 5-member committees, at least one of the external members should be based on a foreign institution.
- ✓ For positions ascribed to a non-academic area, the following additional criteria are mandatory for selecting the composition of the Selection Committee:
 - The General Manager (or Head of the Management & Human Resources Department, if different) will be the President of the Selection Committee.
 - The Head of Department will be the Rapporteur of the Selection Committee.
 - For positions ascribed to the Management & Human Resources Department, if the Head of Department is the same person as the General Manager, another technician (T2 or T3, preferably from the same Department) will be the Rapporteur of the Selection Committee.
 - A middle-/higher-level technician (T2 or T3) from another non-academic area of the ICP or another institution will be the third member of the Selection Committee when the latter is composed of 5 members.
 - The Director will be included as member of the Selection Committee when the latter is composed of 5 members.
 - One external technician (T2 or T3) will be included as member of the Selection Committee. His/her expertise should fit as much as possible with the profile of the offered position.
- ✓ For all positions, internal members of the Selection Committee will be involved in all of the steps of the evaluation process, whereas external members will not



be involved in the prescreening and shortlisting steps detailed in [section 2.b](#) below.

2.b. Screening and shortlisting of applications:

- ✓ After the application deadline and acknowledging the receipt of all applications, the internal members of the Selection Committee will prescreen the applications to check eligibility.
- ✓ Those applicants that do not fulfill any of the required criteria will be informed by email that they have been provisionally excluded from the selection process. Two extra weeks will be given to the excluded candidates to appeal by providing the necessary documents. Failure to do so will result in their definitive exclusion. The Selection Committee decision on appeals will be definitive and communicated by email on an individual basis.
- ✓ Once the list of eligible applicants is definitive, the internal members of the Selection Committee will elaborate a shortlist of candidates to be evaluated, based on the following steps:
 - If the list of eligible applicants is composed of just one or two persons, they will be automatically transferred to the shortlist and gender parity requirements will not apply.
 - If the list of eligible applicants is composed by 3 or more people, each internal member of the Selection Committee will rate the eligible applicants by assigning a rating between 0 and 10 to each of the selection criteria detailed in the job announcement (see [section 2.d](#) below for further details). The ratings for each selection criterion will be weighted based on the percentages specified in the job announcement (see also [section 2.d](#) below). The rating for each applicant will be computed as the average of the ratings assigned by the various members of the Selection Committee.
 - If the list of eligible applicants is composed by 3 or more people, the average rating for each applicant will be used to elaborate the final ranking of eligible applicants (rank of 1 for the highest rating). The shortlist of candidates will be elaborated by the internal members of the Selection Committee based on the final ranking, as specified below.
 - In particular, the shortlist will have to include between one-third and two-thirds of the total number of eligible applicants, as well as one-third of applicants of each gender. The order of the final ranking will be respected as far as possible, until both conditions are fulfilled. If this is not possible, the order of applicants in the final ranking will have to be altered to fulfill the gender parity requirement specified above. If there are not enough male candidates to fulfill the gender-parity requirement above, the latter will no longer apply. If there are not enough female candidates, the application deadline will be extended and a revised job announcement will be publicized, until the gender parity requirement can be fulfilled in the shortlist by incorporating female candidates, up to a maximum of three months. A few examples have been provided below to clarify these instructions:
 - If there are only 3-4 eligible applicants, the shortlist must include 2 candidates (one of each gender); if the first two eligible applicants are of



the same gender, the second one will be substituted by the next applicant of a different gender in the ranking (if any); if all the applicants are female, the latter will not be possible and only females will be shortlisted; but if all the applicants are male, the call will have to be extended until females apply or until three months are elapsed.

- If there are 5 eligible applicants, the shortlist must include 2-3 candidates, and each gender will have to be represented by at least one applicant; in particular, if the first two eligible applicants include a male and a female, no third applicant will be shortlisted; in contrast, if the first two eligible applicants are of the same gender, then the next applicant of a different gender from the ranking (if any) will be shortlisted; if all the applicants are female, the first three applicants will be shortlisted; but if all the applicants are male, the call will have to be extended until females apply or until three months are elapsed.
- ✓ The Selection Committee will transmit the shortlist of candidates to the Non-Discrimination Committee for review and approval, in order to ensure that the criteria specified above are fulfilled. If this is not the case, the Non-Discrimination Committee will require the necessary amendments to the Selection Committee. Otherwise, the Non-Discrimination Committee will communicate the approval to the Selection Committee, which in turn will forward the shortlist to the Head of the Management & Human Resources Department, as well as to the external members of the Selection Committee.
- ✓ The Management & Human Resources Department will communicate to each of the applicants if they have been shortlisted or not on an individual basis, and to those shortlisted it will also provide an estimated deadline for the resolution of the call as well as further information about the merits that will be considered for each selection criterion.

2.c. Assessing merit and future potential:

- ✓ Each member of the Selection Committee (both internal and external) will evaluate each one of the shortlisted candidates based on the selection criteria and included merits (as well as their corresponding percentages), as specified on the job announcement and subsequently communicated to the shortlisted candidates in greater detail (see [section 2.d](#) below for further details). Each member of the committee will also provide a short written commentary on the strengths and weaknesses of each candidate.
- ✓ The ratings assigned to each eligible candidate by the internal members of the Selection Committee during shortlisting will no longer be used during the subsequent evaluation process. Instead, all of the members of the Selection Committee (both internal and external) will assign a score between 0 and 10 to each of the merits included within the various selection criteria. These scores will be weighted based on their corresponding percentages, averaged among the various members of the Selection Committee, and summed to compute the total raw scoring for each shortlisted candidate (see [section 2.d](#) below for further details). A summary consensus view of the strengths and weaknesses of each candidate will be written by the President of the Selection Committee.



- ✓ The total raw scoring of each candidate, computed as specified above, is based on past performance. Therefore, it will have to be corrected by taking into account the candidate's potential, on the basis of computed career duration (see [section 2.d](#) below for further details).
- ✓ If an interview is included in the selection process (depending on professional category, see [section 2.d](#) below), it will be performed by the internal members of the Selection Committee to all of the shortlisted candidates. All interviews to researchers will be performed in English, whereas interviews to technicians will also be acceptable in Catalan or Spanish, except when English proficiency is a minimum requirement of the position. Interviews will be performed either in person or through a telecom software application (e.g., Skype). Each interview will be rated by the various internal member of the Selection Committee (see again [section 2.d](#) below), and the average value will be used as a modulating factor of the corrected scoring to compute the final scoring for each candidate.
- ✓ Candidates will be ranked based on their final scoring, and the resulting prioritized list, with final scorings and individual evaluations for each candidate, will be communicated by the Selection Committee to the Head of the Management & Human Resources Department and the Steering Committee.
- ✓ The candidate with the highest final scoring will be selected for the job if his/her scoring ≥ 7.0 ; otherwise, the call must be considered null, and the Steering Committee will have to decide whether to open a new call at a later time or not. The candidates ranked as second or third on the prioritized list (if any) will be kept in reserve if their final scoring is ≥ 7.0 .

2.d. Selection criteria:

- ✓ The criteria for selecting researchers and technicians should focus on both the candidates' past performance and their future potential (the latter progressively decreasing in significance relative to the former from R1 to R4 and from T1 to T3.)
- ✓ The selection criteria and associated merits provided below refer exclusively to research positions. Selection criteria and merits for non-academic positions will be determined by the Steering Committee and the Selection Committee, respectively, following a similar scheme of percentages but taking into account the particularities of each position. In all instances, selection criteria (with their corresponding percentages) will be included in the job announcements, whereas included merits (and their corresponding percentages) will be communicated to shortlisted candidates.
- ✓ The following selection criteria will be considered for research positions (some are mandatory and others are optional, depending on the professional category):
 - A. Research outputs.
 - B. International visibility & mobility.
 - C. Fundraising abilities.
 - D. Supervision, mentoring & teaching.
 - E. Other academic activities.
 - F. Fieldwork experience.



- G. Management & leadership capabilities.
 - H. Outreach & knowledge transfer.
 - I. Other merits.
 - J. Adequacy of the candidate's profile (to the position offered).
- ✓ The relative significance of the aforementioned selection criteria will depend on the professional category (R1-R4) that corresponds to the position offered. Professional categories refer to the job offer, not to the current category of the applicant (e.g., a Research Group Head position would have the requirements of professional category R4, irrespective of whether the candidate currently has an R3 position). Depending on the professional category, the Steering Committee will ascribe different percentages to each of the selection criteria based on the table below, to be included in the job announcement (not all criteria apply to all the categories, but their sum is 100% in all instances):

	R1	R2	R3	R4
A. Research outputs	15%	25%	35%	40%
B. International visibility & mobility	5%	10%	10%	12%
C. Fundraising abilities	5%	10%	10%	12%
D. Supervision, mentoring & teaching	0%	5%	5%	7%
E. Other academic activities	0%	5%	5%	5%
F. Fieldwork experience	30%	15%	10%	2%
G. Management & leadership capabilities	0%	0%	5%	10%
H. Outreach & knowledge transfer	0%	5%	5%	5%
I. Other merits	10%	10%	5%	2%
J. Adequacy of the candidate's profile	35%	15%	10%	5%
TOTAL	100%	100%	100%	100%

- ✓ The composition and significance of the merits included within each of the ten (A–J) selection criteria outlined above will be further modulated by the Selection Committee, by distributing the percentage of each criterion among the various included merits—depending on the professional category of the position and other specificities of the job. The merits considered (to be specified to the shortlisted candidates) are the following (those denoted with an asterisk are mandatory for the indicated professional categories):
- A. Research outputs:
 - A.1. h-index (R1–R4*).
 - A.2. Total number of publications in SCI (Science Citation Index) journals, i.e., those indexed by the Journal Citation Reports (R1–R4*).
 - A.3. Number of publications in SCI journals from the first quartile (Q1) in the year of publication (R1–R4*).
 - A.4. Number of publications in *Nature*, *Science*, *PNAS*, *Nat. Comms.*, or similar high-ranking multidisciplinary journals (R2–R4*).
 - A.5. Number of publications in open access journals (R3–R4*).
 - A.6. Books, edited books or edited journal special volumes (R2–R4*).
 - A.7. Book chapters in multiauthored international books (R1–R4*).
 - A.8. Contributions to international meetings (R2–R4*).
 - B. International visibility & mobility:



- B.1. Short stays in foreign research institutions (R2–R4*).
- B.2. Long stays in foreign research institutions (R2–R4*).
- B.3. Member of international scientific committees or equivalent (R3–R4*).
- B.4. Invited talks to international meetings (R3–R4*).
- C. Fundraising abilities:
 - C.1. Member of research teams of national projects (R2–R3*).
 - C.2. Individual research grants and projects, other than ERC (R1–R4*).
 - C.3. Member of research teams of international and transnational projects (R2–R3*).
 - C.4. P.I. of national research projects (R3–R4*).
 - C.5. P.I. of international and transnational research projects (R3–R4*).
 - C.6. ERC grantee (R3–R4*).
 - C.7. Attested fundraising abilities by means of engaging donors/sponsors or securing service provision contracts.
- D. Supervision, mentoring & teaching:
 - D.1. Teaching experience in bachelor degrees (R2–R3*).
 - D.2. Teaching experience in master degrees (R2–R4*).
 - D.3. Supervision of bachelor and master theses (R2–R4*).
 - D.4. Mentoring of students, PhD candidates and postdocs (R3–R4*).
 - D.5. Supervision of ongoing and finished PhD dissertations (R3–R4*).
- E. Other academic activities:
 - E.1. Reviewer for SCI journals (R3–R4*).
 - E.2. Member of SCI journal editorial boards (Associate Editor or equivalent; R3–R4*).
 - E.3. Editor of SCI journals (Editor-in-Chief or equivalent; R3–R4*).
 - E.4. Reviewer of project or academic job applications (R3–R4*).
 - E.5. Member of panels of experts for project calls (R4*).
 - E.6. Member of evaluation committees of bachelor/master/PhD theses (R3–R4*).
- F. Fieldwork experience:
 - F.1. Participation in paleontological fieldwork (R1–R3*).
 - F.2. Direction of paleontological excavations, samplings and/or prospections (R2–R4*).
- G. Management & leadership capabilities:
 - G.1. Seniority within the research field (R3–R4*).
 - G.2. Experience as ICREA Research Professor (R4*).
 - G.3. Experience as research group leader (R4*).
 - G.4. Experience as director of research center, university department, or equivalent (R4*).
 - G.5. Number of SCI papers as first, last or corresponding author (R3–R4*).
 - G.6. Experience as principal investigator of research projects (R3–R4*).
- H. Outreach & knowledge transfer:
 - H.1. Popularizing books and articles (R3–R4*).



- H.2. Popularizing talks and participation in scientific dissemination courses and conference cycles (R2–R3*).
- H.3. Appearance in the mass media (R4*).
- H.4. Experience in the business sector (R4*).
- H.5. Patents.
- I. Other merits:
 - I.1. Prizes and other honors (R1–R4*).
 - I.2. Other.
- J. Adequacy of the candidate's profile:
 - J.1. Suitability for the position based on the candidate's academic background and degree, as well as other training (R1–R2*).
 - J.2. Suitability for the position based on the candidate's main research lines throughout his/her career (R2–R4*).
 - J.3. Suitability for the position based on the candidate's main research lines as judged by ongoing projects and publications for the last five years (R3–R4*).
 - J.4. Familiarity and experience with the vertebrate fossil record from Catalonia and/or the ICP collections.
- ✓ Applicants should organize their CV (to be submitted along with the letter of interest when applying to the job) as much as possible following the list of all the selection criteria provided above (in the case of research positions) or indicated in the job announcement (in the case of non-academic positions). The letter of interest is particularly relevant for selection criterion J.
- ✓ For each shortlisted candidate, the members of the Selection Committee (both internal and external) will have to assign to each merit a score comprised between 0 and 10 (with one decimal fraction), by taking into account that 0–2.4 is 'deficient', 2.5–4.9 is 'insufficient', 5.0–6.9 is 'sufficient', 7.0–8.9 is 'very good', and 9.0–10.0 is 'excellent'.
- ✓ As anticipated above in [section 2.c](#), the average score for each merit and candidate will be computed as the arithmetic mean of the scores assigned to it by the various members of the committee. In turn, the average score for each merit will be weighted according to the percentages previously assigned to each by the Selection Committee (note that the sum of percentages assigned to the merits of a given criterion equal the percentage specified for that criterion in the job announcement). The weighted average score for each selection criterion will be computed as the sum of the weighted average scores of the included merits, whereas the total raw scoring for each shortlisted candidate (0–10) will be computed as the sum of the weighted average scores for all the selection criteria.
- ✓ While the past performance of the shortlisted candidates will be measured by the above-mentioned total raw scoring, future potential will also be taken into account by computing a relative scoring standardized by 'career duration'. This scoring will be computed as: $\text{relative scoring} = \text{raw scoring} * \text{maximum career duration among all the shortlisted candidates} / \text{career duration of the candidate}$.
- ✓ Career duration will be measured in years to the nearest 0.1 yr. In the case of researchers, it will be defined as the time elapsed since 1 January of the year



when the candidate first published a SCI paper (with definitive pagination, i.e., online prepublication excluded). In the case of technicians, career duration will be defined as the time elapsed since the first job since 1 January of the year in which the candidate completed the minimum academic degree required for the position.

- ✓ Some exceptions to the definitions provided above apply, since diversified career paths should not be penalized, working experience outside academia might be considered a merit in the case of researchers, and career breaks due to health problems or family circumstances should be adequately taken into account. Therefore, the following additional provisions will apply when computing career duration for both researchers and technicians:
 - The duration of medical leaves (>2 months) after the onset of the research career will be subtracted from the computed career duration, irrespective of whether publications were issued during that period.
 - For parents, 1 year (for males) or 2.5 years (for females) will be subtracted from the computed career duration for each child, irrespective of the actual duration of the corresponding parental leaves (if any), and irrespective of whether publications were issued during that period, except if the subtracted periods preceded the onset of career duration.
 - The duration of career breaks due to work outside academia (>2 months) after the onset of the career will be subtracted from the computed career duration in the case of researchers. If publications were issued during that period, however, these periods will compute like unemployment ones.
 - The duration of unemployment periods (>2 months) divided by 2 will be subtracted from the computed career duration, irrespective of whether publications were issued during that period.
 - The duration of periods with part-time contracts ($\leq 50\%$ of a full-time contract, >2 months) divided by 3 will be subtracted from the computed career duration.
 - When several of the above-mentioned conditions apply simultaneously, only the most favorable provision will be considered.
 - Exceptionally, and upon request by the applicant, similar corrections can be applied to other circumstances not included among the aforementioned provisions, at the criterion of the Selection Committee and with the explicit written approval of the Steering Committee of the ICP.
- ✓ Future potential will be given a decreasing significance from R1 to R4 and from T1 to T3. A corrected scoring will be computed according to the following formulas, depending on the professional category of the job offered:
 - R1 and T1: corrected scoring = (raw scoring * 0.6) + (relative scoring * 0.4).
 - R2 and T2: corrected scoring = (raw scoring * 0.7) + (relative scoring * 0.3).
 - R3 and T3: corrected scoring = (raw scoring * 0.8) + (relative scoring * 0.2).
 - R4: corrected scoring = (raw scoring * 0.9) + (relative scoring * 0.1).
- ✓ Interviewing the candidates will be optional for R1-R2 and T1 (at the discretion of the Selection Committee) and mandatory for R3-R4 and T2-T3. If applicable, it will be performed exclusively by the internal members of the Selection



Committee, who will rate the interview of each shortlisted candidate as: excellent – good – neutral – bad – terrible. Each of these qualifiers will be transformed into a correction factor: excellent = 1.25; good = 1.15; neutral = 1.0; bad = 0.85; terrible = 0.75. For each shortlisted candidate, an interview correction factor will be computed as the arithmetic mean of the correction factors assigned by the various internal members of the committee. The final scoring of each candidate will be computed as: final scoring = corrected scoring * interview correction factor.

3. Appointment phase:

3.a. Feedback:

- ✓ The Selection Committee will make it public through the ICP transparency webpage the name and scoring of the selected candidate and those in reserve (if any), but not the lists of non-selected candidates, non-shortlisted eligible applicants, or excluded applicants.
- ✓ All the applicants will be communicated the successive decision of the Selection Committee as regards to their applications in due time by means of an email sent by the Head of the Management & Human Resources Department. The exclusion of applicants from the selection process will have to be communicated by email and justified on the basis of the requirements specified in the job announcement.
- ✓ Eligible applicants excluded from the shortlist will be informed by email without revealing any details of the composition of the shortlist, and with no other feedback but their position and the number of eligible applicants in the preliminary ranking.
- ✓ In contrast, before the resolution of the call, shortlisted candidates will be informed by email about the subsequent steps of the selection process (including the merits considered for each selection criterion) as well as the number of candidates included in the shortlist, but not of their identities or their relative position on the ranking.
- ✓ After the resolution of the call, all shortlisted candidates (irrespective of whether they are selected, in reserve or non-selected) will individually be given by email a succinct written report of the strengths and weaknesses of their application and will be informed about their final scoring, their average rating for each of the considered selection criteria, their position in the prioritized list, and the final scoring and identities of the candidates selected and in reserve (if any) before the latter are publicized through the ICP transparency webpage.
- ✓ Once all of the communications above have taken place, the Head of the Management & Human Resources Department will contact by email or phone the selected candidate and arrange the formalization of the contract and the subsequent incorporation of the selected candidate to the ICP staff on a specific date.
- ✓ The formalization of the contract (and incorporation of the researcher to the ICP) will have to take place during the next three months after the resolution of the call (including the publicizing of the selected candidate and those in reserve), unless a different time frame was explicitly stated on the job announcement. The



onset date of the contract and incorporation date will have to be agreed by both parties.

- ✓ Upon request, the selected candidate will have the possibility to extend the deadline for the formalization of the contract and incorporation to the ICP up to three extra months. This period can be extended further upon mutual agreement of both parties.
- ✓ If the selected candidate refuses to accept the appointment under the conditions specified on the job announcement, or the candidate fails to formalize the contract and/or incorporate to the job within the time frame specified above for circumstances beyond the control of the ICP, the job will be offered successively to the second and third candidates in reserve (if any). Under those circumstances, the deadlines for the formalization of the contract and the researcher's incorporation date will be postponed proportionally to the delay caused by the renouncement of the previously selected candidate(s).
- ✓ If neither the selected candidate nor those in reserve (if any) happen to formalize the contract and/or incorporate to the job within the time frame stipulated above for circumstances beyond the control of the ICP, the Steering Committee will have to decide whether to appoint the next shortlisted candidate on the prioritized list (if any) or to declare the call null, in which case it might be opened again at a later time.

3.b. Complaints mechanism:

- ✓ Non-eligible applicants excluded from the selection process will have the opportunity to appeal to the Selection Committee during the next 2 weeks and amend their applications by providing the required documents, as described in [section 2.b](#) above in greater detail.
- ✓ Eligible applicants that have not been shortlisted as well as shortlisted candidates that have not been selected (even if in reserve) will have the possibility to complain to one of the ICP ombudspersons if they suspect to have been treated negligently, unfairly or incorrectly. This possibility will be explicitly mentioned in the emails sent by the Management & Human Resources Department to the applicants or candidates.
- ✓ During the next two weeks after the receipt of applicants' or candidates' complaints, the ombudsperson will discuss them with the Selection Committee, and submit a short report to the Steering Committee. During the next two weeks after the receipt of the ombudsperson's report about the complaints, the Steering Committee will have to confirm the decision by the Selection Committee (if the complaints are deemed unjustified), or else implement measures to re-evaluate the applicant/candidate (if the complaints are considered justified).

DEROGATIONS OF THE PROTOCOL

The recruitment protocol above is based on three conditions (open, transparent, and merit-based) that must be fulfilled simultaneously. However, under some circumstances it is not possible to apply all of the three aforementioned conditions, such as for example in career progression opportunities leading to internal promotion at the ICP.

In order to comply with the principle of transparency, it is necessary to specify below all of the possible derogations of the recruitment protocol. None of the derogations specified below contradict the principle of merit-based recruitment, although in some circumstances the evaluation procedures of the protocol cannot apply. Under exceptional circumstances, further derogations of the protocol might be enforced, requiring a written justification and approval by the Steering Committee, as well as its subsequent addition to the list of derogations below (to be subsequently ratified by the Board of Trustees).

1. Work and service contracts:

- ✓ Work and service contracts for researchers and technicians, similarly to contracts with freelances and companies, will not be subject to the recruitment protocol, because they are intended for short and specific tasks that generally require a quick recruitment.
- ✓ As a general rule, these contracts should not have a duration over one year, although punctual extensions for technicians may be justified and approved by the Steering Committee under exceptional circumstances related to the provision of services by the ICP to third parties.
- ✓ The recruitment for work and service contracts will be merit-based, but only by means of a qualitative evaluation of the CV and/or an interview with the candidate(s), without a formal evaluation process.
- ✓ The formalization of this type of contracts will require the approval by the Director, the General Manager, and the Head of the Research Group or Department.

2. Redeployment:

- ✓ When the Steering Committee decides to fill a vacant non-academic position (associated to a definite technician profile), there is the possibility to initially restrict the job offer to the staff of the ICP, at the discretion of the Steering Committee. This possibility requires that there are potentially eligible candidates among the ICP staff and is unavailable for researcher positions (except in the designation of responsible positions, see below).
- ✓ With regard to redeployment, ICP staff will be understood as including those persons with a current employment relationship with the institution when the job is announced (research associates, collaborators and freelances are therefore excluded). The selection process (evaluation and appointment) will be performed as specified in the recruitment protocol.
- ✓ The Selection Committee reserves the right to exclude from the shortlist those applicants that do not fit with the profile of a given position. Unlike in the case of internal promotion, if the call is null (because of lack of eligible candidates),



an external recruitment process for the same position, following all of the provisions of the recruitment protocol, will be initiated.

3. Internal promotion:

- ✓ Pending the elaboration of a more comprehensive “Strategy for the Professional Development of Researchers” (included in the HRS4R Action Plan of the ICP), the Steering Committee, depending on budgetary availability, may decide to improve the professional category of some of its researchers or technicians under permanent contract.
- ✓ Under such circumstances, the job will not be offered externally but publicized only internally, and it will not be linked to any definite profile but only to a certain professional category. For example, this derogation would apply to transitions from researcher (R3) to senior researcher (R4) or from junior research head (R3) to senior research group head (R4), as well as to those technical positions for which junior and senior versions exist (e.g., administrative officer, collection manager, project manager, fieldwork officer, etc.), generally corresponding to professional categories T2 (junior) and T3 (senior; see ICP Salary Scale for further details).
- ✓ The job offer will consist on transitioning from one professional category to another (R3 to R4, T2 to T3...) without a change in position and it will not be associated to any definite researcher or technician profile. All the permanent staff under the immediately lower professional category will be eligible to apply, thereby excluding those researchers or technicians with fixed-term contracts as well as research associates.
- ✓ In the case of researchers, a prioritized shortlist will be elaborated on the basis of the researcher’s overall performance metric (computed as specified later in this document); only those researchers with a positive, very good or excellent evaluation will be shortlisted (those with a negative or neutral evaluation will be excluded), being subsequently evaluated as specified in the recruitment protocol above. If there is a single researcher shortlisted and the internal evaluation result is very good or excellent, further evaluation based on the recruitment protocol will not be necessary and the promotion will automatically follow.
- ✓ In the case of technicians, the provisions of the protocol will be followed also for elaborating the shortlist.

4. Tenure-track positions:

- ✓ Researchers (R3) with a tenure-track fixed-term contract of four or more years, either funded by the ICP basal budget or (more frequently) by an external agency (e.g., ‘Ramón y Cajal’ contracts), will be given the possibility to stabilize their position with an indefinite contract if the criteria established in the State Budget Law (Ley de Presupuestos Generales del Estado) are fulfilled.
- ✓ The new permanent position will have the same profile as the previous position of the ICP researcher in tenure-track, but will be open to external candidates that fit the profile and fulfill other requirements for eligibility determined by the Steering Committee.



- ✓ The process will resemble that specified above in the recruitment protocol, except that: (i) the Steering Committee will stipulate the conditions to be eligible; and (ii) there will be no shortlist. All the candidates that fulfill the conditions for eligibility will be evaluated by the Selection Committee. The permanent position will be attained by the candidate with a highest final scoring ≥ 7.0 .
- ✓ As a general rule, the Steering Committee will set the following requirements for eligibility: (i) very good or excellent evaluation according to the criteria for the internal evaluation of researchers as specified later in this document (i.e., an overall performance metric ≥ 2.0); or (ii) in the case of positions for 'Ramón y Cajal' researchers, at least positive evaluation according to the criteria for the internal evaluation of researchers as specified later in this document (i.e., an overall performance metric ≥ 0.5) and the possession of the I3 certificate (or equivalent) after the evaluation conducted by the external funding agency at the end of the fourth year of contract.

5. Designation of responsible positions:

- ✓ The designations of positions of high-responsibility, namely research group heads (either junior or senior), heads of area, and heads of department, are the Director's prerogative and merely require the subsequent approval of the Steering Committee when they apply to personnel that are already a member of the ICP staff. The same applies to dismissals from office for these positions.
- ✓ Responsible positions imply a wage supplement (compared to the basal salary range for the corresponding professional category) for as long as the position is hold.
- ✓ In case that external recruitment is required to fill a vacant responsible position, the recruitment protocol will apply, without prejudice of the aforementioned provisions about the Director's prerogative to appoint and dismiss from the responsible position (with consequences for the associated wage supplement if explicitly noted in the work contract).

6. Contract extensions:

- ✓ The prolongation of fixed-term contracts, in the case of ICP staff researchers or technicians when they do not imply a change in the position and the professional category, are the prerogative of the Steering Committee and therefore not bounded to the provisions of the recruitment process.

7. Positions funded with ICP competitive funds:

- ✓ Fixed-term positions of researchers in training (R1 and R2) funded exclusively with competitive funds from the ICP (generally from research project grants) up to four years (either with a single or multiple concatenated contracts) are not bounded to the provisions of the recruitment protocol.
- ✓ The candidate(s) will have to be informally evaluated on qualitative grounds by the principal investigators of the project on the basis of their CV and, if necessary, personal interviews.

- ✓ The recruitment of the selected candidate will require the approval of the Selection Committee on the basis of a written report by the principal investigator justifying the selection of the candidate.
- ✓ The partial or complete application of the recruitment protocol by P.I.s for selecting the candidate is strongly recommended but not mandatory.

8. Competitive positions funded by external agencies:

- ✓ Fixed-term positions of both researchers and technicians that are funded by external agencies (even if there is cofunding from the ICP) and subject to their own competitive selection processes (as it is usual for predoctoral and postdoctoral contracts, among others) are not bounded by the provisions of the recruitment process.
- ✓ If there is cofunding, the candidate's application to the external funding agency will require the approval of the ICP Director, General Manager, and Head of the corresponding research group or department.
- ✓ If the funding agency requires to the ICP a prioritized list of candidates (e.g., FI grants from AGAUR), particular mechanisms will be developed and eventually approved by the Steering Committee to comply with OTM-R principles.

9. Executive positions:

- ✓ The recruitment for a vacant position of ICP Director or General Manager is excluded from the recruitment protocol provided in this document, because the appointment of such executive positions is the prerogative of the ICP Board of Trustees.
- ✓ In the case of the Director's position, the Board of Trustees may delegate the selection process to the CERCA institution, in order to guarantee open, transparent and merit-based recruitment as well as scientific excellence.
- ✓ In the case of the General Manager's position, it is designated by the Board of Trustees upon proposal by the Director, who should discuss with the board the most suitable recruitment mechanisms (not being necessarily restricted to those stated on the present protocol).

METRICS FOR THE INTERNAL EVALUATION OF RESEARCHERS

Evaluation metrics

To evaluate the performance of a given ICP researcher, three main metrics will be employed. These metrics are based on the scientific production of each researcher and, in two cases, also that of the ICP as a whole. In particular, the various metrics will be based on variables measured from papers published in journals from the Science Citation Index (SCI), i.e., those indexed by the Journal Citation Reports (JCR); “papers” will include most publication types in those journals (articles, short communications, book reviews, obituaries, etc.) except for abstracts, corrigenda, and similar contributions. The period considered includes the last five previous years (for example, if the evaluation takes place in 2019, the publications appeared during 2014-2018 will be considered). Publication year will be determined on the basis of definitive publication (with volume and, when applicable, with pagination), irrespective of the date of previous online publication. Some raw variables will be ascribed to papers based on the corresponding metrics of the journal as recorded by the JCR of the year of publication (unless unavailable for the last year considered, in which case the JCR of the previous year will be used).

The metrics employed in the evaluation of ICP researchers are termed as follows: (i) ‘global impact’, which could potentially be used to compare the publication outputs of any researchers irrespective of whether they belong to the ICP; (ii) ‘relative contribution’, which measures the relative contribution of each researcher to the ICP production; and (iii) ‘relative impact’, which measures the relative quality of a researcher’s output as compared to that of the ICP.

The two first variables take into account the production volume of a given researcher, even if other indicators (of quality, impact and visibility) are incorporated in their computation. The last variable, in contrast, only measure quality/impact irrespective of production volume. Accordingly, global impact and relative contribution are standardized by career duration (computed as specified in [section 2.d](#) of the recruitment protocol above, but restricted to the last five years).

It is explained below how each of these metrics must be computed. Intentionally, the h-index and the number of citations are excluded from these comparisons, because the selected metrics are intended the measure the performance of researchers during a particular time frame, instead of the result of lifelong career trajectory and irrespective of the biases introduced by the number of practitioners of each scientific discipline.

Global impact

This metric is intended to simultaneously reflect the quantity, quality, impact, visibility and leadership of the SCI production of a particular researcher. It is mostly based on the Journal Impact Factor (JIF), although other variables are taken into account, including quartile, category and open access, as well as number, position and role of authors of the publication.

Based on various variables reflecting the above, the impact of each paper published by a particular researcher is computed as follows:

$$\text{Paper impact} = \text{JIF} \times \text{AF} \times \text{CAF} \times \text{CAT} \times \text{OAF} \times \text{QF}$$

where: JIF = Journal Impact Factor; AF = Author Factor (2 if single author, 1 if first or last author, $1/n$ if n [number of authors] ≥ 3); CAF = Corresponding Author Factor (1.5 if so, 1 otherwise); CAT = Category Factor (1.5 if 'Multidisciplinary sciences', 1.25 if 'Paleontology', 1 otherwise); OAF = Open Access Factor (1.5 if open access, 1 otherwise); and QF = Quartile Factor (2 if Q1, 1 if Q2, 0.5 if Q3, 0.25 if Q4).

The global impact of a particular researcher is then computed as the summatory of the impacts of all the papers published by the researcher during the considered time frame, corrected by career duration (CD; see [section 2.d](#) above for further details) during the last five years:

$$\text{Global impact} = \sum \text{Paper impact} \times 5 \div \text{CD}$$

Needless to say, such metrics aims to reward publication in high-impact and first quartile journals, particularly multidisciplinary and, to a lesser extent, paleontological, both as first/last author and corresponding author.

Relative contribution

This metric aims to measure the relative contribution of each ICP researcher to the total production of the research center in terms of SCI publications, particularly from the first quartile, in open-access and multidisciplinary journals, and/or led by ICP researchers (as measured by the corresponding author).

Relative contribution of each ICP researcher is therefore based on five ratios (in %) in which the numerator is the figure for the individual researcher and the denominator is the corresponding figure for the ICP as a whole. The measured raw variables are the following: SCI (number of SCI papers published by the researcher and the ICP); Q1 (number of SCI papers published in first quartile journals by the researcher and the ICP); OA (number of SCI papers published in open-access journals by the researcher and the ICP); CA (number of SCI papers in which the researcher or any ICP researcher is the corresponding author); and MD (number of SCI papers published in journals from the category 'Multidisciplinary sciences' by the researcher and the ICP). The corresponding ratios between the researcher's values and those of the ICP are denoted, respectively, as SCI%, Q1%, OA%, CA% and MD%. Note that, due to coauthorships among ICP researchers, the summatory of each ratio for all ICP researchers will exceed 100% (except in the case of CA%, unless there are papers with multiple corresponding authors from the ICP).

Once the above-mentioned ratios are computed, the relative contribution to each researcher is calculated as their sum, corrected by career duration (CD; see [section 2.d](#) above for further details) during the last five years:

$$\text{Relative contribution} = (\text{SCI}\% + \text{Q1}\% + \text{OA}\% + \text{CA}\% + \text{MD}\%) \times 5 \div \text{CD}$$

Relative impact

This metric intends to compare the overall quality/impact of the researcher's production with that of the ICP as a whole, irrespective of scientific production (hence, there is no need to correct for career duration). It is based on the absolute value of the Journal Impact Factor

(JIF) as well as on the JIF percentile (JIF%ile); the former variable is not comparable across disciplines (JCR categories), whereas the latter is less biased by such categories.

First, the product of JIF and the median of JIF%ile are computed for both the individual researcher (R) and the ICP as a whole for the considered time span. Then, relative impact is simply computed as a ratio between the two products (that of the researcher in the numerator and that of the ICP on the denominator):

$$\text{Relative impact} = \frac{\text{JIF}_R \times \text{JIF\%ile}_R}{\text{JIF}_{\text{ICP}} \times \text{JIF\%ile}_{\text{ICP}}}$$

Internal evaluation criteria

For each of the three metrics defined above, a rating will be assigned to each researcher based on the comparison between his/her figures and those of all ICP researchers (including research associates) at a given time (i.e., when the evaluation is performed).

It will be considered that an ICP researcher is performing worse than average when his/her metric is below the interquartile range of ICP researchers, that he/she is performing as expected when the metric is within the interquartile range, and that he/she is performing better than average when the metric is above the interquartile range. For researcher within the interquartile range, it will be distinguished between those slightly below the median and those slightly above the median.

The ratings will be assigned as follows: worse than average = -1; slightly below average = 0; slightly above average = +0.5; and better than average = +1. The overall performance metric of an individual researcher will be computed as the sum of the ratings for each of the three metrics (ranging from -3 to +3). The overall performance metric will determine the result of the evaluation: negative (lower than -1.5), neutral (between -1.5 and 0), positive (between +0.5 and +1.5), very good (between +2 and +2.5), and excellent (+3.0). Only researchers with a positive evaluation will be considered eligible in internal recruitment processes.