

**Evaluation Report of the  
*Institut Català de Paleontologia Miquel Crusafont*  
October 24<sup>h</sup>, 2023**

**Members of the Evaluation Commission (EC)**

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- Michael James Benton, Professor of Vertebrate Paleontology, School of Earth Sciences. University of Bristol, UK
- Jessica Meijer, Senior Business Developer focussed on Social Sciences, Humanities & the Arts, LURIS (University of Leiden), the Netherlands
- Lorenzo Rook, Full Professor in Paleontology, Università degli Studi di Firenze, Italy
- Lluís Rovira, CERCA, Catalonia (*Rapporteur*)
- Toni Bassaganyas-Bars, CERCA, Catalonia (*Assistant to Lluís Rovira*)



From left to right: Lluís Rovira, Toni Bassaganyas-Bars, Michael Benton, Lorenzo Rook, Jessica Meijer, and Johannes Vogel

The present evaluation report is based on the fulfilment of the mission of the Institut Català de Paleontologia Miquel Crusafont (hereafter “ICP”) during the period between 2019 and 2022. According to the ICP bylaws, the mission of the centre is focused on research, conservation and dissemination of vertebrate and human paleontology at the highest international level.

## Discussion, conclusions and recommendations

After the presentation by David Alba (ICP’s Director), the Evaluation Committee (henceforth “EC”) discussed the main issues regarding the fulfilment of the ICP’s mission in connection with scientific production and productivity, knowledge and technology transfer, and the management of the Institute.

All agreements on conclusions and recommendations have been achieved by consensus.

### 1. Scientific Production and Productivity

**Conclusion 1:** the numbers and quality of publications achieved during the evaluated period is impressive and represents a clear improvement as compared to the previous evaluation. The ICP could have specialised in publishing good descriptive papers (which it should continue to do), but has chosen to go beyond that and has successfully placed itself among the top ranked institutions in the field in terms of published scientific output. The computational work is particularly remarkable. **Conclusion 2:** as for attracting international projects, and EU funding in particular, the EC acknowledges the ICP has been active in this area, but there remains some room for improvement.

**Recommendation 1:** the ICP should leverage the reputation and visibility obtained through its publications to increase its ability to attract EU funding and participate in more international projects (and even be the initiator/leader in its areas of specialisation). Among many other strengths, the ICP is able to contribute state-of-the-art computational work and to have a key role in multidisciplinary projects, and should capitalise on that to increase its results in this area.

**Recommendation 2:** the EC believes the ICP could be on track for one of its researchers getting an ERC grant, and advises that it should foster applications from researchers of all categories and that there should be an internal plan in place for this as soon as possible. The ICP should encourage its researchers to come up with smart ideas, select the best ones, and nurture them through all the necessary stages. The EC thinks that this process will in itself be very helpful to the ICP, even if the institute is not successful in getting one of these grants, as it will promote the sharing of ideas, internal discussion, etc.

**Conclusion 3:** it was clear to the EC that the ICP is aiming for growth. The research focus of the ICP is defined quite narrowly, and the EC takes the view that this may be a limiting factor for expansion, particularly if it seeks to establish itself as a reference institution at the international level. The ICP’s focus could be slightly broadened without fundamentally changing its identity. The EC

acknowledges that paleoproteomics is an area where the institute is already expanding into, and is supportive of this.

**Recommendation 3:** If the ICP wants to achieve excellence and be at the top level internationally, it should adopt one of two following strategies: either it becomes outstanding in everything that it does within its narrow focus, or it slightly broadens its areas of activity to include related fields that present opportunities to boost its profile. The EC believes the latter is preferable and more realistic. A few options could be invertebrates, paleobotany, micropaleontology, studies of biodiversity and environment, potentially with a focus on the Mediterranean. Understanding ancient ecosystems could be a goal underpinning all of the centre's activities. The ICP should think strategically about this and consider the possibilities of collaborations that any such expansion would bring. The EC considers this as a strong recommendation.

**Conclusion 4:** while acknowledging that the ICP has a key role in international organisations and consortiums, there is room for its international institutional profile being further strengthened.

**Recommendation 4:** the ICP should be more proactive in seeking strategic alliances and membership in national or international organisations, etc. The institute is in a position to take a leading role in this regard, rather than relying on being approached by other parties. This should be a joint effort between the scientific and the management areas of the institute.

## 2. Knowledge and technology transfer

**Conclusion 5:** the ICP is already providing paleontological services and gets a return for this. However, opportunities in this regard could be maximised, and there is room for an increase in the revenue the institute gets from these activities, especially considering it is the main (or only) institution that can provide such specialised services in Catalonia. This increased revenue would be very much welcome given the funding structure of the institute and its lack of basal funds.

**Recommendation 5:** the ICP should explore opportunities to increase its activity in preventive excavations. We recommend developing a strategy with a view to reaching an annual sustained revenue stream, exploring long term agreements with the main relevant companies if feasible.

**Recommendation 6:** the ICP should seek to reinforce its collaboration with the providers of archaeological services in Catalonia (e.g. the IPHES). Consider the idea of developing a joint package that can be offered to companies and to public bodies (bearing in mind there is not much competition in the country) that could maximise the profit for you as providers and streamline negotiation processes with external stakeholders and customers.

**Recommendation 7:** the research activities of the ICP and the services it provides should always be integrated and the links between them should be clear. The top researchers need to be linked to these services, and the services should feedback to the scientific activity of the institute. It has been the case in comparable institutions that a boost in the scientific

area has come through its activities as a service provider, and that could happen for the ICP as well.

**Conclusion 6:** the EC acknowledges that paleontology is not a field where some of the traditional measures of success in KTT activities (e.g. patents) can be easily achieved. However, there is great potential for the ICP in this area that is not currently being tapped into. The EC is aware that this is not easy, but there are examples in Europe where comparable research centres/university groups have been successful in this area. This should be seen as an opportunity for the ICP.

**Recommendation 8:** the ICP should foster entrepreneurial spirit among its researchers. Training opportunities should be offered, so they develop a general awareness in this area and are prepared to seize good opportunities. It may be worth approaching other CERCA centres who are successful at innovation and transfer activities to learn from their best practices.

**Recommendation 9:** the EC believes that adding a business developer to its team would be highly beneficial. If the institute cannot afford a full time business developer, it could explore sharing one with another research institute with similar needs.

**Recommendation 10:** all projects and services undertaken by the ICP (with other academic institutions, public bodies, or private companies) should be governed by a contract where the intellectual property considerations including ownership and (potential) commercialisation and exploitation rights are clearly set out. These should be explicit to allow present and future knowledge transfer and commercialisation activities to occur, if appropriate. These considerations must corroborate with the terms and conditions of the applicable funding body and the ICP's internal intellectual property rights manual. The ICP has valuable expertise and know-how, and should always ensure this is adequately protected where possible. There may be cases where it cannot be protected but it can still be developed and commercialised.

### 3. Management

**Conclusion 7:** the ICP is in a unique position to attract the attention of both the general public and politicians. On the one hand, dinosaurs and primates easily elicit interest from the public. On the other, Catalonia has a very unique paleontological heritage of which the ICP is in charge, and the local government may see that as a great opportunity for the country (and for reinforcing its identity) if it was more aware of this extremely rich heritage.

**Recommendation 11:** the ICP should continue to work with local authorities as it has done until now, but the EC encourages further efforts to make the activities of the institute more visible for politicians at all levels, to convince them of the relevance of the activities for the ICP for Catalonia as a country, with the aim of getting more support from them.

**Recommendation 12:** the ICP should continue to make efforts to engage the citizenship in its activities, inside and outside of the museums it runs. A clear strategy is needed in this

regard, and the EC recommends becoming more engaged in social media, involving researchers too. This strategy should be tied to a set of KPIs so the degree of success can be measured. This strategy should be linked to the knowledge transfer and service provision activities/strategies.

**Conclusion 8:** as has been mentioned above, the EC understands that the ICP's strategy for the coming years is based on the assumption that the centre will grow (in both critical mass and income). This will have effects on management that the ICP should be prepared for, as there are signs that in some areas the centre is already stretched.

**Recommendation 13:** the centre should have a strategy in case the predicted growth in income does not materialise which is not retreating into survival mode (as it had been for a few years in the last decade following the financial crisis).

**Recommendation 14:** the ICP should be open to exploring merging operations such as the one attempted with IBE (and pursue that one too if the window of opportunity re-opens) as it might be beneficial to the institute.

**Recommendation 15:** the EC believes the ICP is ideally placed to look for strategic links with South America that would allow it to expand its activities. Argentina could be one potential target. This could be with a modest collaboration (e.g. an agreement to exchange young researchers) and build from there. The EC strongly encourages the ICP to not rely on serendipity and to develop a plan if it decides to pursue this strategy.

**Conclusion 9:** the ICP leadership should of course keep scientific production as a priority, but there are other aspects to running a scientific institute (e.g. communication and leadership strategies, team-building, shared goals across the workforce) that, if optimised, can work in favour of further improving the quality of the scientific output of the institute. **Conclusion 10:** the EC is aware the general manager has been appointed very recently, and believes he has the adequate profile and is in a position to make a positive contribution to the ICP in this regard. He was interviewed and he made valuable contributions.

**Recommendation 16:** the director, the managing team and the top scientists should work as a team as much as possible to ensure they are all aligned towards the centre's strategic priorities. At the same time, the ICP should ensure there is a bottom-up process that allows its young researchers to have a say in defining the strategic priorities that will define the future of the institute.

**Recommendation 17:** the EC believes that the leadership team could benefit from some training/coaching to further develop their leadership and communication skills beyond scientific research excellence.

**Recommendation 18:** the ICP should take advantage of its existing or new memberships in international alliances, associations, consortiums, etc., to discuss relevant issues beyond narrowly defined scientific work, such as open science, gender equality, public engagement, impact, etc.

**Conclusion 11:** collections are a fundamental component of any institution devoted to paleontology, and they are a great asset for the ICP. The EC is concerned that the current lack of space is hindering the institute's ability to maximise the benefits that this asset could bring.

**Recommendation 19:** the ICP should find a way to solve the issues posed by the lack of space. It should continue to engage with its trustees to explore ways they could help solve this. The institute could also look for agreements with other organisations to get additional space.

**Recommendation 20:** lack of space aside, the ICP could work in other ways to make the most of its collections, e.g. by developing them as much as possible, promoting them with potential collaborators, and also to society and politicians, so they understand their value.

### **Overall qualification:**

The EC had a long discussion about the grade that should be awarded to ICP. The EC wishes to acknowledge and thank the ICP leadership for its dedication and hard work the past four years, including the very difficult period of the Covid pandemic. The EC has considered the very positive evolution the centre has undergone in this evaluation period, with remarkable results in e.g. scientific output. In some areas, however, further work is required to achieve the highest standards of excellence, for instance in internationalisation. The new (and harder) evaluation criteria have also been taken into account. Bearing all these factors in mind, the EC has agreed to award the **qualification of B<sup>+</sup> to ICP** with a high level of consensus. The EC intends this grade to be a recognition of the good work that has been done over the last 4 years and a sign of encouragement to continue tackling the existing challenges during the next evaluation period.