



European Research Council  
Scientific Council

Established by the European Commission

## **ERC SCIENTIFIC COUNCIL**

### **ONLINE CONSULTATION 18 March 2020**

#### **POINT SUMMARY**

On 18 March 2020, Prof. Mauro FERRARI wrote an e-mail to all members of the ERC Scientific Council to pose them two questions related to the ongoing Covid-19 pandemic, and the role (if any) that the ERC could play against it.

In response to this e-mail, all the active members of the ERC Scientific Council rejected a special initiative, because that is not in their remit and the Commission's Research and Innovation Directorate General, with which the ERC is connected, was already very active in developing new programmes to support this research through the appropriate channels.

The complete message sent by Prof. FERRARI to the Scientific Council on 18 March is included in ANNEX I of these minutes, and notes that the Vice-Presidents did not support this proposal.

## **ANNEX I – MESSAGE SENT TO ALL MEMBERS OF THE ERC SCIENTIFIC COUNCIL BY PRESIDENT MAURO FERRARI**

March 18, 2020

Dear Members of the ScC:

As anticipated in my email of a few hours ago, I am writing to pose two questions to you, related to the current Covid-19 pandemic, and the role (if any) that the ERC can play against it. The questions are:

1. Are you willing to support a special focused initiative of the ERC on excellent, breakthrough, blue-sky, frontier, investigator-initiated research on topics related to the Covid-19 pandemic, open to all fields of research (LS, PE, SH)?
2. If so, what forms do you recommend for this special initiative? What forms would you oppose?

On Question 1, the Vice Presidents unanimously and firmly answered “No”. I will defer to them for an accurate explanation of why that is their preference. I answer “Yes”, for reasons that I will summarize further below.

The envisioned path forward depends on your replies to these questions. If there is a unanimous “No” to Question 1, my proposal for a possible focused initiative will stand rejected, and your vote will simply count in lieu of the proposed extraordinary ScC meeting, which at that point it would be pointless to hold. In its stead, we will simply record the vote in our official minutes.

If there is at least one “Yes” in addition to mine, we will continue on-line discussion on both Questions, and hold a video-conferenced, extra-ordinary meeting of the ScC on these matters. Emerging proposals will then be brought again to the attention of the full ScC.

To frame my rationale for these Questions, and some possible options for the form of the special focused initiative, I am appending some further considerations, below, organized in the following Sections:

- A. FUNDAMENTAL STARTING POINTS
- B. MY POSITION
- C. POSSIBLE OPTIONS FOR THE FOCUSED INITIATIVE
- D. THE FUTURE OF THE ERC - RISK ANALYSIS

Of course, my list of Possible Options is by no way exhaustive, and further thoughts and recommendations will be welcomed – they are actually strongly encouraged, if we get to that point.

I am very thankful for your participation in this discussion, no matter what the outcome will be.

Sincerely  
Mauro

## A. FUNDAMENTAL STARTING POINTS

A1. Bottom-Up research is a fundamental, inalienable, defining characteristic of the ERC. It is a core constituent of its legal basis and remit. The Bottom-Up nature of the ERC operations has been the main engine of its extraordinary success. We are all fully committed to Bottom-Up research, and we share the belief that it is through Bottom-Up research funding that the ERC can bring the greatest benefit to society.

A2. The current Covid-19 pandemic is an extraordinary health care tragedy, with the projected potential to become unprecedented in the toll of human lives it will take before it runs its course over the next 1-3 years. With expected scenarios as tragic as tens-to-hundreds millions of deaths, and an extraordinary adverse effect on economic systems worldwide, it is an adversely transformational event in human history.

A3. The current containment measures against the pandemic will probably be effective in delaying the spread of the infection to different regions of the world, hopefully allowing for the respective healthcare systems not to be excessively overwhelmed, and thus probably reducing the burden of death on impacted populations, by some measure. However, a solution to the pandemic (and future pandemics of similar nature) can only come from new therapeutic and prophylactic agents, vaccines and drugs, requiring breakthrough discoveries, or completely unprecedented, out-of-box, blue-sky, highly innovative approaches of different types, currently outside of the fields of view of conventional thought.

A4. The search for a cure for the common cold (also Coronavirus-caused) has been ongoing since the dawn of medicine, with no success. Thus, even with pharmaceutically-focused approaches, only true breakthrough, blue-sky, investigator-initiated, high-risk high-payoff, frontier research can be expected to yield a true solution for the Covid-19 pandemic. Entirely novel approaches are needed, and perhaps these will emerge from the disciplines that normally work in these fields, or perhaps from fields that traditionally do not, or from some creative, unprecedented combination thereof.

A5. The private sector has failed at generating and making available true solutions, despite continued efforts and innumerable attempts over many years. The breakthrough innovation required to achieve it will have to originate in academe – which is where the vast majority of scientific breakthroughs leading to transformational therapies have originated, in history (and then were carried to the clinic by industry-based processes).

A6. True breakthrough, blue-sky, investigator-initiated, high-risk high-payoff, frontier research is what we do. We are the best agency in the world identifying and supporting it. We support the best scientists in Europe, many of the best scientists in the world, in many disciplines which may be the crucible where the breakthrough solutions can be formed. Thus, the ERC is in the best position to help engender the frontier discoveries that will lead to the solutions for the current (and future) pandemics.

## B. MY POSITION

B1. I believe that where there is an opportunity to help, there is an ethical responsibility to do so. I am certain that you share that belief. In view of the magnitude of the exponentially

growing tragedy, the ethical responsibility in front of us is overwhelming. I cannot and should not speak for others, but as for me, I simply cannot turn a blind eye to it and just watch it happen, without trying my best to contribute to its solution. For the reasons listed below, I personally believe that the best course of action will involve a special focused initiative. I will of course fully respect anyone who believes that the best course of action is the status quo, and that our unmodified modus operandi is the most ethical approach we can take, to contribute to the fight against the pandemic.

B2. I am a firm believer in Bottom-Up research; it is truly what attracted me to my current post. However, when the house is on fire, I believe in “all hands on deck”, doing everything possible to save lives, and extinguish the fire.

B3. It is entirely possible that ERC-funded investigators will make the needed breakthrough discoveries, without us having to resort to a special focused initiative; however, I find that the time urgency of the pandemic crisis (interventional horizon required of 1-2 years) is not compatible with normal idea creation and idea-to-clinic translational pathway (10-20 years). Thus, I believe that a special, focused initiative is required.

B4. I believe that a special focused initiative can be structured, that would not change the overall Bottom-Up nature of the ERC. I have confidence that working together we can find measures to ensure that Bottom-Up remains the core, foundational principle of the ERC, even if we launch a temporary, special focused initiative. I am confident that working together, the ScC can identify, and converge upon special initiative mechanisms and boundaries that will safeguard our defining Bottom-Up nature, overall. Some of these potential mechanisms are described in Section C. They comprise the notion that the special Covid-19 focused initiative would be time-limited, budget-limited, and a unique, exceptional case, warranted by the unique magnitude of the current crisis. Very importantly, it would also be Bottom-Up, investigator-initiated, blue-sky, frontier, and evaluated based on scientific excellence only, exactly per the ERC foundational principles and core values – though available to fund a broad spectrum of Covid-19 topics and approaches, and not for all of scientific research.

B5. The special Covid-19 initiative would embrace all three scientific domains, and all approaches, without limitations. New, paradigm-breaking basic research in molecular biology and virology, leading to the identification of new targets and mechanisms-of-action would be a likely rubric for ERC-funded research under this initiative. Other possibly likely approaches would encompass epidemiological models, innovative applications of artificial intelligence, deep learning, quantum computing, behavioral sciences, medical technologies, historical studies all the way to archeological efforts, mathematical frameworks, and diagnostic strategies. In keeping with the blue-sky and Bottom-Up nature of the ERC, however, I suspect, or, rather, firmly believe, that the true winners in this special focused initiative would come from unexpected fields of science – perhaps some that do not even exist just yet.

### C. POSSIBLE OPTIONS FOR THE FOCUSED INITIATIVE

I will keep this section very brief, just listing some possible modes of operations for the focused initiative, since I do not want to induce the ScC into a discussion of details (however important). The immediate matter at hand is Question 1, that is, whether we want to move forward to a full discussion of mechanisms. Question 2 was just posed to start the conversation, in the interest of the current time stringency, and to make sure that it was clear that the decision on the specific mechanism would be let to the full consideration of the ScC.

So, just by way of a few examples, the special focused initiative could operate by:

C1. Allowing current ERC grantees to restructure their projects, moving in full or in part to Covid-19/pandemic research with their current funding;

C2. Same as C1, but with a “top-up”, additional funding mechanism to embrace Covid-19 focused research;

C3. One or more special focused calls, with mechanisms to be determined, possibly of the “POC” variety;

C4. Any of the above, in synergy or partnership with other EC programs, funding agencies, or entities.

C5. Other mechanisms, at your discretion. Please propose, if interested.

It is also clear that any of these mechanisms would have to be validated with the EC, on at least two counts:

- The allocation by the EC of additional funding – a separate budget line, not be counted against the normal financial allocation of the ERC
- The legal boundaries of our remit as a funding agency must be respected, or modified to accommodate the proposed initiative, in whichever shape it would take by means of our discussion

If we reach concurrence from the ScC on moving forward on this initiative with a specific proposal, of course I will bring to the EC both of these concerns. At the same time, I will there make an absolute case that the Bottom-Up nature of the ERC must be preserved; and that the Covid-19 initiative must remain a unique occurrence, justified by a global emergency of unprecedented proportions, the likes of which we most certainly hope never to see again.

#### D. THE FUTURE OF THE ERC – RISK ANALYSIS

D1. The risks associated with moving on to launch an initiative with special focus on the Covid-19 pandemic include:

- Embarking on a slippery slope that will encourage other special focused initiatives, and ultimately undermine the Bottom-Up nature of the ERC;
- A backlash from the components of the scientific community which favor Bottom-Up research;
- Bottom-Up is a defining characteristic of the ERC. If it is lost or diminished, there may be pressures to merge the ERC with other EC research funding units;
- An allocation of further EC emergency funds to the ERC for a focused initiative may lead to a commensurate reduction in our upcoming budget, per a “zero-sum” argument.

D2. The risks associated with remaining with the status quo, that is, not launching any initiative with special focus on Covid-19 include:

- A backlash from the components of the scientific community that is interested in immediately pursuing excellent blue-sky, investigator-initiated, frontier research to fight the Covid-19 pandemic
- A backlash from the communities (including at-large, patients and families, the media, political at all levels, but scientific too) that may interpret the ERC lack of focused action as indifference toward this tragedy, or an affirmation of the primacy of our interests in our own world of science, over the needs of the “real world”, even when the house is on fire. We can of course offer many arguments against these misunderstandings and misinterpretations, but they may not be very effective, once the avalanche starts rolling.
- The ERC is at a time juncture of especially high, possibly existential risks, for which what we decide now is likely to be the decisive factor. The ERC is expected, but not guaranteed, to have its very existence renewed in Horizon Europe, come January 1, 2021. Even if we are renewed, our budget is by no means certain, All of the member States will be under immense financial pressures, to save their own economies from the disasters of Covid-19. Having to deal internally with massive unemployment numbers, they will not be too inclined to give generously to the EU, in the new MFF currently under negotiation. With a potentially dramatic reduction in contributions from member States, everyone at the EC will then be looking for budgets to slash, and line items to eliminate. If the ERC is seen as detached from the most tragic of priorities and needs of the community, and unwilling to adapt its ways to help at these tragic times, it will be near impossible to find anyone willing to defend us, on the nuances of Bottom-Up vs. Top-Down research, which the electoral public and therefore the world of politics really does not appreciate or understand, or care for, at all. Without support from the EU political leadership, the member States, and the community at-large, the ERC would be exposed to the very real risk of being dramatically reduced in funding, marginalized, restructured in its operations and guiding principles, subsumed into other funding agencies, or extinguished. The world of science would have a very difficult time arguing for an ERC that is seen as indifferent to the world’s most tragic needs, and scientists would probably just migrate toward the next exciting funding opportunity.

These are the risk scenarios, as best as I can reconstruct them. The biggest risks, however, are not in the various pragmatic considerations listed above. The fundamental risk is that we do not follow what our individual consciences tell to each of us. The biggest risk is that we do not do all we can to help, at this time of great tragedy and need.

You know where I stand, without hesitation, on these questions. I will look forward to hearing from you.

Sincerely

Mauro