Notes on selection criteria from an HFSP review committee panelist

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We are after cross-disciplinarity & edginess and unconventional approaches. Does the application as a whole demonstrate a fascinating research or intellectual arc through the career of the applicant? Are they a scientific globetrotter? Is it off the wall or wildly inspirational?

HFSP selection criteria that come up during the detailed discussion of the proposals:

1) **The candidate.** Is the candidate outstanding? By that we mean- have they shown originality, fearlessness exceptional promise, during their PhD? Did they set up a new technology or method in the lab where they did their PhD? Did they do X, Y or Z single-handedly, or did they chart out part or all of their own PhD research? Do their PhD supervisors rank them among their top students?

   Did they produce impactful publications (irrespective of the journal- we actually discourage focusing on Nature-Cell-Science & consider the content), or have research accomplishments that opened up new areas of research?

   Are they the type to excel at or conquer whatever project they wish to undertake? Is this person a leader of the field tomorrow?

2) **The project.** Is the project they propose exciting, original, and does it represent a change in direction of what they were doing before? Does this take them to a new place, both scientifically and geographically?

   How much of a change is it from their prior work? New sub-field, new techniques they would learn, new conceptual or intellectual growth?

   *Side note: working in non-standard species is a plus here. Weird insects, fish, lizards, dolphins, mole rats, octopus; studying them in their native habitat & ecology—things that would have a hard time drawing funding from elsewhere.

   Host lab: Does the project go to a host lab that's THE right place to do the proposed work? Is it a top-qualified PI who will be a good mentor? Does NOT need to be a famous lab, but sometimes they are.

What we really want is the Match. Does the applicant bring skills to the host lab that complement what's already going on there? Is the project only possible by the complementary match of applicant and host lab that would be formed though an HFSP application?

We do NOT want a so-called "host-lab" project- which is a direct continuation of the work that the host lab was already doing.

Long-term fellowship example:

Someone who did outstanding work in technology & methods for spatial transcriptomics in a biology lab, who would then apply their methods to make a transcriptomic map of a worm or fly from embryogenesis to adulthood, and using AI to assist with mapping. Risky, kind of crazy, but results would give insight like never before if it worked; so it was very highly ambitious and exciting

Cross-disciplinary example:

Someone who did particle physics at CERN during their PhD, now moving to the US to study cognitive neuroscience of consciousness

Unfunded example: someone doing more of the same from their PhD to post-doc; like if you were studying specific genes that regulate circadian sleep cycles in a typical model organism like a mouse. Then they propose to move to another lab that also studies sleep in mice, but study different classes of genes.