

Concept Clearance for the Common Fund High-Risk, High-Reward Research Program

Reissue of FOAs for the Pioneer, New Innovator, Transformative Research, and Early Independence Award Initiatives

Description of program: The [High-Risk, High-Reward Research \(HRHR\) Program](#) seeks to foster scientific leaps. Thus, for this program, applications do not require preliminary data or detailed experimental plans and review processes use multiple phases to identify proposals with exceptional innovation and the potential for unusually broad impact. The HRHR program serves as the “investigator-initiated” grant program in the Common Fund since any topic within the broad mission of NIH is welcome. It is the only Common Fund program that is not subject to the ten-year limit. The program consists of four initiatives listed in the table below.

Initiative (activity code)	Applicants	Budget (5 yr.; direct)	Current review process
Pioneer Award (DP1)	Any career stage	\$3.5M	“Mail” review of all applications; interview of top ~25 applicants
New Innovator Award (DP2)	ESI	\$1.5M	“Mail” review of all applications; discussion of top ~18-20%
Transformative Research Award (R01)	Any career stage; single or multi-PI	Flexible	Panel identifies top ~40%; “mail” review; discussion of top ~20%
Early Independence Award (DP5)	Those seeking to “skip the post-doc”	\$1.25M	“Mail” review of all applications; discussion of ~top 30

The Common Fund budget for competing awards in FY 2020 is \$97.4M to support seven Pioneer Awards, thirty-three New Innovator Awards, seven Transformative Research Awards, and ten Early Independence Awards. Additional awards may be made through IC support or end-of-year funds.

Evaluations of initiatives: Independent evaluations have been conducted of the Pioneer Award initiative ([in 2012](#)) and the New Innovator Award ([in 2016](#)) by the Science and Technology Policy Institute (STPI). In both cases, STPI found that the initiative was effective in supporting unusually innovative and impactful research. STPI currently is conducting evaluations of the Transformative Research Award and Early Independence Award initiatives. In 2018, the NIH Director convened a Working Group of the Advisory Committee to the Director (ACD) to assess the effectiveness of the HRHR Program and examine questions of diversity and potential bias. The [Working Group concluded](#) the HRHR program is effective in fostering innovative and impactful research. The Working Group also found that the Program’s review processes overall do not adversely affect applications by females and underrepresented groups. However, the Working Group noted that the number of applications to the Program by women and underrepresented groups is low and that the diversity of institutions and research topics also is low. The Working Group made a number of recommendations. The recommendations and [NIH implementation plan](#) will be summarized at the January 24, 2020 meeting of the Council of Councils.

Proposed FOA modifications: Based on the recommendations of the ACD working group, the HRHR FOAs will incorporate language that is strongly inclusive of potential applicants, institutions, and scientific topics and will explicitly state that the potential to enhance HRHR research broadly across the nation will be a programmatic priority for funding decisions. In addition, an anonymized review process will be piloted with the Transformative Research Award initiative.