Fiscal Year 2020 Breast Cancer Research Program Reference Table of Award Mechanisms and Submission Requirements

Award Mechanism	Eligibility	Key Mechanism Elements	Funding	Submission Deadline
Breakthrough Award Levels 1 and 2 Go to: • Program Announcement • General Application Instructions Grants.gov Funding Opportunity Number: W81XWH-20-BCRP-BTA12	 Investigators at all academic levels (or equivalent). Applications from postdoctoral fellows are encouraged to apply under Funding Levels 1 and 2. 	 Supports promising research that has high potential to lead to or make breakthroughs in breast cancer. Potential impact of the research may be near-term or long-term, but it must move beyond a minor advancement and have the potential to lead to a new approach that is fundamentally better than interventions already approved or in clinical development. Partnering PI Option allows two PIs, termed Initiating and Partnering PIs, to collaborate on a single application. Different funding levels, based on the scope of research, are available for the Breakthrough Award. It is the responsibility of the PI to select the funding level that is most appropriate for the research proposed. The funding level should be selected based on the scope of the research project, rather than the amount of the budget. The following are general descriptions, although not all-inclusive, of the scope of research projects that would be appropriate to propose under each funding level: Funding Level 1: Innovative, highrisk/high-reward research that is in the earliest stages of idea development or is an untested theory that addresses an important problem. To foster research that yields new avenues of investigation, preliminary data are not required. Proof-of-concept is the anticipated outcome. Funding Level 2: Preclinical research that is already supported by substantial preliminary or published data and strongly validates clinical translation in a well-defined context within the breast cancer landscape. 	Funding Level 1: • Maximum funding of \$450,000 for direct costs (plus indirect costs) • The maximum period of performance is 3 years. Funding Level 1 with Partnering PI Option: • Maximum funding of \$750,000 for direct costs (plus indirect costs) • The maximum period of performance is 3 years. Funding Level 2: • Maximum funding of \$1 million (M) for direct costs (plus indirect costs) • The maximum period of performance is 3 years. Funding Level 2 with Partnering PI Option: • Maximum funding of \$1.5M for direct costs (plus indirect costs) • The maximum period of performance is 3 years. Funding Level 2 — Population Science and Prevention Studies: • Maximum funding of \$1.5M for direct costs (plus indirect costs) • The maximum period of performance is 4 years.	Pre-Application (Letter of Intent): March 12, 2020 5:00 p.m. Eastern Time (ET) Application: March 26, 2020 11:59 p.m. ET

Punding Level 2 – Population Science and Prevention Studies: Preclinical research that is already supported by substantial preliminary or published data and strongly validates clinical translation in a well-defined context within the breast cancer landscape. With compelling justification, population science and prevention studies may request higher levels of funding and an additional year in the period of performance. Such studies may require additional resources due to the participation of human subjects and/or use of human biospecimens. Funding Levels 1 and 2 Submission of a Letter of Intent is required prior to full application submission. Each investigator may be named as a PI or Initiating PI on only one applications for which an investigator may be named as a Partnering PI. However, investigators are discouraged from being named as a Partnering PI on multiple PV 20 Breakthrough Award Levels I and 2 applications unless they are clearly unique, meaningful collaborations addressing distinct research questions. Additional funds are available for applications submitted under the Partnering PI Option or the Population	Award Mechanism	Eligibility	Key Mechanism Elements	Funding	Submission Deadline
Funding Levels 1 and 2 • Submission of a Letter of Intent is required prior to full application submission. • Each investigator may be named as a PI or Initiating PI on only one application per Funding Level. There are no limitations on the number of applications for which an investigator may be named as a Partnering PI. However, investigators are discouraged from being named as a Partnering PI on multiple FY20 Breakthrough Award Levels 1 and 2 applications unless they are clearly unique, meaningful collaborations addressing distinct research questions. • Additional funds are available for applications submitted under the			and Prevention Studies: Preclinical research that is already supported by substantial preliminary or published data and strongly validates clinical translation in a well-defined context within the <i>breast cancer landscape</i> . With compelling justification, population science and prevention studies may request higher levels of funding and an additional year in the period of performance. Such studies may require additional resources due to the participation of human subjects and/or use	Science and Prevention Studies – Partnering PI Option: • Maximum funding of \$2M for direct costs (plus indirect costs) • The maximum period of	
prior to full application submission. • Each investigator may be named as a PI or Initiating PI on only one application per Funding Level. There are no limitations on the number of applications for which an investigator may be named as a Partnering PI. However, investigators are discouraged from being named as a Partnering PI on multiple FY20 Breakthrough Award Levels 1 and 2 applications unless they are clearly unique, meaningful collaborations addressing distinct research questions. • Additional funds are available for applications submitted under the			Funding Levels 1 and 2		
Initiating PI on only one application per Funding Level. There are no limitations on the number of applications for which an investigator may be named as a Partnering PI. However, investigators are discouraged from being named as a Partnering PI on multiple FY20 Breakthrough Award Levels 1 and 2 applications unless they are clearly unique, meaningful collaborations addressing distinct research questions. • Additional funds are available for applications submitted under the					
			 Initiating PI on only one application per Funding Level. There are no limitations on the number of applications for which an investigator may be named as a Partnering PI. However, investigators are discouraged from being named as a Partnering PI on multiple FY20 Breakthrough Award Levels 1 and 2 applications unless they are clearly unique, meaningful collaborations addressing distinct research questions. Additional funds are available for applications submitted under the 		

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Breakthrough Award Level 3 Go to: • Program Announcement • General Application Instructions Grants.gov Funding Opportunity Number: W81XWH-20-BCRP-BTA3	Independent investigators at all academic levels (or equivalent). Independent investigators at all academic levels (or equivalent).	 Supports promising research that has high potential to lead to or make breakthroughs in breast cancer. Potential impact of the research may be near-term or long-term, but it must move beyond a minor advancement and have the potential to lead to a new approach that is fundamentally better than interventions already approved or in clinical development. Partnering PI Option allows two PIs, termed Initiating and Partnering PIs, to collaborate on a single application. Different funding levels, based on the scope of research are available for the Breakthrough Award. It is the responsibility of the PI to select the funding level that is most appropriate for the research proposed. The funding level should be selected based on the scope of the research project, rather than the amount of the budget. The following is a general description, although not all-inclusive, of the scope of research projects that would be appropriate to propose under this funding level: Funding Level 3: Advanced translational studies with a high degree of project readiness. Where relevant, proof of availability of and access to necessary data, human samples, cohort(s), and/or critical reagents must be provided. If the proposed research would ultimately require US Food and Drug Administration (FDA) involvement, applications must demonstrate availability of and access to clinical reagents (e.g., therapeutic molecules) and patient population(s). Applications must state a realistic timeline for near-term clinical investigation. Small-scale clinical trials (e.g., first in human; Phase I/Ib) may be appropriate. 	 Funding Level 3: Maximum funding of \$3M in direct costs (plus indirect costs) The maximum period of performance is 4 years. Funding Level 3 with Partnering PI Option: Maximum funding of \$4M for direct costs (plus indirect costs) The maximum period of performance is 4 years. 	Pre-Application (Preproposal): March 13, 2020 5:00 p.m. ET Invited Application: June 24, 2020 11:59 p.m. ET

Award Mechanism	Eligibility	Key Mechanism Elements	Funding	Submission Deadline
		Additional Elements • Submission of a pre-application is required; application submission is by invitation only.		
		There are no limits on the number of pre- applications for which an investigator may be named as a PI, Initiating PI, or Partnering PI. Investigators are discouraged from being named on multiple pre-applications unless they are clearly addressing distinct research questions.		
		• Additional funds are available for Funding Level 3 applications submitted under the Partnering PI Option.		
		Applications must include two or more breast cancer advocates on the research team.		
		Clinical trials are allowed.		

Level 4 Go to: Program Announcement General Application Instructions All academic levels (or equivalent). potential to lead to or make breakthroughs in breast cancer. Potential impact of the research may be near-term or long-term, but it must move beyond a minor advancement and have the potential to lead to a new approach that is Level 4 with Partnering PI Option: Maximum funding of \$10M for direct costs (plus indirect costs) The maximum period of performance is 4 years	anism Elements Funding Submission Deadline	Key Me	Eligibility	Award Mechanism
than the amount of the budget. The following is a general description, although not all-inclusive, of the scope of research projects that would be appropriate to propose under this funding level: • Funding Level 4: Large-scale projects that will transform and revolutionize the clinical management and/or prevention of breast cancer. Human clinical trials are required. Pls are expected to have experience in successfully leading large-scale projects and demonstrated ability (through personal experience or via a commitment from a collaborating clinical investigator) to implement a clinical project successfully. Where relevant, applications must demonstrate availability of and access to necessary data, human samples, cohort(s), and/or critical reagents. For proposed research that will require	ng research that has high to or make breakthroughs of the research may be term, but it must move dvancement and have the orange approach that is ter than interventions or in clinical distriction and lows two PIs, and Partnering PIs, to ingle application. Invels, based on the scope diable for the d. It is the research proposed, nould be selected based research project, rather the budget. The maximum period of performance is 4 years. The maxim	Supports prompotential to lead in breast cance. Potential impanear-term or lead beyond a minor potential to leaf fundamentally already approvide evelopment. Partnering PI of termed Initiatical collaborate on Different funding of research, are as Breakthrough A of the PI to select most appropriate. The funding level on the scope of than the amount. The following is although not allresearch projects to propose under that will transfic clinical manage breast cancer. required. PIs experience in scale projects (through person commitment finvestigator) to project success applications more and access samples, cohories.	Independent investigators at all academic levels (or	Breakthrough Award Level 4 Go to: • Program Announcement • General Application Instructions Grants.gov Funding Opportunity Number:

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		therapeutics) that meet regulatory compliance guidelines; proof of availability of and access to appropriate subject population(s); validated projections for patient recruitment; and submission of an Investigational New Drug (IND) or Investigational Device Exemption (IDE) application to the FDA, if applicable.		
		Additional Elements		
		• Submission of a pre-application is required; application submission is by invitation only.		
		• There are no limits on the number of pre- applications for which an investigator may be named as a PI, Initiating PI, or Partnering PI. Investigators are discouraged from being named on multiple pre-applications unless they are clearly addressing distinct research questions.		
		Applications must include two or more breast cancer advocates on the research team.		
		Clinical trials are required.		

Award Mechanism	Eligibility	Key Mechanism Elements	Funding	Submission Deadline
Era of Hope Scholar Award Go to: • Program Announcement • General Application Instructions Grants.gov Funding Opportunity Number: W81XWH-20-BCRP-EOHS	Independent, non-mentored investigator within 6 years of his/her last training position (e.g., postdoctoral fellowship, medical residency, clinical fellowship) as of the application submission deadline.	 Supports exceptionally talented, early-career scientists who have demonstrated that they are the "best and brightest" in their fields through extraordinary creativity, vision, innovation, and productivity. Applications should articulate a vision that challenges current dogma and demonstrates an ability to look beyond tradition and convention. PIs must demonstrate experience in forming effective partnerships and collaborations and exhibit strong potential for future leadership in breast cancer. Experience in breast cancer research is not required; however, the application must focus on breast cancer, and the PI must maintain a 50% dedication of his/her full-time professional effort during the award period to breast cancer research. Applications must include two or more breast cancer advocates on the research team. Submission of a Letter of Intent is required prior to full application submission. 	 Maximum funding of \$3M for direct costs (plus indirect costs) The maximum period of performance is 4 years. 	Pre-Application (Letter of Intent): March 12, 2020 5:00 p.m. ET Application: March 26, 2020 11:59 p.m. ET Confidential Letters of Recommendation Submission Deadline: March 30, 2020 5:00 p.m. ET

Award Mechanism	Eligibility	Key Mechanism Elements	Funding	Submission Deadline
Innovator Award Go to: • Program Announcement • General Application Instructions Grants.gov Funding Opportunity Number: W81XWH-20-BCRP-INNOV	Associate Professor or above (or equivalent).	 Supports visionary individuals who have demonstrated creativity, innovative work, and leadership in any field. Provides opportunity to pursue novel, visionary, high-risk ideas that will accelerate progress toward ending breast cancer. Experience in breast cancer research is not required; however, the application must focus on breast cancer, and the PI must maintain a 50% dedication of his/her full-time professional effort during the award period to breast cancer research. Applications must include two or more breast cancer advocates on the research team. Submission of a pre-application is required; application submission is by invitation only. 	 Maximum funding of \$7M for direct costs (plus indirect costs) The maximum period of performance is 4 years. 	Pre-Application: (Preproposal) March 13, 2020 5:00 p.m. ET Invited Application: June 24, 2020 11:59 p.m. ET Confidential Letters of Recommendation Submission Deadline: June 26, 2020 5:00 p.m. ET