

Request for Proposals: 2022 Health Equity & Diversity in STEM Innovation Fund

SUMMARY:

Genentech and Genentech Foundations's 2022 Health Equity and Diversity in STEM Innovation Fund will award over \$12M in grant funding.

The Innovation Fund is a **bi-annual, competitive process** focused on funding organizations and initiatives led by people of color.

Since 2019, the Innovation Fund has received 443 applicants and awarded 61 grants. Genentech has **invested \$21M**. In 2020, 70% of Innovation Fund program teams were led by people of color.

Purpose

Decades of research in the sociology of medicine, social epidemiology and other fields illuminate the root cause of health inequities. These unjust and avoidable differences in health and well-being are driven by forces of oppression—not by biology or individual behavior, and cannot be explained away by socioeconomic status.¹ Racism shapes access to the building blocks of health and well-being—such as economic opportunity, safe neighborhoods and high-quality health care services—directly influencing the ability of communities of color to attain and maintain optimal health.² Additionally, racism concentrates health-harming conditions—such as exposure

¹ **Williams, David R., et al.** "Racism and Health: Evidence and Needed Research." Annual Review of Public Health, vol. 40, no. 1, Apr. 2019, pp. 105–25; **Hayes-Greene, Deena, and Bayard P. Love**. The Groundwater Approach: Building a Practical Understanding of Structural Racism. The Racial Equity Institute. 2018.

² Williams, David R., et al. (2019).

to pollutants and toxins and poor housing quality—in communities of color and can even "get under our skin" by raising pre-clinical disease indicators³ and altering the way genes are expressed.⁴ Racism in health care shows up in many forms, including but not limited to: distorted clinical algorithms (anchored to false beliefs about biological race) that risk poor clinical quality for people of color⁵; beliefs about the suitability of people of color to participate in cancer clinical trials and subsequent withholding of trial opportunities⁶; and a "two-tier" health care system starkly along the line of race, resulting in poorer quality of care for people of color.⁷

In addition, a science and medical community that can recognize and respond to these forces and reflect the rich racial and ethnic diversity of this country is critical to enable empathetic and high-quality care. Diversity in the science and medical workforce is linked to greater access to care for communities of color, innovations, and improvements in patient experience and health outcomes. However, systemic and structural racism create barriers to access of quality medical and science education and training, resources, mentorship and sponsorship, and pathways to leadership for communities of color, in particular for Black, Latinx/Hispanic, Indigenous and Pacific Islander/Hawaii Native communities. As a result, the scientific and medical workforce does not adequately reflect the diversity of the patients it seeks to serve, and millions of qualified candidates and untold contributions to the fields of science and medicine are left behind.

In 2019, Genentech and the Genentech Foundation established the Innovation Fund to catalyze novel solutions to improve equity in clinical research, health care delivery, and the science and health care workforce. It is one mechanism for advancing Genentech's ambitious Diversity & Inclusion goals and its commitment to transforming society, by addressing the critical challenges that impact our industry's ability to innovate on behalf of patients.

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³ **Bailey, Zinzi D., et al**. "Structural Racism and Health Inequities in the USA: Evidence and Interventions." The Lancet, vol. 389, no. 10077, Apr. 2017, pp. 1453–63

⁴ **Roberts, Dorothy**. Fatal Invention: How Science, Politics, and Big Business Re-Create Race in the Twenty-First Century. New Press, 2011.

⁵ **Vyas, Darshali A., et al.** "Hidden in Plain Sight — Reconsidering the Use of Race Correction in Clinical Algorithms." New England Journal of Medicine, vol. 383, no. 9, Aug. 2020, pp. 874–82.

⁶ Niranjan, Soumya J., et al. "Bias and Stereotyping among Research and Clinical Professionals: Perspectives on Minority Recruitment for Oncology Clinical Trials." Cancer, vol. 126, no. 9, 2020, pp. 1958–68.

⁷ Yearby, Ruqaiijah, et al. "Structural Racism In Historical And Modern US Health Care Policy." Health Affairs, vol. 41, no. 2, Feb. 2022, pp. 187–94.

Advisors

This year, Genentech is bringing together a set of internal advisors to support Aims 1 and 2 of the Innovation Fund RFP. The Internal Advisory Group:

- Provides strategic input and guidance on the RFP
- Promotes the Innovation Fund internally and externally to drive awareness and solicit proposals
- Reviews and provides input on high-potential proposals (but does not make funding decisions)
- Informs the design of the Innovation Fund Learning Cohort



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Health Equity and Diversity in STEM Innovation Fund Aims

The Health Equity and Diversity in STEM Innovation Fund invites proposals to support major priorities:

- 1. **Health Equity:** Increasing representation of communities of color in clinical research and eliminating inequities in care delivery
- 2. **Workforce Diversity:** Dismantling barriers to a diverse, inclusive and antiracist scientific and health care workforce

Successful proposals will align with one of the sub-aims outlined below.

Aim 1: Advancing Health Equity: Genentech is accepting initial applications from prospective partners aimed at pioneering new approaches to engage patients of color across the research to care continuum. We are seeking proposals that elevate patient and community voice, power and engagement in clinical research; build and strengthen accountability mechanisms to eliminate unequal treatment and inequities in care; and expand the reach of health care through community-clinic partnerships.

Specifically, Genentech will consider proposals that advance the following sub-aims:

- A. Strengthen understanding and take action to address systemic racism within clinical trial research and health care delivery. For example:
 - Interventions to address bias or structural barriers preventing people of color to participate in clinical trials, or approaches to embed an understanding of the social determinants of health in clinical trials to improve treatment
 - Assessment and action to address clinical policies and practices that result in poorer quality of care for people of color (e.g., research to assess and correct bias in clinical algorithms, treatment decisions, quality measures, or medical health record systems)
 - Interventions to support institutional transformation toward being fully inclusive, antiracist and multicultural, which may include efforts toward building a workforce that recognizes and responds to structural racism and/or efforts to train the next generation of antiracist clinicians and scientists (e.g., approaches that center racial justice and advocacy in curricula)
- B. Build accountability for health equity through **collaboration between communities and** health systems and/or clinical research teams. For example:
 - Community-engaged approaches that demonstrably shift power, agency and resources to community members and patients in clinical decision making,

- health management and research participation
- Sustainable community-partnered care delivery (e.g., delivery of coordinated, complementary services across health care organizations and human services providers, or provision of jointly staffed and financed services) to foster integrated, comprehensive and high-quality care

Strong proposals will align with the following high-level outcomes:

- Increase trust, engagement, and partnership between research institutions, hospitals/health care systems and communities of color (including approaches that acknowledge and repair historic and ongoing harms inflicted upon communities of color)
- Increase enrollment and retention of patients of color in clinical research by expanding access and embedding effective and purposeful engagement practices
- Advance the science of how "the social becomes biological"—how structural racism (not "biological race") influences biological mechanisms—and the implications for clinical research and care delivery
- Advance the knowledge of sustainable approaches to community-partnered care delivery (e.g., effective integration approaches, addressing cultural and operational differences between health care and human services organizations, and mitigating unintended consequences)
- Improve access to, persistence in and satisfaction with specialty care for patients of color
- Begin to close inequities in health care outcomes between racial and ethnic groups
- Develop and strengthen accountability measures to promote antiracism, diversity, equity and inclusion across health care systems and research institutions

Aim 2: Promoting Diversity in STEM: Genentech is accepting initial applications from prospective partners working to build a more diverse and inclusive future of health care and science. We are seeking proposals that address structural and systemic inequity from kindergarten to careers, and partner with organizations that support the training, recruitment, retainment and advancement of students and researchers from communities of color. We partner to equip students with financial and nonfinancial support, connect young professionals with mentors and prepare early career researchers and health care professionals to become leaders in science and medicine.

Specifically, Genentech will consider proposals that advance the following sub-aims:

- A. Graduate Education Pathways: Reduce barriers to entry and increase diversity within doctoral scientific and health care degree programs (e.g., alternative medical school models that reduce financial burden, bridge programs into advanced clinical practice)
- B. Community-Building: Strengthen networks or initiatives to support advocacy and/or

community-building around equity in scientific and medical training and/or scientific and medical workforce **or** to support and strengthen retention for students and faculty in scientific and medical programs

C. Systems Change: Challenge and transform existing systems and structures (e.g., institutional practices, policies, resource flows, power dynamics, relationships and connections) that promote racial inequity and disparate access to and sustainability of careers in STEM and medicine and/or call for broader action/change from industry and academia.

Strong proposals will align with the following high-level outcomes:

- Increase recruitment, retention, well-being and advancement of the next generation of diverse and antiracist scientific and medical talent
- Develop and test cutting-edge approaches to scientific and medical training that center diversity, inclusion and antiracism
- Catalyze new types of sustainable partnerships and collaborations across sectors (e.g., academia and industry) to build greater alignment, co-develop solutions and redirect funding flows that enable greater diversity in the scientific and health care workforce

Aim 3: Promoting Diversity in Undergraduate STEM Pathways (Genentech Foundation): The Genentech Foundation is accepting initial applications from prospective partners working to build a more diverse and inclusive future of health care and science. We are seeking proposals that address structural and systemic inequity, with a particular focus on streamlining pathways for diverse community college students to pursue science and medicine careers, including transfer to four-year colleges and universities and pursuit of graduate education.

Specifically, the Genentech Foundation will consider proposals that advance the following sub-aim:

A. Undergraduate: Create new models of support for students historically excluded from STEM fields to pursue science and medicine careers, especially transfers to four-year colleges and universities from community colleges (e.g., programs that provide coaching and mentorship, education and career counseling, scientific or research skill development, links to research or internship opportunities, and application and test preparation support, among others)

For this Aim specifically, the following factors will be taken into consideration to demonstrate that the proposed program is operating in a region with a high level of need:

- Need for further investment in STEM education (e.g., demonstrated low rates of bachelor's degree attainment per <u>Census data</u>)
- High levels of racial and ethnic diversity with the region's population

- Emerging or current biopharma industry presence to demonstrate high potential for graduating students to pursue careers in the industry (e.g., presence on one of several lists, including the following examples: 1, 2, 3)
- We will also consider programs that are located where Genentech, Inc. has a community presence: the Bay Area, CA; Vacaville, CA; Oceanside, CA; Hillsboro/Portland, OR; Louisville, KY

Strong proposals will align with the following high-level outcomes:

- Enhance diversity in the national pool of qualified undergraduate students pursuing careers in scientific research and medicine
- Develop and test novel approaches to supporting community college matriculation to four-year institutions that address institutional or systemic barriers to these students' success and have the potential to yield insight or learning for the field
- Create replicable models that drive student success and that center diversity, inclusion, and antiracism

Note: This funding is to be used to provide a one-time grant that enables organizations to greatly expand their reach and/or innovate around new models of support. It is **not** intended to provide direct student support.

Grant Types, Evaluation Criteria, and Restrictions

Types of Grants:

The Genentech Innovation Fund invests in bold ideas and the people who power them. These grants support individuals, organizations and communities coming together to address inequity. Grants can be used to develop and test novel ideas or tools, implement demonstration projects, resource collaboration and partnership, and support research that goes beyond "studying the problem."

For Aims 1 and 2, we invite grant applications ranging from \$250K to \$750K over the course of 18 to 36 months. For Aim 3, we invite grant applications ranging from \$150K to \$300K over the course of 12 to 36 months. The award period for this RFP begins on or after January 1, 2023. Payments will be provided by the end of December of 2022. Grants cannot be self-renewing.

All grant recipients will be invited to participate in the Innovation Fund Learning Cohort throughout the duration of the grant. The Innovation Fund Learning Cohort meets quarterly to discuss and share real-time lessons learned and insights from their individual projects or programs. The goal of convening Innovation Fund grantees is to build community and connection with equity-oriented leaders, share lessons learned and emerging insights, source and scale bold ideas and solutions, provide access to capacity building and support, and contribute to fieldwide learning.

Evaluation Criteria:

- Led by teams that are representative of the patients, communities and students (e.g., race, ethnicity, gender, sexual orientation) impacted by the proposal
- Tackles institutional or systemic barriers to health equity and STEM diversity for patients and communities of color, with a focus on addressing racism as a root cause.⁸
 Consider:
 - To what extent does the proposal take a systemic approach? Does the approach have a clear vision for long-term impact? Is the desired impact focused specifically on communities of color, and addressing past and current harm?
- Directs resources and decision-making power to the communities, patients and students impacted by the proposal. Consider:
 - Are community members reflected as investigators, advisors and sub-grants? Are
 patients, communities and students positioned to inform project design and
 implementation activities? Are community, patients and/or students explicitly
 included at each stage in the process?
- Takes a **novel approach to addressing opportunities** with the goal of translating findings into actionable, sustainable and at-scale change. Consider:
 - Has this approach been taken before? In what ways has it or has it not been successful? In what ways is the project team addressing past challenges? What contribution does this make to the broader field? What future actions, investments, or efforts will this project help inform, catalyze or influence?
- Includes **evaluation and/or research** that integrates equity across the entire learning process. Consider:
 - In what ways will patients, communities and students' expertise shape the evaluation process, inform learning and define success? Are these key audiences influencing with whom, and in what ways evaluation learnings will be shared? How are patients, communities and students poised to benefit from learnings gathered?

In addition, Genentech reviewers will consider the following dimensions:

• Focus on **communities and geographies** at the intersection of significant need (e.g., high rates of inequities) and Genentech presence, especially American Southeast and Mountain West.

⁸ **Zea Malawa, MD, MPH,** Racism as a Root Cause Approach: A New Framework, American Academy of Pediatrics, January 2021.

- For Aim 1: Addresses **inequities in patient outcomes** across at least one of the therapeutic areas below, with a preference for proposals with a focus on inequities in patient outcomes across multiple therapeutic areas.
 - Blood disorders (non-malignant)
 - Cardiology
 - Endocrinology
 - Immunology
 - Neuroscience
 - Oncology
 - Ophthalmology
 - Pulmonary
 - Respiratory
 - Transplantation
 - Virology / Infectious Disease
 - Other / Not Applicable

Restrictions:

Applicants must be recognized by the IRS as a tax exempt, public charity under sections 501(c)(3) and 501(c)(6) of the Internal Revenue Code or be a U.S. governmental organization (such as public schools, public colleges and universities, public hospitals, and federally recognized Indian tribal governments).

In order to be eligible for this type of funding, the funding must **not** be used for:

- Projects taking place outside of the United States
- The purpose of developing clinical practice guidelines (e.g., statements that include recommendations intended to help practitioners make appropriate health care decisions for specific clinical conditions)
- Religious purposes
- Promotion of a Genentech or Roche product or to influence formulary decisions
- Research involving or undertaken in relation to Genentech or Roche products (whether investigational and/or approved for other uses)
- Accredited Independent Medical Education
- Proposal budget cannot exceed 33% of organizational budget and indirect administrative overhead costs cannot exceed more than 25% of the grant amount

For additional requirements / restrictions, please visit <u>funding.gene.com</u>

Application Process & Timeline:

Date	Application Process
April 14, 2022	RFP Announcement
May 4, 2022	Funder Webinar: Opportunity for prospective applicants to ask questions about the RFP. Questions will be solicited and posted in advance. The webinar will be saved and shared. Register for the webinar here.
June 10, 2022	Initial Applications Due: All initial applications will be due in Genentech's online grant system at 11:59 p.m. Pacific Time. Applicants will receive an automatic email acknowledging receipt of initial application.
June 11 - August 4, 2022	Genentech Internal Review
August 5, 2022	All Applicants Notified: All applicants will be notified as to whether they will be invited to submit a full application or if their application has been denied.

About Genentech

Founded more than 40 years ago, Genentech is a leading biotechnology company that discovers, develops, manufactures and commercializes medicines to treat patients with serious and life-threatening medical conditions. The company, a member of the Roche Group, has headquarters in South San Francisco, California. For additional information about the company, please visit http://www.gene.com.

About The Genentech Foundation

Guided by the vision of a future where health and prosperity are accessible to all, the Genentech Foundation works to unlock access to educational and career pathways in life sciences and medicine. The U.S.-based, private charitable foundation was established in 2002 by Genentech. For additional information, please visit https://www.gene.com/good/giving/genentech-foundation.