Funding opportunities in AI and health equity
(NHLBI/NIH)

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National Heart, Lung, and Blood Institute

- The growth of digital health and AI/ML technologies necessitates rigorous evaluation across various populations and contexts.

- The funding opportunity supports the validation of technologies such as sensor technologies, smartphone apps, SaMD, and AI/ML algorithms.

- The focus is on tools already developed but lacking rigorous validation for research, practice, and clinical care.

National Heart, Lung, and Blood Institute
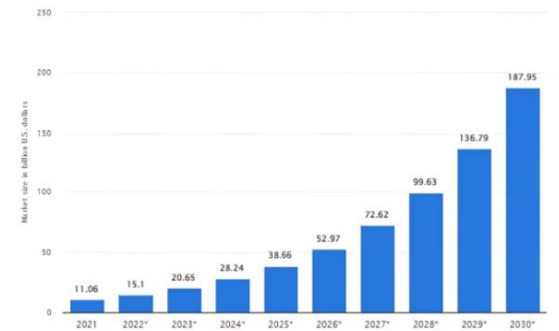
Validation of Digital Health and Artificial Intelligence/Machine Learning (NOT-CA-24-031)

- Research objectives include analytical and clinical validation of digital health and AI/ML technologies.

- Projects should apply rigorous methods and use gold-standard comparators for evaluation.

- The NOSI encourages validation for new uses, including different diseases or specific populations.

- Secondary analysis of existing datasets should address bias and ensure diverse population safety and effectiveness.
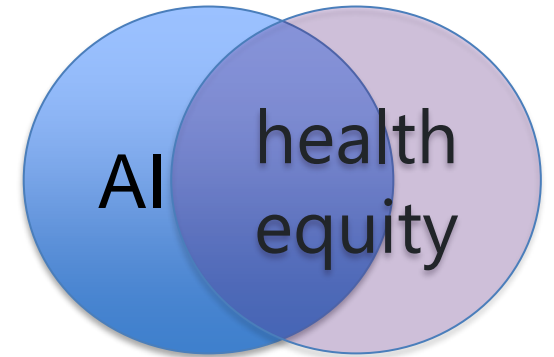
AI · health equity

Intersection of artificial intelligence and health equity

National Heart, Lung, and Blood Institute

Validation of Digital Health and Artificial Intelligence/Machine Learning (NOT-CA-24-031)

- Investigators must align applications with the specific interests of participating NIH Institutes and Centers.

- National Heart, Lung, and Blood Institute (NHLBI) encourages research aligned with its strategic vision, including **validation of technologies for heart, lung, blood and sleep (HLBS) disorders.**

- Due dates from April 05, 2024, through July 06, 2025, and investigators should contact NHLBI/NIH staff for guidance.

Funding Areas

Looking for a contact in your research area?

Climate and Health

COVID-19

Diversity

Heart

Lung

Blood

Sleep

Implementation Science

Precision Medicine

Clinical Trials Optimization

Small Business

HIV/AIDS

NHLBI areas of interest responsive to NOT-CA-24-031

NHLBI Strategic Vision/Research Priorities

Appropriate topics include, but are not limited to following mentioned below:

- Devices and AI algorithms need clinical validation for specific diseases or demographics affected by HLBS conditions.
- Validating consumer device hardware (e.g., tri-axial accelerometers) for diagnosing or treating HLBS conditions.
- Improve AI algorithms by eliminating bias and ensuring robustness against changing clinical inputs.
- Evaluate AI for cardiovascular image reconstruction and processing.

NIH National Heart, Lung, and Blood Institute

NHLBI areas of interest responsive to NOT-CA-24-031

- - Assess AI tools for detecting and diagnosing lung and cardiovascular diseases.

- - Validate AI algorithms for computer-assisted diagnosis in healthcare.

- - Implement smart devices for remote sickle cell anemia management.

- - Validate computational methods for HLBS disease monitoring and management.

National Heart, Lung, and Blood Institute

NHLBI areas of interest responsive to NOT-CA-24-031

- - Validate machine learning for sleep-wake scoring in sleep disorder diagnosis.

- - Study activity level and sleep health correlation using wearables

- - Investigate glycemic state, activity, and sleep health in diabetes using digital tools.

SMITH COLLECTION/GADO/GETTY IMAGES

National Heart, Lung, and Blood Institute

Parent Announcements (For Unsolicited or Investigator-Initiated Applications)

Research (R) Announcements

Activity Code(s)	Title	Announcement Number	Issuing Organization
R01	NIH Research Project Grant (Parent R01 Clinical Trial Not Allowed)	PA-20-185	NIH
R01	Research Project Grant (Parent R01 Basic Experimental Studies with Humans Required)	PA-20-184	NIH
R01	Research Project Grant (Parent R01 Clinical Trial Required)	PA-20-183	NIH

NIH National Heart, Lung, and Blood Institute

Notice of Special Interest (NOSI): IDEA2Health: Innovative Data Evaluation and Analysis to Health

Key Dates

Release Date:	October 26, 2021
First Available Due Date:	February 05, 2022
Expiration Date:	January 08, 2025

Please direct all inquiries to:
John Haller, PhD
National Heart, Lung, and Blood Institute (NHLBI)
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Related Announcements

PA-20-183 NIH Research Project Grant (Parent R01 Clinical Trial Required)

PA-20-185 NIH Research Project Grant (Parent R01 Clinical Trial Not Allowed)

Issued by

National Heart, Lung, and Blood Institute (NHLBI)

NIH National Heart, Lung, and Blood Institute

Notice of Special Interest (NOSI): IDEA2Health: Innovative Data Evaluation and Analysis to Health ([NOT-HL-22-001](https://grants.nih.gov/grants/guide/notice-files/NOT-HL-22-001.html))

- Aim to advance data science methodologies in heart, lung, blood, sleep (HLBS) research.

- Goal: enhance robustness, explainability, and workforce development in HLBS research.

- Leverage AI and ML to improve health decision-making and understand diseases.

Expiration Date:
January 08, 2025
https://grants.nih.gov/grants/guide/notice-files/NOT-HL-22-001.html

NIH National Heart, Lung, and Blood Institute

Notice of Special Interest (NOSI): IDEA2Health: Innovative Data Evaluation and Analysis to Health ([NOT-HL-22-001](https://grants.nih.gov/grants/guide/notice-files/NOT-HL-22-001.html))

- Address data science challenges: noise reduction, hyperparameter optimization, accuracy, and generalizability.

- Stimulate novel data science methodologies for insights and engineering solutions.

- Promote research communication through open-science platforms.

- Encourages studies using diverse data sources, including EMRs, IoTs, and social media.

- Multi-disciplinary, MPI approaches are encouraged to address NHLBI's Critical Challenges.

Expiration Date:

January 08, 2025

https://grants.nih.gov/grants/guide/notice-files/NOT-HL-22-001.html

NIH National Heart, Lung, and Blood Institute

- Applications to use specific FOAs: PA-20-183 (mechanistic clinical trials) and PA-20-185.

Activity Code(s)	Title	Announcement Number	Issuing Organization
R01	NIH Research Project Grant (Parent R01 Clinical Trial Not Allowed)	PA-20-185	NIH
R01	Research Project Grant (Parent R01 Clinical Trial Required)	PA-20-183	NIH

- Include NOT-HL-22-001 in Agency Routing Identifier field for funding consideration.
- Applications requesting $500,000+ in direct costs need prior consultation with NHLBI.
- Prospective applicants should contact NHLBI program officers before submission.

Expiration Date:
January 08, 2025
https://grants.nih.gov/grants/guide/notice-files/NOT-HL-22-001.html

NIH National Heart, Lung, and Blood Institute

The NHLBI funding strategy (2023)

The NHLBI funding strategy use one of two methods :
a payline with selective pay or
a zone of consideration

Payline

Grant Program	Grant Program Description	Percentile	Priority Score
R01	Research Project Grant	14	N/A
R01 ESI	Early Stage Investigators	24	N/A
K awards	Career Development Awards	N/A	30
F30	Pre-doctoral NRSA	N/A	20
F31, F32, F33	Pre- and Post-doctoral NRSA	35	N/A
R15	Academic Research Enhancement Awards (AREA)	N/A	30
R43	Small Business Innovation Research (SBIR) Grants (Phase I)	N/A	30

In FY203, the payline for Early Stage Investigator (ESI) applications was 10 percentile points above the regular R01 payline.

Important Bookmarks

- **www.nih.gov**
  - Links to forms, deadlines and submission policies
  - Provides advice for submitting your application
- **www.grants.gov**
  - Federal-wide portal for finding grant opportunities
- **www.grants.nih.gov**
  - NIH-specific portal for announcing policy and new Notices of Funding Opportunites, which is published daily
- **https://www.nhlbi.nih.gov/**
  - National Heart Lung and Blood Institute (NHLBI/NIH)
  - (includes NHLBI Funding Opportunities and Contacts)

Questions?

Please direct all inquiries regarding the listed funding opportunity announcements to:
John Haller, PhD
National Heart, Lung, and Blood Institute (NHLBI)
Email: john.haller@nih.gov