

**DEPARTMENT OF HEALTH AND HUMAN SERVICES
NATIONAL INSTITUTES OF HEALTH
NATIONAL LIBRARY OF MEDICINE
MINUTES OF THE BOARD OF REGENTS MEETING
(VIRTUAL MEETING)
September 15, 2020**

The 185th meeting of the Board of Regents (BOR) was convened remotely on September 15, 2020, at 10a.m. The meeting was open to the public from 10a.m. to 3:45 p.m., followed by a closed session that lasted until 4:15 p.m. The meeting adjourned at 4:15 p.m.

MEMBERS PRESENT (Appendix A)

Dr. Lourdes Baezconde-Garbanati, University of Southern California
Dr. Suzanne Bakken, Columbia University
Dr. Carlos Jaén, University of Texas Health Science Center at San Antonio (Chair)
Dr. S. Claiborne Johnston, The University of Texas at Austin
Mr. Neil Rambo, NYU School of Medicine (retired)
Dr. Heidi Rehm, Massachusetts General Hospital

CONSULTANTS

Ms. Jane Blumenthal, University of Michigan (retired)
Dr. Kristi Holmes, Northwestern University
Ms. Jennie Lucca, The NIH Children's Inn

EX OFFICIO AND ALTERNATE MEMBERS PRESENT

VADM Jerome Adams, Office of the Surgeon General, U.S. Public Health Service
Col. Thomas Cantilina, United States Air Force
Dr. Carolyn Clancy, Veterans Health Administration
Col. Kent Dezee, United States Army
Dr. Mary Mazanec, Library of Congress
Dr. Brent Miller, National Science Foundation
Ms. Cynthia Parr, National Agricultural Library
RADM Erica Schwartz, Office of the Surgeon General, U.S. Public Health Service
Dr. Dale Smith, Uniformed Services University of the Health Sciences

MEMBERS OF THE PUBLIC PRESENT

Ms. Loretta Jurnak, Technical Resources International, Inc.
Dr. Gerard Kuhn, New York University/Friends of the National Library of Medicine
Ms. Joyce Wanga, Technical Resources International, Inc.

FEDERAL EMPLOYEES/CONTRACTORS PRESENT

Dr. Patricia Flatley Brennan, Director, NLM
Mr. Jerry Sheehan, Deputy Director, NLM
Dr. Milton Corn, Deputy Director, Research and Education, NLM
Ms. Dianne Babski, Division of Library Operations, NLM

Mr. Chris Belter, Office of the Director, NIH
Dr. Dennis Benson, Office of the Director, NLM
Ms. Caitlin Bowler, National Center for Biotechnology Information, NLM
Dr. Anna Calcagno, Division of Extramural Programs, NLM
Ms. Kathi Canese, National Center for Biotechnology Information, NLM
Ms. Brianna Chatman, Associate Fellow, NLM
Ms. Brenna Cox, Division of Library Operations, NLM
Ms. Allison Cruise, Associate Fellow, NLM
Mr. Todd Danielson, Office of the Director, NLM
Dr. Dina Demner-Fushman, Lister Hill National Center for Biomedical Communications, NLM
Mr. Ivor D'Souza, Office of Computer and Communications Systems, NLM
Mr. Levi Dolan, Associate Fellow, NLM
Dr. Kathel Dunn, Office of the Director, NLM
Dr. Anna Fine, National Center for Biotechnology Information, NLM
Dr. Valerie Florance, Division of Extramural Programs, NLM
Ms. Kathryn Funk, National Center for Biotechnology Information, NLM
Ms. Jaime Goff, National Center for Biotechnology Information, NLM
Ms. Elisa Golfopoulos, National Center for Biotechnology Information, NLM
Ms. Rebecca Goodwin, Office of Strategic Initiatives, NLM
Mr. Slava Gorelenkov, National Center for Biotechnology Information, NLM
Dr. Michael Huerta, Office of Strategic Initiatives, NLM
Ms. Christine Ireland, Division of Extramural Programs, NLM
Ms. Casey Jennings, National Center for Biotechnology Information, NLM
Dr. David Landsman, National Center for Biotechnology Information, NLM
Ms. Deborah Lockett-Jordan, Division of Library Operations, NLM
Ms. Wei Ma, Office of Computer and Communications Systems, NLM
Ms. Jennifer Marill, Division of Library Operations, NLM
Dr. Clem McDonald, Office of the Director, NLM
Ms. Tara Mowery, Office of Communications and Public Liaison, NLM
Ms. Jody Nurik, Office of Communications and Public Liaison, NLM
Ms. Christina Robinson, National Center for Biotechnology Information, NLM
Ms. Leigh Samsel, Office of Strategic Initiatives, NLM
Ms. Mary Sanders, National Center for Biotechnology Information, NLM
Ms. Amanda Sawyer, Associate Fellow, NLM
Dr. Steve Sherry, National Center for Biotechnology Information, NLM
Ms. Jean Shipman, National Institutes of Aids and Infectious Diseases, NIH
Dr. Hua-Chuan Sim, Division of Extramural Programs, NLM
Ms. Anagha Sridhara, Office of the Surgeon General, U.S. Public Health Service
Ms. Maureen Strange, National Center for Biotechnology Information, NLM
Ms. Samantha Tempchin, Division of Extramural Programs, NLM
Ms. Louise To, Office of the Director, NLM
Dr. Tony Tse, National Center for Biotechnology Information, NLM
Dr. Alan Vanbiervliet, Division of Extramural Programs, NLM
Lt. Dennis Anderson Villaluz, Office of the Surgeon General, U.S. Public Health Service
Dr. Rebecca Williams, National Center for Biotechnology Information, NLM
Ms. Becca Xu, National Center for Biotechnology Information, NLM

I. CALL TO ORDER AND INTRODUCTORY REMARKS

Dr. Carlos Jaén, Chair, BOR

Dr. Jaén called the meeting to order, welcoming attendees to the meeting. Dr. Jaén introduced three new BOR members:

- Dr. Kristi Holmes, Director of the Galter Health Sciences Library & Learning Center and Associate Professor of Preventive Medicine (Health & Biomedical Informatics), Northwestern University.
- Ms. Jennie Lucca, Chief Executive Officer of the Children's Inn, NIH.
- Dr. Nancy Smider, Director of Research Informatics, at Epic Corporation in Madison, Wisconsin.

The meeting was broadcast to the public via streaming video at <https://videocast.nih.gov>

II. REPORT FROM THE OFFICE OF THE SURGEON GENERAL

VADM Jerome Adams, Surgeon General, Office of the Surgeon General, U.S. Public Health Service

VADM Adams provided an update on the Office of the Surgeon General's efforts related to the COVID-19 pandemic in addition to other public health efforts and applauded the NLM's role in providing critical information to the public and scientific community during this time.

Upcoming OSG publications will focus on the Community Health and Economic Prosperity initiative, examining social determinants of health and their consequences within communities, and oral health, which will focus on the impact on overall health. Three calls to action will also be published, one for maternal health, one for hypertension, and one for suicide prevention.

One focus of the OSG are social determinants of health, including topics such as race and building health equity, an issue that will be examined in upcoming publications and has a significant impact on the COVID-19 pandemic. VADM Adams noted current efforts in the context of the COVID-19 pandemic to address disparities, including placing testing facilities in vulnerable areas and ensuring that all testing data reported by states include race, ethnicity, and zip code to better identify and understand vulnerable communities.

BOR members noted that though the pandemic has been a period of prodigious research, it has also been a time when science and scientists have been questioned. BOR members also stressed the importance of engaging with leaders (both in communities and in businesses) and other figures of trust and authority to help convey key scientific information and guidelines to the public. Other topics discussed included whether placing testing sites in vulnerable areas had encouraged members of those communities to get tested.

III. MAY 2020 MINUTES AND FUTURE MEETINGS

Dr. Carlos Jaén, Chair, BOR

Dr. Jaén listed dates for future BOR meetings, including the addition of the Fall BOR Meeting

on September 13-14, 2022. There were no objections or conflicts noted.

Motion: The BOR approved the motion to accept the September 13-14, 2022, meeting date.

Motion: The BOR approved the motion to accept the minutes of the May 12, 2020 meeting.

IV. REPORT FROM THE NLM DIRECTOR

Dr. Patricia Flatley Brennan, Director, NLM

Dr. Brennan reviewed the key pillars of the NLM's 10-year Strategic Plan to accelerate discovery and data-driven health and the work in aligning the NLM's strategic goals with the NIH, serving the public through health and science; the NLM guiding principles of resilience, relevance, and reinvention are being implemented during this time. Dr. Brennan noted three areas where the NLM is supporting the NIH's commitment to science, including the response to the health effects of systemic racism, the science of senescence, and creating a diverse health workforce. As part of these initiatives, the NLM assuring that its key processes such as funding research are free of bias and is leveraging its experience to provide information to diverse communities in need.

Dr. Brennan described NLM's involvement with the NIH's COVID-19 efforts. NLM received 10 million dollars in supplemental funding as part of the Coronavirus Aid, Relief, and Economic Security (CARES) Act, which was used to support the library's COVID-19 initiatives, including providing high-quality information to public and professional audiences and expanding its research portfolio to address some of the molecular and computational challenges of the COVID-10 pandemic. NLM has been involved in many partnerships across the NIH, including those supporting early detection processes projects and providing the NIH Office of Engagement and Training with materials for the Community Engagement Alliance Against COVID-19 Disparities.

NLM has made important progress towards the achievement the goals set out by the strategic plan. Requests for Information (RFIs) on strategic opportunities and challenges regarding the implementation of the strategic plan and on NLM support will be due later in the year. Other key initiatives include the reorganization of the Lister Hill National Center for Biomedical Communications, finalized guidance on the desirable characteristics of research data repositories, and the PubMed Central (PMC) Preprint Pilot program. Dr. Brennan noted that construction for the NLM renovation is continuing with COVID-19 safety plans in place.

Dr. Brennan announced departures from the NLM and BOR, and new open positions within NLM.

BOR members discussed the future of remote work at NLM, and the possibility that any changes brought about by the COVID-19 pandemic will be explored as permanent changes. Members also discussed if there need to be changes to how NLM supplies services to reflect the changing way in which scientific research is being conducted. Dr. Rehm noted that PMC is a critical resource as science becomes more global, and this could continue to be facilitated by ensuring more structured data and creating the ability to query supplemental materials. Ms.

Funk noted that the NLM is working on how to increase the discoverability of data and how to set standards for supplemental material and data submission.

V. BOR WORKING GROUP BREAKOUT REPORTS

BOR members discussed the status of the Working Groups. It was agreed that it would be beneficial to all to rotate BOR members through the four working groups annually. The possibility of establishing a Working Group focused on infrastructure spending was also discussed.

Strategic Planning

Dr. Rehm reported on behalf of the Strategic Planning Working Group. The group reviewed the strategic plan, NLM's 10-year proposal that was approved in February 2018. It was agreed that the current plan is up to date, with over 200 implementation initiatives that have originated from the plan. The group discussed the development of the biomedical workforce as noted in the plan's goals, including intramural and extramural programs and the rapid implementation of workforce activities in relation to the COVID-19 pandemic. Regarding criticism that there is not enough mention of libraries within the plan, Working Group members noted that libraries should be encouraged to think about their role in the current era and assume greater partnership roles in engagement with others. Members discussed seeking opportunities for synergy and partnerships across NLM programs, such as ClinicalTrials.gov and the Preprint Pilot program. The group encouraged BOR members to respond to the current RFI as responses have been limited. It was inquired how the BOR would prefer to hear about the Strategic Plan and its implementation, be it verbal or written communication, and high-level vs. more detailed reports. BOR members suggested more detailed reports, especially of early stage ideas and/or issues be provided prior to the meeting for review to help facilitate discussion. It is anticipated that an RFI summary and high-level breakdown of the plan budget information will be provided at the Spring meeting.

Research Frontiers

Dr. Corn reported on behalf of the Research Frontiers Working Group. NLM staff presented to the Working Group on the NIH's response to recommendations provided by the NIH Director's Advisory Group on artificial intelligence (AI). The presentation will be made available to BOR members by request. It was noted that the NIH's planned response to the NIH's Director's Advisory Group will include the extramural funding of new design centers. Working Group members agreed that the plan is complex, appreciating that the NIH reached out to other federal agencies to determine lessons learned and grand challenges. The group discussed NLM's potential role in this initiative as a result of those recommendations for both their intramural and extramural activities. It was also noted that this plan will use a different type of funding mechanism.

Collections

Ms. Kathryn Funk reported for the Collections Working Group. The group focused on two main topics: updates on the NIH Preprint Pilot and improvements to the collection and accessibility of

journal supplementary materials. Regarding the latter topic, in FY2020, NLM fellows implemented a research project examining the sharing and accessibility of supplementary materials and how that information is currently presented in PMC. Preliminary findings noted a lack of standardized policies and practices implemented across the journals reviewed; these findings reflect ongoing challenges concerning what information is being provided as supplementary data. More detailed metadata and accessible file formats that would help make supplementary materials more discoverable are needed. The Working Group also recommended engagement of stakeholders about this issue. The group discussed current NLM initiatives including the standardization of data in general, as well as other stakeholder initiatives that are currently being implemented. The group also discussed the status of the NIH Preprint Pilot, which is currently in its first phase, focusing on COVID-19 preprints. To date, 1,000 preprints have been added to PMC along with corresponding records in PubMed. There were approximately 300,000 views of preprints within PubMed since its launch. Feedback has been mostly positive, and engagement with stakeholders has been ongoing. BOR members discussed how direct feedback on the Preprint Pilot and discoverability of data as it relates to the program can be provided. Feedback on the NIH Preprint Pilot can be sent to preprints@ncbi.nlm.nih.gov. Members suggested and discussed greater cooperation with ClinicalTrials.gov as a complementary resource to pre-prints by supporting accountability in reporting of clinical trials.

Public Service

Dr. Jaén reported for the Public Service Working Group. The group discussed the recent ClinicalTrials.gov modernization activities that are currently focusing on engagement to determine and validate the modernization approach, specifications, and definition of user groups. Along with the dissemination of RFI and the public meeting comments, there has been the continued enhancement of internal business processes and the initial development of a modernization roadmap. This month, Working Group members participated in a facilitated collaborative strategy session to discuss roadmap priorities and solicit recommendations from the Working Group. Additional information was shared during the ClinicalTrials.gov presentation later in the meeting. The importance of this Working Group and its influence and perspective to this project was noted.

VI. NEWS FROM THE NLM HISTORY OF MEDICINE DIVISION

Dr. Jeffrey Reznick, Chief, NLM History of Medicine Division (HMD)

HMD responded rapidly to the pandemic by organizing and curating initiatives to encourage and support a critical understanding of related events in historical context and connecting those understandings to NLM's historical collections. One of the initiatives included the virtual research symposium, "Reporting, Recording, and Remembering the 1918 Influenza Pandemic". This symposium was held in late April 2020 in collaboration with the National Endowment for the Humanities. As part of the 2020 NLM lecture series that promotes awareness and use of NLM historical collections, Virginia Tech students presented research on various aspects of the 1918 pandemic including newspaper reporting, policies, and documented experiences during this time.

Additionally Dr. Reznick noted that in response to the pandemic, HMD published several blog

posts to its blog, Circulating Now (<http://circulatingnow.nlm.nih.gov>). One of these posts, authored by NLM staff, offered an overview of the initiative of NLM to collect and preserve for future research social media content and stories of the current pandemic. This initiative is a collaborative effort, with internal staff and external federal agencies able to recommend content to add to the collection. Dr. Reznick also discussed several other posts regarding the historical context of hand washing and NLM exhibitions of notable epidemics throughout history. He also spoke about recent acquisitions of the division, including the papers of Dr. Louis W. Sullivan, MD, former United States Secretary of Health and Human Services (HHS), hospital postcards published during the first 7 decades of the 20th century, a film, titled “Cloud of Confusion,” a declassified US Army production about experiments conducted on volunteer soldiers examining incapacitating chemical agents, and historical monographs of the first book known to describe the first officially sanctioned dissection in Japan, as well as the first addition of the foundation work that introduced quantitative experimentation in biological sciences.

BOR members discussed the division’s acquisition process and criteria, the use of the NLM collection by G13 grantees, and how storytelling and the recent collaboration with Virginia Tech has expanded the Library’s reach to new researchers who can benefit from its vast historical collections.

VII. CLINICALTRIALS.GOV UPDATE

Dr. Rebecca Williams, Acting Director, ClinicalTrials.gov

Dr. Williams provided an overview of ClinicalTrials.gov’s COVID-19-related activities, which include providing rapid access to information about over 3,300 COVID-19-related clinical studies, and 2,500 additional studies through the World Health Organization (WHO) database. The team was able to leverage their experience to provide recommendations for registering and reporting results of master protocols, an emerging design being used in COVID-19 research. Dr. Williams noted that the pandemic reinforced the benefits of having a comprehensive registration and results reporting system and the role of ClinicalTrials.gov as an informational scaffold that supports discovery of study information available across multiple resources and platforms, adding that third-party websites are using information from Clinical Trials.gov.

Dr. Williams supplied a summary of the Public Service Working Group on ClinicalTrials.gov Modernization’s activities since its formation at the end of 2019. Key elements include providing input on the development of the RFI, which gathered nearly 270 responses from key stakeholders, and participating in the virtual public meeting in April, which attracted nearly 400 attendees. The key themes from the analysis of the RFI feedback were discussed at the public meeting. Key themes that emerged from the RFI were enhancing website functionality and the information submission process and the importance of using plain language, a theme that was noted by both patients and researchers.

These activities have provided the tools to support development of the modernization roadmap, which was discussed during the recent Working Group meeting. Key themes that were highlighted as part of the vision for ClinicalTrials.gov included trust in research and making research equitable for all. The Working Group will continue to engage with stakeholders and develop the modernization roadmap.

Recently implemented ClinicalTrials.gov features to address several legal requirements were noted. As a result of the *Seife v. HHS* court decision summary results for an increased number of trials will need to be reported to ClinicalTrials.gov. The FDA guidance on civil money penalties relating to ClinicalTrials.gov was finalized and, in conjunction with the court decision, may also contribute to increased reporting. Other requirements discussed included the posting of results to ClinicalTrials.gov no later than 30 days after submission even if major comments are noted by NLM; such major comments noted by NLM must be corrected by the submitter within 25 days of notification. The submission and posting process was updated to accommodate these new deadlines.

BOR members discussed how to integrate more plain language content into ClinicalTrials.gov and how to make this resource equitable for all user groups. Dr. Williams noted the importance of considering what context is needed and how to make information actionable, which will be further discussed in the modernization process. The group also discussed ClinicalTrials.gov's potential role in identifying areas that would benefit from further research and opportunities to engage with data submitters.

VIII. ANNOUNCEMENT OF NLM AWARDS

Dr. Carlos Jaén, Chair, BOR

Dr. Patricia Flatley Brennan, Director, NLM

Dr. Brennan presented the NLM Director's Honors Award, recognizing the work of NIH employees who have contributed outstanding achievements to NLM to the following individuals:

- Ms. Dianne Babski, acting associate director of the Division of Library Operations, was recognized for her substantial contributions to NLM.
- Ms. Deborah Lockett-Jordan, senior administrative officer in the Division of Library Operations, for her work on the administration and logistics related to the reorganization and integration of the specialized information services staff.
- Ms. Tara Mowery, chief of visitor operations in the Office of Communications & Public Liaison (OCPL), was recognized for her work as the "face of the NLM" providing tours and raising awareness for NLM's work and accomplishments.

Dr. Brennan presented the Frank P. Rogers Award, recognizing the work of NIH employees who have made fundamental, significant contributions to the library's operational programs and services to the following individuals:

- Ms. Kathi Canese, program manager for PubMed at the National Center for Biotechnology Information (NCBI), was recognized for her leadership and support of PubMed and her contributions in the modernization of this resource.
- Ms. Wei Ma, chief of the Applications Branch in the Office of Computer and Communications Systems, was recognized for collaborative work in establishing standards to measure performance in customer satisfaction with NLM digital products and the implementation of NLM product improvements.
- Ms. Susan C. Schmidt, head of the Indexing Unit B at the Bibliographic Services Division in the Division of Library Operations, was recognized for her leadership and management to increase the efficiency of MEDLINE indexing with the implementation

of automated indexing methods.

Dr. Jaén presented the Board of Regents Award for Scholarship for Technical Achievement, which recognizes scholarly and technical achievements that enrich biomedicine to the following individuals:

- Dr. Yumi Jin, under the Information Engineering Branch at NCBI, was recognized for his technical excellence in authoring the genetic relationship and fingerprint graph software, creating a unique computational framework for genomic data quality control.
- Dr. Jeffery Reznick, the Chief of HMD, and Mr. Donald Bliss, from OCPL, for their technical achievements in documenting the history of the social determinants of health through the lens of the American educational children's television program, Vegetable Soup.

IX. ADJOURNMENT


Dr. Jaén adjourned the BOR meeting at 4:15 p.m. on September 15, 2020.

Actions Taken by the Board of Regents:


- Approval of the May 12, 2020, BOR meeting minutes
- Approval of the September 13–14, 2022, meeting date

Appendix A. Roster — Board of Regents

I certify that, to the best of my knowledge, the foregoing minutes are accurate and complete.

 Digitally signed by Brennan,
Patti (NIH/NLM) [E]
Date: 2020.12.14 09:06:08
-05'00'

Patricia Flatley Brennan, RN, PhD
Director, National Library of Medicine

Carlos Roberto  Digitally signed by Carlos
Roberto Jaén, MD PhD
Date: 2020.11.23
11:48:24 -06'00'

Dr. Carlos Jaén, MD, PhD
Chair, NLM Board of Regents