2021 Election for Board Director

<u>**Candidate**</u>
Jonathan Rich Nebeker

<u>**Professional Title and Affiliation**</u>
Acting CMIO, VA / Professor, University of Utah

<u>**Personal Statement**</u>
I'm excited to contribute my experience in leadership, innovation, and strategy as a full member of the AMIA board. I've been active in AMIA for nearly 20 years and am currently an ex officio member of the board.

Please vote for me if you care about improving AMIA's support for:
- Applied informaticians that work in healthcare and public-health systems,
- Academics that train and collaborate with applied informaticians, and
- Informatics leaders that manage health systems.

I will outline some specific priorities below. However, I know that Board members are responsible for representing the interests of all members and for providing strategic guidance for all Association business. I believe my ex-officio participation on the Board and its task forces has demonstrated my unbiased advocacy for the strongest possible AMIA.

For the last two years, I have chaired the Health Systems Task Force. We aim to establish the Health Systems Council, an institutionally backed community of applied informaticians that work in healthcare and public-health systems. The Council will have its own membership agreement that makes it easier and more compelling for health systems to sign up their employees for memberships and participate in educational programs. We will launch the new membership for the Health System Council this fall, pending final Board approval.

The Health Systems Council aims to boost the following:
- Competency of the applied-informatics workforce
- Science of applied informatics and its management
- Sharing of innovations in tools and practices
- Advocacy for informatics leadership and funding

Although these goals have special relevance to health systems, I hope you agree that most of AMIA's membership has a stake in them.

The Health Systems Council also has an aggressive agenda for expanding membership of applied informaticians from *all* professional backgrounds: nurses, pharmacists, technicians, physicians, and others. This expansion will increase the diversity of AMIA membership and improve the stability of AMIA financials. The Council will work with AMIA workgroups for nurses and physicians (among others) to expand and support this community.

Finally, it's a great advantage for AMIA to have a few board members with leadership experience in the Federal government. We can provide connections to various Federal entities that are relevant to AMIA's mission. It is an unusual advantage to have a current Federal executive on the board. Through special statutory allowance and Undersecretary approval, I can serve on the Board on behalf of the Veterans Health Administration. This status allows me to ethically coordinate with and provide advocacy for AMIA in an official capacity. These advantages have limits and come with the notable tradeoff of not being able to fully participate in AMIA's financial matters. However, please consider the special and powerful contributions that I can make to AMIA and for all of you.

Informatics Interests
I am passionate about the role of informatics in supporting high-reliability healthcare in the context of a learning health system. Continuing informatics interests include:
1.   Interdisciplinary teams for production of modular, standardized, and generalizable health practice patterns for clinical care delivery.
2.   Competency promotion and virtual team formation among the field health informatics workforce with an emphasis on diversity, equity, and inclusion so that the informatics workforce shares backgrounds with the patients that we serve.
3.   Platform modernization and middleware integration of EHRs, decision support, patient-engagement, and analytics.
4.   Developing new blended methods of traditional and machine-learning techniques for process analysis for safety, effectiveness, and efficiency.
5.   Value measurement of informatics activity

AMIA Engagement and Participation
For the past 2 years, I have led interactions with AMIA and other healthcare systems for outlining goals and agenda for a new AMIA membership category for healthcare systems and new health system workgroup formation. In this role, I have served as an ex officio member of the AMIA board and on the leadership committee of Physicians in AMIA. In the last year, I have served on 4 AMIA Board-Chartered Task Forces: Health System TF, CEO Task Force/Search Committee, Governance TF, Career TF

I have been an active presenter and participant in AMIA meetings for decades and a frequently recognized outstanding reviewer. Several of my papers have won AMIA awards. I am a zealous supporter of the student design competition and related WISH initiative. Finally, I have coordinated responses on HHS rule making between AMIA and VHA for the last 3 years, so each response will reinforce the other, to the extent that AMIA agrees with the VHA position.

Participation in other organizations
Since 2015, I have been a board member of Logica Health, the not-for-profit industry association resulting from the merger of Health Services Platform Consortium and the HL7-and-professional association called Clinical Information Interoperability Council. Logica promotes standards for effective semantic and process interoperability and hosts a sandbox for developing FHIR-based applications. I served on the ONC Health IT Policy Committee and, from its inception, the U.S. Health IT Advisory Committee. I am the VA informatics lead on pilot initiatives with CMS for using EHR data for value measurement. From 2009 through 2015, I served as a consultant to AcademyHealth in development of its informatics agenda, administration of ARRA grants, and establishment of eGEMS.

Education and Experience
I am Acting CMIO at Department of Veterans Affairs and tenured Professor of Medicine at University of Utah.

I completed my BA and internal-medicine residency at Harvard and MD/MS (higher education administration) at the University of Pennsylvania.

My informatics career began with developing and selling an EHR/CRM/Revenue-cycle system for assisted living facilities in the 1990s and early 2000s. I was a hospital CMIO and informatics researcher until about 2008. Subsequent national leadership positions in VA included: establishing and directing its national research and computing infrastructure (VINCI), leading user-experience work for the VA-DoD EHR project. Subsequently I was clinical director and functional/UX architect for VA's large and highly innovative EHR modernization program. As a researcher, I have been PI on tens of millions of dollars of federal grants for drug safety, EHR safety, EHR user-experience development, and analytical systems. In addition to my current CMIO duties, I lead work with Departments of Energy and Defense on modernization of enterprise platforms for data and analytics and methods of process analysis.

I have nearly 140 citable publications with over 4,600 references and an h-index of 29.
https://scholar.google.com/citations?user=bHgQoQQAAAAJ&hl=en

Recent Publications
Pfaff MS, Eris O, Weir C, Anganes A, Crotty T, Rahman M, Ward M, Nebeker JR (2021). Analysis of the cognitive demands of electronic health record use. J Biomed Inform, 113, 103633.

Butler JM, Gibson B, Lewis L, Reiber G, Kramer H, Rupper R, Herout J, Long B, Massaro D, Nebeker J (2020). Patient-centered care and the electronic health record: exploring functionality and gaps. JAMIA Open, 3(3), 360-368.

Ozmen O, Klasky HB, Omitaomu OA, Olama M, Kuruganti T, Ward M, Scott JM, Laurio A, Drews F, Nebeker JR (2020). Feature Engineering and Process Mining to Enable Hazard Detection in Health Information Technology. AMIA Jt Summits Transl Sci Proc, 2020, 469-476.

Brown SH, Stevenson L, Territo DJ, Kilbourne J, Nebeker JR, Miller H, Lincoln MJ (2020). One-Way and Round-Trip Analysis Demonstrates Surprising Limitations of Standards-Based Terminology Maps. AMIA Annu Symp Proc, 2019, 258-266.

Olufemi A. Omitaomu, Ozgur Ozmen, Mohammed M. Olama, Laura L. Pullum, Teja Kuruganti, James Nutaro, Hilda B. Klasky, Helia Zandi, Aneel Advani, Angela L. Laurio, Merry Ward, Jeanie Scott, Jonathan R. Nebeker (05/07/2019). Real-Time Automated Hazard Detection Framework for Health Information Technology Systems, Health Systems. Health Syst.

Legler A, Price M, Parikh M, Nebeker JR, Ward MC, Wedemeyer L, Pizer SD (2019). Effect on VA Patient Satisfaction of Provider's Use of an Integrated Viewer of Multiple Electronic Health Records. J Gen Intern Med, 34(1), 132-136.

D'Amore J, Bouhaddou O, Mitchell S, Li C, Leftwich R, Turner T, Rahn M, Donahue M, Nebeker J (2018). Interoperability Progress and Remaining Data Quality Barriers of Certified Health Information Technologies. AMIA Annu Symp Proc, 2018358-367. (AMIA 2018 Distinguished Paper Award)

Burningham Z, He T, Teng CC, Zhou X, Nebeker J, Sauer BC (2017). Evaluation of the Case-Crossover (CCO) Study Design for Adverse Drug Event Detection. Drug Saf, 40(9), 789-798.

Leecaster MK, Weir CR, Drews FA, Hellewell JL, Bolton D, Jones MM, Nebeker JR (2017). Translation of Contextual Control Model to chronic disease management: A paradigm to guide design of cognitive support systems. J Biomed Inform, 71SS60-S67

CR Weir, MA Rubin, J Nebeker, M Samore (2017) Modeling the mind: How do we design effective decision-support? J Biomed Inform

Honors and Awards
It's an honor to serve America's Veterans.

Evidence of Strategic Thinking/Experience in Activities of AMIA or another non-profit or institution
Strategy is one of my strongest suits. I have been a leader or the leader for strategy in VA health IT initiatives since 2008. I support AMIA's strategic goal of augmenting its membership through better serving the needs of those working in healthcare and public health systems. To this end, I have leadership positions in three AMIA initiatives.

1. I have led the establishment of the Health Systems Task Force. This creates a new membership category that is attractive to health systems in terms of benefits and manageability (in preparation for board review). The Health System group aims to work with AMIA and its membership for improved sharing of innovations and practices, research on informatics management and application, advocacy for applied informatics, and education of

the applied workforce. Members of the Health System group believe that we can double AMIA membership through the Health System membership program and community.

2. I serve on the AMIA Governance Task Force. In this capacity, I worked with other AMIA leaders to propose a package of reforms for the Board of Directors that improves transparency, accountability, and representativeness of the board. One of our recommendations was to eliminate ex officio members, which would take me out of Board discussions, as I am currently an ex-officio member. Before this, I served on the taskforce that recommended a new governance structure for AMIA (CEO + Chair of the Board) and the subsequent search committee for the CEO.

3. I serve on the Career Task Force Advisory Committee. My goal on this committee is to better define informatics careers for government recognition, higher demand, higher pay, and higher skills. I also have a goal to promote a more diverse health informatics workforce by including highly skilled informatics professionals without a master's degree.

Contributions to Activities that Support Diversity, Equity, and Inclusion
In early 2019, I created a DEI program in my office. There were three motivations. First, the reorganization that I effected resulted in a dramatic shift from an administrative to a technical focus. This shift left a disproportionate number of people of color in administrative positions wondering how they fit with the new mission. Second, VA needs an informatics workforce that shares backgrounds and life experiences with the Veterans that we serve. The diverse workforce helps us provide the best patient experience. Finally, we had marked gender inequities in salaries, roles, and recruitments. We instituted a multi-pronged approach to address each of these major issues plus the usual background problems of insensitivity.

In the first half of 2020, when people of color were feeling and being attacked for a variety of reasons, our office had a foundation that facilitated needed conversations of support and comfort.

Interestingly, the DEI program has been especially challenging to implement in the government. Rigid hiring and position-management processes have been the biggest impediment. The VHA office of diversity and inclusion was not staffed until this year, so we had to seek help from other agencies. A Presidential order to stop most diversity training and VA leaders' awkward statements of measured sympathy were not helpful. Despite these difficulties, we continue to strengthen our DEI program.

In AMIA, I continue to advocate for applied informaticians, which form a very diverse community as characterized by socioeconomic, ethnic, and professional backgrounds. Related initiatives are described above.