

To: RADM Tim Gallaudet
Re: 'Omics Strategy: reply to public comments
From: Cisco Werner, Kelly Goodwin, Mark Strom, and Jeanette Davis
Date: 8 January 2020

Summary: the public comments were very supportive of the *'Omics Strategy* and encouraging of further development of ideas and partnerships. We received no comments that identified critical flaws or missing elements in the *Strategy* requiring significant overhaul of the November 2019 draft. Most of the comments can be addressed with enhancement or clarification of wording within the *Strategy*. Additional recommendations requiring action or budget considerations are best addressed, or expanded upon, in the upcoming *Implementation Plan* (IP). We acknowledge and thank all comments and look forward to finalizing the *Strategy* and start working on the IP.

1. Comments to incorporate in the 'Omics Strategy [each addressed with targeted (re)wording]

- Ensure cross-referencing of the four Strategies
- Emphasize partnerships with agencies (e.g., NASA, ONR, DARPA, NSF, USGS, etc.), as well as academia, the private sector, counterpart international agencies; relation to OSTP
- Emphasize the importance of continued baseline work (to be further expanded in the IP – please also see item 2 below). Within the *Strategy*, we will target edits:
 - addressing the development of standards, and the need for inter-calibration of conventional and new approaches,
 - clarifying statements about abundance vs. development of indices of abundance, and
 - including statements acknowledging the need to overcome present uncertainties.

2. Comments not incorporated in the 'Omics Strategy, but expanded in the Implementation Plan (IP)

- Expand discussion on the importance of partnerships, including public-private efforts, foundations, NGOs, intergovernmental agencies, etc., to help continued use of 'omics in the development of aquaculture, bioprospecting, cell-cultivation, applications to biodiversity (BBNJ), among others.
- Overcoming bottlenecks, some of which require budgetary considerations, e.g., large equipment
- Other budgetary considerations, e.g., investments in R2X, operationalization, development of data repositories, etc.
- Call for attention to statistical design, development of standards, interoperability, best practices, etc.

3. Comments requiring no action

- There were a number of very kind comments that were supportive, complimentary, and encouraging. [These require no action and will be thanked in the Acknowledgements section.]
- A recommendation to attend a meeting in Korea on "*'Omics into Regulatory Science*" to disseminate the NOAA *'Omics Strategy*; Dr. J. Davis will attend. [No further action required.]