

OSELP

Oppenheimer Science and Energy
Leadership Program (OSELP)

Cohort 4 Think-Piece Summary

***Building the Future of the Labs from the Lessons Learned
During Covid-19***

BUILDING THE FUTURE OF THE LABS FROM THE LESSONS LEARNED DURING COVID-19

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Overview

We propose two recommendations based on our experience with COVID-19 over the past year.

1) We embrace the transition many of our labs are taking to a hybrid working model, where some people are fully on site, some are fully virtual, and some are a combination. However, we propose the intentional implementation of policies and tools to enable the latter two scenarios to be successful, including “in the background” software to enable serendipitous interactions to help build culture and innovation in this modified mode.

2) We propose that our ability to effectively work remotely enables inter-lab exchanges, with 1-5 people per lab each year relocating to a new lab, from 3 months to a year (or longer), with ½ of their work being performed remotely for their home lab to avoid leaving a hole and facilitating reintegration.

Approach

We approached this thinkpiece with the idea that with boots on the ground at every lab, we would have a unique view into the effects of the pandemic. We collected a variety of operational data as we worked to formulate the focus of the thinkpiece, with the idea that we could comment on lab response to the events of 2020-2021. As the pandemic progressed, we observed a lot of positive actions across the lab. We saw that: 1) the labs were very agile and flexible in implementing solutions to enforced remote work; 2) the safety protocols worked, where the majority of the labs were safer than the surrounding areas and almost all of the labs had fewer than 2 cases transmitted on site; 3) remote work was largely effective. From what we could observe, there were no clear operational pitfalls.

While we were collecting our lab data, we also researched a variety of literature to learn best practices and challenges related to dealing with the pandemic, remote work in general, and remote work during a major crisis. We also met with many senior leaders¹ in addition to learning about many of the labs’ pandemic response during our virtual site visits. This research, along with our own perspectives, led us to four areas that we felt could be impacted by our experience during the pandemic:

¹ Julie Carruthers (DOE)

Susannah Howieson (DOE)

Ron Townsend (Battelle)

Charlie McMillan (LANL)

John Sarrao (LANL CRO, NLCRO lead)

Pat Dehmer (DOE, retired)

Jack Anderson (COO BNL, Co-Chair LOB HR/Benefits Working Group, NLCOO)

- 1) Changes that might need to be implemented as we go from a virtual or hybrid work environment, as the result of the pandemic, to the same environment made as an institutional choice,
- 2) Using what we have learned from effective remote work to enable short term inter-lab transfer to build a stronger national lab community,
- 3) Some groups were more affected by the pandemic than others, particularly women,
- 4) The idea of having a group of scientists across the lab ready to respond during a crisis.

In our discussions, we learned that the COO's and the CRO's were developing a white paper to address some of the Human Resource issues affecting women and other groups—we were invited to be part of this group and contributed in that way. We also learned that Susannah Howieson was developing the idea of a Scientist Reserve Corps—many of our OSELP cohort, and previous OSELP members were part of those discussions, and our thinkpiece team continues to be engaged to share what we learned. Based on these significant efforts by others, we decided to focus on (1) and (2) as impactful ways that we can alter the trajectory of the National Labs from what we have learned over the past year.

Recommendation 1

Proposed Action(s) and Justification

- From our literature review and ongoing publications and articles on the subject, it has become clear that a large majority of workers surveyed by a variety of organizations desire a hybrid work structure.² This also resonates with the information we collected from the Labs by our conversations with Lab COOs and Covid response teams. Research, as well as anecdotal experience, shows offering hybrid work has become a recruiting issue, even amongst the science and engineering workforce. Many executives are reporting concerns with maintaining culture, and ensuring equity in productivity, pay and promotions between onsite and remote workers in a hybrid environment. Therefore, there is a need to introduce some rules and new norms to intentionally guard against these pitfalls, as we adjust to the new normal and the lab of the future.
- Action: Identify and implement policies and practices that *intentionally* describe the ground rules for long term successful implementation and cultural assimilation of employees.
 - Meetings shall continue to have VC options and include video; some software allows one to track who is speaking, so that leaders and managers can purposely draw out those that are more reserved and less likely to contribute during large group settings.
 - Leaders need to model new norms of intentionally pausing meetings when IT fails, to ensure remote workers are included. Alternative is to continue completely remote meetings for all hybrid teams to maintain inclusivity.
 - Onboarding culture should involve intentional meetings with leadership and frequent meetings with first line supervisor, and ideally some time on site to get acclimated to the lab operations and capabilities by working with colleagues to understand the intricacies of lab safety expectations and develop a scientific foundation for the programs through technical mentorship by senior staff..
- Supporting IT Actions:
 - Implement the broad use of “in the background” software tools that enable **rich** virtual engagement, including enabling meaningful “accidental” interactions. Examples include Virbela, Gather.Town, Spatial.Chat, Remo, and Shindig.

² See, for example, the research reported here: Cutter, Chip, “Companies Brace for Reality of Hybrid Work,” *Wall Street Journal* print ed., May 26, 2021.

- Allow labs flexibility in identifying the best platforms; a bonus would be a common platform among the labs in order to improve cross-labs communication and collaboration.

Benefits

- Proactively address barriers to full engagement in the coming hybrid workplace
- Ensure everyone feels they are mission essential
- Tools offer a more “real” virtual feel and allow for unscheduled interactions, just like onsite.
- Levels the playing field between onsite and off-site workers, to ensure opportunities and promotion are equitable.
- Ensures that offsite workers aren’t left out, feeling disconnected with the site mission objectives and/or left with a feeling their contributions are not of similar value to the lab.

Potential Unintended Outcomes to be considered

- Not everyone adjusts quickly to virtual environments. Some individuals have proven their ability to work effectively virtually, whereas for others it was more of a challenge. Additional training may be required to ensure this model can be sustained long term. Some individuals may need 1-1 follow-up by managers to elucidate input. Managers may need training on how to be more intentionally inclusive in group meeting/brainstorming settings.
- There will be a learning curve that may initially reduce productivity for some.

Barriers

- May require adjusted meeting norms, including pausing meetings when VC IT fails until remote participants can rejoin.
- Labs may not have the flexibility required to implement the best tools.
- May require some IT expenditures upfront.
- May be unanticipated cybersecurity concerns.
- Those without access to high bandwidth or behind the firewall may be limited in how they can use these tools.

Implementation Approach

- Pilot use of platform within a division at a Lab. Require daily/automatic login to encourage use and to maximize the potential high-quality, “accidental” interactions between those on and off-site.
- Introduce people to the tools by hosting virtual poster sessions, brainstorming sessions, and coffee hours, for example.

Recommendation 2:

Proposed Action(s) and Justification

- Action: Take the best of work-from-home opportunity and expand across the Labs by establishing a cross-lab scientific exchange program.
- We propose a leadership rotation in a cohort style: Each lab would send 1-5 people to another lab for 3 months to a year (or even longer). The visitors live in the location of the guest lab, spending ½ of their time learning the lab, operations processes, mission, and culture. They stay **remotely** connected to their “home” lab and projects 1/2 time, while on assignment in the rotation.

- Program would allow for reverse exchanges (e.g., “trades”), regional exchanges, short or long (e.g., summers, 6 months, 1 year). The visitors work collaboratively to establish new programs and directions of research or launch recently funded major projects.
- The exchange person could work on programs that already involve a collaborative program ongoing between parent and host lab or could work towards the development of new program collaborations involving the two labs.
- Target demographic: late-early-career to mid-career.

Benefits

- Set the foundation for a new model for DOE to manage the National Labs for tackling large problems collectively,
- Individual participants increase their own knowledge of other labs, gain new perspectives, expand networks,
- Lab Complex benefits overall as the learning is brought back and shared with others at the home institutions,
- Keeping the person actively connected with their home institution avoids creating a hole while they are gone and enables a smooth transition when coming back from their assignment.

Potential Unintended Outcomes to be considered

- Don’t want to create a “two full-time jobs” situation. It would be incumbent on the home institution to reduce the participants’ workload to no more than ~1/2 time, which would have to be able to be done remotely. Benefits and salary should not be reduced.
- Does the program require central coordination? If yes, who is responsible? Should there be other cohort-level training/development made available to cohort?
- Who needs to approve rotation at the individual Labs? Does this require HQ approval?

Barriers

- How funded? LDRD, Program \$\$, Indirect costs. Allowability of costs?
- Would federal employees at NETL be able to participate?
- Family re-location would need to be addressed so as not to inhibit fair participation from a range of people.
- Costs of living and taxes would also need to be addressed.
- Ensuring no gaps in benefits, insurance—fiduciary commitments.

Implementation Approach

- Create a pilot program between a subset of labs. Suggested option for pilot:
 - Align based on purpose (e.g., multi-purpose SC labs, NNSA/Security Labs)
 - Include at least one single purpose SC lab in pilot
- Metrics: Feedback from participants, increased number of collaborative proposals, increased collaborative publications, better recruiting outcomes and retention of staff within the DOE lab complex; qualitative assessment of burden vs benefit to home Lab and visiting Lab.

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