Scenarios for Rearranging Research Priorities

All of these scenarios necessitate a firm and intentional shift toward a team-based approach to your research programs. No matter how collaborative your group may have been before, it will be crucial to ensure that you foster a collective sense that everyone is contributing to the success of the team and the progress of the research mission, regardless of the scope and scale of the contribution. Trust, patience, and generosity will be key.

Research of the literature
The technician in the lab is normally responsible for preparing reagents and supporting experiments (all lab-based activities). New data has taken the research portfolio in a different direction that was unanticipated and an area in which the lab has little familiarity. The technician could be charged with doing research of the literature and in turn sharing what they learn with the lab to inform data interpretation and research direction.

Combining skills development with meaningful data analysis
Many trainees are taking the opportunity to develop skills in statistical analysis or programming, with the hope that these skills will be useful in their research or can be included on a CV for future positions. The trainee *could* use publicly available datasets, even data that's of interest like the JHU COVID data, but it would be more meaningful and motivating if skills development could be tied to the lab's research program. Trainees could analyze datasets that would otherwise be outside of their personal project - helping others in the lab, or even collaborators.

Preparing for re-opening
Resumption of research will likely take longer than the shut-down. A cohesive and coordinated plan for prioritizing experiments, and for ensuring everything is in place, will help get things ramped up quickly. As a group, undertake an assessment of the full research program, and the constraints that each trainee is operating under, to develop a lab plan for eventual return to work. Foster a fully integrated team approach in which everyone contributes to the whole, and everyone benefits. Design tools and reagents so that they are ready to be ordered and delivered ASAP. Even better if you can submit orders, where companies are still operating (eg. Twist Bioscience is still making oligos!).

Improve rigor and reproducibility...
... while preparing papers, grants, and for lab reopening. It's not the most exciting of tasks, but crucial to science. Organizing datasets, creating databases for reagent tracking, or getting up to speed on electronic notebooks can help people reintroduce order and control in their lives, which is especially important in an uncertain and chaotic situation. Different trainees can be in charge of different projects: organizing plasmid tracking and naming conventions; setting up databases; learning and training around the use of electronic notebooks etc. Again, foster a fully integrated team approach in which everyone contributes to the whole, and everyone benefits.

Identify gaps and opportunities
Examine the full scope of the group's research/scholarly mission, identify opportunities for forward momentum, and match people/skillsets to those opportunities.