

## **Department of Energy** Washington, DC 20585

February 22, 2021

## Dear Colleague:

Welcome to the 2021 Genomic Science and Bioimaging Program Annual PI Meeting. What an extraordinary year it has been since we last met! It was almost exactly a year ago that we were all convening in Washington DC for what was to be the last big face-to-face meeting within BER. Two weeks later we were all on lockdown. BSSD staff have remained on telework status ever since. Despite the challenges that remote work has presented, we have tried to maintain our programmatic activities as much as possible and our portfolio continues to thrive due to your fervent efforts. From all of us in BSSD, we thank you for your endeavors to maintain a sense of normalcy in abnormal times and continuing your best efforts to advance your research as the situation allows. The ongoing COVID-19 pandemic has impacted us all in various ways, and we hope, above all, that you and your families have remained healthy and safe.

From BSSD's perspective there have been some remarkable achievements to note this past year. The 2020 Nobel prize in chemistry was awarded to Dr. Jennifer Doudna (UC-Berkeley and LBNL) for her efforts in developing CRISPR-based gene editing, a discovery whose origins trace back to early DOE support and which now is a standard technique used in much of the research presented at this meeting. Also, Dr. Susannah Tringe (LBNL and JGI) was awarded one of DOE's highest honors as a recipient of the 2020 Ernest Orlando Lawrence Award for her work in environmental metagenomics and fostering entire communities of researchers in this area through her position at JGI. Congratulations to both!

It has also been a year of extraordinary scientific publications in our core topics of bioenergy and bioproduct research from the BRCs, biosystems design, plant genomics, microbial and microbiome science, structural biology, and bioimaging research. Additionally, there have been exciting developments within JGI, KBase, NMDC, at the new cryo-EM centers, and at our resources at the DOE Synchrotron Light and Neutron Sources. As a result, the portfolio continues to be rich with amazing ideas and full of promise. As we transition to a new Administration, we are confident that the Division will have a major role in spurring innovations for renewable energy, biotechnology, environmental research, and enabling an expanding bioeconomy. We therefore remain very optimistic on the portfolio's future and wish to thank you again for making the Genomic Science and Bioimaging programs so successful. It is our pleasure to work with you in this exciting and vibrant program.

This year, we have combined the Genomic Science meeting with our Bioimaging PI meeting. Our Bioimaging program seeks to develop new multimodal methods to image and analyze biological processes of relevance to the Genomic Science program. We encourage cross-connections between our Genomic Science and Bioimaging portfolios, and in this spirit, we are privileged to have Dr. Eva Nogales of UC-Berkeley as our keynote speaker to highlight some of the extraordinary developments in imaging science that will hopefully be of interest to everyone. We also have an excellent lineup of plenary speakers, breakout sessions and presentations from team representing key enabling capabilities being developed within the portfolio.

Finally, I would like to extend a warm welcome to our new Early Career awardees, new Sustainability PIs, new Secure Biosystems Design SFA teams, new Computational Biology projects and new Quantum Science-enabled Bioimaging projects. These last three elements are new efforts in the portfolio for this year. As always, we hope this meeting provides context for how your project fits within the larger portfolio and sparks collaborations and/or contacts to enrich your science.

Sincerely,

Todd Anderson, Ph.D. Director, Biological Systems Science Division, SC-23.2 Office of Biological and Environmental Research Office of Science