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Hi,

not sure if I am in the correct user interface because I cannot see the document I am commenting on. However, I have it up in a different window. My only comments are pretty minor.

In the abstract, it has a lot of commas in the first sentence. Perhaps replace the last comma with a hyphen at the end? U.S. computing leaders, including the National Science Foundation, have partnered with universities, government agencies, and the private sector to accelerate research into responses to COVID-19 – providing an unprecedented collection of resources that include some of the fastest computers in the world.

Rephrase "In this current work we expand. . . " to "This current work expands on last month's Leadership Computing article.."

Maybe change the ordering of the second and third paragraph because the reference to the NSF resources comes out of the blue. So perhaps

"This article highlights several Consortium projects and extends the discussion in the previous issue by shifting focus to projects hosted outside the Department of Energy's Leadership Computing Facilities. For example, the National Science Foundation is a major partner in this effort, with many of its funded advanced computing organizations making significant contributions. These include XSEDE, which is managing request processing and allocations for consortium resources, the University of Texas at Austin's Texas Advanced Computing Center (TACC), the Pittsburgh Supercomputing Center (PSC), the San Diego Supercomputing Center (SDSC), and many others. We also broaden the discussion beyond the Consortium by bringing in additional supercomputing-enabled COVID- 19 research to showcase the range of contributions that the national cyberinfrastructure is making to global efforts to stop the pandemic. This article touches on research efforts to learn how SARS-CoV-2 spreads among different populations, the biology and structure of the virus and its mechanisms of infection, and to develop effective vaccines for prevention and antiviral therapies for treatment."

Page 2: 2nd paragraph, second sentence has a missing comma:

"Using Galaxy and HypPhy researchers can perform. . . "

"Using Galaxy and HyPhy, researchers can perform. . . "

Page2 2nd paragraph, 3rd sentence, perhaps rephrase to "Because of the rapid availability of SARS-CoV-2 genome sequence data from infections around the world, researchers can use these to evaluate the degree to which the virus is – or is not –mutating over time."

Page 2 2nd paragraph, 2nd-to-last sentence is missing "evolves"

"Thus far these analyses indicate that SARS-CoV-2 evolves slowly because of an enzyme that does error checking and correction during replication."

P2para3,first sentence: "Another science gateway being used for COVID-19 research is the I-TASSER gateway for automated protein structure and function prediction that is hosted at the San Diego Supercomputer Center"

For Page 2 section entitled "Discovering the Mechanisms of Infection"

The question is whether there are cool images that visualize the spike protein that will end up in the final article? That would be really cool to have.

Page 2: In the description of the molecular dynamics, it says "... to simulate the spike protein on the shorter timescales relevant to biological processes." This seems confusing as the previous sentence complained that it needed to simulate *longer* timescales. Is this what was intended in the sentence? I think it should say "longer timescales relevant to biological processes."

Page 3, 2nd para, last sentence: says "In Baylor College of Medicine's Numan Oezguen's case, molecular dynamics simulations like these 50 days of processing time to simulate one microsecond of viral action."

Perhaps should be "In Baylor College of Medicine's Numan Oezguen's case, molecular dynamics simulations like these typical take 50 days of processing time to simulate one microsecond of viral action."