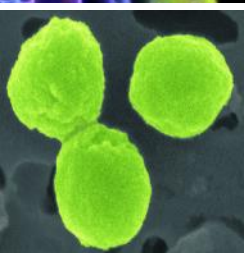
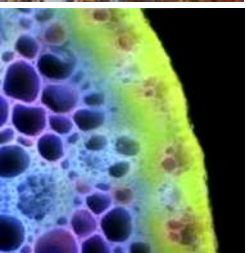


The Future of Environmental System Science



ESS Virtual PI Meeting Webinars

May 19, 2020

Daniel B. Stover, Ph.D.



U.S. DEPARTMENT OF
ENERGY

Office
of Science

Office of Biological
and Environmental Research

Program Evolution

- In the FY 2021 (White House) budget request, BER is requesting funding for Environmental System Science (ESS) instead of requesting funding for the TES or the SBR programs.
 - https://www.energy.gov/sites/prod/files/2020/03/f72/doe-fy2021-budget-volume-4_0.pdf, page 165
- The budget request refers to ESS as an “activity.”
- The proposed/temporary vision for ESS is to: “develop a unified predictive capability that integrates scale-aware process understanding with unique characteristics of watersheds, coastal zones, and terrestrial-aquatic interfaces that are present in, e.g., the Arctic, boreal zone, and the Tropics, including the Great Lakes.”
- Research within ESS will “... provide an integrated, robust and scale-aware predictive understanding of environmental systems, including the role of hydro-biogeochemistry from the subsurface to the top of the vegetative canopy.”

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Science

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Program Evolution

- Based on the vision and statement of research, ESS maps to the same Grand Challenges in the EESSD (formerly CESD) Strategic Plan as the TES and SBR programs did.
- Assuming Congress accepts the proposed change, the new program will be called Environmental System Science (ESS).
- A more generic program name provides more flexibility in program scope.
- Due to the pandemic and associated delays, the TES and SBR program managers were forced to delay planning sessions/retreats until this summer.



Implications

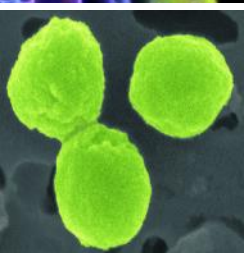
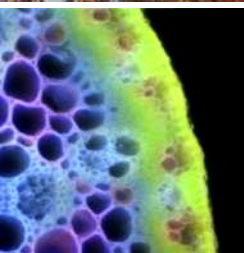
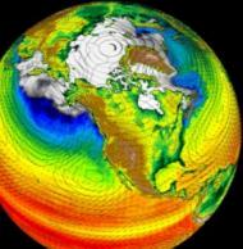
While details are still emerging, here's what to expect:

- ESS will build off the legacies and successes of the TES and SBR programs.
- In the near-term,
 - PI's won't see much of a change in the scope of research.
 - Essentially ESS will have 2 sub-programs that function "business as usual".
 - PI meetings, cyberinfrastructure and other joint activities will continue, but in a more integrated fashion.
 - Planning for a combined program website.
 - ESS will develop a new "mission statement" to focus future efforts solicitations and programs.
 - Program managers may shuffle POC responsibilities due to new team members.

Implications

- In the mid-term
 - SFA's may evolve as they come up for renewals.
 - ESS will form stronger integration with other BER programs.





Terrestrial Ecosystem
SCIENCE



Questions?

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