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Global Science: Brave New World

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Scientists have always viewed their activity as one without borders, and they can be rightfully called first adapters of globalization. Be careful what you wish for! While there are great benefits to working together - e.g., tackling bigger problems, traveling to exotic places, and bringing the world closer together - there are challenges too - e.g., more approvals and longer timescales; larger, more diverse collaborations with different customs; meshing not only currencies but accounting systems. It is too late to go back - and I for one would not want to - and the rules have changed forever. In a small world with three similarly economically powerful regions, dominance is impossible - what's important in the Americas will soon become important to Europe and Asia; what's no longer important to Europe and Asia will soon no longer be important to the Americas. Cooperation is encouraged, competition is bad, and duplication cannot be afforded. The biggest challenge of all is coordination/formation of world projects without a "World Science Foundation." I will use NSF examples to illustrate, including Gemini, IceCube, LHC, and ALMA.