Have you heard the one about the shrimp and the treadmill?

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Did you hear the one about the shrimp on the treadmill?

It's a classic tale of how a government-funded study became shorthand among conservatives for wasteful spending. The researchers who studied the shrimp on a miniature treadmill were ridiculed. The little critter himself wound up on the wrong end of a political skewer, an all-you-can-eat buffet of cruel jokes by everyone from AARP to a presidential candidate.

"I don't want my shrimp going to the gym," remarked former Arkansas governor Mike Huckabee on his Fox News show. "I want them going to the grill, or the oven, and then to the table."

But, like many things in science, the shrimp study was deeper than it seemed.

That's why I was surprised to see U.S. Rep. John Culberson jumping on the shrimp-bashing bandwagon, declaring in a recent e-blast to constituents: "We should focus on basic research and exploration and not million-dollar wasteful studies about shrimp on a treadmill."

Culberson's remarks are significant because the Houston native and seven-term congressman just became one of the most important voices in scientific research in Washington. As the new chairman of the Commerce, Justice, Science and Related Agencies subcommittee, Culberson now oversees billions in research funding for NASA, the National Science Foundation and several other scientific agencies.

In recent interviews with various publications, Culberson describes himself as a science enthusiast, although just about the "pure" sciences, not the social and behavioral varieties. Space is a "pure" science, Culberson declares, and he talks zealously about funding exploration that could someday reveal extraterrestrial life. He reports that just the idea of digging into Jupiter's icy moon, Europa, keeps him up at night.

With such a zeal to tackle hard questions, I called the congressman to see if he'd asked any questions about the shrimp study.

A simple Google search reveals several stories debunking criticisms, including an eye-opening piece by one of the researchers posted in November to the Chronicle of Higher Education's web site. "My name is David," it read. "And I am the marine biologist who put a shrimp on a treadmill – a burden I will forever carry."

In the piece, David Scholnick, a professor of marine biology at Pacific University in Oregon, explained that the point of the study was not to exercise shrimp. It was to study how well today's marine organisms fight bacteria, which could help us understand how much bacteria is ending up in our food. Scientists devised the treadmill to simulate shrimps' movement in the wild.

The treadmill didn't cost millions, Scholnick wrote; it cost less than $50. It was made from spare parts from an old truck, a skateboard and a pump motor. And Scholnick paid the bill out of his own pocket.

Some might argue that for an academic, Scholnick ran his experiment as frugally as any tea party Republican.

But Culberson clung to his talking points, calling the shrimp study a cautionary tale for scientists.

"Our national scientific research institutions have a sterling reputation and they should not damage that reputation with the public," Culberson told me. "Every grant they award, they should think about a headline in the Chronicle or a Tweet."

Culberson repeated that the public's perception is essential and that studies like the shrimp one leave a bad impression.

"Those grant projects are routinely mentioned to me by constituents and taxpayers as examples of waste," he said.

I'm sure they are. And there's no wonder why. The public was riled by the narrative of waste, a false narrative as it turned out.

"You're contributing to that negative perception, are you not?" I asked Culberson.

He repeated how he reveres our scientific institutions and sees himself as their advocate. "It's a good thing they've got somebody in charge of their subcommittee funding looking out for their reputation," Culberson said.

When I reached Scholnick, he seemed pretty confident in NSF’s ability to guard its reputation. Grants are chosen through competitive processes. Goals, significance, benchmarks all must be clearly stated.

"If Rep. Culberson is unwilling to support marine biology and the need to understand the organisms that support a multi-billion dollar seafood industry in this country, he is certainly entitled to his opinion," the biologist wrote in an email. "But, his opinions are not supported by data or I'm guessing the thousands of Texans whose jobs are linked to a healthy marine ecosystem."

Culberson himself probably wouldn't have attacked the shrimp study if the congressman had taken the time to ask a few questions, test his own hypothesis. You know, let a little science get in the way of his politics.

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