Growing Climate Solutions
Path to Positive
Southwest Florida

Think Deeper – Thoughts from the Regional Director, Dr. Puszkin-Chevlin

For the Love of Modeling!
COVID-19 Shows Us How to Trust the Experts

Respect for science and experts has been declining over the past decade, noted Dr. Tom Nichols, Professor at the US Naval War College and author of *The Death of Expertise* (2017). This trend is patently visible in public beliefs around the causes of our changing climate, as 16 % of Americans, and 17 % of Southwest Floridians state that the primary driver of climate change is nature, rather than human activity. But could the COVID-19 pandemic reverse the tide? The answer, as many college professors say, is "that depends."

Skepticism of climate science and climate change impacts exists for several reasons. The fossil fuel industry's vigorous 30-year disinformation campaign, akin to the tobacco industry's deception on the relationship between smoking and cancer, has been well documented.[1,2]But, electronic media has also augmented the reach of a multitude of competing voices with equal volume, often conflating facts and falsehoods, self-publishing opinion as factual reporting, in rhetoric that appeals to audiences of specific dogmas. Educational shortcomings have resulted in a public with a shallow understanding of chemistry and earth science, geography and social studies, as well as a weakened ability for critical analysis, compounding the problem. And, politicization of climate change information, coupled with a polarized electorate, suppresses even casual conversation of climate topics among friends

[1] https://www.scientificamerican.com/article/exxon-knew-about-climate-change-almost-40- years-ago/
[2] https://www.scientificamerican.com/article/exxon-knew-about-climate-change-almost-40- years-ago/

and families, hindering climate change awareness and reinforcing firmly held beliefs.

However, several thought leaders have suggested that the COVID-19 pandemic may be a watershed event for scientific truth. “It was easy to sneer at experts until a pandemic arrived, and then people wanted to hear from medical professionals like Anthony Fauci,” argues Nichols. Indeed, as average Americans and elected officials seek answers to the pandemic threat, medical professionals, epidemiologists and scientists have emerged as trusted messengers, a concept that comfortably translates to the climate change challenge.

The current public health crisis has reacquainted many with basic mathematical and biological concepts including, trend lines, exponential curves and vulnerable populations. It may soon become easier to present data about atmospheric concentrations of CO2 and impacts of longer heatwaves and climate-induced poor air quality on vulnerable populations. The cry to “flatten the curve” in order to prevent overburdening the healthcare system not only taught us the importance of statistical modeling, it impressed upon us the responsibility of collective action. Public distain for people that callously disregard the social distancing recommendations and endanger others, will hopefully result in a similar reaction to people and companies that fail to adopt climate mitigating actions in the future. In the climate field “flattening the curve” means keeping global warming to under 1.5 degrees Celsius; and success hinges on collective action.

However, the hope that this Covid-19 crisis will have course-corrective impact on the looming climate emergency is tempered by concern over how society might respond if epidemiological models fail to accurately predict morbidity outcomes and the benefits of prudent containment actions--- especially in light of the negative economic impacts experienced. If our expert’s models fail to explain the outcomes people are witnessing, the public may grow even more cynical of the value of science and predictive modeling, and increasingly distrust

the expert messenger; further fueling the discourse of climate deniers. More important, shared sacrifices made to implement social distancing must demonstrate quantifiable and equitable positive results. Lives must be saved across the nation regardless of socioeconomic status, race and age. Likewise, environmental justice concerns must also frame solutions to climate challenges. As climate mitigation and adaption will also require behavioral change, the lessons learned from our response to the pandemic must demonstrate that personal responsibility and collective mobilization are effective and yield the best outcomes.