

Science AMA Series: Shaughnessy Naughton, founder of 314 Action and chemist and breast cancer researcher, to discuss why scientists should run for office, Ask Me Anything!

314Action<sup>1</sup>and/ScienceAMAs<sup>1</sup>

<sup>1</sup>Affiliation not available

April 17, 2023

[REDDIT](#)

# Science AMA Series: Shaughnessy Naughton, founder of 314 Action and chemist and breast cancer researcher, to discuss why scientists should run for office, Ask Me Anything!

314\_ACTION [R/SCIENCE](#)

[removed]

[READ REVIEWS](#)

[WRITE A REVIEW](#)

#### CORRESPONDENCE:

##### DATE RECEIVED:

March 28, 2017

##### DOI:

10.15200/winn.149061.15436

##### ARCHIVED:

March 27, 2017

##### CITATION:

314\_Action , r/Science ,  
Science AMA Series:  
Shaughnessy Naughton,  
founder of 314 Action and  
chemist and breast cancer  
researcher, to discuss why  
scientists should run for office,  
Ask Me Anything!, *The  
Winnower* 4:e149061.15436 ,  
2017 , DOI:  
[10.15200/winn.149061.15436](https://doi.org/10.15200/winn.149061.15436)

© et al. This article is distributed under the terms of the [Creative Commons Attribution 4.0 International License](#), which permits unrestricted use, distribution, and redistribution in any medium, provided that the original author and source are credited.



Politics takes money, where do you see scientists going to get the funds to run for office?

[LoveandBonor](#)

When I ran for Congress we did a lot of outreach and received a lot of support from the STEM community. Part of what we are trying to do with 314 Action is leverage that support for other candidates running for office. Our average contribution to 314 Action is around \$30. Our candidate training sessions detail how to create a successful fundraising plan for a campaign. Bottom line - there's no substitute for picking up the phone and asking people to support your campaign.

How do you think scientists can rebuild trust in institutions and with a public that has been trained to believe that anything you can't explain in a sound byte is too complex for them?

"Trust me, I'm a scientist" really isn't any better than "Trust me, I'm rich" or "Trust me because you like me". The message of science needs to be "Trust yourself and evidence". There just doesn't seem to be time to engage from first principles in a YouTube video.

[spinur1848](#)

Part of what we are trying to do is make science both more accessible and applicable to Americans. We do that by engaging more at the community level and by organizing locally. 314 Action is recruiting state and college organizers to do just that. We need to convey the message that science isn't just for scientists - we all benefit from clean water, better technology and research that leads to cures for diseases. Our state and college chapters will be focused on getting scientists and pro-science advocates out into their communities to talk about why the work scientists do is so important to society.

I'm sure you get this one a lot, but some people would argue that science as a field has benefitted from being relatively divorced from politics. If scientists start running for (and holding) office in large numbers, do you think that could compromise the integrity of the scientific community/machine. If not,

what safeguards do you see protecting the field(s) of science against the corruptive effects we see occur in so many other areas that intersect heavily with politics?

[Tedesche](#)

While in an ideal world, science and politics would be completely divorced from each other, the reality is that politicians who are anti-science are not going to stop gutting research funding or denying the existence of climate change. While some believe science should continue solely in an advisory role, I believe the STEM community needs to take a more active role in politics to defend against these attacks. The point being, science is going to be politicized by those who attack it, whether scientists step up or not. I think that by getting in the game and running for office, scientists and science itself will be better represented in the policy put forth by the U.S.

The best safeguard, in my opinion, is the very training scientists undergo. We know evidence matters. That doesn't leave once you get elected. Also, having a more citizen legislature (as opposed to a legislature made up solely of those who are politically connected) also helps to combat this.

I'm sure you get this one a lot, but some people would argue that science as a field has benefitted from being relatively divorced from politics. If scientists start running for (and holding) office in large numbers, do you think that could compromise the integrity of the scientific community/machine. If not, what safeguards do you see protecting the field(s) of science against the corruptive effects we see occur in so many other areas that intersect heavily with politics?

[Tedesche](#)

I would argue that science has always been political (Einstein, Galileo, Darwin, etc) even if scientists viewed science as pure and politics as dirty. What we should all be alarmed by is politicians meddling in science. The House Science Committee has issued over 50 subpoenas since Lamar Smith took over. Meanwhile, Smith has taken hundreds of thousands of dollars from the fossil fuel industry. Any guess what field of science he is subpoenaing?

Hi Shaughnessy,

Context: I'm about to graduate with my M.S. in Biostatistics and I've been accepted into a highly ranked PhD program - also in Biostatistics. However, I'm currently torn between whether pursuing a PhD is the "right thing to do" when the social and political problems dogging our country/world are so tremendous.

Question: Do you think an M.S. would be just as effective as "representing science" in public service as a PhD?

Reason I ask: The difference between PhD/M.S. in Biostatistics is mainly a familiarity with subject matter expertise, as well as general experience, but those three letters can hold a lot of weight amongst the general public.

Thanks!

[trijazzguy](#)

Congratulations on attaining your M.S.! My best advice is to go where you feel you can do the most. When you are passionate about the causes that you are championing, that can be more persuasive than a degree.

This isn't a question of science, but of your group's further politics.

I've been reading some of the articles posted on 314 Action, such as the one on Immigration, to get an understanding of your policies. Since 314 is firmly for sound-science and research, my question is would your representatives be open to pushing research-sound, but unpopular agendas, even if it means losing votes in the next year or becoming a one-term politician?

Politics is a hard racket, the ethics of politics is much different from the politics of nursing, social work, or STEM, so it does eat people up.

[KnightOfTheMind](#)

Great question. We do not have a litmus test for our candidates other than they have a scientific or technical background and support a pro-science agenda. That being said I think it is often easier for "outsiders" in politics to take unpopular stands that they can defend with reason and facts. Scientists in this respect are the ultimate outsiders.

Many scientists are transplants into areas, with comparatively little understanding of the local politics since they have followed career opportunities. With the old adage "all politics is local", how do you see scientists overcoming labels of carpetbagger or just being drummed off the political stage by local party officials?

[sciendias](#)

Have to start somewhere, get involved in your local community. There are a number of groups, especially since the 2016 election that are engaging people directly, outside of the traditional party apparatus. We are one of them!

Hi Shaughnessy,

How do you see the interaction of partisan politics with an insistence of evidence and scientific expertise? Currently most attacks on science seem to come from one side of the political spectrum, although it can and does come from other places as time goes on. How can a scientific organization stand up for science without being forced to "pick a side"?

[superhelical](#)

Politicians of all stripes attempt to bend science to support their causes. Think vaccines, GMOs, climate change, etc. By getting scientists elected we can better combat that. However, only one party has in their platform a patently anti-science stance on climate change so we did feel the need to "pick a side".

Scientists try to objectively assess all evidence to come up with a solution to a situation. This means transparently discussing both sides of an issue. This is basically the opposite of how politics functions in which you will rarely see a politician give any merit to a view they don't support. In politics you hide all rational thought that you used to come up with your decision and you just sell one side.

Do you think the voting public could accept a politician transparently discussing the merits of both sides of an issue or would this be seen as weak and indecisive?

[smileedude](#)

It's definitely a challenge. Scientists are very comfortable with uncertainty and not as comfortable with absolutes. Politicians tend to speak in absolutes. One of the topics we cover in the "communications" section of our candidate training.

Based on everything you've experienced so far...how long until we're electing scientists to office? Until they make up the majority of government positions?

[typicalredditorscum](#)

We've had some candidates with incredible backgrounds express interest in running for office, and we are still going through the more than 3,000 (and counting) candidate submissions we've received from across the country.

We will be making announcements about candidates we will be supporting in the next several months. The best way to follow along would be to sign up for our newsletter on our website [314action.org](http://314action.org)

This is important work and I'm all for it, but I don't quite *get* it. When I was a working scientist, I was politically active but completely uninterested in running for office because I was working on stuff that I liked better. Could you tell us a little bit about what drove you to want to pursue politics more than continue working in research? Have any of the people involved in 314 spoken about what pushed them into wanting to run? Do you think that science/research would eventually draw you back, and do you think that would have any effect, positive or negative, on political viability?

[spinnetrouble](#)

I had been out of the lab for over a decade (working in business) when I decided run. But part of what motivated me was the anti-science rhetoric we hear by too many politicians and the attacks on research budgets and basic research that are short-sighted and harmful to the advancement of our country and economy. I believe we benefit by having diversity in elected office. Yet, at the federal level we have only a handful of representatives with STEM backgrounds. I think we would have a more fact-based and collaborative approach with more people from the sciences having a seat at the table.

A couple of questions:

Has anyone thought towards putting together a "Politics 101" or "Politics in your area" guide in scientific journal format for aspiring politicians with science backgrounds?

Does 314 provide assistance to people who make the leap? How much? How does 314 avoid being vilified as a behind-the-scenes political influence, particularly by opponents of the politicians you assist?

How are you encouraging people to leave background they're comfortable with to spend at least one political term, and possibly the rest of their career, in a completely different industry? Particularly one which tends to be far less rigorously based on data and fact, and far more on presentation, personal charisma, and juggling multiple simultaneous and often incompatible demands?

Do you have scientists shadow or intern to existing politicians (yours or otherwise) to get a hands-on look at what they'd be jumping into, before they make the plunge?

Do you have particular methods of countering anti-science/anti-intellectual voting demographics and campaigns? Or even custom-build them on an as-needs basis? Have any 314-launched politicians been elected so far in the face of such opposition?

Does 314 encourage scientific approaches or a general appreciation for science and logic in electorates even significantly before a 314 candidate nominates? Theoretically, if a non-314 candidate who is still relatively educated/scientific steps up to the plate and looks to be a strong contender, would that be considered a win from 314's long-term goal perspective?

Does 314 encourage candidates to practise political skills such as rhetoric, media presence (catering to the local demographic), personal presence, presentation skills aimed at the media and the general public (as opposed as to grant boards, management structures, and/or student bodies), and so on?

[Gemini27](#)

At 314Action, we are helping candidates at all levels (not just federal) run for office. We have our next candidate training on April 20th in DC where we will go over everything from putting together a campaign team, setting up a communications and finance plan, putting together a field team and organizing, legal and compliance advice to get started etc. Additionally we work with candidates to help them craft their message and launch successful campaigns from the start.

Shaughnessy! 8th district here from upper bucks!

We love you! Do you have plans to run again? :)

[poauma](#)

Much love for Upper Bucks!

Do you think it's possible to balance a career as a scientist and a politician? How do you manage both interests?

[lbman](#)

Get involved at a local level, run for school board or town council that doesn't require a full time commitment.

What can the average person on the street do to help your cause?

[P-cketSuds](#)

Definitely sign up under the take action tab on 314action.org

What can the average person on the street do to help your cause?

[P-cketSuds](#)

We're building out state coordinators and university chapters, holding 314Action house parties and letter campaigns. We want to emphasize that we hold elections every 6 months not just every 4 years and need folks to vote every time!

My question is pretty simple. What protects scientists from the influence of money more than other experts who have previously ran for office? You don't have to dig far into any field of science to discover scientists who have been paid off by companies to produce biased research or articles. Plenty

of scientists have also sold out for their own business interests, using their expert background to peddle products for profit.

[r3dt4rget](#)

Well, being able to rely on a network of small dollar contributors certainly insulates them. Enter 314 Action...

As a seemingly uncommon person interested in both science and politics, I'm a bit overwhelmed and excited to hear of this initiative! I have a few softball questions.

You mentioned advocating at the local, state, and national level. What have you done (and what can citizens do) to lessen the gap between science and politics? And what necessary assets do scientifically-trained representatives provide to the political system?

[DivinelyMinely](#)

Get involved in local politics. Get involved in our local outreach programs, which will help you do so. (Learn more by signing up here <http://go.314action.org/page/s/takeaction>)

Evidence-based reasoning is one asset. Too many politicians in our country don't value evidence. I think scientists who are elected do and will.

As an engineering student with aspirations in local and state level politics, what are some things that I could do to start preparing myself to eventually run for office? Most programs and guidance at my school are engineering or business career-focused.

[LusitaniaNative](#)

Attend our training on April 20th! A portion will be streamed as well. Start a 314Action on your campus. Reach out a campaign you're interested in supporting and volunteer your time. All are important.

You refer to STEM a few times but then only speak toward getting scientists elected. Is this program science-centric or does it truly embrace those of all STEM backgrounds?

I don't mean this as a slight, BTW. Just curious, as someone in the technology field.

[one800higgins](#)

Both scientists and STEM professionals can sign up for our training

Why HAVEN'T scientists ran for office before?

[Brooooooooooooooooooooo](#)

Part of it is that the structure of scientific careers don't allow for a break in continuity in the way that, say, law careers do. Also, there haven't been many role models or support systems for scientists who want to get in the game. That's part of what we are trying to change with 314

As the popularity of "alternative facts" grows in our current political landscape, do you think we'll ever

get back to fact based arguments and debates or will we be staying in this post-trump apocalypse for good? Do you think his many supporters will ever listen to fact based conclusions again?

[modman2](#)

I am hopeful that the "alternative fact" era is a short-lived one. His approval rating suggests that might be the case. I think it is incredibly important for the scientific community to be vocal advocates for the causes they believe in, though. Giving up hope because Trump prevailed in 2016 is not the answer.

How do you plan to address the fact that scientists are specifically maligned by many right wing groups and individuals? When fact and science and even intelligence itself is seen as some kind of dangerous evil in someone's mind, how can you expect to get through to them?

[cacophonousdrunkard](#)

I think part of this starts with education at the local level. If we can show the average person the impact and benefit that science has on their everyday lives, we might change some minds. That's why we are organizing locally and also are training and supporting scientists who wish to run for local offices.

Your primary concern seems to be that politicians are not knowledgeable enough about scientific matters to pass effective legislation.

Is there concern that scientists in elected office may lack the political savvy to the same result?

What are the ideas to prevent this from occurring?

Another concern common to the political landscape is lobbying and / or corruption, where politicians favor legislation in exchange for personal incentives. Do you feel that scientists will be less vulnerable to these temptations?

[DangerMacAwesome](#)

My primary concern is the lack of diversity of experience. The results of this reflected in everything from budget priorities to environmental policy. If someone can learn organic chemistry, she can learn how to write a bill.

Politics unfortunately requires people skills, questionable morals, charisma, a ton of money, the ability to lie and manipulate... And an almost sociopathic drive to do whatever it takes to get ahead. These are things that most STEM majors either don't have or don't want.

[gkp85](#)

I don't share your cynicism. Most people who go into public service do it to advance what they believe to be the public good. Of course there are exceptions, but I think your comment really speaks to the disconnect people feel to their elected representatives. We need citizens to step up and get involved, run for office, get elected and change that perception.

why not start at the local level, why shoot for Federal seats with no experience?

[neuromorph](#)

We're taking an all of the above approach