CRITICA™
INTERVENTION PROTOCOL

TACKLING THE SPREAD OF MISINFORMATION
These protocol elements were derived from research into methods that studies found to be successful for countering misinformation and presenting evidence-backed viewpoints over a variety of communication mediums.

The protocol is based on the idea that providing correct information is necessary but not sufficient to influence a person's beliefs and actions.

Many emotional, social, and unconscious factors are important in determining whether a person will adopt an incorrect belief or misinformed perception about a health/science topic and therefore it is important to engage people with approaches that go beyond reciting corrective information or rebutting misinformation.
Although misinformed posts may be initiated by people who are advocates for a scientifically incorrect position, studies show it is difficult to convince the already-committed advocate.

Instead, we focus on influencing people who have not yet made up their minds about the topic and are seeking information, that is, people who are on the fence or “fencers.”

On many of the health and science topics you will be dealing with, fencers are most of the people who have a belief or position that is not in keeping with scientific evidence; committed advocates against science are the minority.

Therefore, it is less important to “argue” with the original poster than it is to try to move through the elements of the protocol, trying to engage “bystanders” who observe but may not enter the conversation.

With that in mind, it is then less important to make the original poster or other people who participate in the conversations change their minds.
When working online, you will sometimes be interacting with individuals who are part of a community that shares a set of values, goals, and viewpoints. Keep in mind that each comment you make is addressing the entire community as well as the individual to whom you are responding.

Trying to understand the values of the community is important; framing your comments in a way that emphasizes an understanding of those values can help engage your audience. Sometimes certain behaviors may seem counter to community values, like getting vaccinated in communities focused on natural healing. But sometimes reframing those behaviors as commensurate with community values can be helpful for the community to begin discussing how to weigh competing values and understand why someone may share their values but choose a different behavior.

Many people who are part of a group are also ambivalent about the group's position, often trying out different stances and not yet fully committed to the group's overall position. Drawing out that ambivalence can help a person think things through more carefully.
3. EXPRESS CONSIDERATION OF THEIR VIEWPOINT

Make clear that you have read the misinformed statement carefully, while at the same time **minimizing** the amount of **misinformation** you actually **repeat**.

Repeating misinformation, even with the intention of correcting it, **can reinforce the misinformation** so it is best to try not to include the bulk of the misinformed statement when you begin intervening.
Give an accurate introduction of yourself, your affiliations, and your motivations. **Be transparent** but at the same time **gain trust** and make clear that you are genuinely interested in what other people have to say about an issue.

If there are questions about your credentials, you can answer them with accurate answers, but be careful not to imply that the goal is to change anyone’s attitudes, beliefs, or behaviors.

Our main focus is to **understand the motivations** that underlie belief in incorrect ideas about science and health and to **assess motivation for change** among individuals and communities.

While it is always appreciated if our interventions result in people becoming more willing to consider scientific points of view, **we are not trying to convince people to change their behavior** unless they feel motivated to do so. We aim to **ensure that people have all the tools** they need to make **informed decisions**, including accurate scientific information.
5. ASK FOR MORE INFORMATION

Ask the poster to explain what they know about the issue. Use open-ended questions to probe the poster’s beliefs, being careful not to sound critical or judgmental. You are most interested in understanding the poster’s ideas at this point. Ask for clarification and summarize what you think you have heard the poster saying.

Research shows that people become more objective about an issue as they explain their current position because they recognize inconsistencies or gaps on their own.

Bystanders to the online conversation will also be reading along as the poster attempts to explain the basis for their ideas and inconsistencies in the explanation may influence them to consider alternative points of view.
It is especially important to consider the overall community’s values in trying to establish empathy when doing online work. For example, an individual who expresses hesitancy to have their child vaccinated against childhood diseases may be part of an online parent community that seeks to find healthy solutions to problems affecting their children. In this case, it is important to empathize with the community’s overall goal of trying to advance the health and safety of their families.

It is much easier to be empathic with people who have been misled than with people who are deliberately misleading, so keep the former always in mind as you proceed through these steps. By working on establishing empathy, you can also simultaneously establish common ground with people who are interacting.

Use the first-person to make comments that establish an empathic relationship. As people enter the conversation with statements about the health area under discussion, simply acknowledge you have read them and understand how people feel. Remember as you do this that most people who hold incorrect beliefs about a health or science topic are not doing so because of some sinister reason, like trying to make a profit on an alternative product or actually harming people.
Continuing with the childhood vaccination example, it is clear that vaccinating children against diseases like measles and polio is in keeping with an overall community value of maximizing children’s safety.

Look for discrepancies in people’s arguments and inquire about them. Let them express themselves, gently and respectfully point out any discrepancies, and point out that what they are saying may not be in keeping with the goal of being safe and healthy.

Be especially alert for ways in which an incorrect belief may be discrepant from a community’s overall values.

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Remember, the focus is not on the people who have extreme views to change their minds using this technique, the focus is on the bystanders or fencers. You can try to respond to some hostile comments by giving facts, because these are going to be read by the bystanders too. Even respectfully pointing out that the commenter’s behavior is disrespectful or aggressive can be helpful to set higher norms for online interaction.

Be careful not to antagonize or preach. Ask open-ended questions after allowing people to express their negative beliefs. Be reflective and recognize if you are becoming defensive about hostile comments or frustrated.
Feeling there is something we can do helps us change our minds, even when the topic is something we have firm prior beliefs about. Invite people to do their own fact checking and give a link to one good source they are likely to trust (i.e., don’t send anti-government extremists to the FDA website).

Self-affirmation or self-efficacy — a sense of confidence that we are in control of our motivations, ideas, and behaviors — has been shown to be important in promoting behavior change.

We recommend encouraging a sense of self-efficacy by showing people that they are able to research and understand the facts on their own, even though it is always important to take into account what experts on any health or science topic have to say. People are also capable of recognizing their own biases and taking them into account as they weigh conflicting facts and evidence.
When offering corrective information, it is important to do so in an open, engaging, and non-technical way. Often it helps to first “ask permission” to offer information, e.g., “I would like to offer some information that is a bit different from what you have said, would that be okay?” Sounding dogmatic or condescending (“I am the expert and you should listen to me”) will generally be counterproductive.

This is a controversial technique, so it is important to know some context around it. In short, rebuttal can work. But it can also backfire, where people double down on their mistaken beliefs. What is important is using it sparingly, carefully, and quickly pivoting to other techniques if it either doesn’t seem to work or makes the situation worse.
It is very important to respond in different ways within the area of interest. One study showed that science debunking tends to say the same thing regardless of the point being made by the misinformed. For example, if a misinformed post says vaccines violate civil liberties, we recommend **not countering with standard facts** about vaccine safety **but thinking carefully about the underlying issue** and framing your response to directly address the “freedom” issue. It is important to have a repertoire of subtopics of response. **When providing corrective information, remember these two principles:**

1. **Use positive framing** (for example, instead of “fluoride does not cause brain damage” try “fluoride in the small doses added to our drinking water has been hugely effective in reducing children’s tooth decay and oral infections”).

2. **When providing correct information, try to provide an alternative explanation.** For example, “you say there is a relationship between an increased number of cases of autism and an increased number of children who get vaccines, but correlation isn’t causation. Two things can go up at the same time, even by coincidence, even if a statistical test shows an association between them. That same association can be found between rising cases of autism and the number of people who buy electric cars or the number of people who stream programs on television.”

Keep in mind that backfire (aka psychological reactance or a “boomerang” effect) can happen. There is not currently a consensus among social scientists that gives sufficient guidance on how best to avoid it. Know it exists, be ready to recognize it, and quickly change tactics if necessary.
Tell (true!) narratives whenever possible. An often-quoted statistic is that stories are remembered 22 times more than facts. This may seem unscientific but remember that you have provided correct information based on the best available data, so it is okay to balance that with a personal story or two. If you have an electric car, for example, you might explain to a climate change denier how easy and inexpensive it has been to own and operate one.
Even if we disagree about certain controversial topics, we can often find a point on which we do agree. We all want to live safely and see our children thrive, for example. Beliefs can be difficult to change if a person holds them because of a group affiliation, i.e. If they see themselves in one group and you in another, distrusted group. But finding ways to minimize that distance by connecting over other shared values has been shown to be effective in changing how people view a controversial issue.

This is especially important when considering the online community with which you are interacting. Even if you are dealing with a group that holds political opinions that are widely divergent from your own, you can try to find some common values.

For example, take the example of a group that believes that face mask mandates violate civil liberties. Although you may not agree with that opinion, you may agree with the overall importance of protecting individual freedoms. Acknowledging that shared value may help narrow the perceived gap between you and the online community with which you are interacting.
Once you have started on the road to providing correct information, do not hesitate to repeat the correct information. Many people will not remember something they see only one time, but after several times will commit it to permanent memory. Remember that they have probably heard misstatements many times.
14. LISTEN CAREFULLY FOR “CHANGE TALK”

As you proceed through the conversation, listen carefully for any evidence that people joining the conversation may be open to changing their minds. This is called “change talk.” Affirm that whenever possible.

For example, if someone who has expressed doubts that vaccines are effective says something like “I guess you are saying that even though vaccines can't prevent someone from getting sick, they prevent you from getting really seriously sick,” be sure to acknowledge that comment by saying something like “yes, that is what I think. What do you think about that?”