**Discussion Guide for Faculty/Principal Investigators/Lab Managers: *Fostering a Safety Culture in Stanford Labs***

**Background on Stanford’s Laboratory Safety Culture**

* A culture of excellence extends throughout the research and teaching activities at Stanford, and the university aspires to a similar culture of excellence for laboratory safety in its (our) research and learning environments.
* A task force was convened to proactively engage in thoughtful, creative, and scholarly discussion regarding laboratory safety to: (1) better inform the university research laboratory community of the current status of laboratory safety culture at Stanford, and (2) identify opportunities for its continued advancement.
* One of the most critical findings of the task force was the clear recognition that Faculty/PIs are the single most important element for developing and sustaining a strong, proactive laboratory safety culture, and must clearly communicate to and regularly reinforce with everyone within their groups that safety within the research laboratory is a top priority.
* To that end, this discussion guide and accompanying video, produced by the Dean of Research, are designed to foster conversation around a positive laboratory safety culture and to reinforce that safety is a core value on campus.

**Actions for Faculty/PIs/Lab Managers to Advance Stanford’s Laboratory Safety Culture**

To facilitate discussion[[1]](#footnote-1) about safety culture within your research and teaching laboratories:

1. Watch video titled *Safety Culture in Academic Research Laboratories* [(CLICK HERE TO PLAY VIDEO)](https://www.youtube.com/watch?v=v5agbBf360I)

* Professor Robert Waymouth of Chemistry, and current chemistry PhD candidate with the Wender Group, Jessica Vargas, discuss their experiences and perspectives on the importance of a strong safety culture in academic research laboratories at Stanford.

1. Lead a discussion about laboratory safety culture:

* After viewing the video with your lab group, initiate a discussion with your researchers using the suggested questions in Attachment A.

**Attachment A – Discussion Guide for *Safety Culture in Academic Research Laboratories***

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| ***General statement about lab safety culture discussions:*** Sometimes lab safety culture can be challenging to discuss, but clear and open communication helps to reinforce the premise that safety is, and should be, a top priority in the laboratory. Some questions are a fill-in-the-blank, while others involve free response designed to elicit dialogue. |

1. **Main themes and attitudes in the video:** What are some of the main themes around safety culture that are exhibited throughout the videos? Please share some attitudes you noticed present throughout the film (e.g., safety is a top priority for senior faculty; safety is an institutional value, safety of everyone in the lab is important, etc.)
2. **Reinforce and reassure that you support safety within the lab environment:** Within research there is a clear indication that lab leaders set the tone for safety culture within research labs; please share a statement in your own words, in the form of: “I want you all to know that a strong safety culture for our lab is important to me as your (insert title here, PI, lab manager, senior researcher..) because...”
3. **Communications about safety:** Anyone with safety concerns regarding laboratory operations should feel comfortable discussing them with colleagues, as well as raise the issues to their PI/Lab Manager without fear of repercussions. What are ways in which our lab can further an environment where these safety concerns can be openly discussed?
4. **Good science is safe science**: What are systems we have established in our lab that promote executing science in a safe manner? What operations or procedures could lead to an accident or near-miss which could affect the integrity or continuation of our work?
5. **Methods for active participation:** Reporting and discussing incidents and “near-misses” are examples where lab personnel can actively promote a culture of safety. Brainstorm ideas for your lab to facilitate active participation. Share an example where a “near-miss” occurred and how the lab addressed it.
6. **Open discussion:** Any questions or concerns about the safety culture of the lab?

Additional Resources Available:

1. [Attributes of a Strong, Positive Research Laboratory Safety Culture](http://web.stanford.edu/dept/EHS/cgi-bin/lsctf/sites/default/files/Attributes-of-a-Strong-Lab-Safety-Culture.pdf)
2. Video and Discussion Guide for Senior Leadership and Faculty: *Safety as a Core Value in Stanford Laboratories*

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* A task force was convened to proactively engage in thoughtful, creative, and scholarly discussion regarding laboratory safety to: (1) better inform the university research laboratory community of the current status of laboratory safety culture at Stanford, and (2) identify opportunities for its continued advancement.
* One of the most critical findings of the task force was the recognition that Stanford Leadership at every level, from senior leadership through deans and department heads, must promote and reinforce the need for a strong, positive safety culture as a core value in research laboratories at Stanford.
* To that end, this discussion guide and accompanying video are designed to further discussion around a positive laboratory safety culture and to reinforce awareness of safety as a core value on campus.

**Actions for Senior Leadership and Faculty**

To facilitate discussion about safety culture within your research and teaching units:

1. Watch video entitled *Safety as a Core Value in Stanford Laboratories* at Dean or faculty meetings. [(CLICK HERE TO PLAY VIDEO)](mailto:https://www.youtube.com/watch%3Fv=mjxL_V-BuOk)

* Stanford Vice Provost and Dean of Research, Professor Ann Arvin, and the Dean of the Stanford School of Engineering, Professor Persis Drell, discuss their perspectives on the importance of ensuring and advancing safety as a core value at Stanford, speaking from personal experiences as researchers and institutional academic research program leaders.

1. Lead a discussion about laboratory safety culture.

* After viewing the video with your group (e.g., Deans with department chairs; department chairs with faculty), initiate a discussion using the suggested questions in Attachment A.

**Attachment A – Discussion Guide for *Safety as a Core Value in Stanford Laboratories***

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| ***General statement about lab safety culture discussions:*** Sometimes lab safety culture can be challenging to discuss, but clear and open communication helps to reinforce the premise that safety is, and should be, a top priority in the laboratory. Some questions are a fill-in-the-blank, while others involve free response designed to elicit dialogue. |

1. **Main themes and attitudes:** What were the three most important messages in this video? Discuss each point and the greater role it plays within the context of Stanford University.
   1. ***PI’s set the tone for safety culture within the Lab***: “Don’t worry students never listen to you; remember they are always watching you” *Robert Fulghum, Author [ALTERNATIVE QUOTE TO CONSIDER: “Be the change that you wish to see in the world.” –Mahatma Ghandi]*
   2. ***Safety is important as a core University Value:*** Academic leaders need to regularly discuss the value of safety in their meetings with school and departmental leaders and faculty
      1. Important to Researcher - we are creating the next generation of science and thought leaders and should instill in them the core value of safety
      2. Important to Faculty – a robust safety culture keeps minor incidents minor
      3. Important to Institution – accidents are not common, but can be devastating
   3. ***Good Science is Safe Science*** –Stanford is a world leader in scientific research and education. Stanford’s culture of excellence must extend to the habits and behaviors that define Stanford’s Lab Safety Culture.
2. **Reinforce and reassure that you support safety within the university:** Within research there is a clear indicator that leaders set the tone of safety culture within the institution and research labs. Please share a statement in your own words, in the form of “I want you all to know that a strong, positive safety culture in our research laboratories is important to me as a (dean, department chair, principal investigator...) because....”
   1. **Relate an incident or near miss experience that could have severely impacted your career (or in another lab in your field).**
   2. **…….**
   3. **…….**
3. **Growth of safety culture:** Continuing to develop and grow a culture of safety on campus is a high priority for senior university leaders at Stanford. What are institutional systems we have established to promote executing science in a safe manner? What are some of the obvious risks to the greater university if we fail to establish strong, positive culture of safety?
4. **Empowering faculty/PIs:** How can we, as school and department leaders, help empower faculty and PIs to embrace and advance the culture of safety within their laboratories? What conversations and mechanisms can be used to assist in this?
5. **Communications about safety:** What are some of the ways in which we can better promote sharing of safety lessons learned and best practices between labs and departments? How would sharing this information help improve the culture on campus overall?
6. **Open discussion:** Any questions or concerns about the safety culture of the lab?

Additional Resources Available:

1. [Attributes of a Strong, Positive Research Laboratory Safety Culture](http://web.stanford.edu/dept/EHS/cgi-bin/lsctf/sites/default/files/Attributes-of-a-Strong-Lab-Safety-Culture.pdf)
2. Video and Discussion Guide for PIs and Lab Managers: *Safety Culture in Academic Research Laboratories*

1. This discussion can be facilitated by a PI or lab manager among a research lab group (with or without the PI present), or in a departmental safety committee meeting with faculty, researchers, and grad students present. [↑](#footnote-ref-1)