

Managing my life, my career, and the little bumps along the way — Kathleen Fisher

Lecture 1 - June 27, 2025

The talk offers insights into Dr. Kathleen Fisher's professional and personal journey, highlighting key milestones from her academic pursuits and career progression, including roles at AT&T, DARPA, and Tufts University. It outlines her "Winding Life Path," which involved adapting to various challenges and unexpected opportunities, such as the academic job market and a unique Google interview request. The document emphasizes "Guiding Principles" that shaped her decisions, including the importance of enjoying her work, maintaining marketability, prioritizing personal relationships, striving to make a difference, and contributing to her communities. Finally, it shares valuable "Lessons Learned" regarding time management, effective communication, and the cultivation of leadership skills, particularly stressing the significance of trustworthiness and respectful interactions.

1 A Dynamic Career Path

Kathleen Fisher's career background is notable for its blend of academic, industrial, and governmental roles. She started her PhD at Stanford in 1991, following her marriage in 1990 and the birth of her daughter Elaine in 1992. Upon finishing her PhD in 1996, she joined AT&T as a researcher, rather than immediately pursuing a professorship, because the academic job market in Computer Science was not favorable at the time. Later, she became a Program Manager at DARPA in 2011 and a full professor at Tufts in 2014, eventually becoming the CS Department Chair at Tufts in 2016. In 2021, she began serving as Director of I2O at DARPA. Her personal life also saw significant events, including a divorce in 2000 and remarriage in 2002. Her career path demonstrates adaptability and strategic decision-making. For instance, when offered an interview at Google, she successfully requested interviews for her husband and ex-husband, which resulted in her husband working at Google. Furthermore, while working at I2O, she recognized her enjoyment of leadership and chose to remain there over taking a Dean position at Northeastern.

2 Guiding Principles for Life and Career

Kathleen Fisher navigates her life path using a set of guiding principles:

- Enjoy What I Am Doing Most of the Time.
- Be Marketable at the Kinds of Institutions I Want to Work For: This principle is rooted in the belief that "The only real job security is being hirable". While at AT&T, she actively maintained her skill set by teaching classes and getting her name on teaching evaluations to demonstrate her teaching ability, and she also practiced grant writing. These efforts proved beneficial when she transitioned to Tufts.
- Have a Great Relationship with My Husband, Daughter, Extended Family, and Friends and a Life Outside of Work: She emphasizes the importance of disconnecting from work and relaxing, for example, through playing golf. She also maintains "sleep discipline," committing to getting 7 hours of sleep a night, and uses calm audiobooks if she wakes up during the night.
- Striving to Make a Difference: For Fisher, doing work she finds personally meaningful is extremely important. She is highly motivated by the mission to address vulnerabilities in critical infrastructure and software, noting that adversaries exploit these weaknesses. She states that current approaches are reactive, patching vulnerabilities "post-facto". She warns that a major conflict could be lost "on day one" due to vulnerable military systems, many of which were built with the outdated assumption of being air-gapped. She highlights that we possess the knowledge to build secure software but often choose not to, making the application of formal methods to solve these vulnerabilities a significant motivator for her.
- Contributing to the Vibrancy of the Communities to Which I Belong.

3 Key Lessons Learned

- Dr. Fisher shares several crucial lessons derived from her experiences:
 - Time Management
 - She acknowledges that "there is always more to do".
 - When deciding whether to take on a new task, she advises referring to her guiding principles, estimating the time required, and avoiding overload, stressing that it is "much worse to say yes and do a bad job than to say no".
 - She finds it is generally acceptable to decline tasks, particularly if done promptly.



- Communication Skills:
 - These skills are "incredibly important".
 - It is vital to know your audience and pitch your message appropriately. For example:
 - $\ast\,$ NSF proposals should describe scientific innovation and societal benefits.
 - * DARPA proposals focus on how the work will "change the world," with the necessary science being a secondary point.
 - She recommends the book "How to Know a Person: The Art of Seeing Other People Deeply" by David Brooks.
 - A simple communication tip is to ask value or meaning questions instead of fact-based questions to keep a conversation going.
- Leadership Skills:
 - While often viewed with suspicion in academia, leadership skills are "incredibly valuable at many different levels" and "can and should be learned".
 - She suggests that it's never too early to start developing these skills and that volunteer organizations are a great way to acquire them.
 - Her Leadership Principles include:
 - * Being trustworthy.
 - * Treating everyone with respect, which includes starting and ending meetings on time.
 - $\ast\,$ Giving hard feedback when necessary in a compassionate but clear way.
 - * Having closed feedback loops to prevent mistakes from escalating into catastrophes.

In essence, Kathleen Fisher's career exemplifies a holistic approach, proving that a fulfilling and impactful professional life can be built through strategic adaptability, clear guiding principles, and continuous development of essential skills like communication and leadership, all while maintaining a crucial balance with personal well-being and a commitment to making a tangible difference.