

2. NCI's role in AI research: current activities Given these successes, it is clear that AI technologies hold immense promise to further improve the care of people with cancer and to facilitate cancer research. With this potential, it is incumbent on NCI, as the world's largest supporter of cancer research, to consider and support the development of AI/ML technologies. There are several ways that NCI is already addressing this need in critical areas: generating large, publicly available, curated datasets that are ready for ML applications; training the next generation of scientists interested in both AI and cancer; supporting methodologic work leading to novel AI/ML approaches that are well-suited for cancer research; procuring adequate and novel computer architectures for future AI/ML projects; and assuring AI/ML research and application occur in ways that are socially and ethically responsible.