



Science Advancement & Outreach  
A DIVISION OF PETA

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February 2, 2026

Dear Members of the National Cancer Advisory Board's Ad Hoc Working Group on Extramural Research Concepts and Programs:

I am writing as a stem cell biologist and Research Associate with PETA's Science Advancement and Outreach Division to urge the Ad Hoc Working Group to request that extramural research priorities for the National Cancer Institute (NCI) align with—and ideally go beyond—NIH's April 2025 commitment to prioritize non-animal methods (NAMs) and reduce animal use.

Despite notable progress in early detection and screening,<sup>1,2</sup> cancer remains the second leading cause of death in the U.S.<sup>3,4</sup> A key driver of this persistent burden is the continued use of animals to study cancer biology and develop treatments. Even with substantial investment, the success rate for oncology drugs remains below 10%.<sup>5</sup> This failure reflects profound genetic, molecular, immunological, and cellular differences between humans and other species, which prevent animal experiments from accurately identifying effective human cancer therapies.<sup>6</sup>

The methods used to create animal models of human cancers—particularly xenografted and genetically engineered animals—add even greater scientific limitations.<sup>7,8</sup> Xenograft approaches introduce artificial biological conditions by placing human tumor cells into other animal hosts, fundamentally altering tumor behavior and treatment response (i.e. make them more animal-like and less human).<sup>9</sup> Genetically modified animals offer limited control over gene expression levels and may produce unintended biological effects.<sup>10</sup> These models also fail to replicate the sporadic, heterogeneous, and evolving nature of human tumor development, producing results that do not translate to the clinic.<sup>11</sup>

Non-animal, human-based methods offer powerful, mechanistic insights—often using a patient's own cancer cells—in a physiologically meaningful environment.<sup>12</sup> These approaches include bioprinted tumor models, organ-on-chip systems, and organoids, which can be used to test potential cancer therapeutics,<sup>13,14,15,16,17</sup> predict treatment response,<sup>18,19</sup> identify biomarkers,<sup>20</sup> and study the tumor microenvironment and neo-vasculature.<sup>21,22</sup> In parallel, advances in cancer genomics<sup>23,24,25,26,27</sup> and machine-learning tools<sup>28,29,30,31</sup> are transforming diagnosis and enabling real-time predictions of therapeutic response.

As NIH expands its investment in non-animal research, exemplified by the establishment of the Standardized Organoid Modeling Center,<sup>32</sup> the Ad Hoc Working Group can—at the very least—play a critical role in ensuring that NCI's extramural portfolio advances human-relevant

science and aligns with NIH's broader priorities of reducing animal use. But this is only a start. The Ad Hoc Working Group should look toward phasing out extramurally funded animal experimentation entirely. Our Research Modernization NOW report offers a blueprint for this transition and can be accessed using the following link: <https://www.peta.org/wp-content/uploads/2025/11/Research-Modernization-NOW-FULL.pdf>. Information on cancer research and carcinogenicity specifically can be found on pages 25 and 66, respectively.

Thank you for considering these recommendations.

Sincerely,

A handwritten signature in cursive script that reads "Gabby Vidaurre".

Gabby Vidaurre, Ph.D.  
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