Cancer moonshot?
We've already landed

Alan Blum (Zachary Riggins)
On the heels of President Obama's announcement in May of the $1 billion National Cancer Moonshot Initiative, a report last week of the failure of the heavily advertised lung cancer drug Opdivo to live up to its marketing promise calls for a reality check.

This new kind of drug, which harnesses the body's immune system to fight cancer, proved no better than conventional chemotherapy, which selectively kills cancer cells. At best the drug extends life by an average of three months--and at an astronomical cost of $150,000 for the initial treatment and $14,000 a month thereafter.

The failure of innovative but unaffordable approaches to cancer treatment should remind us that we can and must prevent more people from getting cancer.

Not long ago while chatting with a man in the neighboring seat on an airline flight, he asked me what I did for a living. "I'm a family physician with a focus on preventing cancer and heart disease," I said.

"Oh, that's wonderful work, doctor. I hope my son who's pre-med will follow in your footsteps. But tell me, do you think there'll be a cure for cancer in our lifetime?"

After pointing out that cancer is not a single disease but rather dozens of related diseases in which cells in various parts of the body go haywire, I noted that there have been great advances in the treatment of many cancers, notably leukemia, testicular cancer, and breast cancer. Then I added, "Actually, we have a foolproof cure for nearly 40% of all cancers."

"Really? That's great news. But what's this cure?"

"Not smoking."

My seatmate pulled away from me as if I'd sneezed in his face. "Oh, I get it," he said with disgust, "You're just one of those anti-smokers." He didn't speak to me for the rest of the flight.
I mean no disrespect to researchers toiling away on innovative immunologic and genomic approaches to cancer treatment. And I don't want to take away from the important work of the American Cancer Society (ACS) in assisting patients with cancer and educating caregivers about it. In its 2016 advertising campaign, the ACS claims, "If we could all focus our compassion on the growing cancer epidemic, think of the lives we could save. 1 in 7 people around the world die from cancer. Help us change this statistic. Join us in our mission to end the pain and suffering of cancer." But there is no mention of the leading, entirely avoidable cause of cancer: cigarette smoking.

In their recent book *The Death of Cancer*, Dr. Vincent DeVita, former director of the National Cancer Institute, and co-author Elizabeth DeVita-Raeburn express their frustration with the conservative, risk-averse cancer research establishment. But my greater dismay emanates from the shirking of responsibility by national health agencies, cancer centers, the ACS, and organized medicine to do more to end the smoking pandemic.

According to surveys of patients, over half of physicians fail to talk to their patients about smoking. No doubt they think the subject is too intellectually simplistic and even a waste of time.

At most public health schools, which should be taking the lead in communitywide tobacco control programs, the battle has become less about fighting smoking than about fighting over grants to write papers about fighting smoking. The nation's largest college teachers' pension fund, TIAA-CREF remains one of the largest investors in tobacco stocks. And next month's national fundraising telethon Stand Up To Cancer will salute several sponsors that still manufacture, sell, or promote cigarettes, such as the technology giant Siemens, which makes cigarette-manufacturing machinery for the world's major tobacco companies and publishers TIME Inc and Conde Nast, which still publish cigarette ads in their respective magazines such as *Sports Illustrated* and *Glamour*.

Alabama remains one of the few states without a statewide clean indoor air act. Although more than 8600 Alabamians die from cigarette caused diseases each year (by comparison, motor vehicle accidents claim the lives of 900) and although Alabama has the ninth highest smoking rate in the nation, the state has cut its funding for anti-smoking programs. Less than 2% of the annual payment from the tobacco industry to the state under the 1998 Master Settlement Agreement reached with the state attorneys general--funds that were intended to be directed primarily to curb smoking—is used for that purpose.
By all rights, lung cancer should have been included along with smallpox as one of the diseases that was eradicated in the 20th century. Instead, to the undying shame of the health professions--and due to the untiring energy of the tobacco industry--the production, distribution, marketing, and use of cigarettes continues to grow in every corner of the world. The medical and public health communities, not to mention our elected officials and the business sector, bear a great part of the blame for their foot-dragging and failure to act decisively and fearlessly on what we knew for certain more than 52 years ago when U.S. Surgeon General Luther L. Terry, an Alabamian, released the landmark report that named cigarette smoking as the leading avoidable cause of lung cancer. This year more than 480,000 Americans will die from smoking-caused diseases, including over 160,000 from heart disease 160,000 from lung cancer. And the number is growing.

We landed a man on the moon in 1969. We've known even longer how to prevent over a third of cancer deaths. Let's not keep pretending otherwise. We all have a personal responsibility to prevent teenagers from taking up cigarette smoking and to help our friends and relatives who still smoke end this irredeemably harmful addiction.