

July 25, 2023

Sundar Pichai
Chief Executive Officer
Google, LLC
1600 Amphitheatre Parkway
Mountain View, CA 94043

Dear Mr. Pichai:

I write to express my concerns and request additional information related to the disturbing December 2022 *ProPublica* report about Google's confidential attempts to secure exclusive access to tissue samples held at the Department of Defense's (DoD) Joint Pathology Center (JPC).¹

The JPC contains more than 31 million blocks of human tissue and 55 million slides, including many rare samples, making it "the federal government's premier pathology reference center supporting the Military Health System (MHS), DoD and other federal agencies."² It is "the world's oldest and largest repository of rare pathology specimens"³ and archived tissues at JPC have contributed to historic breakthroughs like the first genetic sequencing of the 1918 influenza virus.⁴ Indeed, Google described its potential as "on par with the Human Genome Project" – which resulted last year in the first complete human genome sequence – for "its potential for strategic, clinical, and economic impact."⁵ Access to this data could be used "to design algorithmic models that can identify patterns a pathologist might miss."⁶

I am alarmed by reports that Google tried to privately broker a deal to secure exclusive access to JPC data.⁷ According to the *ProPublica* report, Google approached JPC in 2015 to pursue the valuable – and potentially profitable – pathology slides, undermining the public government

¹ ProPublica, "Inside Google's Quest to Digitize Troops' Tissue Samples," James Bandler, December 12, 2022, <https://www.propublica.org/article/google-human-tissue-jpc-military>.

² ProPublica, "Inside Google's Quest to Digitize Troops' Tissue Samples," James Bandler, December 12, 2022, <https://www.propublica.org/article/google-human-tissue-jpc-military>; Committee on the Review of the Appropriate Use of AFIP's Tissue Repository Following Its Transfer to the Joint Pathology Center, Board on the Health of Select Populations, Institute of Medicine of the National Academies, "Future Uses of the Department of Defense Joint Pathology Center Biorepository," December 13, 2012, <https://www.ncbi.nlm.nih.gov/books/NBK236827/>.

³ SXSW, "55M human Tissue Samples + AI = Better Medicine | SXSW 2021," <https://www.youtube.com/watch?v=LIE-E1hAbug>.

⁴ ProPublica, "Inside Google's Quest to Digitize Troops' Tissue Samples," James Bandler, December 12, 2022, <https://www.propublica.org/article/google-human-tissue-jpc-military>.

⁵ *Id.*; National Human Genome Research Institute, "The human genome sequence is now complete," <https://www.genome.gov/about-nhgri/Director/genomics-landscape/april-7-2022-the-human-genome-sequence-is-now-complete>.

⁶ ProPublica, "Inside Google's Quest to Digitize Troops' Tissue Samples," James Bandler, December 12, 2022, <https://www.propublica.org/article/google-human-tissue-jpc-military>.

⁷ *Id.*

contracting process that would typically include soliciting competitive bids to make sure any agreement maximizes the benefit to the public interest.⁸ Google launched its years-long campaign by submitting an “unsolicited proposal,” which would have provided the company with “‘exclusive access’ to the data for at least four years.”⁹ The proposal included a “requirement that it be able to charge the government to store and access the digitized information,”¹⁰ effectively excluding the government from tapping into its own data unless it paid a fee to Google. In an effort to cover its tracks, Google also inserted a non-disclosure agreement into the proposal, and disturbingly, may have attempted to improperly influence the process by making an employment offer to a DoD employee.¹¹ Further, this DoD employee had a Google corporate email address and access to Google corporate files.¹²

Google’s secretive maneuvers raised alarms for DoD staff charged with managing the JPC. One DoD engineer shared that he “was dismayed by the relentlessness of Google’s advocates in the department” and concerned about “some big tech company monetizing [servicemembers’ biological data].”¹³ Another JPC leader noted his discomfort with the request “not [to] disclose what seems to be a contractual relationship to the press,”¹⁴ a particularly concerning request given DoD publicly announces contracts on their website almost daily.¹⁵

Despite Google’s best efforts to obtain exclusive access, JPC issued a request for information in 2020 for a pilot project to modernize its archives.¹⁶ Google doubled down on its brazen tactics after the company lost the pilot project to Johns Hopkins.¹⁷ In a letter to DoD, Google wrote “that the company had been unfairly excluded from ‘full and open competition,’” a bold claim considering the frequent interactions between Google and JPC over the better part of the last decade.¹⁸ Frustrated by its lack of success at DoD, Google launched a lobbying campaign in Congress, where the company secured favorable report language in the *National Defense Authorization Act for Fiscal Year 2023*¹⁹ (NDAA FY2023) stating that the “process by which the JPC has chosen to digitize [its archives] may not fully incorporate advances in technology to scale this effort in a timely manner.”²⁰ The language also “encourage[s] the Department [of Defense] to apply advancements already developed, such as through the use of an augmented reality microscope developed by the Joint Artificial Intelligence Center and the Defense Innovation Unit” – a microscope whose software was conveniently engineered by Google.²¹

⁸ *Id.*

⁹ *Id.*

¹⁰ *Id.*

¹¹ *Id.*

¹² *Id.*

¹³ *Id.*

¹⁴ *Id.*

¹⁵ U.S. Department of Defense, “Contracts,” <https://www.defense.gov/News/Contracts/>.

¹⁶ ProPublica, “Inside Google’s Quest to Digitize Troops’ Tissue Samples,” James Bandler, December 12, 2022, <https://www.propublica.org/article/google-human-tissue-jpc-military>.

¹⁷ *Id.*

¹⁸ *Id.*

¹⁹ *Id.*

²⁰ National Defense Authorization Act for Fiscal Year 2023, H.R. 7900, <https://www.congress.gov/congressional-report/117th-congress/house-report/397/1?overview=closed>.

²¹ *Id.*; ProPublica, “Inside Google’s Quest to Digitize Troops’ Tissue Samples,” James Bandler, December 12, 2022, <https://www.propublica.org/article/google-human-tissue-jpc-military>.

Google's aggressive attempts to gain access to the personal medical information stored in the JPC archive are even more troubling given the company's repeated failures to protect patients' data.²² In 2019, I led my colleagues in writing to Google about "Project Nightingale" and the alarming reports that Google collected millions of Americans' health data without their consent.²³ Google engineers worked without payment to "create an omnibus search tool to aggregate disparate patient data and host it all in one place," which Google could then sell to other hospital systems.²⁴ Even before Project Nightingale, a Google subsidiary collected troves of patient data without notifying patients about how their data would be used.²⁵

The public deserves a full accounting of Google's efforts to access the private health data contained at the JPC and complete transparency surrounding its intended use. To address my concerns, I request answers to the following questions by August 8, 2023:

1. Did Google at any time obtain access to any JPC data or samples? If so, please provide a full list of all such data or samples, and a summary of Google's actions taken with these samples and data.
2. Please provide all communication regarding Google's access to JPC data or samples, and any employment offers, visits, and meetings between Google and DoD about the JPC.
3. Please provide a summary of all Google's lobbying activities related to the JPC, including an explanation of how language favorable to Google was inserted into the NDAA FY2023.
4. Please provide the full list of "clinical, demographic, and patient information" you sought from JPC.²⁶ How are you intending to use this information?
5. Please detail what plans, if any, you had for protecting patients' anonymity and keeping patient data safe.
6. Please provide a list of all offers of employment to DoD employees, including from subsidiaries.
7. How many government employees, and specifically DoD employees, also have access to Google corporate systems?

²² ProPublica, "Inside Google's Quest to Digitize Troops' Tissue Samples," James Bandler, December 12, 2022, <https://www.propublica.org/article/google-human-tissue-jpc-military>.

²³ Letter from Senators Warren, Blumenthal, and Cassidy to Google, November 19, 2019, <https://www.warren.senate.gov/download/senators-letter-to-google-on-project-nightingale>.

²⁴ The Wall Street Journal, "Google's 'Project Nightingale' Gathers Personal Health Data on Millions of Americans," Rob Copeland, November 11, 2019, <https://www.wsj.com/articles/google-s-secret-project-nightingale-gathers-personal-health-data-on-millions-of-americans-11573496790>.

²⁵ The Guardian, "Royal Free breached UK data law in 1.6m patient deal with Google's DeepMind," Alex Hern, July 3, 2017, <https://www.theguardian.com/technology/2017/jul/03/google-deepmind-16m-patient-royal-free-deal-data-protection-act>.

²⁶ ProPublica, "Inside Google's Quest to Digitize Troops' Tissue Samples," James Bandler, December 12, 2022, <https://www.propublica.org/article/google-human-tissue-jpc-military>.

8. How many former DoD employees has Google hired since 2015? Please provide their names and positions.
9. Why did Google not file a protest with the Government Accountability Office to contest the fairness of the DoD contracting process?

Sincerely,



Elizabeth Warren
United States Senator

July 25, 2023

The Honorable Lloyd James Austin III
Secretary of Defense
U.S. Department of Defense
1400 Defense Pentagon
Washington, DC 20301-1000

Dear Secretary Austin:

I write to express my concerns and request additional information related to the disturbing December 2022 *ProPublica* report about the Department of Defense's (DoD) Joint Pathology Center's (JPC) secretive dealings to share exclusive access to servicemembers' and veterans' tissue samples with the tech giant Google.¹

The JPC contains more than 31 million blocks of human tissue and 55 million slides, including many rare samples, making it “the federal government's premier pathology reference center supporting the Military Health System (MHS), DoD and other federal agencies.”² It is “the world’s oldest and largest repository of rare pathology specimens,”³ and archived tissues at JPC have contributed to historic breakthroughs like the first genetic sequencing of the 1918 influenza.⁴ Indeed, Google described its potential as “on par with the Human Genome Project” – which resulted last year in the first completed human genome sequence – for “its potential for strategic, clinical, and economic impact.”⁵ Access to this data could be used “to design algorithmic models that can identify patterns a pathologist might miss.”⁶

Any number of researchers or companies could utilize this data for the public good. I am alarmed by reports that the JPC seriously considered Google’s attempts of privately brokering a deal to

¹ ProPublica, “Inside Google’s Quest to Digitize Troops’ Tissue Samples,” James Bandler, December 12, 2022, <https://www.propublica.org/article/google-human-tissue-jpc-military>.

² ProPublica, “Inside Google’s Quest to Digitize Troops’ Tissue Samples,” James Bandler, December 12, 2022, <https://www.propublica.org/article/google-human-tissue-jpc-military>; Committee on the Review of the Appropriate Use of AFIP's Tissue Repository Following Its Transfer to the Joint Pathology Center, Board on the Health of Select Populations, Institute of Medicine of the National Academies, “Future Uses of the Department of Defense Joint Pathology Center Biorepository” December 13, 2012, <https://www.ncbi.nlm.nih.gov/books/NBK236827/>.

³ SXSW, “55M human Tissue Samples + AI = Better Medicine | SXSW 2021,” <https://www.youtube.com/watch?v=LIE-E1hAbug>.

⁴ ProPublica, “Inside Google’s Quest to Digitize Troops’ Tissue Samples,” James Bandler, December 12, 2022, <https://www.propublica.org/article/google-human-tissue-jpc-military>.

⁵ *Id*; National Human Genome Research Institute, “The human genome sequence is now complete,” <https://www.genome.gov/about-nhgri/Director/genomics-landscape/april-7-2022-the-human-genome-sequence-is-now-complete>.

⁶ ProPublica, “Inside Google’s Quest to Digitize Troops’ Tissue Samples,” James Bandler, December 12, 2022, <https://www.propublica.org/article/google-human-tissue-jpc-military>.

secure exclusive access to JPC data.⁷ According to the *ProPublica* report, Google approached JPC in 2015 to pursue the valuable – and potentially profitable – pathology slides, undermining the public government contract process that would typically include soliciting competitive bids to make sure any agreement maximizes the benefit to the public interest.⁸ Google launched its years-long campaign by submitting an “unsolicited proposal,” which would have provided the company with “‘exclusive access’ to the data for at least four years.” The proposal even included a “requirement that it be able to charge the government to store and access the digitized information,”⁹ effectively excluding the government from tapping into its own data unless it paid a fee to Google. In an effort to cover its tracks, Google also inserted a non-disclosure agreement into the proposal. Most disturbingly, Google may have attempted to improperly influence the process by making an employment offer to a DoD employee through a temp agency.¹⁰ The DoD employee was also given a Google corporate email address and access to Google corporate files.¹¹

Google’s secretive maneuvers raised alarms for DoD staff charged with managing the JPC. One DoD engineer shared that he “was dismayed by the relentlessness of Google’s advocates in the department” and concerned about “some big tech company monetizing [servicemember’s biological data].”¹² Another JPC leader noted his discomfort with the request “not [to] disclose what seems to be a contractual relationship to the press.”¹³ This was a particularly concerning request given DoD publicly announces contracts on their website almost daily.¹⁴

The DoD’s actions showed clear “favoritism” towards Google getting the JPC contract. Specifically, three incidents raise ethical and legal concerns about DoD’s relationship with Google.¹⁵ First, in 2015, a naval officer who was “working with Google on a project to apply machine learning to medical imaging”¹⁶ reached out to JPC with an unsolicited proposal from Google indicating an interest in determining “exactly what JPC has.”¹⁷ JPC staff raised concerns and asked if the deal “need[ed] to go through an open-source bid” and flagged that “giving Google access to this information without a competitive bid could result in litigation from the company’s competitors.”¹⁸ Despite these concerns, the JPC director invited Google to the facility for a private tour¹⁹ – an exclusive offer that may not have been given to other interested contractors.

Second, in 2017, Google pushed the JPC to release sensitive personal health data. The company wanted “clinical, demographic, and patient information from the repository” that could have “compromise[d] patients’ anonymity.”²⁰ The director of the JPC “dissolved” discussions with

⁷ *Id.*

⁸ *Id.*

⁹ *Id.*

¹⁰ *Id.*

¹¹ *Id.*

¹² *Id.*

¹³ *Id.*

¹⁴ U.S. Department of Defense, “Contracts,” <https://www.defense.gov/News/Contracts/>.

¹⁵ ProPublica, “Inside Google’s Quest to Digitize Troops’ Tissue Samples,” James Bandler, December 12, 2022, <https://www.propublica.org/article/google-human-tissue-jpc-military>.

¹⁶ *Id.*

¹⁷ *Id.*

¹⁸ *Id.*

¹⁹ *Id.*

²⁰ *Id.*

Google at that point citing the inability “to find a pathway that we legally could do and ethically should do.” But DoD eventually allowed Google to return to the negotiating table.

In 2020, the Defense Health Agency (DHA) resumed discussions with Google once JPC issued a request for information (RFI) for a pilot project to modernize its archives.²¹ The RFI terms specified that “no feedback would be given to companies about their submissions and that telephone inquiries would not be accepted or acknowledged.”²² Despite this, the DHA Chief Information Officer (CIO), Thomas “Pat” Flanders, insisted on meeting with Google. At the subsequent meeting with Google, Mr. Flanders reportedly “wanted to see how both the government and company might profit from the [JPC’s] data so that he could influence the requirements [of the bid] on the government side.”²³ This left DoD staff, and even Google employees, “speechless” as Mr. Flanders appeared to be rigging an open bidding process to favor Google.²⁴

The DoD eventually awarded the JPC pilot project to Johns Hopkins instead of Google.²⁵ However, in a letter to DoD, Google wrote “that the company had been unfairly excluded from ‘full and open competition,’” a bold claim considering the many interactions between Google and DoD over the better part of the last decade.²⁶ Frustrated by its lack of success at DoD, Google launched a lobbying campaign in Congress, where the company secured favorable report language in the *National Defense Authorization Act for Fiscal Year 2023*²⁷ (NDAA FY2023) stating that the “process by which the JPC has chosen to digitize [its archives] may not fully incorporate advances in technology to scale this effort in a timely manner.”²⁸ The language also “encourage[s] the Department [of Defense] to apply advancements already developed, such as through the use of an augmented reality microscope developed by the Joint Artificial Intelligence Center and the Defense Innovation Unit” – a microscope whose software was conveniently engineered by Google.²⁹ I am concerned the implementation of this NDAA FY2023 provision might violate our servicemembers’ and veterans’ data privacy.

Federal law requires the government to assess a company’s past performance to determine whether a contractor is “responsible.”³⁰ And Google’s aggressive attempts to gain access to the personal medical information stored in the JPC archive are even more troubling given the

²¹ *Id.*

²² *Id.*

²³ *Id.*

²⁴ *Id.*

²⁵ *Id.*

²⁶ *Id.*

²⁷ *Id.*

²⁸ ProPublica, “Inside Google’s Quest to Digitize Troops’ Tissue Samples,” James Bandler, December 12, 2022, <https://www.propublica.org/article/google-human-tissue-jpc-military>; National Defense Authorization Act for Fiscal Year 2023, H.R. 7900, <https://www.congress.gov/congressional-report/117th-congress/house-report/397/1?overview=closed>.

²⁹ ProPublica, “Inside Google’s Quest to Digitize Troops’ Tissue Samples,” James Bandler, December 12, 2022, <https://www.propublica.org/article/google-human-tissue-jpc-military>; National Defense Authorization Act for Fiscal Year 2023, H.R. 7900, <https://www.congress.gov/congressional-report/117th-congress/house-report/397/1?overview=closed>.

³⁰ Congressional Research Service, “Evaluating the ‘Past Performance’ of Federal Contractors: Legal Requirements and Issues,” Kate M. Manuel, February 5, 2015, p. 1, <https://sgp.fas.org/crs/misc/R41562.pdf>.

company's repeated failures to protect patients' data.³¹ In 2019, I led my colleagues in writing to Google about "Project Nightingale" and the alarming reports that the company collected millions of Americans' health data without their consent.³² The goal of the project was to "create an omnibus search tool to aggregate disparate patient data and host it all in one place," which Google could then sell to other hospital systems.³³ Even before Project Nightingale, a Google subsidiary collected troves of patient data without notifying patients about how their data would be used.³⁴

The public deserves a full accounting of DoD's secretive interactions with Google regarding private health data contained at the JPC and complete transparency surrounding DoD's blatant favoritism towards Google. To address my concerns, I request answers to the following questions by August 8, 2023:

1. Did DoD provide Google access to any JPC data or samples at any time? If so, please provide a full list of all such data or samples.
2. What is DoD's internal process for staff to file complaints/concerns about unethical or illegal behavior?
 - a. Did DoD process any internal complaints/concerns from staff regarding Google's access to JPC data or samples, such as employment offers, visits, and meetings between Google and DoD about the JPC? If so, how many complaints were processed?
3. Please provide your privacy guidance and ethical standards that protect sensitive information of military personnel at the JPC when working with contractors?³⁵
 - a. What are the ethical, regulatory, and legal approvals that are needed to share de-identified data during JPC's modernization process?
 - b. Does DoD believe all of the guidance and standards were followed regarding data held at the JPC?
4. A former Director of the JPC, Col. Clayton Simon, raised concerns about sharing too much personal information, Google's want for an exclusivity requirement, and how DoD would be charged for accessing its own data.³⁶ Why was Google allowed to

³¹ ProPublica, "Inside Google's Quest to Digitize Troops' Tissue Samples," James Bandler, December 12, 2022, <https://www.propublica.org/article/google-human-tissue-jpc-military>.

³² Letter from Senators Warren, Blumenthal, and Cassidy to Google, November 19, 2019, <https://www.warren.senate.gov/download/senators-letter-to-google-on-project-nightingale>.

³³ The Wall Street Journal, "Google's 'Project Nightingale' Gathers Personal Health Data on Millions of Americans," Rob Copeland, November 11, 2019, <https://www.wsj.com/articles/google-s-secret-project-nightingale-gathers-personal-health-data-on-millions-of-americans-11573496790>.

³⁴ The Guardian, "Royal Free breached UK data law in 1.6m patient deal with Google's DeepMind," Alex Hern, July 3, 2017, <https://www.theguardian.com/technology/2017/jul/03/google-deepmind-16m-patient-royal-free-deal-data-protection-act>.

³⁵ ProPublica, "Inside Google's Quest to Digitize Troops' Tissue Samples," James Bandler, December 12, 2022, <https://www.propublica.org/article/google-human-tissue-jpc-military>.

³⁶ *Id.*

continue having discussions with JPC regarding becoming a partner on the project despite these concerns?

5. Is there any guidance regarding DoD employees that have access to private corporate systems such as corporate email addresses?
6. What is DoD's policy for employees recusing themselves from companies who have offered them employment?
7. Has DoD issued any legal guidance around when and how to provide access to JPC's data to contractors?
8. How many other bidders were in talks with JPC leadership to get the project? Were any of those bidders invited to tour the JPC facility? What were the names of these bidders, if any?
9. How many former Google employees has DoD hired since 2015? Please provide what offices they work for at DoD and if they have the power to inform DoD's bidding process.
10. Please provide any material provided to comply with the NDAA FY2023 report language requiring a comprehensive assessment on the digitization effort at JPC and a briefing to the House Armed Services Committee on that assessment.
11. Is Google, its subsidiaries, and/or entities backed by Google currently a contractor working on any project involving medical data for DoD? If so, please describe the projects and the medical data being shared with Google.

Sincerely,



Elizabeth Warren
United States Senator