C Google Cloud



Helping accelerate progress towards curing today's 7,000+ rare diseases

A next-generation biomedical research solution

From sensors to scientific research, the current volume of biomedical data is overwhelming. For example, in oncology alone, one would have to read 17 journal articles per waking hour just to keep up with the cancer literature.¹ Or, with lightsheet microscopes generating as much as five terabytes of data per experiment, researchers would need the space to store the equivalent of five stories of data on CDs. Between the explosion of scientific data and the risk of creating data silos upon silos that will never interoperate, the scientific community needs a cloud solution that will enable open data and collaborative science at scale.

Collaborating to improve the ease of data use and sharing

Deloitte and Google Cloud have teamed up to create a next-generation, cloud-native solution that can securely manage and analyze findable, accessible, interoperable, and reusable (FAIR) data at scale, while enabling collaborative biomedical research to result in faster, reproducible discovery.

Following the principles and best practices laid out by the NIH Data Commons and several other standard-setting organizations, the solution helps:



Disruption is no longer solely an effective means for making the advancements needed in biomedical research. Data-driven co-creation offers a new way forward.

Beth Meagher

Principal and Government & Public Services Chief Strategy Officer, Deloitte Consulting LLP

¹ Warner, Jeremy L, Oncology & Hematology Review, 2015;11(2):102-3, https://doi.org/10.17925/OHR.2015.11.02.102

Leveraging the benefits of cloud for biomedical and clinical scientists

A Google Cloud-native platform delivers managed and highly scalable storage and compute resources, helping reduce the focus on IT infrastructure and simplifying collaboration. Scientists can share data, algorithms, workspaces, and research projects more easily and securely, while quickly generating insights through optimized data ingestion, management, searchability, and analysis.

 $\overline{(1)}$

Accelerate treatment development through optimized data usage, shifting the focus from IT infrastructure to science

Reduce research costs with customized billing reports, cost estimation, and cost management tools

Prevent infrastructure challenges through effortless storage and compute scaling, and data hygiene including archiving and avoidance of duplication

We want to leverage on-demand computing, ML-enabled processing, and effective storage tiering to make our big research data sets more available for collaboration and re-use. Deloitte and Google Cloud understand how big data works at scale and understand our need for solutions to get the most from our instruments.

Take the digital performance of health care to the next level

Deloitte, a top consulting firm, has decades of experience working with life sciences and health care clients across the world. With numerous publications on the future of health, we help global clients strategize and implement cloud solutions quickly and at scale to help fulfill the future of possible.



No. 1

Consulting Service Provider Worldwide by Gartner¹

Luc Betbeder-Matibet

Director of Research Technology Services at UNSW Australia

¹ Gartner Market Share Analysis: Consulting Services, Worldwide, 2018, Chrissy Healey, Brendan Williams, Patrick Sullivan, Dean Blackmore, 23 April 2019

Learn more today

Juergen Klenk, PhD Principal Deloitte Consulting LLP jklenk@deloitte.com

Beth Meagher Principal Deloitte Consulting LLP bmeagher@deloitte.com

Rahul Mehendale Managing Director Deloitte Consulting LLP rahmehendale@deloitte.com **Lisa Noon** Managing Director Deloitte Consulting LLP lisanoon@deloitte.com

As used in this document, "Deloitte" means Deloitte Consulting LLP, a subsidiary of Deloitte LLP. Please see www.deloitte.com/us/about for a detailed description of the legal structure of Deloitte USA LLP, Deloitte LLP and their respective subsidiaries. Certain services may not be available to attest clients under the rules and regulations of public accounting.

This publication contains general information only and Deloitte is not, by means of this publication, rendering accounting, business, financial, investment, legal, tax, or other professional advice or services. This publication is not a substitute for such professional advice or services, nor should it be used as a basis for any decision or action that may affect your business. Before making any decision or taking any action that may affect your business, you should consult a qualified professional advisor. Deloitte shall not be responsible for any loss sustained by any person who relies on this publication. Copyright © 2020 Deloitte Development LLC.