

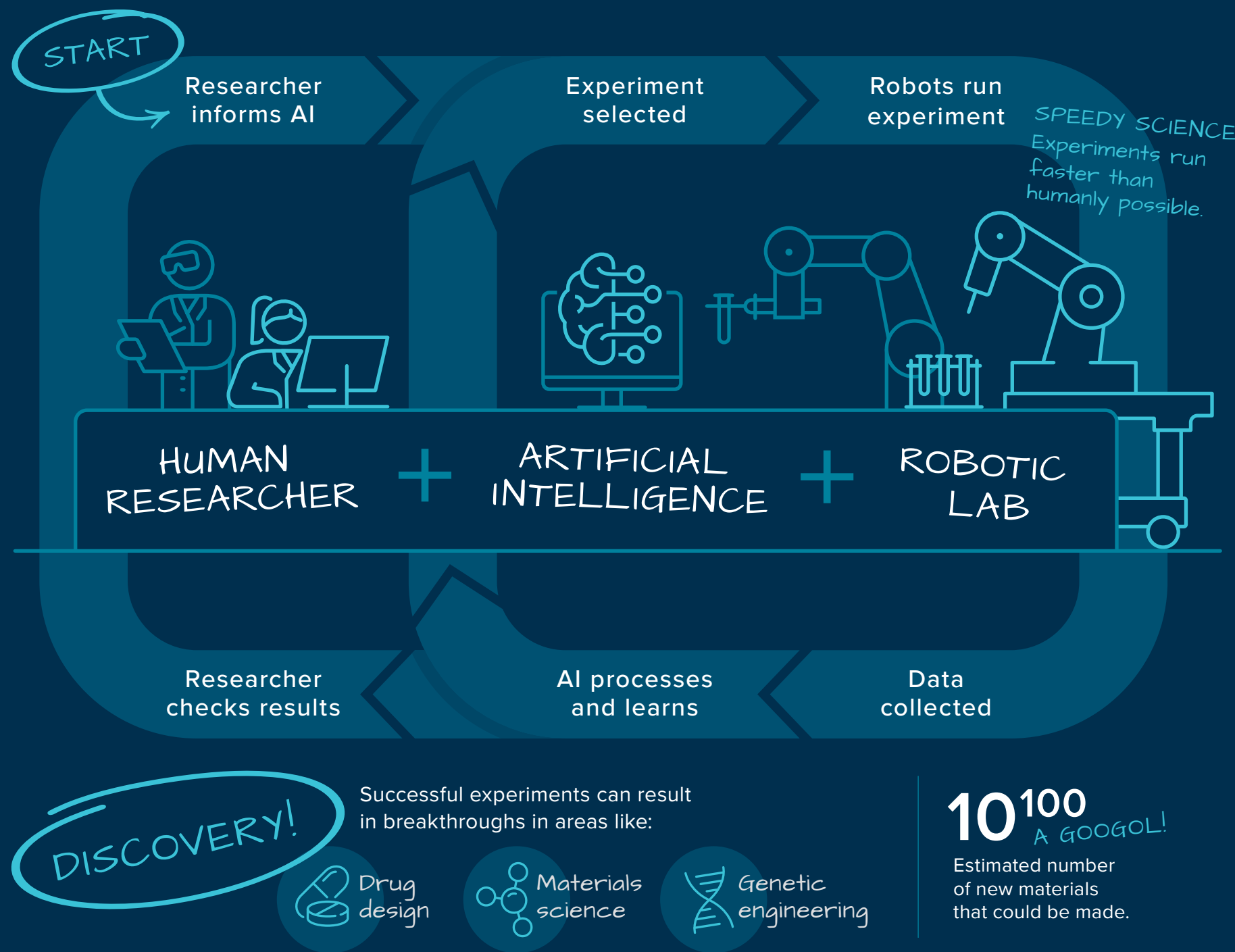
WHAT IS AUTONOMOUS DISCOVERY?

A new way of doing science that will bring discoveries to light faster than ever before.

The human brain is an amazing science-solving machine, but the human body can only solve problems for so long before a human researcher needs to eat or sleep. Today's biggest challenges, like climate change, emerging diseases, and plastic pollution won't wait for us to grab a sandwich or take a nap. We need answers now. That's why scientists are getting an assist from robotics, artificial intelligence (AI), and machine learning.

We define a problem. AI identifies, sets up, and runs hundreds of experiments using robotic systems that can work the problem 24/7. With machine learning, AI gets smarter as it goes, looking for new patterns and new experiments to run. Human scientists are free to use their big, creative brains to interpret and act on the most interesting results. Autonomous discovery will bring solutions to us 100x or even 1000x faster.

Learn more at www.anl.gov/autonomous-discovery.



10¹⁰⁰
A GOOGOL!
Estimated number of new materials that could be made.