

Statement on White House Pandemic Preparedness Plan

Roswell applauds plan, outlines alignment with company vision

Our company, Roswell Biotechnologies, was founded with the vision of making dramatically more powerful diagnostics to battle disease. From DNA sequencing to rapid point-of-care tests, diagnostics empower precision medicine with the information needed to make decisions. They are, therefore, the starting point of managing or combating any disease.

The COVID-19 Pandemic has exposed many gaps in our national ability to respond effectively to new pandemic viruses. The net result has been over \$16 trillion in economic impact and 680,000 lost lives in the U.S. alone. We now face an even riskier future, where—in addition to the ongoing risk of novel pandemic viruses—we will certainly be challenged with new variants of SARS-CoV-2, such as the Delta variant and beyond. We also face a new threat of engineered bioweapons based on this virus. In response, **the Whitehouse has released a [plan for a modern "Apollo Program"](#)** to address these gaps and risks in this decade and achieve a new era of resilience to future pandemics.

The Roswell Molecular Electronics Chip (Roswell ME™ Chip) was intentionally designed to be the ideal platform for low-cost, fast, highly informative diagnostic tests that can be deployed in the field, at point-of-care or point-of-infection, or in the home. Our vision has always been to be able to test for "everything, everywhere, every day." This means tests that detect pathogens in the environment, infection and immunity in individuals, and genetic risk, to name a few. This also means highly informative tests—we want to test for many disease-causing agents and determine the complete DNA sequence of pathogens and individuals. And this means tests that are fast and easily administered on small, low-cost, simple-to-use devices.

These goals didn't arise from any unique or extraordinary vision but rather address the reality of what is required to inform decision-making to battle disease broadly. It is therefore great news that the Pandemic Preparedness Plan boasts these same themes in its critical action items. The plan outlines a total of \$65 Billion in spending over this decade, including \$16.8 billion to support areas the Roswell platform addresses.

This Whitehouse's new \$65 billion "Apollo Program" to achieve pandemic preparedness this decade is much needed and deserves the highest level of national priority.



Alignment with Roswell's Vision and Development Plan

Specific elements of the plan's goals align with and support the Roswell ME Chip platform. These include the call for rapid testing, an early warning system, digital health information, and advances in biosecurity. It recommends regulatory changes that enable and encourage the deployment of new diagnostics.

The plan demands rapid testing of any virus, including the ability to test daily at home. The Roswell ME Chip platform will support multi-plex testing for many viruses at home at a cost that enables daily personal testing. The scalable chip platform offers the unique ability to provide ultra-low-cost tests and enables a manufacturing capacity that can scale to produce trillions of tests annually.

An early warning system is also an integral part of the plan. The Roswell ME Chip platform will support both the need for rapid, distributed DNA sequencing and smart, connected environmental sensors that can inform a global early-warning information network, including the dimensions of automated monitoring of wastewater or air. As the plan calls for, the Roswell platform provides real-time measurement as well as real-time electronic data aggregation from distributed devices.

Roswell also provides an integrated solution regarding the plan's stated desire for digital health information, which can serve vulnerable and global communities. The Roswell ME Chip platform is smart, connected, and designed to offer ultimate access by making devices and tests ultra-low-cost, simple, and point-of-need deployable.

The Roswell platform supports advanced sensor concepts that can help detect bioweapon pathogens early—a specific goal in the plan for advancing biosecurity. The platform also supports the ability to study antibody-antigen interactions that can inform bio-preparedness and threat response, such as rapid test deployment and vaccine development.

A fundamental challenge to many of these goals will be developing a regulatory framework that supports the deployment of new diagnostics. The need for new regulatory policies is acknowledged in the plan and will be a critical accelerator for deploying the Roswell platform to make a population-scale impact and potentially drive market adoption years sooner than would have been possible with the legacy "business-as-usual" regulatory procedures.

Apollo Program Budget Aligns to Support Roswell ME Chip Platform Development

Most important is that this "Apollo Program" plan be powered by proper funding, and for this reason, it comes with clear budget directives. Specific elements of the budget—totaling \$16.3 Billion—align to provide support for the Roswell platform development and deployment, including:

- \$5 Billion to support development of a new generation of diagnostics, for which the Roswell platform provides an ideal solution
- \$5.3 Billion to go into Early-Waring & real-time response systems, and again the Roswell platform can provide the ideals sensors and diagnostics to enable these systems
- \$1.6 Billion to support regulatory approval of new diagnostics platforms, such as the Roswell Platform, and to ensure regulations allow for and encourage new technologies

Overall, the plan aligns perfectly with the Roswell vision and urgent timelines. And most importantly of all, regarding the specific call for new diagnostic technology, the Roswell platform responds perfectly to their call—even to the point of "reconfigurable testing platforms". This is a unique feature of the Roswell ME Chip platform, which can be reconfigured not just to detect any viral DNA, but also viral surface proteins (for direct detection of particles in the environment or for rapid tests with minimal sample preparation) or antibodies (for detection of immunity).

Just as the original Apollo program addressed the Cold War of those times, we are now fully engaged in an equally consequential Cold War against emergent pandemic viruses. At Roswell, we will be developing our technology to its full potential to win this war against Pandemic viruses and all diseases.

Barry Merriman (CSO)

Paul Mola (CEO)

