

# Q2 2021 Investor Update & HyperSciences pitch to Spaceman Richard Branson



**Friends and investors of HyperSciences,**

Thank you for your incredible support! Our 2nd quarter of 2021 has been even more exciting than Q1! Below are some highlights and videos of our progress.

## **HYPERCORE TECHNOLOGY UPDATE**

**Geothermal - CEO, Mark Russell presented to Virgin Galactic's Richard Branson and TED's Chris Anderson**

We are excited to announce that HyperSciences competed in the PIVOT2021 New Venture Competition with Judges Richard Branson of Virgin Galactic and Virgin group of companies and Chris Anderson of TED Talks. The virtual geothermal event was held on Thursday, July 22nd at 9:30 am CT. You can view the presentation and hear their great feedback [HERE](#).

Learn more and consider investing again! We are planning to host an investor update webinar with HyperSciences CEO, Mark Russell on Thursday, August 19, 2021 at 11:30 AM PST (2:30 PM EST). Please click this link to register: [HyperSciences Investor Update Webinar](#).



### **We made a technical breakthrough in Ram Accelerator Technology!**

Recently, HyperSciences with its partner (Dr. Carl Knowlen's team at University of Washington Ram Accelerator Lab) accomplished the breakthrough testing that we knew would literally change our trajectory: Acceleration of extremely long and very heavy high velocity projectiles in a baffle tube ram accelerator for repetitive hypersonic flight. We are now scaling up to enable our vision for repetitive low-cost access to hypersonic boost for government and commercial aerospace applications. Ram acceleration operations were demonstrated in the heaviest scaled projectiles with the 'Baffle Tube Ram Accelerator' (BTRA) technology using extremely simple, low cost propellant combinations, and realized extremely high velocity gains in a single ram accelerator stage. This breakthrough confirms that the ram accelerator is capable of providing not only low-cost hypersonic boost for our terrestrial tunneling applications but also scales to provide payload launch volumes for "up" applications for large atmospheric and aerospace vehicles/payloads. Time to fly! Come to the [webinar](#) to learn more!

### **HyperDrill**

We have run a very successful test campaign for our downhole HyperDrill tool at our MineLab site. We have received very encouraging drilling data and while analysis is ongoing, preliminary analysis suggests performance above that anticipated. We have also made significant progress in many of the supporting systems that enable our technology, such as: fluid feed systems, deployable diaphragm solutions, and payload optimisation.

Additionally our CEO Mark Russell participated as a panelist in the PIVOT2021 technical session The Future of Drilling for Deep Geothermal on July 23rd. You can view the video [HERE](#).

### **Aerospace & Micro Tunneling**

As part of our continued development of all of our business/tech verticals we have been developing our aerospace and micro-tunneling platforms. A deliberate effort to use the synergy of systems means that the near-term aerospace flight solution and our microtunneling solution share the same start engine. We are beginning plans to test this start system at MineLab. We anticipate initial testing will begin soon and look forward to updating you in quarter 3. This start system will provide the ability to form the foundation of a larger system capable of launching to the edge of space as well as providing the workhorse for a well sized micro-tunneling solution.

## **FINANCE**

### **Finance Updates**

We are hard at work finalizing the next financing round (Reg D and potentially a near-term Reg A crowd financing that follows) and optimize the use of proceeds. Information will be sent out through our periodic email updates as soon as the round is kicked off. Our Board of Directors has approved a SAFE financing and more information will be provided ahead of the webinar and you can review and feel free to indicate your interest at <https://www.hypersciences.com/invest/>.

## **BUSINESS**

### **Phase 2 HyperDrill Joint Development Agreement – Increment 1 Completed!**

We have completed our first increment for the Joint Development Agreement with our Major Top 10 Mining Company partner in the exploration drill and are working diligently on our next set of requirements

### **Hyper Tunneling: Milestone Conference Case Study Paper Published and Presented – Las Vegas, NV**

Our HyperTunneling system was a major hit at the Vegas Rapid Excavation and Technology Conference (RETC2021). We presented our Robotic Mining and MicroTunneling paper at the technical session in Las Vegas demonstrating game-changing tunneling speed increase and major cost reduction. You can view the video that played at our booth [HERE](#).



**Abstract:** Hypersonic tunnel boring (HTB) uses directed, high velocity projectile impacts to remove rock. HTB is independent of rock strength and targets hard, abrasive rock and variable rock environments. This paper discusses history, theory and presents test (2x2m and .75x.5m tunnels) field trial results and technical and economic evaluation. The HTB tests are compared against the historic 'project REAM' and the concept against tunnel boring machines and drill & blast in design studies for full-scale 12m and 4.5x5.5m tunnels. The positive results indicate that under these conditions HTB can replace Drill & Blast and Tunnel Boring Machines.

#### **Mining Assets - Asia Mining Project**

HyperSciences has purchased minority equity rights in a new high tech minerals and energy minerals project in Asia. An independent economic geology analysis is underway to assess the potential of the project for high value rare Earth and hard rock high purity quartz with the goal to deploy our hyper tunneling and mining tools into production. We will discuss more on this opportunity at the August [webinar](#).

#### **New Hires**

*Nicolas Palacios, Project Manager.* Nicolas has two Master's Degrees and a Project Management Professional license. He has worked the majority of his career in aviation in both experimental and certified environments. Nicolas also managed Covid-19 mass vaccination and test sites for Snohomish County Health District throughout the pandemic. You can view his LinkedIn profile [HERE](#).

*Tim Elder, Principal Engineer.* Tim has over ten years experience in the application of hypervelocity launchers in the oil and gas, mining, and aerospace industries. Tim left Blue Origin to work for HyperSciences. He provides technical expertise on the development of the HyperCore engine at HyperSciences. You can view his LinkedIn profile [HERE](#).

*Lance Underwood, Principal Engineer.* Lance is a Lead Drilling System Design Engineer with over 40 patents and 40 years' experience in the design and testing of downhole drilling tools, including rock bits, mud motors, turbodrills, percussion drills, directional tools and previous led development of laser drilling. You can view his LinkedIn profile [HERE](#).

We are also having an excellent summer season with some fantastic engineering interns!

Again, thank you for your great support of HyperSciences! See you at the [webinar](#)!

**All the best,**

Mark Russell  
CEO, HyperSciences, Inc.



#### *Forward-Looking Statements*

This email includes statements that describe expectations regarding future periods, which might be considered forward-looking statements. Assumptions underlying these expectations could be inaccurate and you are cautioned not to place undue reliance on any forward-looking statements. HyperSciences undertakes no obligation to publicly update or revise any forward-looking statements. Please review HyperSciences' most recent annual report on [EDGAR](#) to learn more about the principal risks, uncertainties, assumptions, and other important factors that could cause actual results to differ materially from any forward-looking statements.

#### *About HyperSciences*

Founded in 2014, HyperSciences develops and builds innovative hypervelocity technologies intended for major industries such as fast tunneling, energy drilling and aerospace. HyperSciences previously offered securities under Tier II of Regulation A, and is now subject to current and periodic reporting obligations. You can access these reports and other securities filings on [EDGAR](#). HyperSciences has a Reg D 506(c) offering of securities open for accredited investors and also has a Reg CF offering of securities open for accredited and non-accredited investors.