



Mount
Sinai



Performance 360 at Mount Sinai

How can we quantify *performance* and identify our personal capabilities? Optimize our focus? Give ourselves the nutrition, exercise, and sleep we need in the most efficient and advantageous ways? Become more resilient to physical and mental obstacles? How can our bodies and minds function together to best achieve the goals we set for ourselves, whether we work long hours at a desk, strive to shave fractional seconds from our times during Olympic competition, or with our comrades charge into burning buildings bearing 75 pounds of gear on our backs?

From elite athletes, high-level executives, and Navy SEALs, to people recovering from life-altering injuries such as spinal cord injury and concussion, the Performance 360 Program (P360) at Mount Sinai creates individualized and multifaceted approaches to optimize each participant's physical and cognitive performance abilities. Unlike executive health programs that seek to mediate risk, P360 brings together physicians, scientists, mental strengthening coaches, nutritionists, physical therapists, and physical trainers in a proactive approach to maximize an individual's abilities across all dimensions. **The scope of our capabilities and program is truly without compare.**

Currently, P360 is a sought-after partner for professional sports teams, Olympic athletes, and elite military personnel. However, we have developed our findings to the point where we are not only opening the doors to the general public, but we are applying them to improve the resilience and performance of people who serve our communities like the FDNY, and to those who seek to overcome monumental challenges put in their path by conditions such as stroke, spinal cord injury, and traumatic brain injury, and still complete everyday tasks or compete in their sport at the highest level.

At this critical juncture of our development, only philanthropy can provide the catalytic base from which to build and realize this vision. Gifts to P360 will allow us to follow a modern approach to philanthropy and construct a self-sustaining model, one that spins off revenue to be reinvested in P360's growth and leveraged to fund programs for social good. With your help, this catalyzing Center will be an essential resource for every person who seeks to attain their fullest potential through human performance, no matter their starting point.

The Competition: Performance Lab Comparison

	Mount Sinai Performance 360	NYU Performance Center	HSS Performance Center	Lennox Hill NISMAT	Columbia Runlab
VO2 Max testing	✓	✓	✓	✓	✓
Basic labs	✓	✓	✓	✓	✓
Running mechanics analysis	✓	✓	✓	✓	✓
Tennis analysis	✓	✓	✓	✓	
Golf analysis	✓	✓	✓	✓	
Gait analysis	✓	✓	✓	✓	
Motion Analysis	✓	✓	✓	✓	
Body composition	✓	✓	✓		
Motion Analysis (in real environment)	✓				
Cognitive testing (NIH tool box)	✓				
Concussion assessment *	✓				
Eye tracker (concussion evaluation)	✓				
3D body scanner	✓				
Neuropeptide Y	✓				
Microbiomes	✓				
Genomes	✓				
Sleep Assessment	✓				
Recovery (cryo, float)	TBD				

*Concussion assessment is located in different sites for NYU, HSS, Lenox Hill and Columbia



Specialized P360 programs

- The physiology of spirituality
- Running injury prevention program
- VO2 Max testing
- Lactate threshold testing
- Endurance programming
- Ergonomic evaluation
- Mental strengthening
- Group and team dynamics
- Stress management
- Resilience
- Nutritional consulting
- Body composition analysis

The Performance 360 Center for Human Performance

P360 embodies the notion that our attitude toward our overall wellbeing should be proactive, not reactive. Even healthy and high-performing individuals, from top professionals to elite athletes, can boost their performance and resilience by leveraging our scientific understanding of the body and its integration with the mind. P360 is a peerless effort that combines a diverse spectrum of physiological and cognitive disciplines with elite training methodologies to push the limits of human performance.

Led by Executive Director Joseph Herrera, D.O. and Director of Rehabilitation Innovation David Putrino, PT, PhD, in its fully built-out form, P360 will combine Mount Sinai's expertise in rehabilitation and sports medicine with new technologies and precision data analysis to significantly advance human performance. Whether recovering from a life-changing injury, recuperating after a minor strain or sprain, or upping your game in sports or life, P360 optimizes physical and cognitive performance based on individualized, 360-degree profiles of a person's health, ability, and potential.

Case Study

Red Bull High Performance. P360 is the medical provider for all Red Bull High Performance athletes. Our collaborations include:

- Red Bull Breakdancing Team: This past year we ran a mental strength and resilience camp with the Red Bull Breakdancing Team, teaching seven of the best break-dancers in the world how to sleep, improve their skills with mindfulness meditation, recover from jetlag, and increase their reaction time.
- Fear and Threat Response: We are analyzing fear and threat response in big wave surfers, comparing their vastly different experience with that of regular wave surfers.
- Concussion Management: Unlike the more common, subjective assessments of concussion, we have developed objective computerized assessments and 'return-to-play' protocols for our athletes that track improvement metrics and get them back to winning world championships.

“Red Bull has an international reputation for training the best athletes in the world and thanks to our relationship with the Performance360 team at Mount Sinai we have an even greater ability to support our athletes with a world-class performance team on the east coast of the country. Red Bull Performance are excited at the opportunity to grow our relationship with the Performance360 team at Mount Sinai, continuing our mission to optimize our knowledge of all facets of human performance together.”

Per Lundstam
Director of Athlete Performance
Red Bull North America



Partnering with the Brooklyn Nets

With P360 as the performance team for the Brooklyn Nets—involved in team selection, injury recovery, nutritional programming, and high-performance research for injury prevention—the Nets rose from a bottom-ranked team to number seven.

Performance team gives Nets an advantage, particularly with older players

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By Net Income | Jun 29, 2019, 7:39am EDT

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“the performance and medical staff has particular value in gaining Brooklyn an advantage over the Knicks, Clippers and Warriors”

Unlocking the power of P360 for social good

P360 is committed to unlocking performance to create a better future. Whether enabling individuals who have sustained life-changing injuries to take part in activities they never thought possible; helping law enforcement and emergency personnel improve public safety for all; or empowering individuals who face social and economic challenges access new opportunities, we want to bring the best of P360's unique approach to improve people's lives. Some examples of current programs that philanthropy will enable:

Boosting New York's Finest

New York City's EMS and firefighters operate under increasing levels of stress every day, where their performance affects the ability to protect not only their own lives, but those of the public at large. Applying the same techniques for resilience and stress-inoculation used to train Navy SEALs and Green Berets, P360 is currently working with the NYPD to develop programs to give officers the physical and mental tools they need to perform at their best. Philanthropic support will enable P360 to pursue two pilot programs:



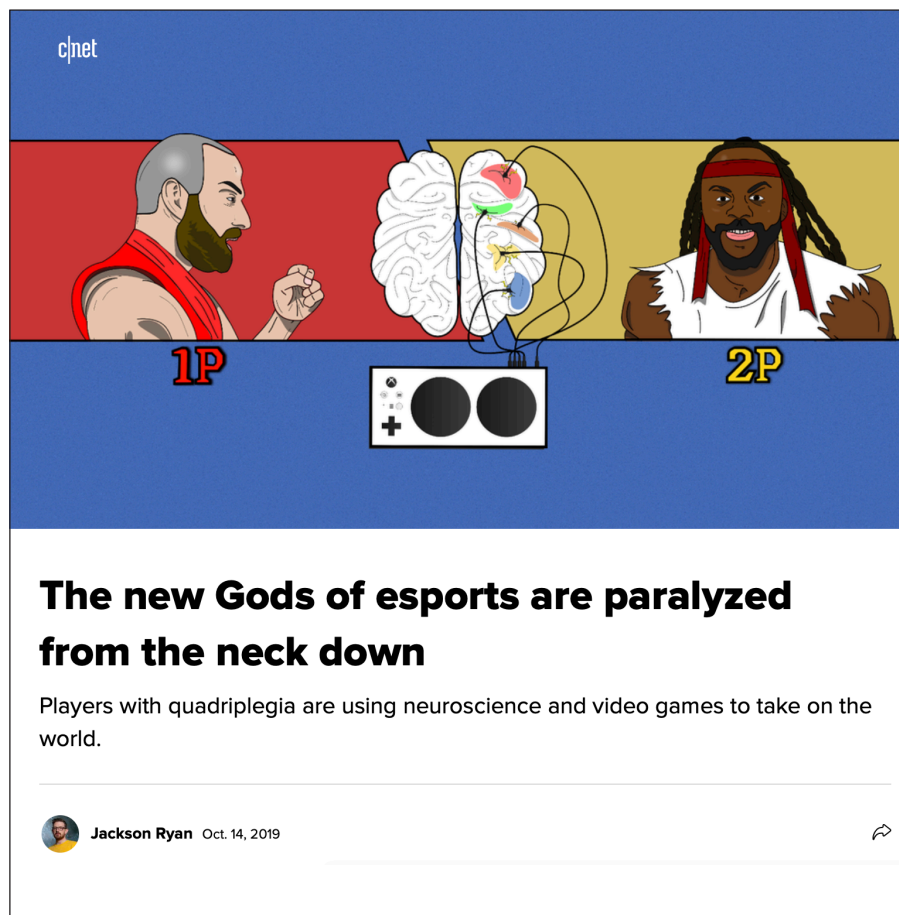
- **Recharge rooms for FDNY:** P360 had notable success creating recharge rooms for frontline health workers during the COVID-19 crisis and surge. Prior to entering the rooms, the average stress level of Mount Sinai front-liners was reported as 4.7/5 (± 1.0). After a single 15-minute experience in a recharge room, the average user-reported stress level was 1.9/5 (± 1.1), representing a 60.0% reduction in self-reported stress levels. The rooms have had such success that Navy SEALs have asked us to create them in conflict zone containers. With support, we will create recharge rooms in select FDNY houses to help train firefighters in relaxation, support bio-synchrony between fighters, and improve group cohesion. Our team will conduct research over time to assess the impact of these environments on fighters' stress and performance with an eye on replicating them at additional houses.
- **Performance Under Pressure Camp:** This one-time program for 3,000 officers would mirror our work with Red Bull and other high-performance athletes. The program involves running the officers through stress-inducing activities, analyzing their coping and regulation responses to understand how their bodies respond under stress, and then trying to improve their response.

The Quad Gods—Flipping the Script for Those with Catastrophic Injury

After witnessing the pain and frustration of an elite extreme sports athlete who had suffered a spinal injury that had relegated him to a wheelchair, incapable of moving below the neck, P360 recruited others with similar spinal cord injuries to found and train a para-athletic eSports team, the Quad Gods. **Now sponsored in part by the Mark Cuban Foundation, the team has helped give the lives of these talented players renewed purpose.**

Unlike traditional sports, eSports is unique in that people with spinal cord injury can not only participate, but can do so on the same playing field as able-bodied competitors. The Quad Gods team is entirely comprised of individuals with tetraplegia—meaning players' arms and legs are affected by spinal cord injuries. P360's goal for the team is ambitious, but we believe it is achievable: To train hard and hone players' skills to the point where the Quad Gods are winning competitions against able-bodied eSports athletes.

eSports provides a portal to social engagement, builds community, accelerates the progress of rehabilitative therapy, and reframes the meaning of “ability” for people with paralysis. Individuals with tetraplegia often suffer from extreme social isolation and intense feelings of disconnection from their able-bodied peers. It is our hope that by training and participating in the eSports community—newly invigorated by Logitech's five year commitment to sponsor the world's first adaptive eSports tournament, for which P360 will be providing the initial player evaluations—our team will experience a new level of social integration and inclusion that was not possible before. We are also committed to sharing the Quad Gods' experience with the world: We will document the team's journey on social media and other platforms to inspire other individuals with quadriplegia to pick up a controller, engage in eSports, build confidence, and experience social opportunity and faster recovery.



A High Performance Opportunity

P360 is excited to be opening its doors to the public, providing the opportunity for all to access services that were until now only available to elite athletes and military service members. As part of a transformative medical center, P360 maintains a commitment to scientific research that advances medicine for all. With a participants-as-partners philosophy, people who come to P360 will provide real-time feedback on new therapies and technologies, help us unlock new avenues for investigation, and provide research data across a variety of clinical measures to fuel studies to improve performance for people everywhere. With philanthropic support, we will be able to build out a flexible program, and extend these benefits to people facing a great breadth of challenges. We hope you will join us in this mission.



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With wide-ranging application for its services, P360 is currently accepting support for these and other efforts. If you are interested in being a part of these life-changing endeavors, please contact:

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