Quest Diagnostics and Rutgers University Announce Sports Science Research Collaboration to Advance Athletic Performance

February 26, 2018

Collaboration will leverage insights from Quest's Blueprint for Athletes biometric testing service data to examine physiological changes, performance variables in competitive athletes at the newly created Quest Diagnostics Sports Science Laboratory at the Rutgers–New Brunswick Center for Health & Human Performance

Secaucus, NJ and New Brunswick, NJ, Feb. 26, 2018 (GLOBE NEWSWIRE) -- Quest Diagnostics (NYSE: DGX), the world's leading provider of diagnostic information services, and Rutgers University–New Brunswick have collaborated to open the new "Quest Diagnostics Sports Science Laboratory at the Rutgers Center for Health & Human Performance," within the New Jersey Institute of Food, Nutrition, and Health (IFNH). This new lab will yield research and develop new innovations that combine the human athletic performance and recovery research conducted at Rutgers with diagnostic information capabilities and insights from Blueprint for Athletes, Quest's biometric testing service for competitive and professional athletes.

The first research projects under the newly formed collaboration will focus on three preliminary areas: how changes in biomarker levels are associated with training load and performance-related variables such as changes in movement mechanics, endurance, power, and body composition; the correlation between the biomarkers in the Blueprint for Athletes test service and performance, metabolism, nutrition, and bone density in competitive male triathletes; and how new point-of-care micro-sampling technologies may expand hormone analysis capabilities. Biomarkers are biological indicators or measurements of a condition or health state. "This collaboration is a natural extension of the collaborative efforts between Quest and Rutgers over the past several years.

Together, we have sought to further the understanding of how diagnostic information, specifically blood-based biomarkers, can improve health and athletic performance," said Richard C. Schwabacher, MPH, executive director, sports science and human performance, Quest Diagnostics. "Dr. Arent and his team are researching topics that will have practical applications in the near-term, while contributing to the broader academic field of study. That's what is so exciting about this collaboration: the laser focus on practical, impactful research, which will enable athletes to compete optimally and safely."

Shawn Arent, PhD and director of the Center for Health and Human Performance at the Rutgers–New Brunswick Institute of Food, Nutrition and Health, said, "The insights from the data derived from Blueprint for Athletes will provide the context for us to consider performance variables holistically, including nutritional education and intervention, injury assessment, and training load monitoring as well as sophisticated biometric analyses. Given Rutgers' stature in Division I collegiate men's and women's soccer and our access to other high-level athletes, we're especially interested in tracking biomarkers over the course of the season with these teams and players, to better understand the association between changes in key biomarkers, training load, stress, and performance. Ultimately, we hope to optimize both the health and performance of these individuals."

In addition to conducting original research to better predict biological response to training exertion and hormone status, and their impact on human athletic performance in collegiate athletes and competitive triathletes, the collaboration Quest and Rutgers will also aim to create new, innovative products and services based on the applicability of actionable insights. New intellectual property and invention resulting from the collaboration will be jointly owned by both entities.

Both Quest Diagnostics and Rutgers will provide opportunities for further, substantive collaboration. Schwabacher will serve on the IFNH External Advisory Board. Quest will also have the opportunity to appoint visiting scholars to the IFNH and provide Rutgers students with opportunities for internships and independent studies. Arent, PhD, FACSM, Rutgers University, and director, Center for Health and Human Performance at Rutgers–New Brunswick Institute for Food, Nutrition and Health (IFNH), and 2017 Outstanding Sport Scientist of the Year and current President of ISSN, will continue to serve as a member of the Quest Diagnostics Sports Diagnostics External Advisory Board.

The IFNH Center for Health & Human Performance first began conducting research using Blueprint for Athletes in 2015 as the biomarker testing service was being designed by Quest Diagnostics. In 2016, Rutgers researchers used data from Blueprint for Athletes in original research, presented at the American College of Sports Medicine Annual Meeting, which showed female college athletes at their highest pre-season fitness levels were more susceptible to overreach in a team sport environment.Quest also plans to utilize the insights gleaned from this collaboration to enhance the Blueprint for Athletes consumer offering. Blueprint for Athletes evaluates levels of blood-based health markers such as vitamin D, creatine kinase, and glucose that influence protein synthesis, energy levels, and wellness, and provides specific insights athletes can use to help improve their performance. Consumers, such as other collegiate athletes, endurance athletes, professional athletes and others engaged in intense conditioning, can choose between six stacks, panels of lab tests geared to specific fitness goals. Results from the biometric analysis are provided in an easy to read action-oriented report. Blueprint for Athletes introduced micro-sampling for the hormone stack in 2017.

The service is used by professional sports organizations across all professional sports leagues to gain a longitudinal sense of the impact of modifications on health and as well as specific performance goals. Current pro team clients include the New York Football Giants, Pittsburgh Steelers,

Kansas City Chiefs, Houston Texans; Washington Wizards, Houston Rockets; Seattle Sounders, New England Revolution, FC Dallas, DC United and Washington Capitals.For more information on Blueprint for Athletes, visit www.blueprintforathletes.com.

About Blueprint for Athletes
Blueprint for Athletes is the first athlete-specific direct-to-consumer service from Quest Diagnostics. The service was developed in collaboration with internationally renowned experts in the fields of nutrition, exercise physiology, athletic training, and human performance and the New York Football Giants, "Proud Partners in Health." Athletes and fitness enthusiasts are provided with custom reports that contain personalized laboratory test results detailing their personal health markers, how they relate to sports physiology, and results that may suggest the need for modification. One-time testing provides a snapshot of health status; repeat testing provides a longitudinal look over time, allowing comparisons prior to and following strategies to achieve improvements.

About Rutgers University–New Brunswick
Rutgers University–New Brunswick is where Rutgers, the State University of New Jersey, began more than 250 years ago. Ranked among the world's top 60 universities, Rutgers's flagship university is a leading public research institution and a member of the prestigious Association of American Universities. It is home to internationally acclaimed faculty and has 12 degree-granting schools and a Division I Athletics program. It is the Big Ten Conference's most diverse university. Through its community of teachers, scholars, artists, scientists, and healers, Rutgers is equipped as never before to transform lives.

About the New Jersey Institute for Food, Nutrition, and Health
The New Jersey Institute for Food, Nutrition, and Health exists to improve the health of New Jersey through interdisciplinary research and programs related to food, nutrition, and physical activity. The institute oversees centers of excellence related to lipid metabolism, digestive health, human performance, and early childhood nutrition education. For more information, visit ifnh.rutgers.edu.

About Quest Diagnostics
Quest Diagnostics empowers people to take action to improve health outcomes. Derived from the world's largest database of clinical lab results, our diagnostic insights reveal new avenues to identify and treat disease, inspire healthy behaviors and improve health care management. Quest annually serves one in three adult Americans and half the physicians and hospitals in the United States, and our 45,000 employees understand that, in the right hands and with the right context, our diagnostic insights can inspire actions that transform lives. www.QuestDiagnostics.com.

Attachments:

A photo accompanying this announcement is available at http://www.globenewswire.com/NewsRoom/AttachmentNg/951c830f-7644-409e-b614-9ef010f80ada

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