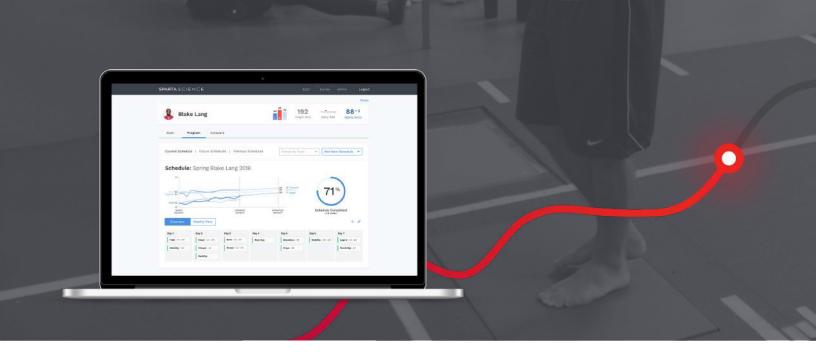


Optimize musculoskeletal health. Minimize injury risk. Safely speed recovery back to work, play and life.



# **Enable Optimal Movement**

**Sparta Science** helps medical providers, hospitals, and patients measure and minimize injury risk, optimize human performance, and safely speed recovery. The **Sparta System™** uses our patented assessments to quickly assess an individual's movement and balance in seconds.



### Mission

Sparta Science provides diagnostic software to assess and optimize musculoskeletal health, minimize injuries and improve human resilience for every body. Partners rely on our **database of over 1 million Sparta Scans** to provide personalized plans that improve patient engagement, safely speed rehabilitation and return to healthy movement at work, at play, on duty and in life. 66 Having this amount of reliable data, practitioners are able to target deficiencies and validate what they're seeing with functional movement tests, pushing patients forward at the right pace."

## Dr. Tammara Moore

Founder SOL Physical Therapy + Performance Training

# **Experience Sparta**

#### The Sparta System

The Sparta System includes force plate hardware coupled with our proprietary software that enables a quick assessment of a patient's movement and balance within seconds.

The Sparta System generates a **Movement Signature™** - a time-based snapshot of movement strengths and weaknesses unique to every individual. Scanning on the force plate gives you the opportunity to explore your diagnoses and provide patients with a more **personalized rehabilitation program to safely improve patient recovery, strengthen weaknesses without creating further imbalances, and minimize the risk of re-injury or future injuries.** 

#### Sparta Scan™

The suite of Sparta Scans includes three assessments performed on a force plate. The scans identify injury risk, strengths and weaknesses, and generate a unique Movement Signature™ for each individual.

#### Interpreting the Movement Signature™

Our software, based on more than 1 million scans, interprets the patient's results. From this information, the software generates a personalized program tailored to the individual's needs.

#### **Recovery Protocols**

Offering objective insights, Sparta's software provides the practitioner with data that helps more accurately assess when an individual is ready to return to work, life or play.



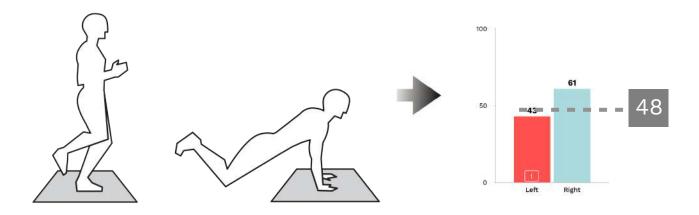


# **The Sparta Scans**

#### **Over 1 million Sparta Scans & Counting**

The Sparta Scan<sup>™</sup> includes three assessments that **identify potential risk of injury** as well as strengths and weaknesses. Each Sparta Scan is compared to a database of over 1 million scans and 7,000 anonymized injuries from more than 35,000 individuals to **provide actionable insights** to help practitioners make program adjustments that target the individual's strengths and imbalances.

**The Balance Scan** assess an individual's static stability on the left and right sides. This quickly tells you if the individual is at an increased risk of re-injury or physically able to progress with rehabilitation.



#### How to Perform Sparta Balance Scans:

The **Balance Scan** progresses through the following positions while standing barefoot on the force plate: standing with eyes-open, standing with eyes-closed, alternating single-leg with eyes-open, alternating single-leg with eyes-closed. When needed the individual can touch down the opposite foot to avoid falling. Two 20-second balance trials are collected from both sides.

The **Plank Scan** can be done through the following positions: kneeling, prone push- up, and lifting one hand off the force plate during push-up with alternating arms. Two 20-second plank trials are collected on both sides.

A score below 48 indicates increased odds of suffering an injury due to static instability. Scores are based on the patient's performance compared to the database of individuals. A score of 50 is average.

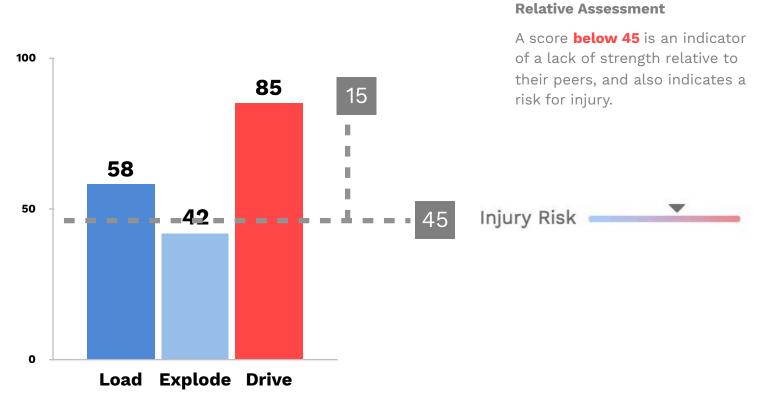
# The Movement Signature™

#### The Jump Scan

Three key variables make up the Sparta **Movement Signature™** measured during the **Jump Scan** assessment - **Load**, **Explode**, and **Drive** - defining a person's ability to **start**, **transition**, and **finish a movement**. From these variables, we deliver actionable insights and provide key recommendations to target the individual's strengths and weaknesses.

#### **Imbalance & Injury Risk**

When variables are more than **15 points away** from each other, the patient is mechanically imbalanced and at an increased risk of injury.



# Functional Restoration

#### **Rate of Return to Function**

The medical community uses the Sparta Software to tailor rehabilitation programs, accelerate patient recovery time, and minimize the risk of further injuries.

#### **Scientifically-validated Insights**

Backed by clinically validated research, the **Sparta Scan** allows you to quickly assess patients, diagnose the results, and prescribe personalized plans to support healthier outcomes.

#### **Personalized Prescriptions**

Each patient is prescribed a plan with exactly what they need, resulting in stronger, more resilient individuals.

|   |                            |                           | Scan               | Survey A              | Imin Logout                      |
|---|----------------------------|---------------------------|--------------------|-----------------------|----------------------------------|
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| Sarah Purifoy   |                            | 63 81<br>L E 0            | 161<br>Weight (bs) | Injury Risk           | 89 <sup>-1</sup><br>Sparta Score |
| an Program Compa  | are Injury Reports         |                           |                    |                       |                                  |
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#### **Reimbursable by Insurance**

The Sparta Assessments are clinically reliable and reimbursed by insurance carriers.

#### **Prevent Injuries, Reduce Costs**

The Sparta System systematically reduces the likelihood of injuries, reducing the number of insurance claims and the cost of providing insurance services to each patient.

# **Trusted Partners**

Sparta Science has partnered with more than 100 organizations worldwide including healthcare providers, physical therapy clinics, governments, sports teams, and collegiate athletic departments. Read case studies from Sparta partners at spartascience.com.



66 We can look at different parameters from Sparta Scans and see the profiles that place a person at risk for injury. We have the ability to put in place a program to appropriately minimize that risk."

### Dr. Brian Sennett, M.D.

Chief of Sports Medicine University of Pennsylvania



## SPARTA SCIENCE

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