

Sheri L. Roggy, O.D.

# PERFORMANCE THROUGH VISION

See Better .... Be Better

Roggy Eye Clinic, specializes in working with athletes of all ages and levels from Jr. High students, Division 1 collegiate programs to professional athletes. Sports vision Training improves functional athletic performance through a specialized vision training program.

As co-founder of VisioSport, LLC, Dr. Roggy, along with her colleague and business partner, Dr. Kara Heying, have developed a comprehensive program that delivers customized sports vision training protocols with proven, measurable results utilizing highly-specialized clinical and technological systems. Dr. Roggy can make student athletes perform more consistently and at a higher level, both on and off the field.

# **VISION SKILLS CAN BE MEASURED AND IMPROVED**

Vision is more than 20/20 eyesight. Over 40% of the brain's machinery is dedicated to vision. Scientific research shows that visual-motor and visual-sensory skills are modifiable. Everyone from the injured athlete to the high performer can be trained to react quicker, focus faster, and maximize depth perception and visual sensory skills. Assuming every athlete has equal ocular motor skills is like assuming that every athlete can run the same speed or jump the same height. Roggy Eye Clinic can improve an athlete's oculomotor and visual-sensory skills which will improve athletic performance.

Sports vision training can better prepare the athlete for competition by dramatically improving the athletes' peripheral awareness, body reaction, eye-hand and eye-foot coordination, visual perceptual skills, visual clarity, eye teaming, focusing and tracking. Sports vision training should be in tandem with the overall conditioning and training of the athlete.

# **ASSESS + ANALYZE + TRAIN (OPTIMIZE)**

Our approach is simple.

**Assessment:** Each athlete completes baseline vision and binocular testing by the doctor *plus* individualized instrument visual-motor and visual-sensory skill evaluation. These are accurate, efficient and sophisticated vision assessments performed in the office or at your team's facility.

**Analysis:** All individual assessment data is analyzed by the doctor and by Senaptec's database, separating each athlete by sport, position and competition level. Strengths, weaknesses and potential areas for visual growth are identified.

**Training (optimization):** Specific and highly customized sports vision training protocols are designed and implemented to improve visual motor and sensory performance for each athlete based on individual assessment analysis. All vision therapy training will be individualized and done under the doctor's direction and administered by vision therapists.

Roggy Eye Clinic utilizes proven vision and sensorimotor improvement methodologies with state-of-the-art technology to make athletes see better... be better.

# **Services**

The Sports Vision Training program is a *process* that is completely controlled by the client. Our process starts with thorough vision and sensorimotor testing to determine baseline data of the vision capabilities and potential deficits of each athlete. Individual vision strengths and weaknesses of the athlete is then clearly identified to players, coaches and trainers.

The doctor prepares a summary analysis and recommendations for consideration based on the analysis of the testing data. Once complete, you will be ready to proceed with the Sports Vision Training program. This may include training for select high-impact players, players demonstrating significant impairment, or to move entire teams to a higher level of performance through sports vision training.

# **Sports Vision Training Assessment**

- ✓ Sports Vision Training Assessment by the Doctor
  - o Comprehensive history and baseline vision measurements.
  - Clinical evaluation of binocular skills critical for athletic success.
- ✓ Complete a Sensory Senaptec vision assessment including 7 to 10 of the following:

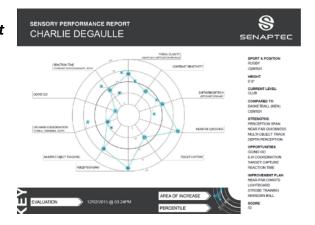
Target Capture Eye Hand Coordination

Visual Clarity Depth Perception

Perception Span Reaction Time

Go / No Go Contrast Sensitivity

Near Far Quickness Multiple Object Tracking



# **Sports Vision Training Analysis**

- ✓ Clinical analysis for each athlete's assessment.
- ✓ Presentation of results with athletes, coaches, trainers and other authorized participants.
  - \*Analysis of testing may result in Doctor recommendation for a Clinical Vision Exam.

# **Sports Vision Training**

- ✓ Development of customized vision training programs and modalities at the individual level.
- ✓ Demonstration of specific sports vision exercises used in the vision training program.
- ✓ Access to our experienced team of qualified vision therapists to ensure the individual drills are utilized and maximized.
- ✓ Provide motivation techniques designed to ensure athletes embrace their individual sports performance vision training regimen.
- ✓ Review of athlete progress up to three times throughout the athlete's program
- ✓ All vision training is performed under the medical supervision of the Doctor.

# **Coach Testimonials**

## Rick Heller, Head Coach, University of Iowa Baseball (01/22/2020):

"Dr. Heying and Dr. Roggy are a big part of our team. With their expertise we have developed an elite level vision training system with our team that not many (if any) are doing nationally. The success stories we have are many! Several of our players over the years have completely changed their careers. All of our players improve their functional vision. Being diagnosed early in a player's career allows them to fix or improve a lot of functional vision limitations before it's too late.

In a lot of programs, the coaches think the player's issue is his swing or his attitude, when a great deal of the time it's a simple vision problem. We have eliminated "guessing" in our program. No more spinning our wheels thinking it's a mechanics problem. We look at vision right away."

#### **Desi Druschel** Player Development, New York Yankees

"Sports vision is an untapped area for improvement and I believe this is the start of something big. The Strobe glasses drove me to Dr. Heying but I believe the other drills are probably more important than the glasses. The most critical factor in improved sports vision is working with an expert and getting, then using empirical data to outline a plan for vision strengthening."

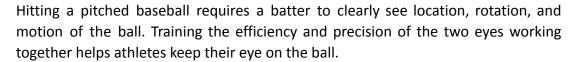


# Dr. Sheri Roggy

Dr. Sheri Roggy is a graduate of Northwest Missouri State University with a degree in Molecular Biology and Valedictorian of the University of Missouri - St. Louis School of Optometry. Dr. Roggy, co-founder of VisioSport, is a Sports Vision Performance Specialist for the University of Iowa Athletic Department, Pennsylvania State University, Mizzou and the West HIgh Baseball program. In addition, she works with the Chicago Cubs Youth program, as well as professional athletes and individual youths. She is the owner of Roggy Eye Clinic, Coralville, Iowa and has practiced for 22 years in primary eyecare with special interest in pediatrics and sports vision. She enjoys lecturing at the local, state and national level on vision-related learning problems and post-concussion vision rehabilitation

# BENEFITS OF SPORTS VISION TRAINING

#### **BASEBALL**





- Improved hand-eye coordination
- Improved confidence in swing commitment
- Pick up pitches quicker out of the "window"
- Increased overall field and situational awareness
- Improved timing and balance
- Improved swing consistency
- Quicker reaction defensively: depth perception and "read" on fly balls, line drives, and hard grounders
- Locate pitches more consistently
- Improved confidence and performance under pressure
- Improved concentration
- Improved decision-making

#### **FOOTBALL**

Visual skills influence overall field awareness and specifically depth perception, eye tracking, focusing flexibility, eye alignment, and visual memory are all used for passing & judgment of distances between yourself, the ball and other players.



- Improved consistency in performance
- Improved hand-eye coordination
- Improved performance under pressure
- Improved coordination and balance
- Quicker reaction time
- Enhanced field awareness of teammates, opponents, referees, etc.
- Improved concentration
- Improved overall decision-making
- Improved timing accuracy
- Increased overall field and situational awareness

#### Quarterbacks:

- More efficient scanning of the field
- Quicker defensive reads
- Improved pass timing and accuracy
- Cleaner hand-offs
- Improved consistency in the passing game
- Increased field of view and awareness

## **Kicker/Punter:**

- Improved handling of snaps
- More accurate judgment of goal posts
- Improved kicking accuracy
- Improved kicking distance through more consistent contact (eye-foot coordination)

#### Linemen:

- React to snap quicker
- Read plays quickly and more accurately

#### **Receivers:**

- More consistent catching
- Improved perception of location of ball in space
- Improved awareness of defensive players in relation to self

## **Running Backs:**

- Quicker recognition of gaps in the line
- Quicker determination of cutbacks and angles on sweeps

#### **BASKETBALL**

Visual skills influence overall court awareness and specifically depth perception, eye tracking, focusing flexibility, eye alignment, and visual memory are all used for free throw shooting, jump shots, set shots, passing, and judgment of distances between yourself, the basket, and other players.



- Improved consistency in performance
- Improved hand-eye coordination
- Improved performance under pressure
- Improved coordination and balance
- Quicker reaction time and timing for block shots, steal passes, and rebounds
- Enhanced court awareness of teammates and opponents
- Increased overall court and situational awareness with a widened field of view
- Improved concentration
- Improved overall decision-making
- Improved shooting accuracy through better judgement of basket depth and angle of approach

#### **GOLF**

Visual skills influence all aspects of a golf game, including putting, driving, chipping, judging distances, concentration, and reading the greens. Visual tracking skills are necessary for keeping the eyes steady and on the ball prior to impact from the swing and for locating the ball in flight.



- Improved swinging consistency
- Improved concentration
- Improved accuracy of shifting focus between the ball and the target
- Improved accuracy in judging distance to the hole

#### **HOCKEY**

Visual tracking, focusing flexibility, depth perception, reaction time, and visual memory are paramount for goalies to recognize and react to the speed, direction, and height of the puck. In addition, goalies must continuously be aware of the offensive and defensive players without losing sight of the puck.



- Improved consistency in performance
- Improved performance under pressure in stressful situations
- Improved coordination and balance
- Quicker reaction time to fast moving shots and passes
- Enhanced field awareness of teammates, opponents, referees, etc.
- Improved concentration
- Improved overall decision-making
- Improved timing accuracy
- Improved pass accuracy
- Improved visual memory
- Improved confidence in shooting

#### **SOCCER**

Vision is the dominant sense for soccer and most sports. As soccer is a sport of almost constant motion, learning and developing peripheral vision awareness, improved reaction time and concentration will lead to superior performance in the game, but also helps to avoid collision and injury.



- Improved peripheral vision awareness of the ball, other 21 players, boundaries and goal
- Improved judgement in distances when connecting on passes or leading teammates
- Improved reaction time to opponent's move
- Improved timing in connecting with passes
- Improved shooting accuracy
- Improved concentration, especially in high pressure situations
- Improved coordination and balance

#### **TENNIS**

Improved perception of speed and direction of ball when playing volleys, baseline drives, return of serves, and overheads.

- Improved ability to track the ball and quicker reaction to its direction
- Improved eye alignment for more accurate fixation on the ball
- Improved depth perception of the ball's position in free space
- Improved concentration
- Improved focusing flexibility when returning a serve
- Improved eye-hand coordination
- Enhanced court awareness of the sidelines, baseline, service line, and net
- Improved accuracy of racquet placement
- More controlled body movement

#### **VOLLEYBALL**

### Blocking:

- Quicker processing of visual information
- Quicker decision-making
- Improved perception of the position of teammates and opponents
- Improved awareness of sidelines, baseline, and service line
- Improved tracking of the ball

## Hitting/Spiking:

- Improved precision
- Improved control of speed, rotation, and direction of the ball
- Greater awareness of contact point
- Improved shoulder position and line of swing
- Improved balance and landings

#### Serving:

- Improved precision
- Improved confidence
- Improved coordination and balance
- Improved form and greater consistency

#### Setting:

- Improved hand position
- Accuracy in timing
- Accuracy in footwork
- Enhanced awareness of contact point
- Improved follow through
- Improved anticipation



## **Off-The-Field Benefits**

Regardless of the sport or position played, the benefits of AVT training do not stop at the locker room. Many of the techniques, methodologies and modalities become portable to other aspects of life, notably in the classroom. Student-athletes are, first and foremost, *students*.



If athletes are struggling academically, it can dramatically affect their performance on the field ranging from increased stress, to potential ineligibility or loss of scholarship or merit aid. Our sports vision process often uncovers related, but separate, vision issues that can negatively impact athletes in the classroom<sup>1</sup>. Some of these vision challenges include:

- Amblyopia. Amblyopia is also called "lazy eye." This is a vision development problem where the eye fails to achieve normal visual acuity due to unequal refractive errors or strabismus. Strabismus stems from an inability to keep the eyes properly aligned. Often clients obtain a higher rate of success with vision therapy than compared to other medical procedures.
- Strabismus. A misalignment of the eyes, and can include intermittent, constant, small or large angle eye turns. Depending on the level of dysfunction, depth perception is affected at various degrees. Other mal-adaptations often occur such as suppression, amblyopia, eccentric fixation, or anomalous correspondence - all complicating the clinical presentation and treatments.
- Vergence Insufficiencies. Binocular vision dysfunction characterized by a reduced ability
  of the eyes to turn towards each other to sustain convergence or to turn out to sustain
  divergence. They may include, but are not limited to, intermittent diplopia (double
  vision), eye strain, transient blurred vision, difficulty sustaining near-visual function,
  abnormal fatigue, headache, and abnormal postural adaptation, among others.
- Uncorrected Refractive Errors. The Sports Vision assessment can identify previously
  undiagnosed vision corrective needs. While the specific sports vision training may not be
  able to adequately address or correct these conditions, often proper referral or
  intervention with lenses or contact lenses is simple.
- Accommodative Dysfunctions Focus vision disorders (when one or both of the eyes fail
  to change focus or sustain focus normally). They may include, but are not limited to, eye
  strain, transient blurred vision, difficulty sustaining near-visual clarity, abnormal fatigue,
  difficulty changing focus quickly or headache.

<sup>&</sup>lt;sup>1</sup> The sports vision process is beneficial in the identification of certain other vision challenges. Those vision issues may require additional clinical / medical vision evaluation, and non-sports (non-SVPT) vision therapy programs or corrective eyewear.

# **Player Testimonials**

#### Robert Neustrom (Class A Baltimore Orioles, UI Baseball RF): 08/01/2019

"Having Exceptional vision is imperative to being a successful baseball player. I believe the last three years of vision training with Dr. Roggy has played a key part to my success so far in this game. Vision training is an important supplement to a hitters training not only to maintain exceptional eyesight, but to improve in areas where one may not even think possible. With all of the resources available in today's game, my training would not feel complete without vision training."

### Tyler Weigers (UI Football. QB): 10/11/17

"Since beginning vision training I've noticed a huge difference in my ability to contrast between shades and colors and have found that helpful with being able to adjust to the stadium lights or bright days. I've found my depth perception down field to be a lot better which has helped with throwing deep balls, I'm better able to judge where the defender is and how far in front of the receiver I need to throw the ball. My peripheral vision has improved a lot, especially on the left side so I've been able to feel defenders better and it's helped me scanning across the field, especially when I have full field reads. Lastly I'd say it's just given me better reaction time and slowed things down for me. I'm a lot more confident in what I'm seeing on the field so I can play faster."

## Ashley Yoways (UI Softball Pitcher): 01/19/2017

"Working with you and Rachel was the best thing that has happened since the injury. The vision therapy has helped me tremendously in all aspects of my life, including softball. The difference is so apparent that my family and my roommates notice a difference in my abilities in all kinds of things like driving, grabbing and setting down a glass, and most of all my clumsiness. We did a drill at practice the other day where coach had a bucket of baseballs and tennis balls. We had to choose a hand to catch each ball (e.x. Right hand tennis ball, Left hand Baseball), then from about 3 yards away coach would rapid fire balls at us in all directions. When my turn came, I only missed one and was one of the best at the drill! It was unbelievable because I could remember when I couldn't even really catch one ball confidently with two hands. When I think about my improvement since I began working with you I get emotional and am so blessed that I have confidence in myself again.

I notice little differences everyday and I can't thank you enough for all of your help making the best out of my vision. I loved every minute of working with such amazing individuals like you and Rachel (vision therapist)."

#### Zach Fricke (Baseball Catcher): 03/07/2017

"I had a great experience with vision therapy. Before I found out that I had strabismus I didn't feel like I had many challenges in baseball. In school I always had trouble reading and being able to comprehend what I read. I would find myself having to reread what I previously read and it was at a slow pace. After vision therapy I was and am able to read faster without losing my place as much and I am able to comprehend what I am reading better. I had always found ways to be successful in baseball and had no clue there was an issue with my eyes before we had vision screening. When Dr. Roggy told me some of the challenges people have with strabismus I began to notice I experienced these. I noticed my depth perception was essentially nonexistent, I had troubles with

contrast, and a reaction time. After doing vision therapy I was able to improve my depth perception. I don't struggle as much picking up the ball when I'm hitting and catching. Catching has become easier because my reaction time has improved so much. Vision therapy has also helped me not have to strain my eyes as much and has reduced the amount of headaches and tired eyes. I would recommend vision therapy to anyone."