CELEBRATE 35 YEARS
NATIONAL CONFERENCE AND EXHIBITION
JULY 11 – 14, 2012 | PROVIDENCE, RI
WWW.NSCA.COM/NATCON2012
Individualizing the Management of Pitchers: How to Spot What Your Throwers Need

Eric Cressey, MA, CSCS
Founder/President – Cressey Performance
www.CresseyPerformance.com
www.EricCressey.com
About Cressey Performance

- 80-85% Baseball Players
- Training Destination
- Over 30 Division 1 Baseball Scholarships in the Class of 2011
- 12 Picks in the 2011 MLB Draft
- MA: 5th ranked state in deepest draft since ‘86
- 60+ Professional Players this Off-Season
Three Windows of Adaptation

1. Determining Position on the Absolute Strength to Absolute Speed Continuum
2. Getting Outside the Sagittal Plane
3. Understanding and Individualizing Deceleration
How do you build a sprinter?

Absolute Speed  Speed-Strength  Strength-Speed  Absolute Strength

Specific  IDEAL  General

Sprinting, Plyos  Jump Squats  Olympic Lifts  Squats, Deadlifts
Applied to Pitching

- Absolute Speed
- Speed-Strength
- Strength-Speed
- Absolute Strength

Specific
IDEAL
General

- Long Toss, Bullpens, Flat-Ground Drills
- Weighted Balls
- Medicine Balls
- Strength Training

NATIONAL CONFERENCE AND EXHIBITION
JULY 11 – 14, 2012 | PROVIDENCE, RI
Getting Outside the Sagittal Plane

- Rotational sports take place in all three planes of motion, yet most training programs “live” in the sagittal plane.
- Overlooks opportunities to improve
- Reinforces imbalances

<table>
<thead>
<tr>
<th></th>
<th>Foot Contact</th>
<th>MER</th>
<th>BR</th>
<th>Home Plate</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PELVIS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thorax</td>
<td><a href="image">Diagram</a></td>
<td><a href="image">Diagram</a></td>
<td><a href="image">Diagram</a></td>
<td><a href="image">Diagram</a></td>
</tr>
<tr>
<td>Pelvis</td>
<td>R ASIS</td>
<td>L ASIS</td>
<td>L ASIS</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-64 ± 12°</td>
<td>+11 ± 10°</td>
<td>+18 ± 8°</td>
<td></td>
</tr>
<tr>
<td><strong>THORAX</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thorax</td>
<td><a href="image">Diagram</a></td>
<td><a href="image">Diagram</a></td>
<td><a href="image">Diagram</a></td>
<td><a href="image">Diagram</a></td>
</tr>
<tr>
<td>Thoracic</td>
<td>RSJC</td>
<td>LSJC</td>
<td>LSJC</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-92 ± 11°</td>
<td>+10 ± 12°</td>
<td>+25 ± 9°</td>
<td></td>
</tr>
</tbody>
</table>
The Demands of Hitting

- Welch et al. (1995):
- 714°/s rotation at the hips
- Stride length averaged 85cm - or roughly 380% of hip width.
Specificity of Power Development

- It’s not just running and jumping.
- We can’t expect rotational power from linear modalities.
The Exercises: Rotational

- Rotational Shotput
- Rotational Scoop Toss
- Step-Back Rotational Scoop Toss
- Recoiled Shotput
- Step-Behind Shotput
- Hot-Feet Recoiled Shotput
- Reverse Lunge to Shotput
The Exercises: Overhead

• OH Stomp to Floor
• Recoiled Rollover Stomp to Floor
• Split-Stance OH Throw to Wall
• Split-Stance Stand-up Stomp
• Recoiled Rollover Throw to Wall
• Crow Hop to OH Throw to Wall
• Sledgehammer Swings fall in this category as well.
A Typical Off-Season Med Ball Week

- 240-360 total throws per week
- Spread over three sessions
- Generally one rotational and one overhead variation per session
- As throwing volume increase, medicine ball volume decreases.
Frontal Plane Plyos

- Heidens
- Repeated Lateral Heidens
- Reactive Heidens
- Band-Resisted Heidens
Understanding and Individualizing Deceleration

- Supinators
- Elbow flexors
- Glenohumeral Joint: External Rotators & Anti-Distractors
- Scapular Retractors
- Thoracic Spine
- Core Stabilizers
- Lower Half
Clearing Up the Rotator Cuff Controversy

• Rhythmic Stabilizations
• Manual Resistance
• Traditional External Rotation Drills
• Remember that the scapular stabilizers may fatigue before the cuff!
Anti-Extension

- Prone Bridging
- Push-up Variations
- Rollout Variations
- TRX Fallouts/Flutters
Anti-Rotation

• Side Bridging
• Anti-Rotation Chops & Lifts
• 1-arm Carries
• Asymmetrically Loaded Strength Exercises
Thank You!

ec@ericcressey.com
www.EricCressey.com