



NFL COMBINE

THE ULTIMATE PRE-PARTICIPATION PHYSICAL

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NFL Scouting Combine

- Originally: National Invitational Camp (NIC)
- Goal = Invite all players likely to be drafted
- 1982 National Football Scouting Service
 - 1st camp for member teams – Tampa
 - Purpose = obtain “medical information”
 - 163 players
 - 2 other camps held for other non-member teams

NFL Scouting Combine

- 1985: All teams “Combined”
 - » Share costs of Medical Evaluations
- 1987: NFL Scouting Combine moved to Indianapolis
- Present:
 - 320-350 Athletes Invited
 - Medical Evaluations = 4 days
 - Workouts and Evaluations by Team Personnel

NFL Scouting Combine

Purpose

- Predict: Effect of Injuries & Conditions
 - Practice
 - Play (Games lost)
 - Career Longevity
 - Predisposition to Injury
 - Deterioration of Skills
- Predict: **Productivity and Success in NFL**
- What Evaluation tools are Most Accurate
?????

NFL Scouting Combine

4 Day Job Interview/Pre-employment

- Complete Medical Evaluations
- Physical Tests
- Psychological Tests
- Media Interviews
- Private Team Interviews

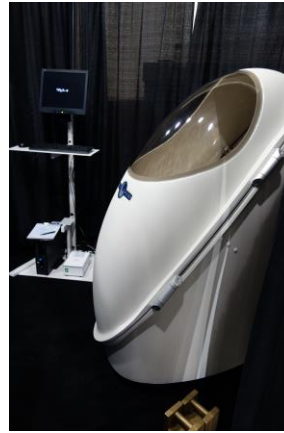


NFL Scouting Combine



Medical Evaluations

- General Medical Evaluation
- Orthopedic Evaluation
- Vision Test
- Impact Test
- Bodpod
- EKG
- Echocardiogram
- Routine Blood Tests
- Drug Screen
- Cybex



NFL Scouting Combine

PURPOSE: PROMOTE THE NFL



NFL EXPERIENCE



Physician Academic Meeting

- NFL Team Physician Society
- Educational meeting
- Scientific papers
- Combine data
- NFL Injury data



Orthopaedic Evaluation

- Prescreened:
 - History
 - Radiographs (MRI) ordered
- Teams grouped: 6 rooms



Orthopaedic Evaluation

- Cooperative Evaluation
 - History Reviewed
 - Physical Exam
 - All ordered tests
 - Player Presented to Group
- Each Team:
 - 3 to 6 Ortho
 - Radiologists



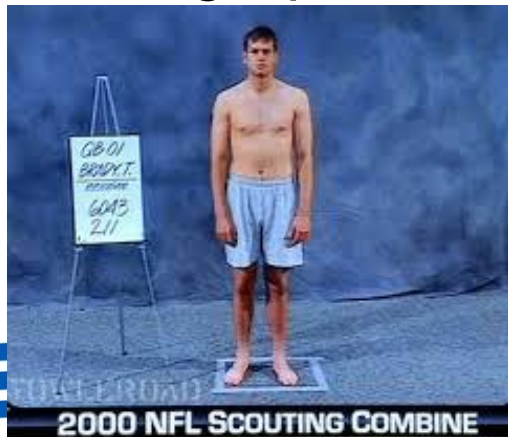
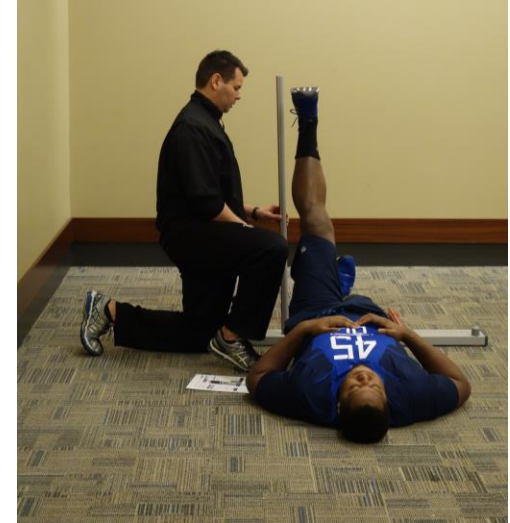
Other Tests

- Plain Radiographs 1000's
- MRI 508
- CT Scan 55
- Bone Scan 3
- EMG/NCS 4
- KT-1000 4



Evaluations

- Functional Movement Screen
- Measurements:
 - Height
 - Weight
 - Arm Length
 - Hand Span
 - Wing Span



“THE FUN STUFF”

Bench Press



- 225 pounds (max rep record 51 = Justin Ernest)

ON FIELD WORKOUT

- “40”
- Vertical Jump
- Broad Jump
- 20-60 Shuttle
- 3 Cone Drill
- Flex Station
- Skill Drills



“The 40”



“The 40”

- Break Combine 40 record in **Adidas** – Win an Island of \$1 million



John Ross – Washington 4.22



Vertical Jump



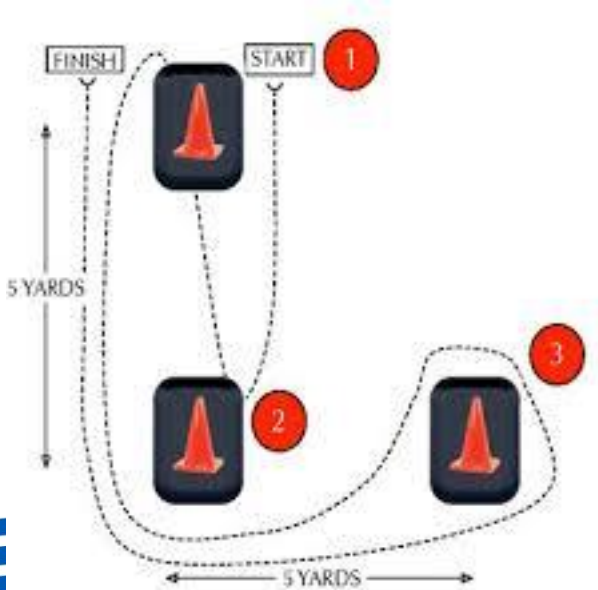
Broad Jump



Shuttle run



3 Cone Drill



Wonderlich Intelligence Test

Wonderlic Intelligence Exam

NFL AVERAGE

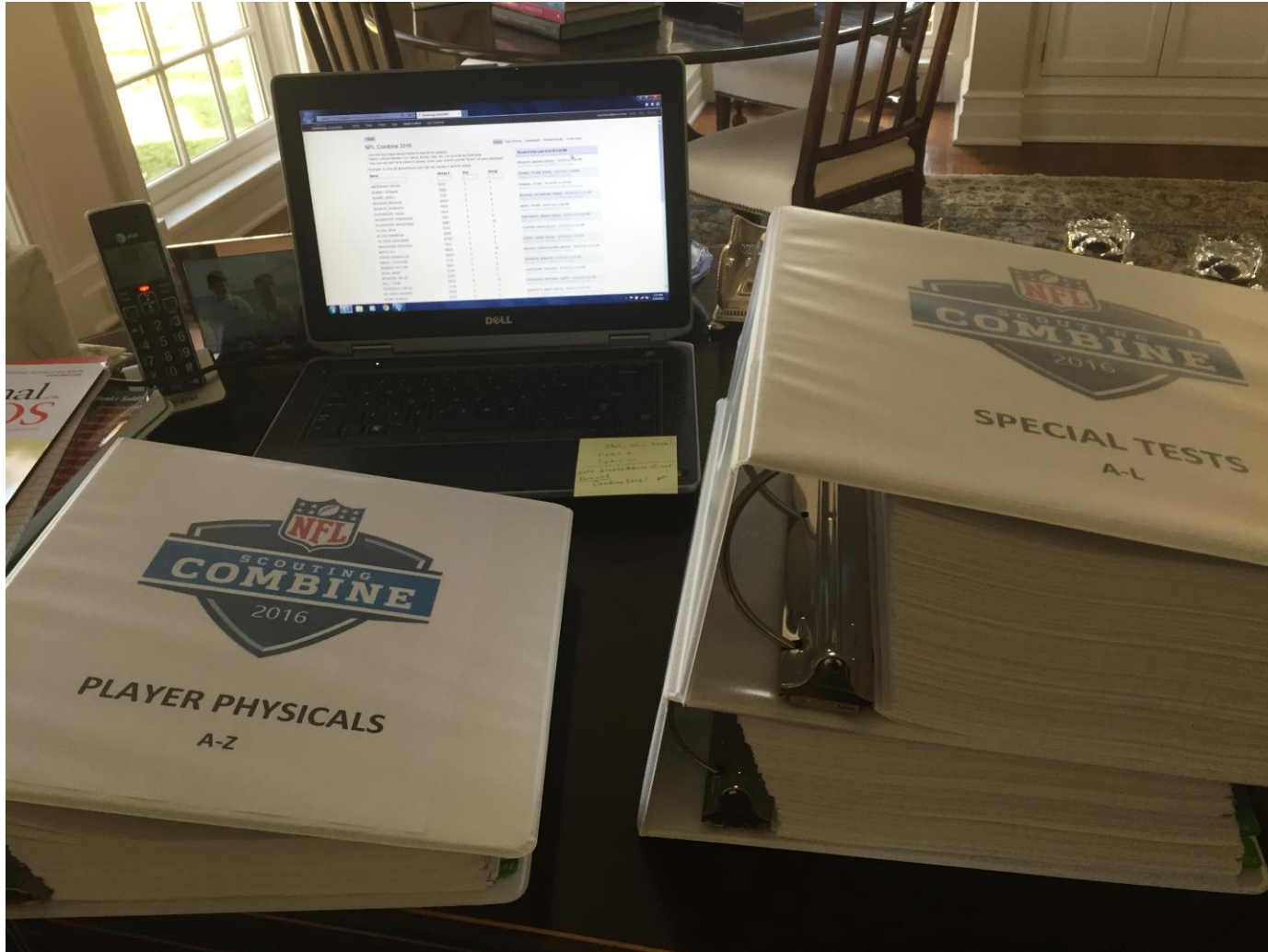
- Look at the row of numbers below. What number should come next?
27 9 3 1 1/3 1/9 ?
- Assume the first 2 statements are true. Is the final one:
1 True 2 False 3 Not Certain
- The boy plays for the Tigers. All the players on the Tigers wear white sneakers. The boy wears white sneakers.
- Paper sells for 21 cents per pad. What will 5 pads cost?
- How many of the six pairs of items listed below are exact duplicates?
Niemann, K.M. Neiman, K.M.
Thomas, G.K. Thomas, C.K.
Hoff, J.P. Hoff, J.P.
Warner T.S. Wanner, T.S.
Pino, L.R. Pina, L.R.
Hammar, C.G. Hammar, C.G.
- PRESENT, RESENT - Do these words
1 Have similar meanings
2 Have contradictory meanings
3 Mean neither the same nor opposite
- A train travels 20 feet in 1/5 seconds. At this exact speed, how many feet will it travel in three seconds?
- When rope is selling at \$.10 a foot, how many feet can you buy for sixty cents?

- Offensive tackle – 26
- Center – 25
- Quarterback – 24 (Most teams want at least 21 for a quarterback.)
- Guard – 23
- Tight end – 22
- Safety – 19
- Linebacker – 19
- Cornerback – 18
- Wide receiver – 17
- Fullback – 17
- Halfback – 16

Media Interviews



BACK HOME – THE WORK STARTS



FINAL MEDICAL EVALUATION

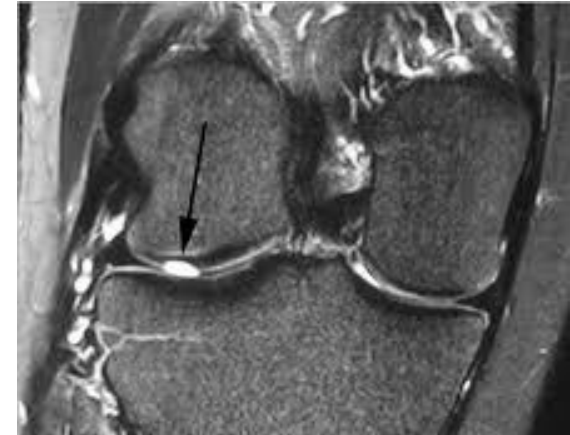
- Review **All** Medical and Orthopaedic Info.
- Assign Medical Grade (1-4)
- Grade based on Overall Condition
 - History of Injuries
 - Missed Time
 - Risk of Further Injury
 - Severity of Ongoing Problems
 - Correctible Condition ?
 - Position (unique demands/stresses)

ACL RECONSTRUCTION

- YEARS SINCE RECONSTRUCTION
- PLAYING HISTORY POST SURGERY
- SUBSEQUENT SURGERY –
MENISCUS/CHONDRAL DAMAGE
- MISSED PRACTICE/GAMES
- SWELLING/NSAID USE
- EXAM: LACHMAN/PIVOT SHIFT
- XRAY & MRI: DEGENERATIVE CHANGES
- GRAFT CHOICE/TUNNEL LOCATIONS
- **20% RISK OF CONTRALATERAL OR RETEAR**

MENISECTOMY

- MEDIAL VS **LATERAL**
- PLAYING/PRACTICE HISTORY
- MEDS/INJECTIONS
- BODY MASS
- POSITION
- EXAM/EFFUSION
- XRAYs/MRI FOR CHONDRAL DAMAGE
(**OA**)
- WORKOUT AT COMBINE/PRO-DAY



PATELLOFEMORAL CHONDROMALACIA

- COMMON FINDING (DB & WR)
- DIFFUSE WEAR VS DEFECTS
- VARIABLE EFFECT ON PERFORMANCE
- POSITION DEPENDENT
- CYBEX RESULTS! (yes, we still do cybex)

OTHER CHALLENGING CONDITIONS

- STINGERS AND CERVICAL STENOSIS
- LUMBAR SPONDYLOLYSIS IN LINEMEN
- 5TH METATARSAL STRESS FRACTURES
 - UNTREATED
 - PREVIOUSLY FIXED AND INCOMPLETELY HEALED
 - BONE SCAN/CT SCAN
- CONCUSSIONS (??? >3)



UPPER EXTREMITY INJURIES

- LESS LIKELY TO IMPACT PLAY
- LESS LIKELY TO IMPACT CAREER LONGEVITY
- SURGICAL TREATMENTS MORE EFFECTIVE AT PROLONGING PLAY
- SHOULDER INSTABILITY/LABRAL TEARS
- AC JOINT INJURIES
- HAND FRACTURES
- SCAPHOID FRACTURES/NONUNIONS

WHAT WOULD YOU ADVISE ?

- DJ HAYDEN (Houston)
- Practice: Making a Tackle
- Avulsion of Inferior Vena Cava
- Emergent Life Saving Surgery
- Hadn't played again ???
- “Cleared to play Football” by Operating Surgeon
- “Shut Down Corner” // 4.33 40 dash
- Drafted 12th Pick Oakland Raiders
- Adhesion surgery required before first season
- Started 23 games 3 years



WHAT WOULD YOU ADVISE ?

- Jaylon Smith
- Notre Dame Senior
- Fiesta Bowl
- ACL, posterolateral corner injury
- Complete Peroneal nerve injury
- Drafted Dallas, 34th pick overall
- Successful repair & ACL reconstruction



Pre-draft Medical Meeting

- GM, Player Personnel, Head Coach
- +/- Discuss “Hot List”
- Discuss 3’s and 4’s
- “Don’t care if they are going to limp when their career is over”
- “Will they make it through their first contract?”

Summary

- Intense 4 day Evaluation
- Role of Medical Team
 - Review History
 - Conduct Complete Physical Exam
 - Assess Diagnostic Testing
 - Provide Team Prognostic Advice
 - » Medical Grade
 - » Known Risk Data
 - » EXPERIENCE



THANK YOU



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