

## UNIVERSITY ATHLETICS COMMITTEE Minutes

Thursday, December 12, 2024 (3:30 – 5:00 p.m.)

Zoom Meeting - <https://virginiatech.zoom.us/j/88010840825>

**Members Present:** Whit Babcock, Robin Queen, Dan Thorp, Alex Efird, Jen Irish, Phil Miskovic, Paul Knox, John Galbraith, Eric Martin, Emma Atkinson, Dirk Buengel, Frank Thompson, Brent Kremer, Amy Ingram, Rachel Holloway.

**Absent:** Chris Wise, Liesel Ritchie, Lisa Karlisch, Ken Stiles, Simon Allen, Travis Burns, Mark Feldman, Leanna House, Brad Whitney, Brad Wurthman, Joe Tront.

**Guests:** Sarah Anderson, Danny White, Reyna Gilbert-Lowry, Steve Rowson.

- 1. Approval of Agenda.** Group
- 2. Electronic Approval of November 14, 2024 Meeting Minutes.** Posted on the Governance web page (<http://www.governance.vt.edu>). Galbraith
- 3. Faculty Athletics Representative Report:** Jen Irish gave an update about the best practices meeting she attended. Academic best practices were discussed, and how to raise up the value of academics in the post-House v. NCAA era. Whit Babcock and Tim Sands met with Student Athlete Advisory Committee (SAAC) about the impacts from the House v. NCAA case. She would like the Missed Class Policy subcommittee to take a more proactive role in developing mitigation strategies, especially for the sports where competitions last multiple days in a row (e.g., golf, baseball, softball). Small tweaks may be proposed for approval.
- 4. Student Athlete Presentation:** about Student Athlete Advisory Committee (SAAC) of about 500 student athletes that meet bi-weekly. Emma Atkinson (swimming) and Frank Thompson (tennis) made a presentation (attached). One topic of concern was that a student athletes' absence to attend a university scheduled sports event is counted against their missed class totals, which does not leave them a fair total of misses for sickness or other reasons. There was a concern about a very minor number of professors that were very strict about missed class.
- 5. Guest Presentation:** Dr. Steve Rowson gave a presentation (attached) about helmet safety. His lab is a national leader in research on biomechanics, helmet evaluation and ratings, helmet covers and ratings, and safety. Started in 2003, as Virginia Tech was the first university to instrument helmets to understand head impacts and the forces that cause head injuries.
- 6. Guest Presentation:** Senior Associate AD Reyna Gilbert-Lowry gave a report (attached) about the Fall ACC Meetings. The next meeting is in February and she will attend and then present a report.

**7. Athletic Director Update:** Whit Babcock gave an update about the current state of the athletic program. His remarks follow a [video interview](#) with Bill Roth released on Dec. 6<sup>th</sup>. Whit gave an update on the current athletic teams and their successes. Whit has been meeting with coaches at least once per month to update them on the possible (but still unknown) implications of the House v. NCAA case whose outcome is expected in early April. He clarified that university academic budget cuts are not associated with the \$20.5 million per year the university is allowed to share with athletes starting July 1. Additional scholarships will be allowed but some roster reductions will also be imposed by the NCAA. He reported that football generates 75-80% of the programs' revenue, and gave multiple examples of how the costs to run our sports programs are more than made up by the income brought to Southwest Virginia, as well as other non-monetary values such as school pride, game day experience, and improved quality of life in our communities. Satisfaction among graduates of Virginia Tech is extremely high compared to most other institutions, and the two groups with the highest satisfaction are the Corps of Cadets and the student athlete graduates. Whit reported our Athletic budget to be about \$125 million per year, ranking us about 14<sup>th</sup> of 18 in the ACC, and 54<sup>th</sup> of the top 68 schools in Division I. We break even every year. The athletic program currently returns more value back to Virginia Tech students than the \$25 million received from student fees to support the athletic programs. We have the lowest student athletics fee in the ACC and it makes up the lowest proportion of any ACC budget.

**8. Adjourned at 5:04 pm.**

Proposed Spring 2025 UAC Meeting Schedule

**Jan 16<sup>th</sup> – 3:30 p.m. – 5:00 p.m.** (In-person, location: 5<sup>th</sup> floor dining area, Lane Stadium north tower entrance)

**Feb 13<sup>th</sup> – 3:30 p.m. – 5:00 p.m.** (Virtual Only)

**March 20<sup>th</sup> – 3:30 p.m. – 5:00 p.m.** (In-person, location: 5<sup>th</sup> floor dining area, Lane Stadium north tower entrance)

**April 17<sup>th</sup> – 3:30 p.m. – 5:00 p.m.** (Virtual Only)

**May 7<sup>th</sup> (if needed) – 3:30 p.m. – 5:00 p.m.** (In-person, location: 5<sup>th</sup> floor dining area, Lane Stadium north tower entrance)



# Concussion Research in the Virginia Tech Helmet Lab

Steve Rowson, PhD

*Biomedical Engineering and Mechanics  
Director, Helmet Lab  
Virginia Tech*

# Virginia Tech Helmet Lab

## Injury biomechanics research

- Our research focuses on quantifying concussion biomechanics
- We collect data directly from higher-risk athletes
- We translate those findings to develop laboratory tests that can be used to improve helmets





Helmet-mounted accelerometer arrays, clinical test battery

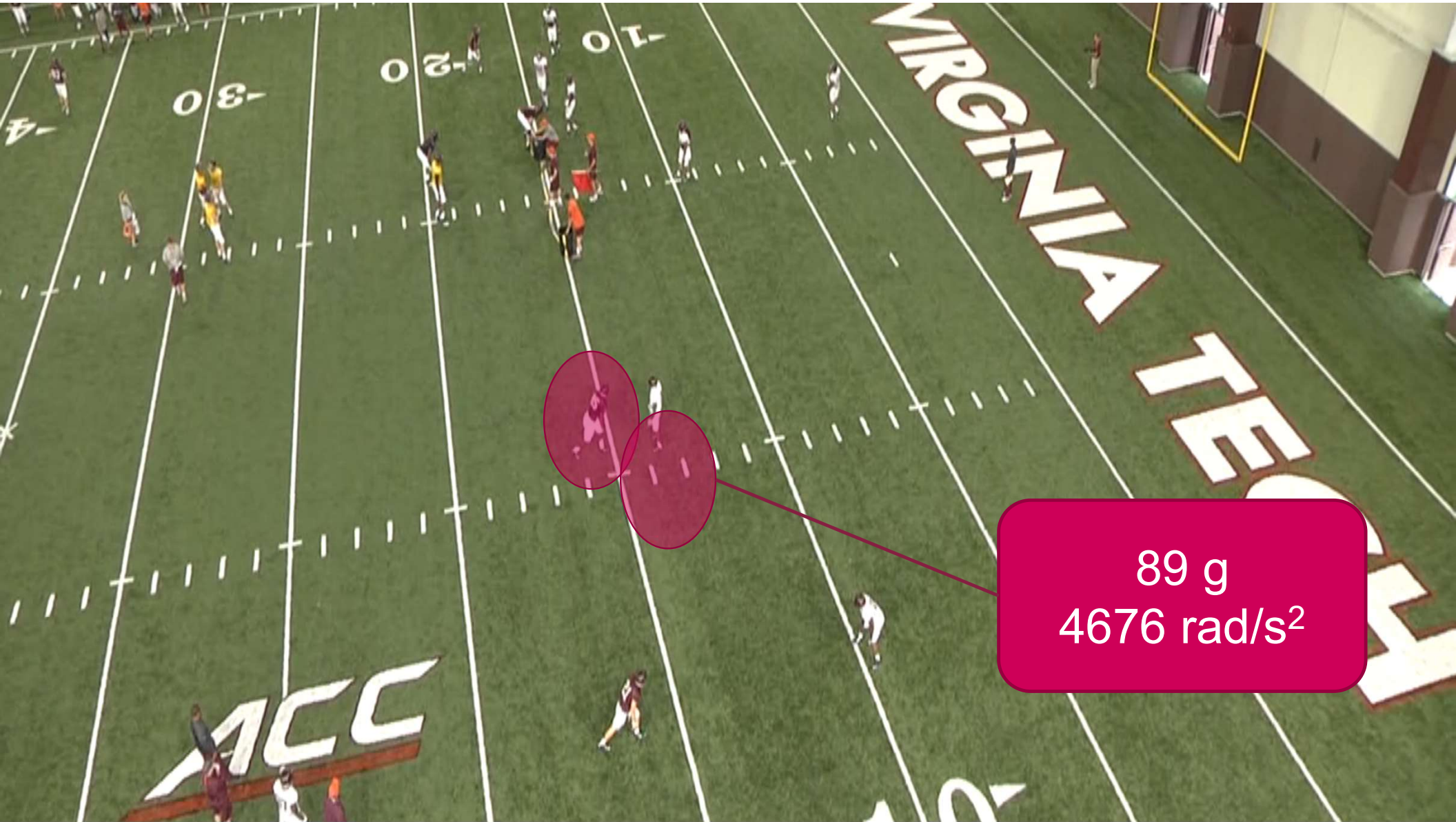
A wide-angle photograph of a large stadium at night, filled with spectators. The football field is illuminated, and the name 'VIRGINIA TECH' is visible on the field. A large crowd is visible in the stands, and fireworks are exploding in the sky above the stadium. The stadium lights are on, and a large video screen is visible on the right side of the stadium.

20 years of on-field data collection

Wireless coverage of  
entire field

**Research Funding**

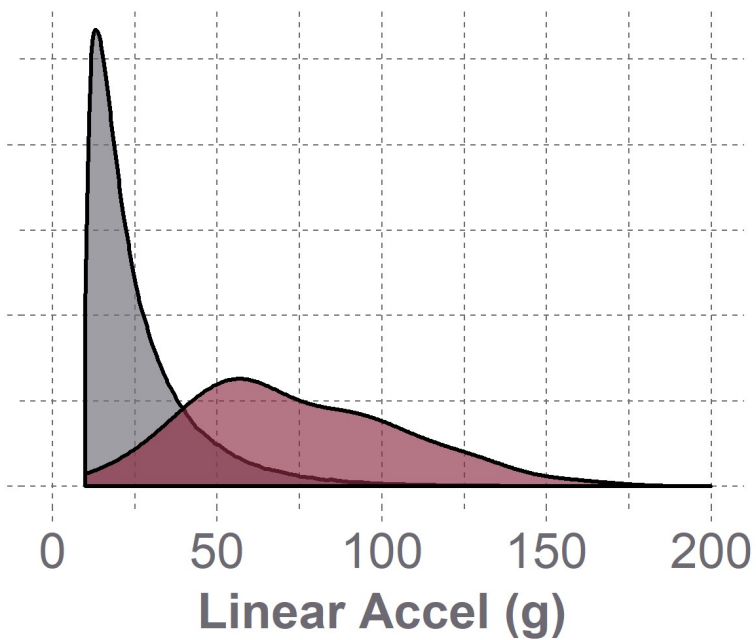
DOT  
Toyota  
NIH  
DOD  
NCAA



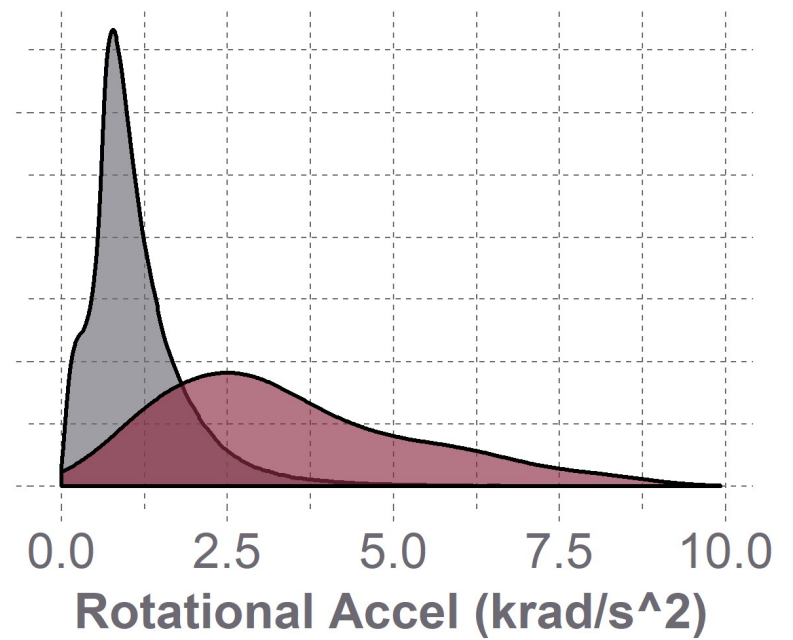
89 g  
4676 rad/s<sup>2</sup>

# Concussion vs. no injury

■ No Injury ■ Concussion



■ No Injury ■ Concussion



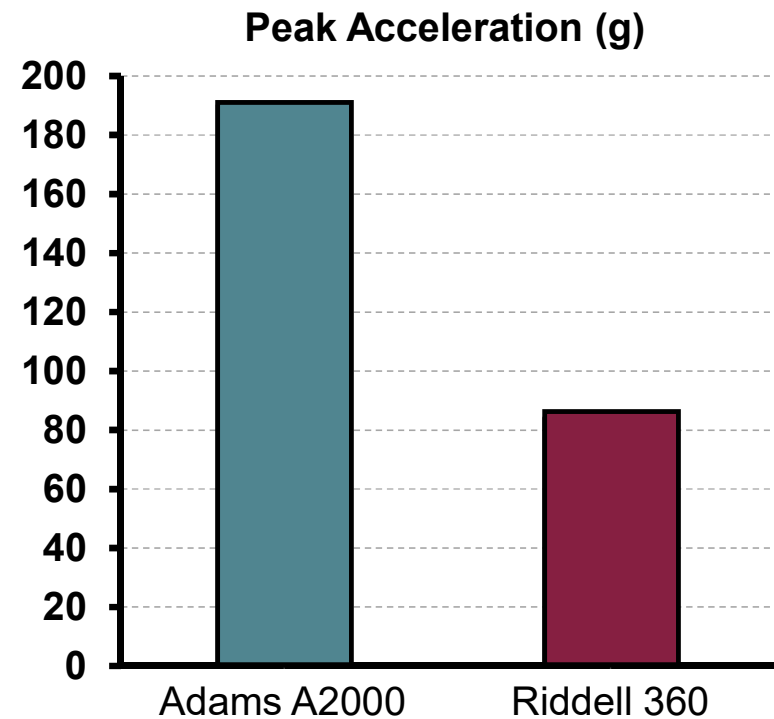
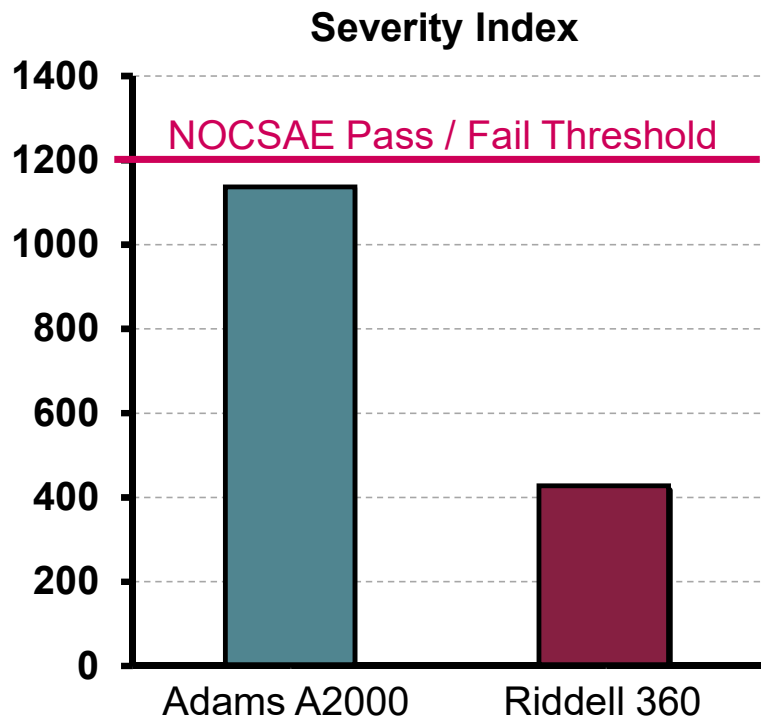




**“What helmets should we buy?”**

**- Lester Karlin, VT Equipment Manager**

# Helmet comparison: 60 inch drop (top)





# Virginia Tech Helmet Ratings

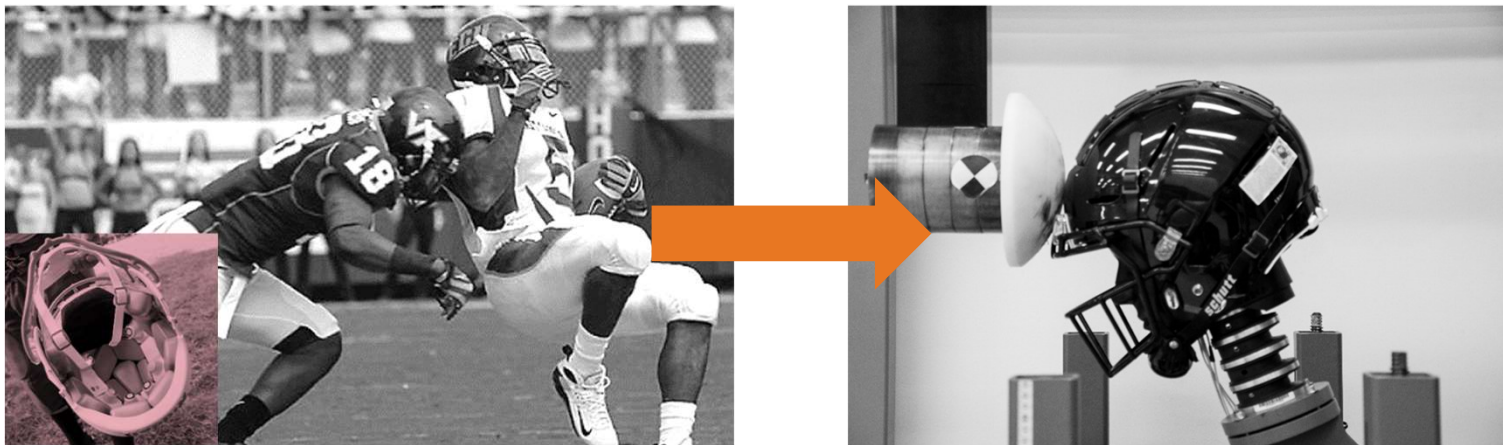
The helmet ratings program has 2 primary objectives:

1. To **inform consumers** of relative concussion risk differences between helmets
2. Provide manufacturers with a **design tool** to optimize helmet design to best reduce concussion risk in the real world

[vt.edu/helmet](http://vt.edu/helmet)

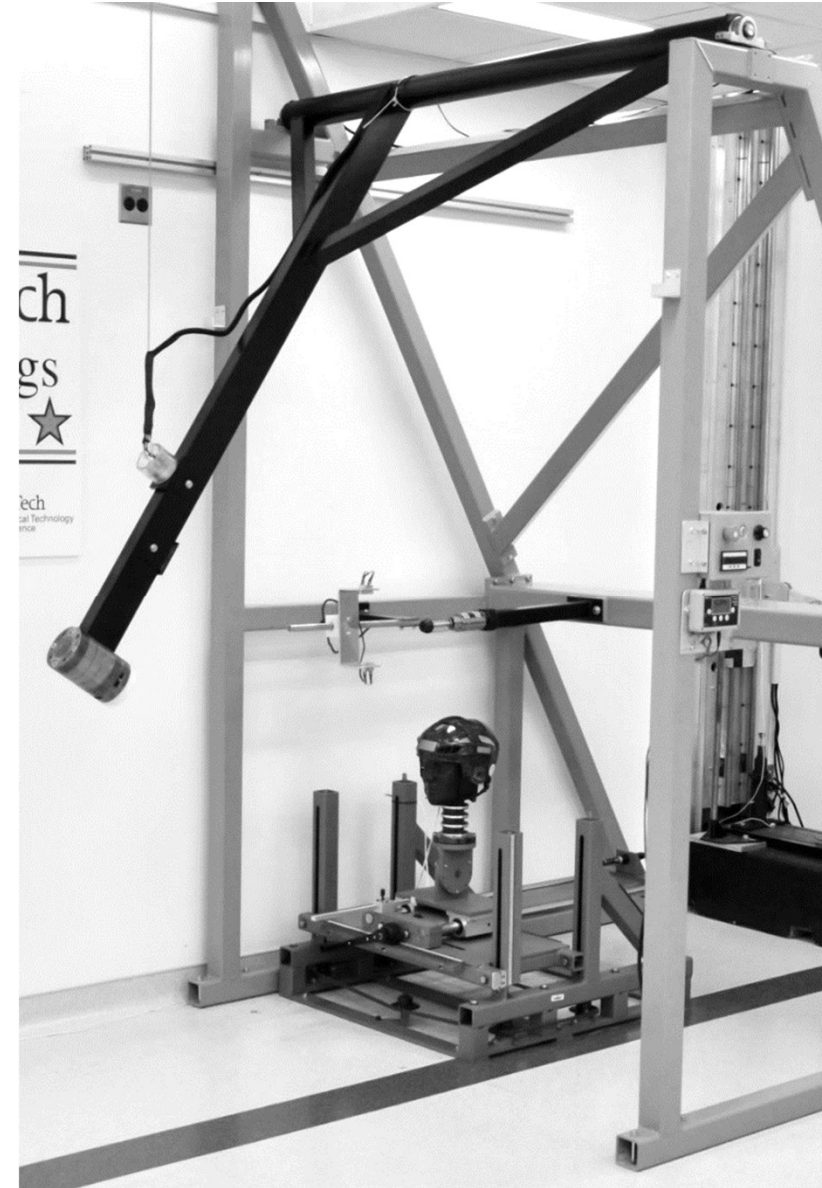
# General helmet evaluation approach

- Characterize sport-specific head impact exposure and concussion risk in the real-world
- Translate and map impact scenarios to sport-specific impact test equipment in the lab
- Evaluate helmets over a range of impact locations and severities; summarize results into an overall rating



# Helmet impact approach

- **Pendulum impactor**
  - High repeatability
- **Headform assembly**
  - Blue NOCSAE headform
  - 50<sup>th</sup> male Hybrid III neck
  - 16 kg sliding torso mass
- **Instrumentation**
  - 3 linear accelerometers
  - 3 angular rate sensors



4 locations

facemasks



rigid, rounded  
impactor face



Force direction varied with respect to headform CG

# VARSITY FOOTBALL HELMET RATINGS

2022 Edition

Transformed the sports helmet industry  
Ratings correlate with real world injury rates

A total of  
accelerations  
these impacts

-  U
-  T
-  N
- ALL**

A total of  
acceleration of the head resulting from a range of head impacts a football player might see on the field. Helmets with more stars provide a reduction in concussion risk for  
these impacts compared to helmets with less stars.

Search for helmets...

#1



#2



#3





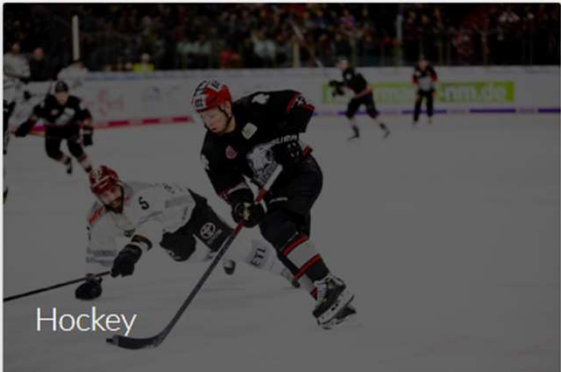
Varsity Football



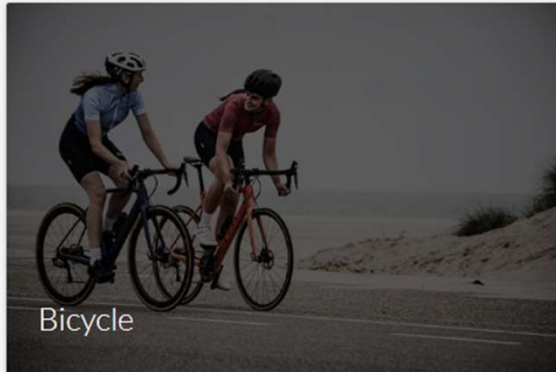
Youth Football



Flag Football



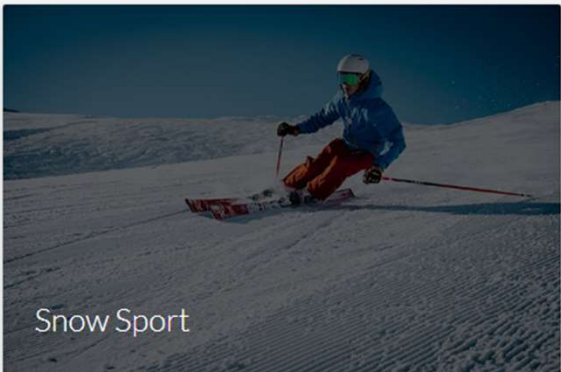
Hockey



Bicycle



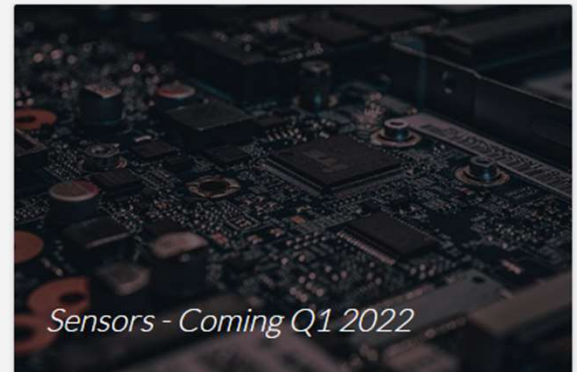
Soccer



Snow Sport



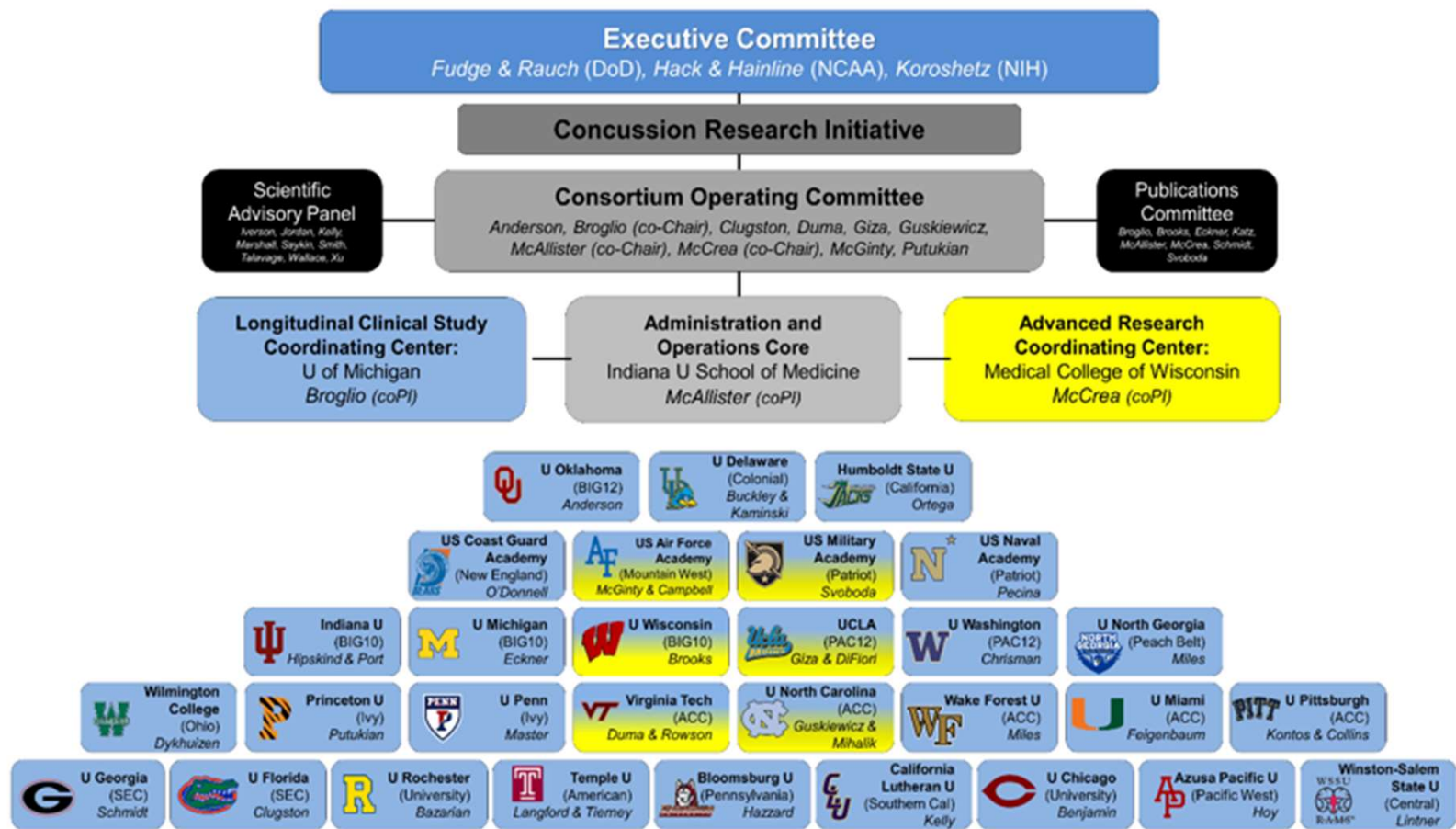
Rugby - Coming Q1 2022



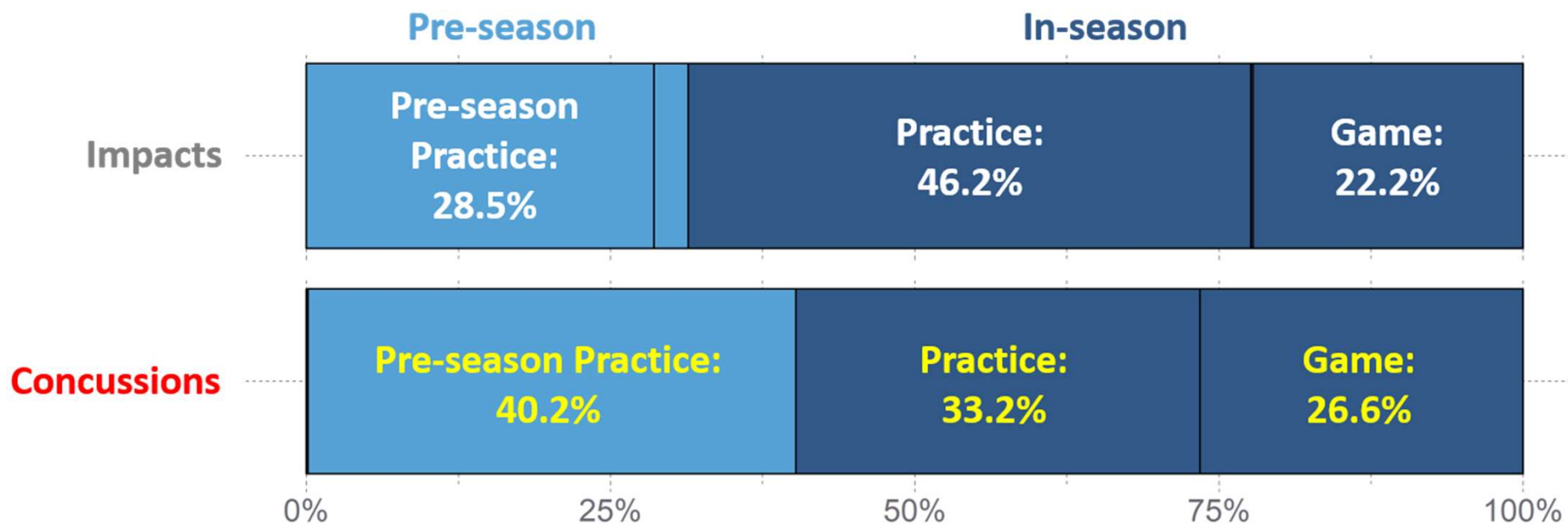
Sensors - Coming Q1 2022



# NCAA-DOD Grand Alliance 2014



## NCAA-DOD Grand Alliance CARE Consortium



# Preseason football practices

# Rule changes – NCAA preseason practice

Head impacts

August

	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

September

				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	

October

							1
2	3	4	5	6	7	8	
9	10	11	12	13	14	15	
16	17	18	19	20	21	22	
23	24	25	26	27	28	29	
30	31						

November

			1	2	3	4	5
6	7	8	9	10	11	12	
13	14	15	16	17	18	19	
20	21	22	23	24	25	26	
27	28	29	30				

December

					1	2	3
4	5	6	7	8	9	10	
11	12	13	14	15	16	17	
18	19	20	21	22	23	24	
25	26	27	28	29	30	31	

Concussions

	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	

							1
2	3	4	5	6	7	8	
9	10	11	12	13	14	15	
16	17	18	19	20	21	22	
23	24	25	26	27	28	29	
30	31						

			1	2	3	4	5
6	7	8	9	10	11	12	
13	14	15	16	17	18	19	
20	21	22	23	24	25	26	
27	28	29	30				

					1	2	3
4	5	6	7	8	9	10	
11	12	13	14	15	16	17	
18	19	20	21	22	23	24	
25	26	27	28	29	30	31	

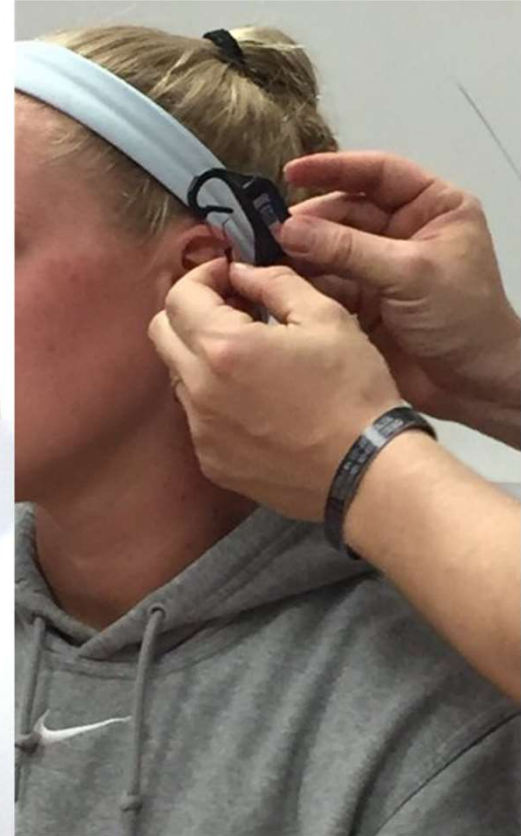
S M T W T F S

S M T W T F S

S M T W T F S

S M T W T F S

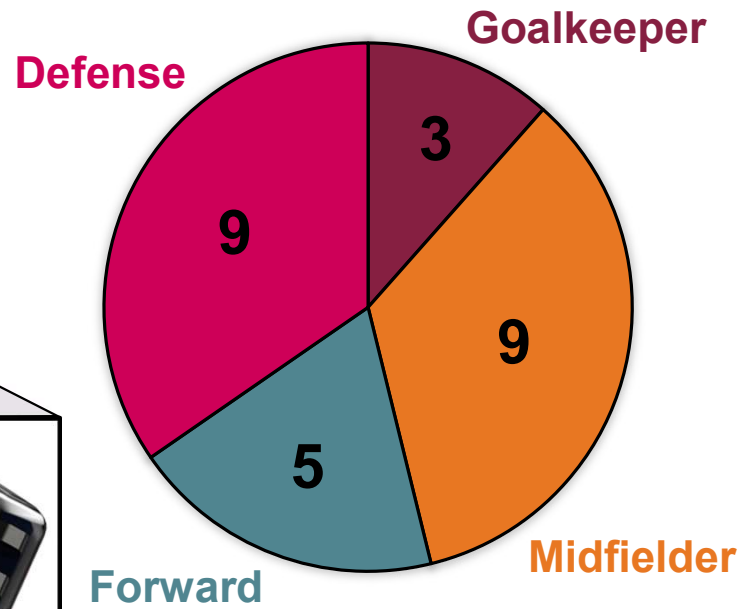
S M T W T F S



## In-ear sensors for women's lacrosse

Average impact around 18 g

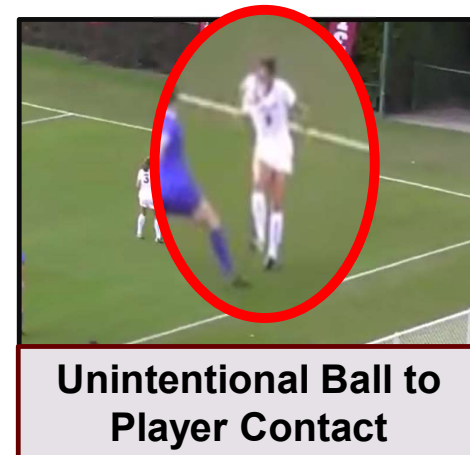
# Virginia Tech Women's Soccer Team



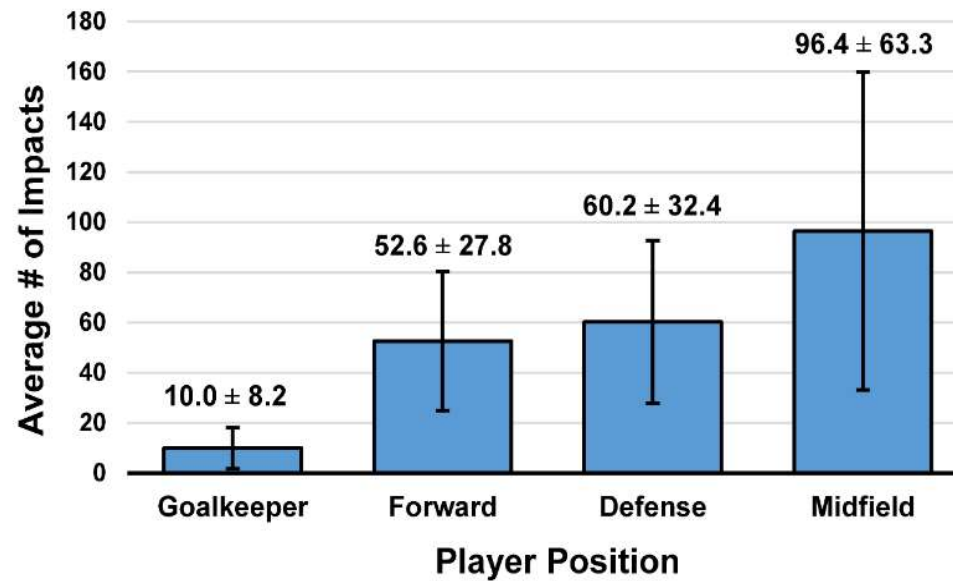
## Concussion History

# Previous Concussions	0	$\geq 1$	$\geq 2$
# Players (26 total)	15	11	4

# Impact Mechanisms



# 1703 Impacts on Video



	Player Exposures	Impacts	Average # of Impacts / Player
Practices	585	988	1.7
Games	331	715	2.1
Total	916	1703	1.9



Wake Forest Retainer





Wake Forest Retainer



20 g, 14 rad/s

# Face shields for VT football helmets



# Helmet shell add-ons

- We tested currently available helmet shell add-ons using our helmet evaluation method
- **Guardian Caps**
  - XT
  - NXT (NFL version)
- **SAFR**



**Riddell  
SpeedFlex**

**Control**



**Guardian  
Cap XT**



**Guardian  
Cap NXT**



**SAFR**



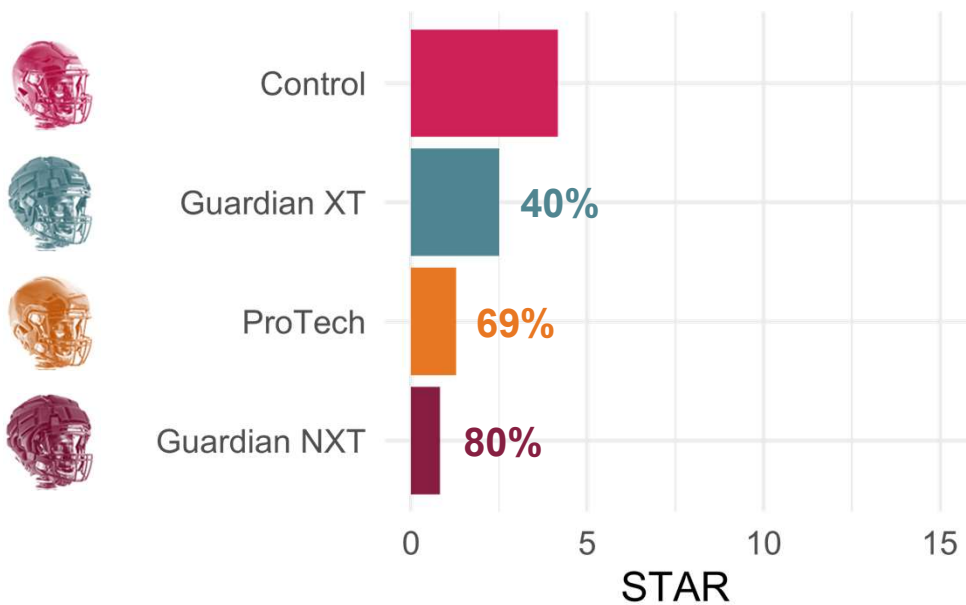
**Schutt  
F7**



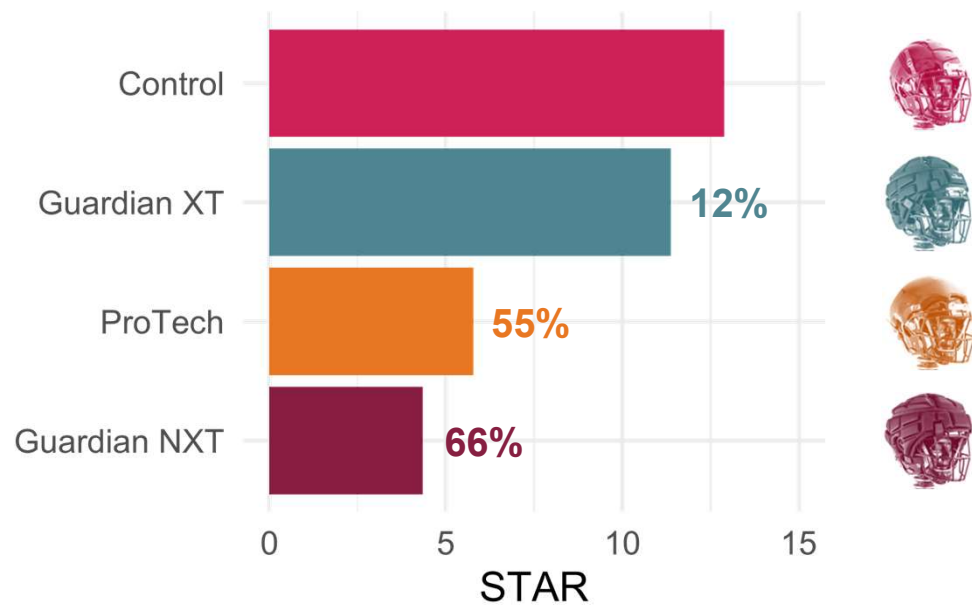
# Reduction with add-on on both helmets



## Riddell SpeedFlex

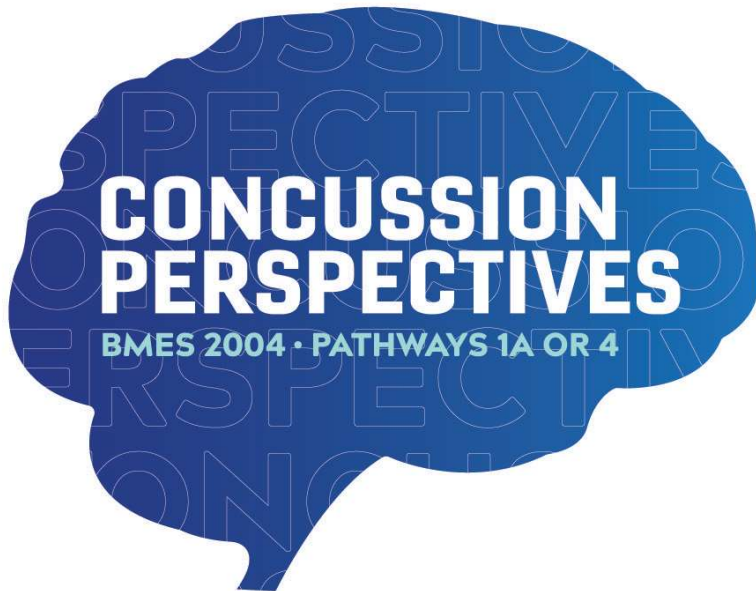


## Schutt F7





# Undergraduate classes on the VT concussion research







# Concussion Research in the Virginia Tech Helmet Lab

Steve Rowson, PhD

*Biomedical Engineering and Mechanics  
Director, Helmet Lab  
Virginia Tech*

# HOKIES

**REYNA GILBERT-LOWRY**  
**EXECUTIVE ASSOCIATE A.D./**  
**SENIOR WOMAN ADMINISTRATOR(SWA)**

**ACC FALL MEETINGS RECAP**

**DECEMBER 2024**

- **ACC PRIORITIES**

- **REVENUE GENERATION**
- **ACC/ESPN PARTNERSHIP**
- **NATIONAL REPUTATION**

- **ACC STUDENT-ATHLETE ADVISORY COMMITTEE**
  - **MENTAL HEALTH PROPOSAL**
  - **CONFERENCE-WIDE COMMUNITY SERVICE PROJECT**
  - **INCREASE COMMUNICATION BETWEEN STUDENT-ATHLETES WITHIN THE CONFERENCE**
  - **PROVIDE EDUCATION TO STUDENT-ATHLETES ABOUT THE CURRENT LANDSCAPE OF COLLEGE ATHLETICS**
  - **AMPLIFY THE STUDENT-ATHLETE VOICE BY CONNECTING STUDENT-ATHLETES TO LEGISLATORS**

- **LEGAL AND GOVERNANCE UPDATE**

- **HOUSE SETTLEMENT TIMELINE**

- **DECEMBER 17, 2024 - ALLOCATION ESTIMATE AVAILABLE TO ATHLETES VIA SETTLEMENT WEBSITE**

- **NOTICE PROCESS**

- **ATHLETES' ATTORNEYS SET DAMAGES ALLOCATIONS (ATHLETES ARE REPRESENTED BY PLAINTIFF'S ATTORNEYS)**

- **SUGGESTED COMMUNICATION PLAN TO FORMER/CURRENT SA'S**

- **ROSTER LIMITS**