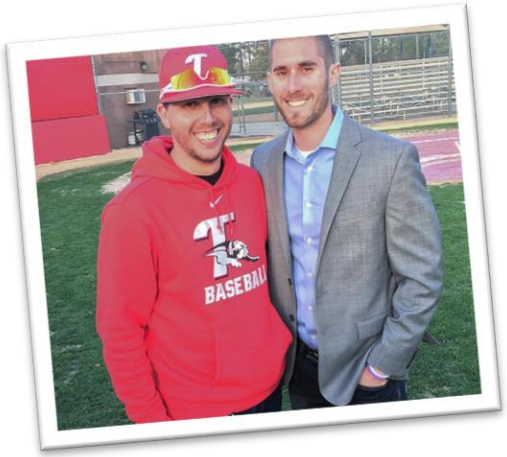
STRENGTH & CONDITIONING FOR HIGH SCHOOL BASEBALL

Considerations for every weight room and field

Ryan J. Faer, CSCS

Thank you!

Phoenix Baseball CoachesInsider Clinic November 2021



GET TO KNOW ME…

About me…

RYAN FAER

CENTRAL FLORIDA, BORN & RAISED

DOG NAMED FETTYWAP

Fascinated by…

COMMUNICATION

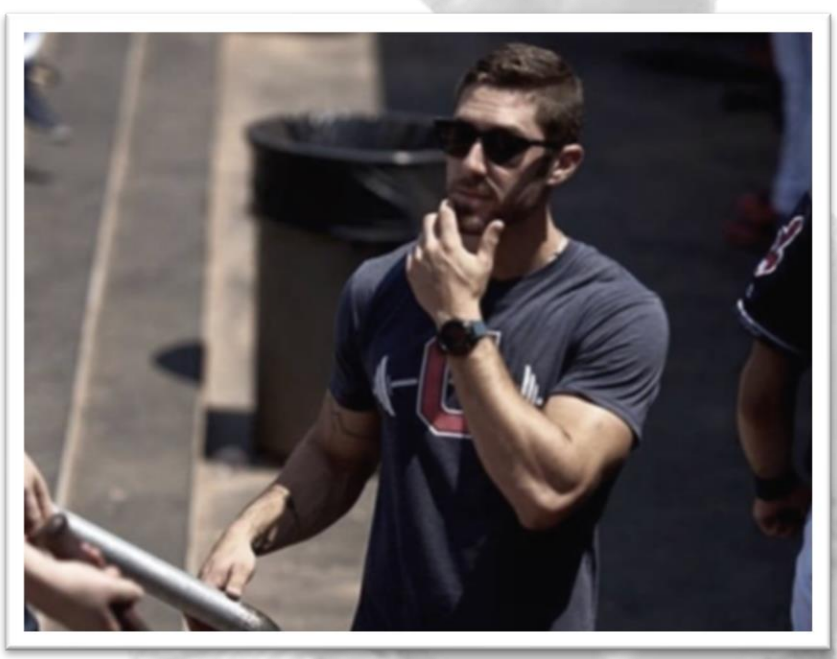
SPORT SCIENCE

MOUNTAIN BIKES

GET TO KNOW ME…

14 years playing

7+ years HS Coaching



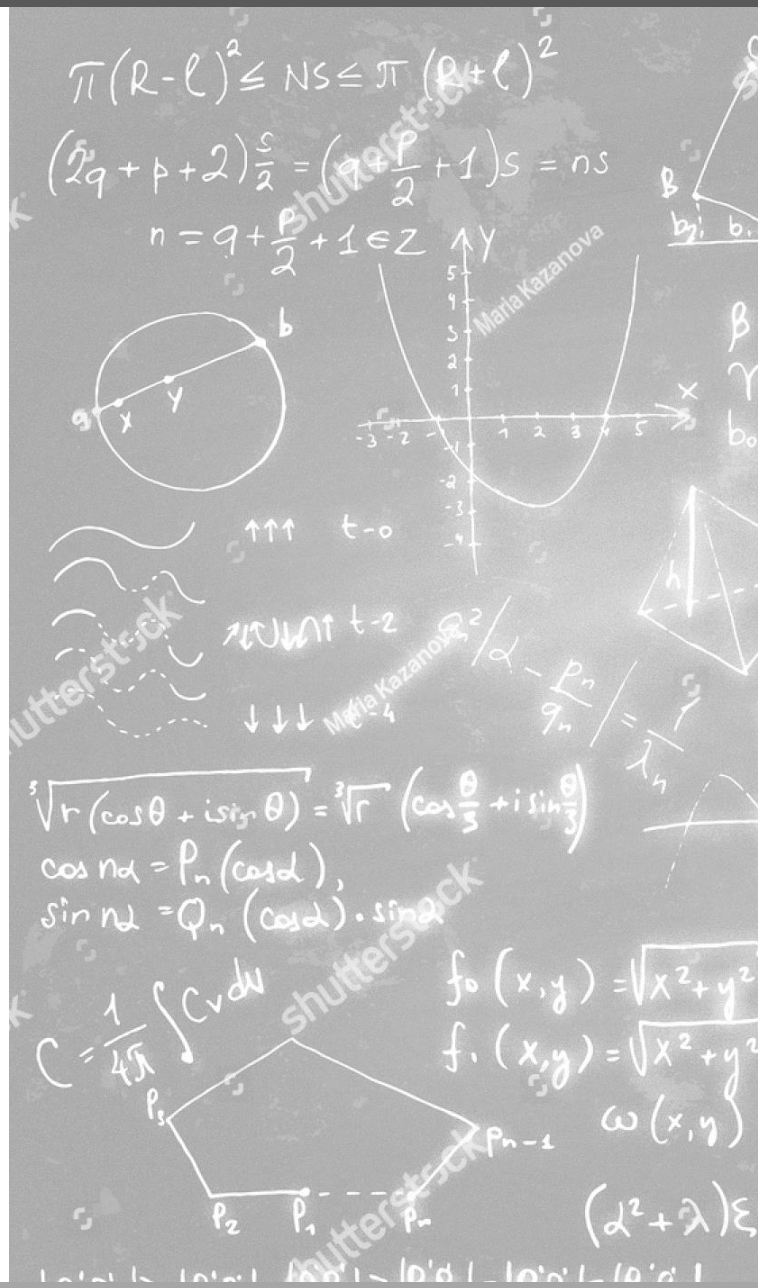
8 Season in Pro Baseball

OBJECTIVES

I. Understand the *'non-negotiables'* for any training program

II. Discuss *philosophies* that are built to last

III. Consider how *'Sport Science'* can help your program



NON-NEGOTIABLES

THE ‘NON-NEGOTIABLES’

“THE ONLY ABSOLUTE IS THAT

THERE ARE NO ABSOLUTES”

But there are plenty of values and principles that hold true under most circumstances

THE ‘NON-NEGOTIABLES’

1. CULTURE BUILDING

Athlete buy-in is a must; almost anything can be productive if the team is bought in

2. CONSISTENCY

Every team’s needs and resources are different, but inclusion of S&C-work should be considered…

- On the weekly/daily level – training sessions and micro-dosing; warm-ups, recovery, prep, etc
- On the monthly/season level – training cycles in and out of season
- On the yearly level – consistent exposure year-on-year to stack progression

3. INTEGRATION

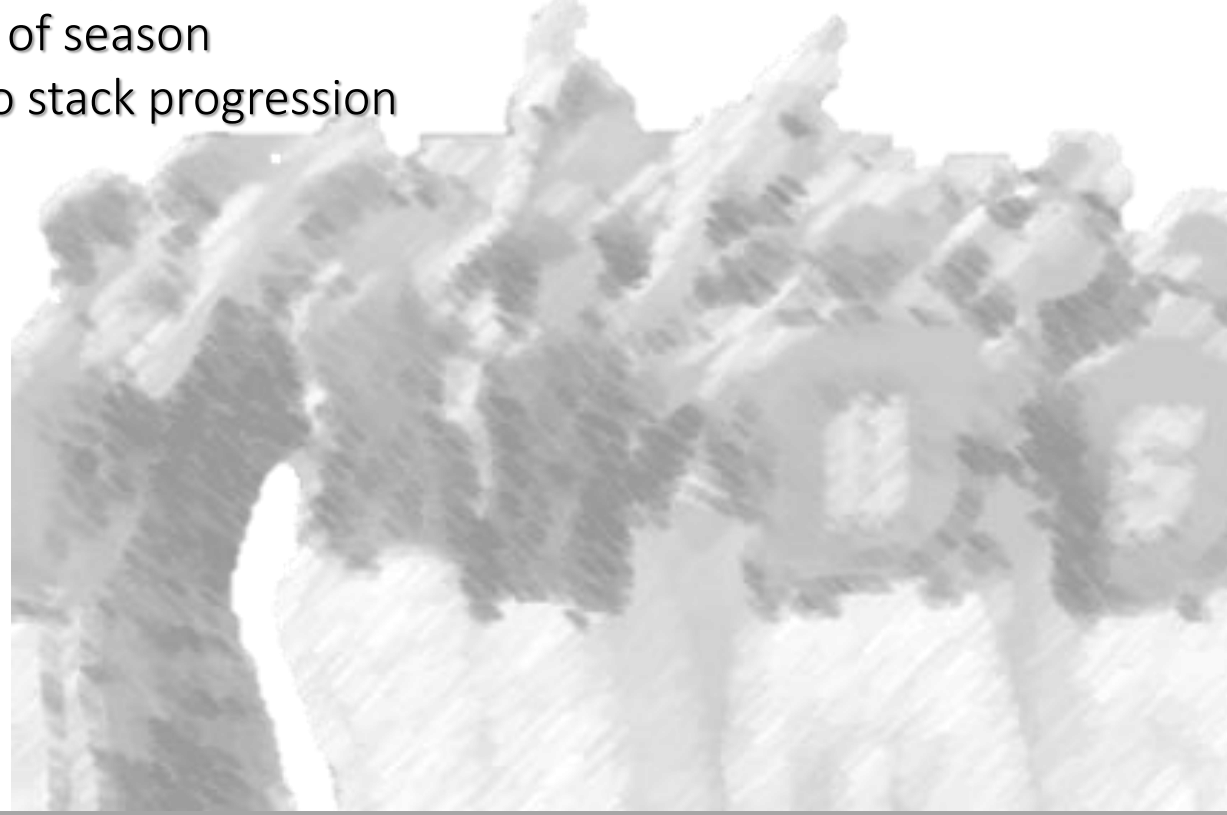
Creativity unlocks avenues for greater inclusion of S&C practices & concepts

- How can they be woven into *practice, pre-game, post-game, off-days, etc…?*

4. EDUCATION

Getting it to *stick* when they are away from the team

- Meal-time, off-season, travel-ball, etc…



GUIDING PHILOSOPHIES

PHILOSOPHIES BUILT TO LAST

1. TAKE ADVANTAGE OF TRAINING AGE

"Anything can work"

- Massive window for neuromuscular adaptation in the early years of training
- No need for anything fancy; save the "ace" up your sleeve for when it is needed

2. DON'T FIGHT BIOLOGICAL AGE

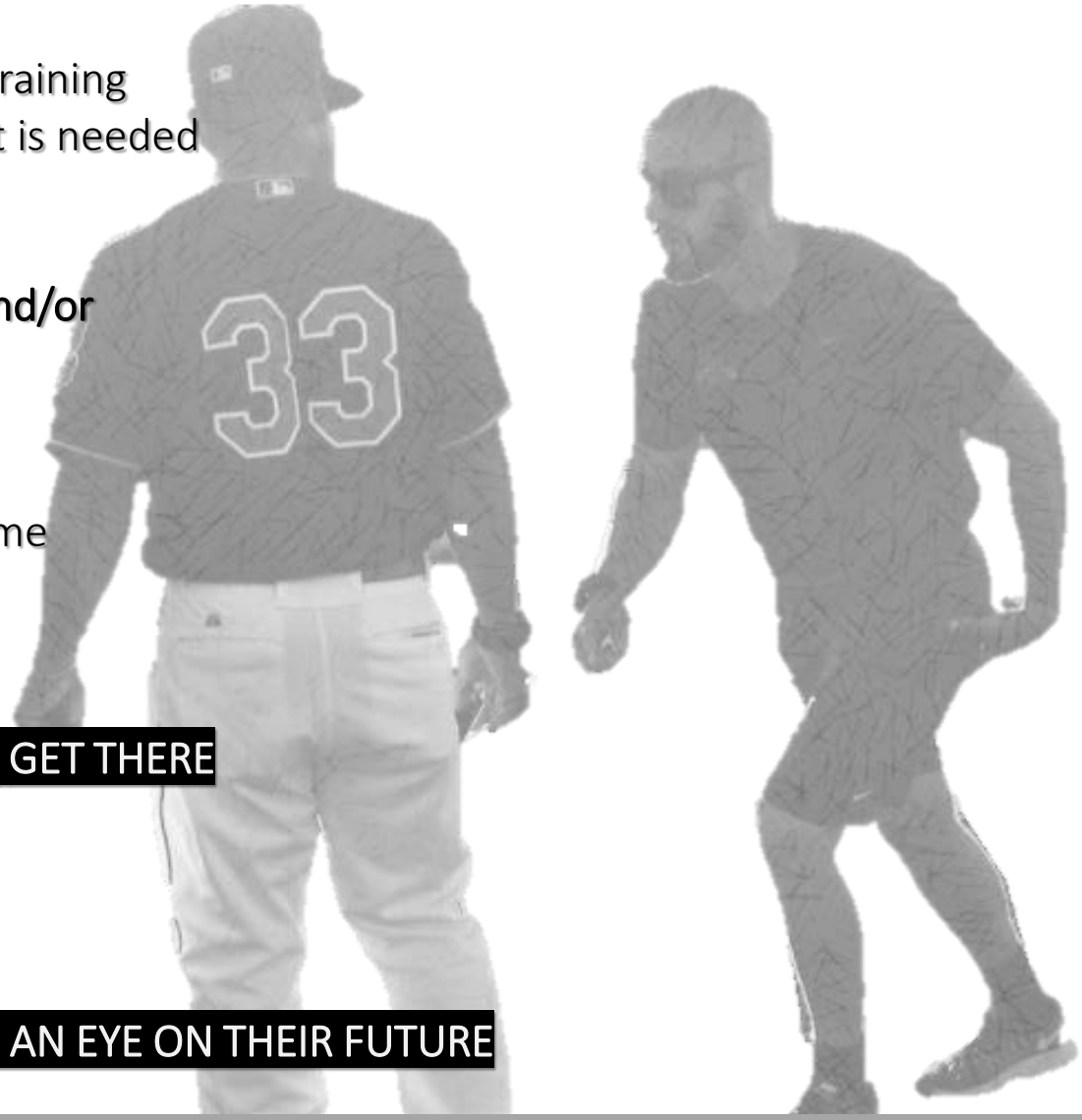
A lot of training time can be wasted chasing what the body isn't ready for and/or what it is already being exposed to. Instead, try focusing on…

- Structured, repeatable movements in the weight room
- High volume, low-load to teach movements early on
- Moderate-to-Low volume w/ progressive loading to train CNS over time
- Free play to encourage general athleticism
- Hypertrophy work when the 'time is right'

3. IDENTIFY ADAPTIONS WE WANT TO TARGET & KNOW THE ROADMAP TO GET THERE

- Force Production – progressive overload
- Rate of Force Production – sprinting and jumping
- Force Absorption – landing, stopping, and free-play

4. OUR JOB IS TO PREPARE THEM TO COMPETE NOW, WHILE ALSO KEEPING AN EYE ON THEIR FUTURE



TALKING SPORT SCIENCE

WHAT IS SPORT SCIENCE, AND HOW CAN IT BE APPLIED?

A formal definition…

"Sport Science is a multi-disciplinary field concerned with the understanding and enhancement of human performance. It includes the knowledge, methods and applications of sub-disciplines of human movement studies (i.e., exercise physiology, biomechanics, motor control and motor development, exercise and sport psychology), as well as how they interact.

Sports scientists are trained experts who assist sports people to achieve the best possible sporting performance. They evaluate, research, assess and advise on coaching, training, competition and recovery practices in all areas and levels of sport.

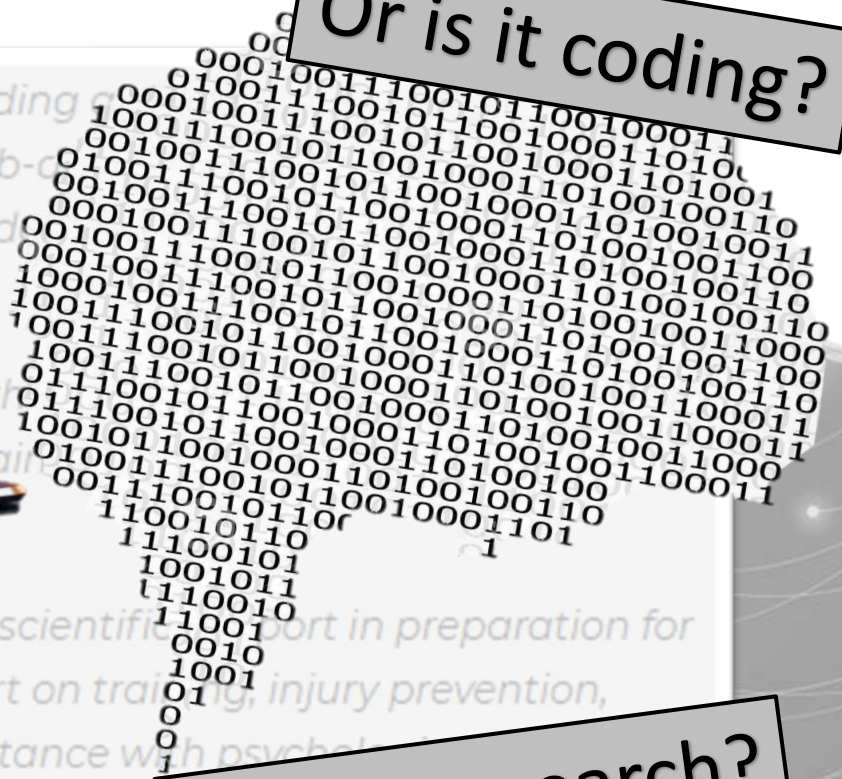
A sports scientist will work with teams and individual athletes to provide scientific support in preparation for competition. This can involve information, technical and practical support on training, injury prevention, technique analysis, nutrition and optimisation of performance, and assistance with psychological issues (such as motivation, stress and arousal, and coping strategies). For example, a sport scientist might design a training programme to increase a cyclist's speed or improve a swimmer's power off the swimming blocks."

Exercise and Sports Science Australia (ESSA)

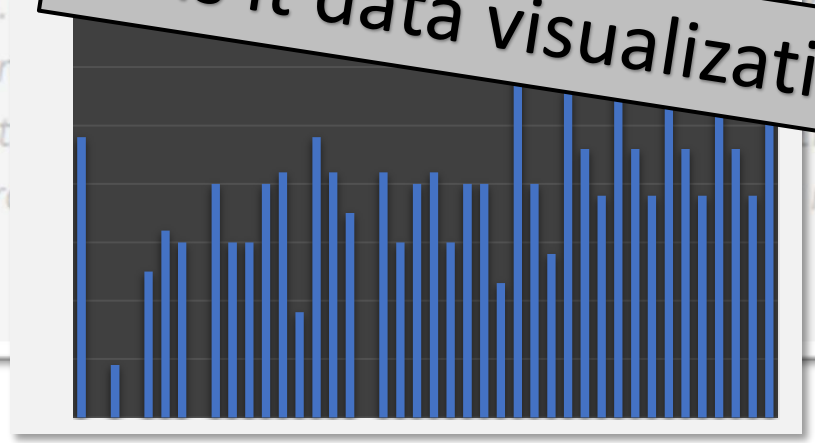
WHAT IS SPORT SCIENCE, AND HOW CAN IT BE APPLIED?

Or is it tech?

Or is it coding?



Or is it data visualization?



Or is it research?

The Association Between t… Ratio and Injury and its Ap… Team Sports: A Systematic Review

Alan Griffin, Ian C. Kenny, Thomas M. Comyns & Mark Lyons

Sports Medicine 50, 561–580 (2020) | Cite this article

Abstract

Background

There has been a recent increase in research examining training load as a method of

WHAT IS SPORT SCIENCE, AND HOW CAN IT BE APPLIED?

A simple, personal take on sport science…

"Sport Science is a multi-disciplinary field concerned with the understanding and enhancement of human

I. Using scientific principles and rigor to evaluate sport

II. Answering meaningful sporting questions

SPORT SCIENCE IN HIGH SCHOOL BASEBALL

SCIENTIFIC PRINCIPLES & RIGOR

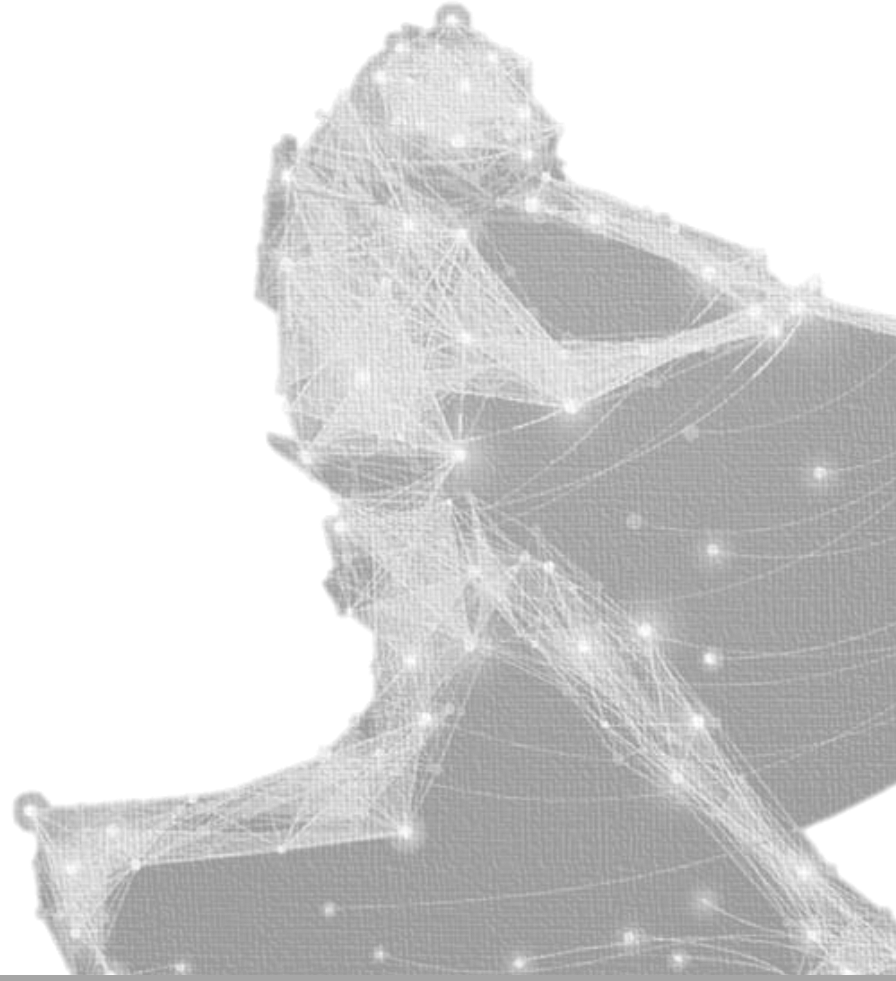
Using available "evidence" to help make decisions. Evidence can be…

- Scholarly (research papers)
- Academic (books, other resources)
- Internally Mined (collecting your own data)
- Experiential (gut feeling, intuition, "coach's eye")

ANSWERING MEANINGFUL SPORTING QUESTIONS

Using the scientific method to find answers to your questions, whether they be related to…

- Weight Room/Training
- Injury Occurrence
- Player Workloads
- In-Game Strategic or Tactical Decisions
- Practice Planning



IN SUMMARY…

- Foster a culture that prioritizes total-athlete development so that S&C is an integrated part, inseparable from the whole
- The ‘north star’ is still slow-cooked, long-term athletic development
- ‘Sport Science’ principles are there to help you sharpen your coaching tools, not take them away

THANK YOU!

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