

# AN OVERVIEW OF LONG TERM ATHLETE DEVELOPMENT (LTAD)

Piers Martin  
CEO



BRITISH FENCING

“The health and well being of the nation and medals won at major games is a simple by-product of an effective sport system”

Istvan Balyi



# WHAT IS LTAD?

Putting the needs of the *ATHLETE* at the centre of everything we do in our sport

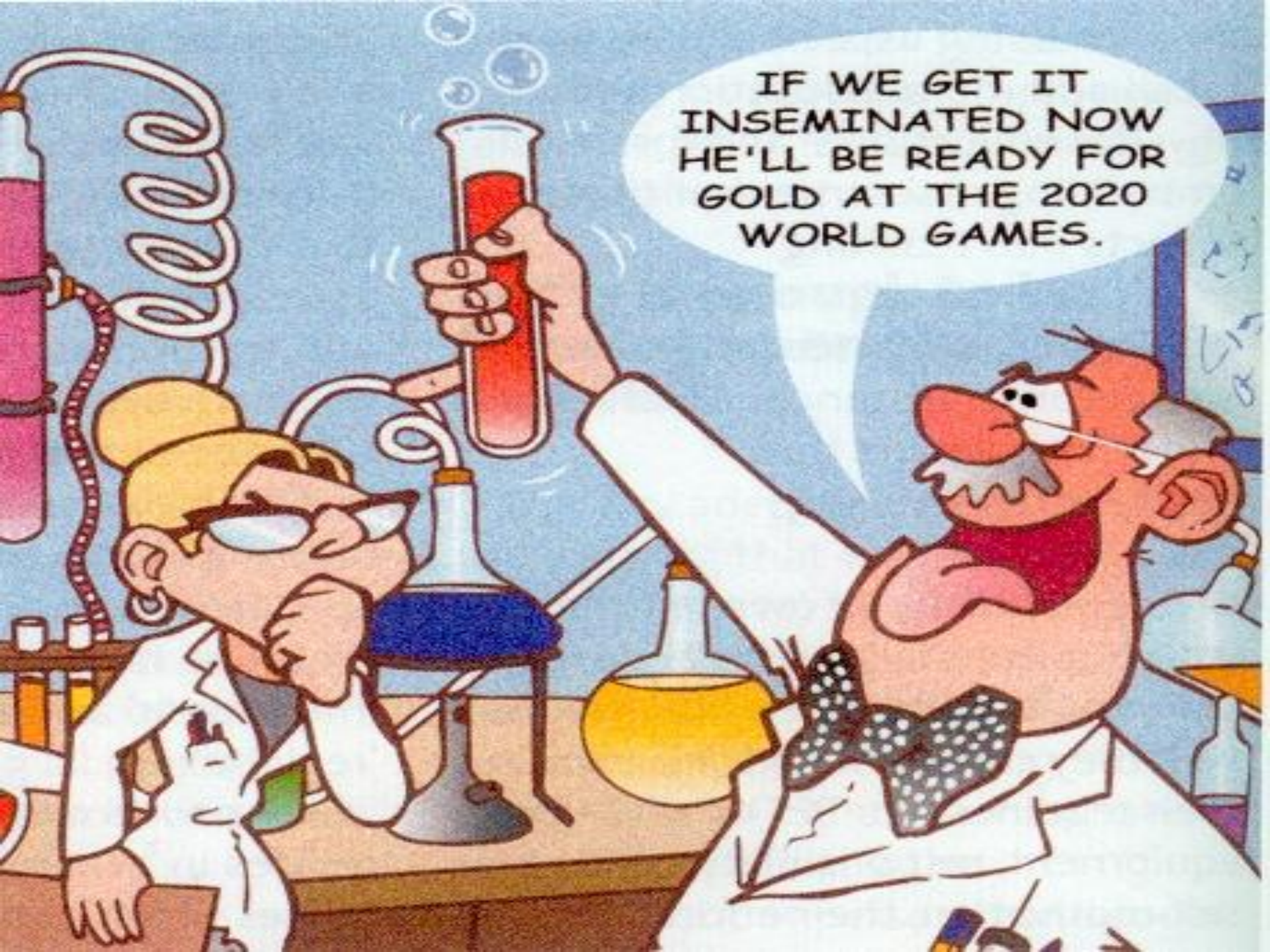


# DOING THE RIGHT THINGS AT THE RIGHT TIME

Long Term Athlete Development is about achieving optimal training, competition and recovery throughout an athlete's career, particularly in relation to the important growth and development years of young people.





A cartoon illustration of a laboratory scene. On the left, a female scientist with blonde hair in a bun and glasses looks thoughtful, with her hand to her chin. In the center, a hand holds a test tube containing a red liquid. On the right, a male scientist with a large nose and a polka-dot bowtie looks excited. The background shows various lab equipment like flasks and a coiled tube.

IF WE GET IT  
INSEMINATED NOW  
HE'LL BE READY FOR  
GOLD AT THE 2020  
WORLD GAMES.

# LTAD PRINCIPLE (1)

Two ways in which performances improve:

- Growth & development
- Training



# LTAD PRINCIPLE (2)

“It takes at least 10 years of extensive practice to excel in anything.”

(H Simon, Nobel Laureate)

“10 years or 10,000 hours.”

Ericsson and Charness  
Salmela et al

10,000 hours in 10 years:

- 20 hours per week x 50 weeks per year



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# WHY LTAD?

- Young athletes under-train, over-compete.
- Low training to competition ratios in early years.
- Adult competition superimposed on young athletes.
- Adult training programmes superimposed on young athletes.
- Male programmes superimposed on females.
- Training in early years focuses on outcomes (winning) rather than processes (optimal training).
- Chronological age dominates training rather than biological age.





# WHY LTAD?

- The “critical” periods of accelerated adaptation are not fully utilised.
- Under development between 6-16 years cannot be fully overcome (athletes will never reach potential).
- The best coaches are encouraged to work at elite level.
- Coach/Teacher education tends to skim the growth, development and maturation of young people.



# FOCUSES OUR SPORT

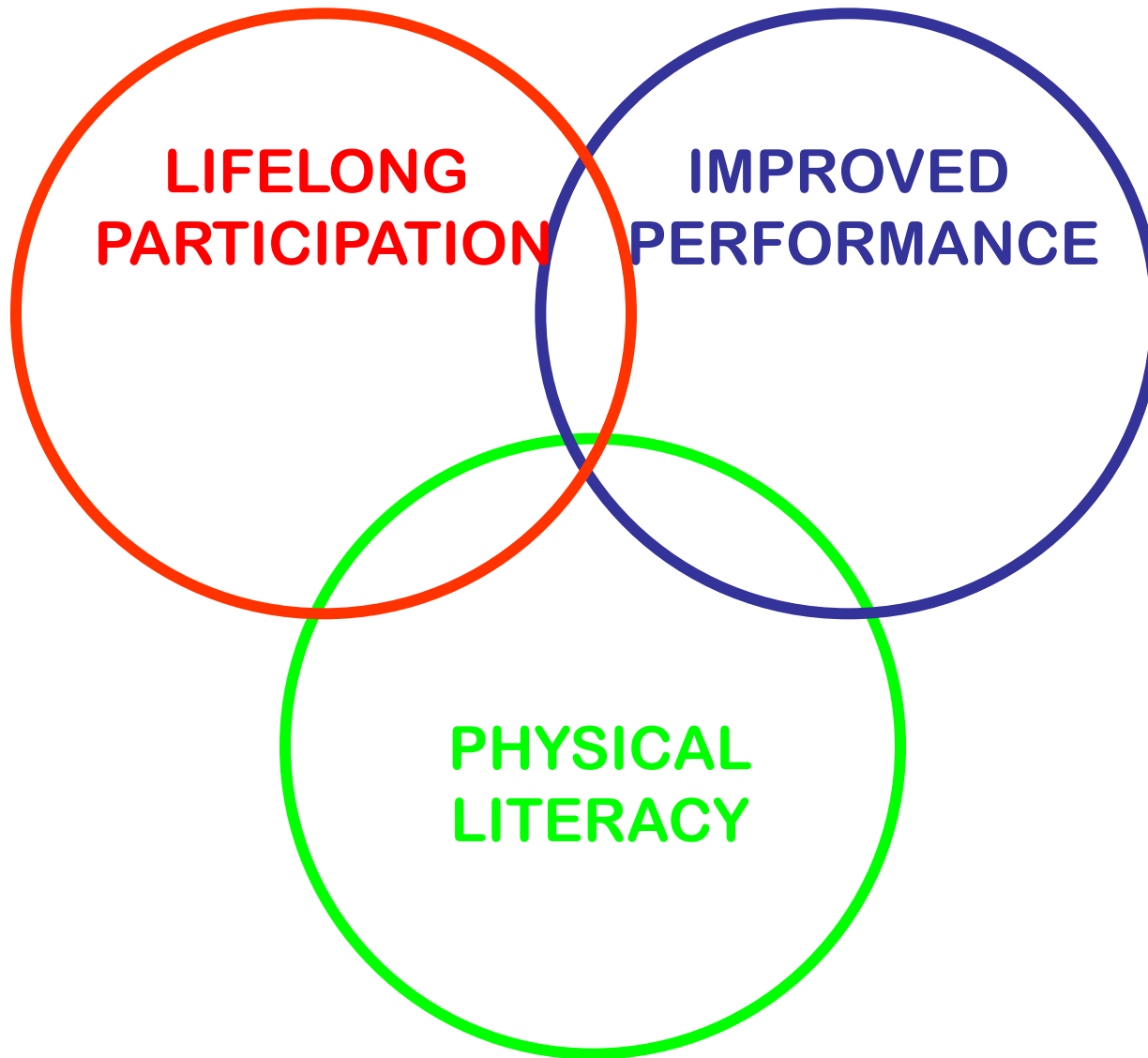
- Impacts on every area
- EVERYONE sees where and how they fit in
- Defines athlete pathway



# ACTS AS CATALYST FOR CHANGE

- Identified gaps in current programme
- Programme alignment
- Support structure
- Talent + Environment + Desire = Success
- Making great sports people and a bigger pool of talent to pick great athletes!





# BENEFITS

**“Children who possess inadequate motor skills are often relegated to a life of exclusion from organised and free play experiences of their peers, and subsequently, to a lifetime of inactivity because of their frustrations in early movement behaviour. ”**

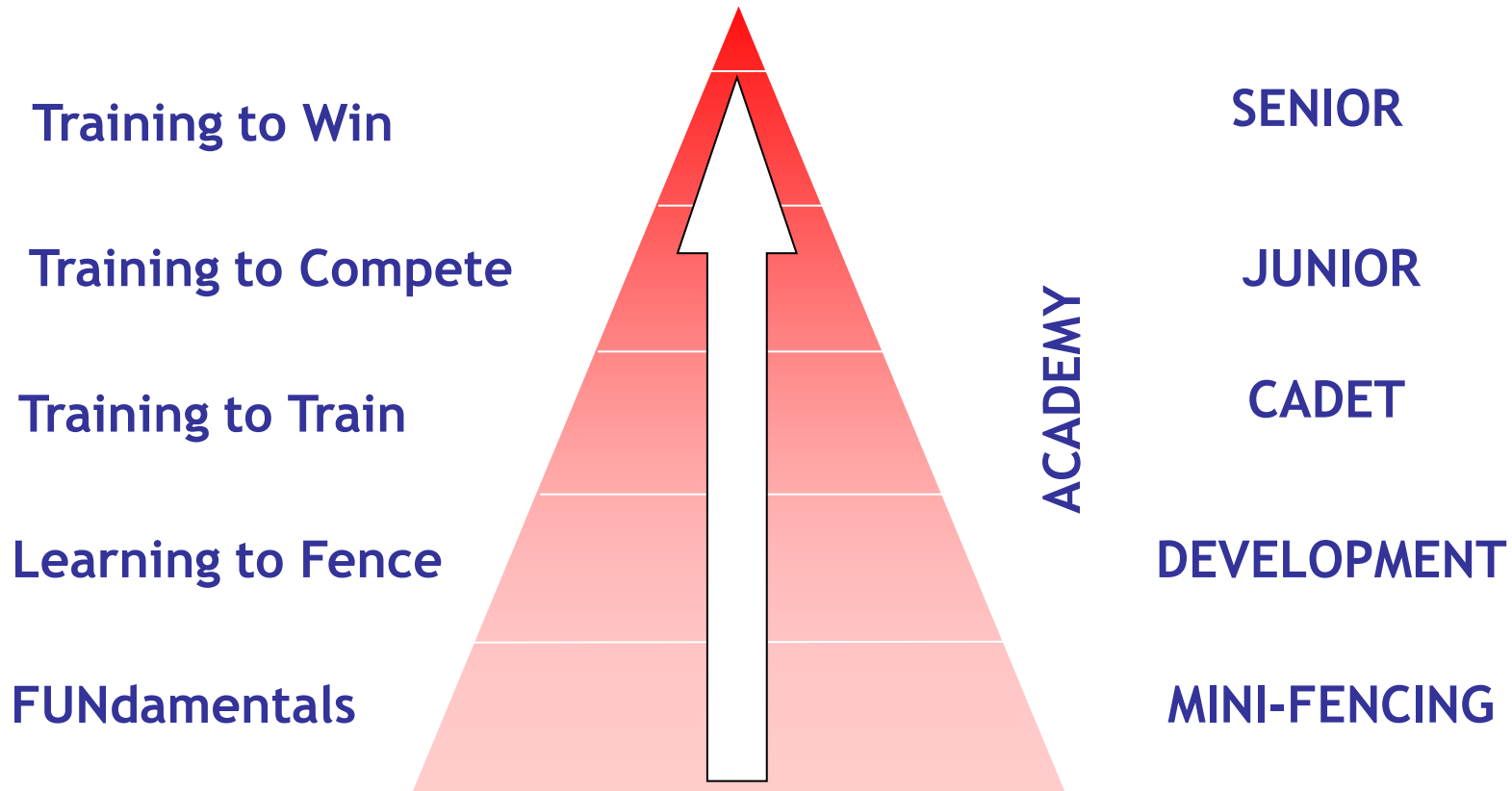
Seefeldt et. al. (1979)



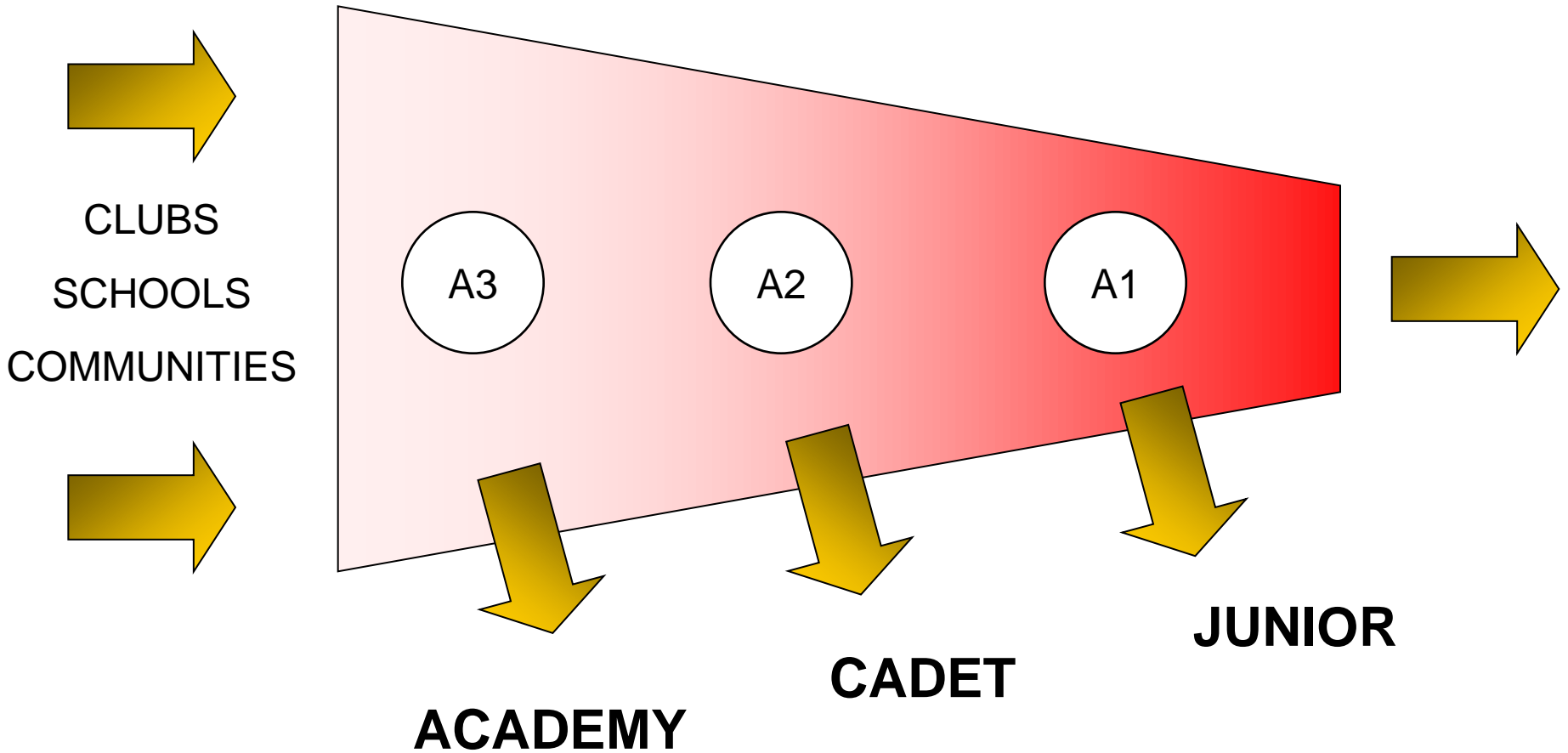
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# THE FENCING PATHWAY



# THE NATIONAL ACADEMY



# STAGES OF GROWTH & DEVELOPMENT

Growth & Development	LTAD Framework
Childhood	FUNdamentals
Late Childhood	Learning to Train
Adolescence	Training to Train
Early Adulthood	Training to Compete
Adulthood	Training to Win



# LTAD PHASES

Phases	LTAD Framework
Building overall motor skills	FUNdamentals
Sport specific skills	Learning to Train
Building the engine	Training to Train
Fine tuning, test driving	Training to Compete
Winning the race!	Training to Win



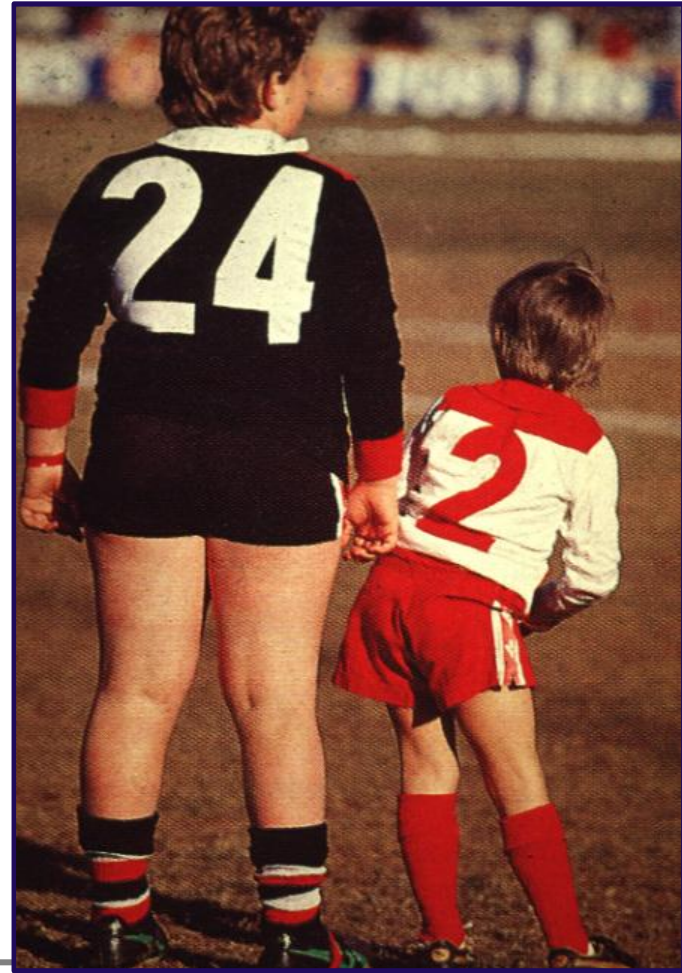
# CHRONOLOGICAL Vs DEVELOPMENTAL AGE

- Training and competition is based on chronological age
- Athletes can be 4 - 5 years apart by maturation levels
- Training a biologically 11 or 15 year old the same way?
- Players progress because they get **OLDER** or **BIGGER** not **BETTER**





# HOW OLD IS A 13 YEAR OLD??



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# HOW OLD IS A 13 YEAR OLD??

**Biologically**

**11**



**Chronologically**

**13**

**4 YEARS**



**Chronologically**

**13**

**Biologically**

**15**



# SUMMARY

## LTAD is important because:

- It is core to **EVERYTHING** we do;
- It is **ATHLETE** centred
- It provides a clear pathway based on sound principles of growth and development
- Everyone can see where & how they fit in
- It provides guidelines for success on the world stage
- It keeps people in the sport and in sport
- You can't argue with it!

