



Individualized Training Approach to the Team
Concept

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Background

**Tiffin University (OH) – BBA
Marketing**

**Bowling Green State (OH) – MEd.
Sport Administration**

USATF – Level I, II, III



Team Approach

1. How you coach your team.
2. Tools you use to coach your team.



Team Approach

Tools -

- Coaching Staff (both CC and T&F)
- Blood Analysis Coach (exercise physiologist)
- Athletic Training Staff
- Sports Performance Staff (strength)
- Chiropractor
- Sports Psychologist
- Parents



Components of Training

1. Psychological Training

2. Physiological Training

Other points of focus must be addressed:

- Nutrition
- Sleep
- Stress
- Lifestyle
- Family



Psychological Training

- Individual Meetings
- Goal Setting
- Preliminary Counseling
- Sports Psychologist Session



Physiological Training

- Strength Training
- Aerobic Training
- Anaerobic Training



Strength Training

Manipulation of force production.

- Difference between middle distance and long distance.

Biomotor Abilities:

1. Speed
2. Endurance
3. Flexibility
4. Coordination
5. Strength

FMS Testing



Aerobic/Anaerobic Training

1. Volume

2. Intensity



Aerobic Training

Mileage –

Minutes per week spent running below threshold.

- Impact Running
- Semi-Impact Running
- Non-Impact Exercise



Intensity - Workouts

Any volume can be performed at a cost.

- volume/time/intensity

In order to maximize performance the correct intensity at the correct time is paramount.

- Run your best when you need to.

How do you know what is right and when?

General Training Theory

Blood Lactate Analysis



Training Modules

1. VO_2 Lab tests
2. Blood Lactate Testing
3. VO_2 Charts



Training Modules

Race Pace Calculation - Current Fitness Level										VO2 Max Development					Merge Zone					Lactate Threshold Development					Steady State Running							Aerobic		
10k	8k	5k	3200m	3K	MILE	800m	VO2 Mile (100% 3k/3200 RP)	99%	98%	97%	96%	95%	94%	93%	92%	91%	90%	89%	88%	87%	86%	85%	84%	83%	82%	81%	80%	79%	78%	77%	76%	75%	70%	65%
								5kRP					10kRP																					
28:40	23:00	13:47	8:34	8:02	4:00	1:46	4:16	4:18	4:21	4:24	4:26	4:29	4:32	4:35	4:38	4:41	4:44	4:47	4:51	4:54	4:57	5:01	5:05	5:08	5:12	5:16	5:20	5:24	5:28	5:32	5:37	5:41	6:06	6:34
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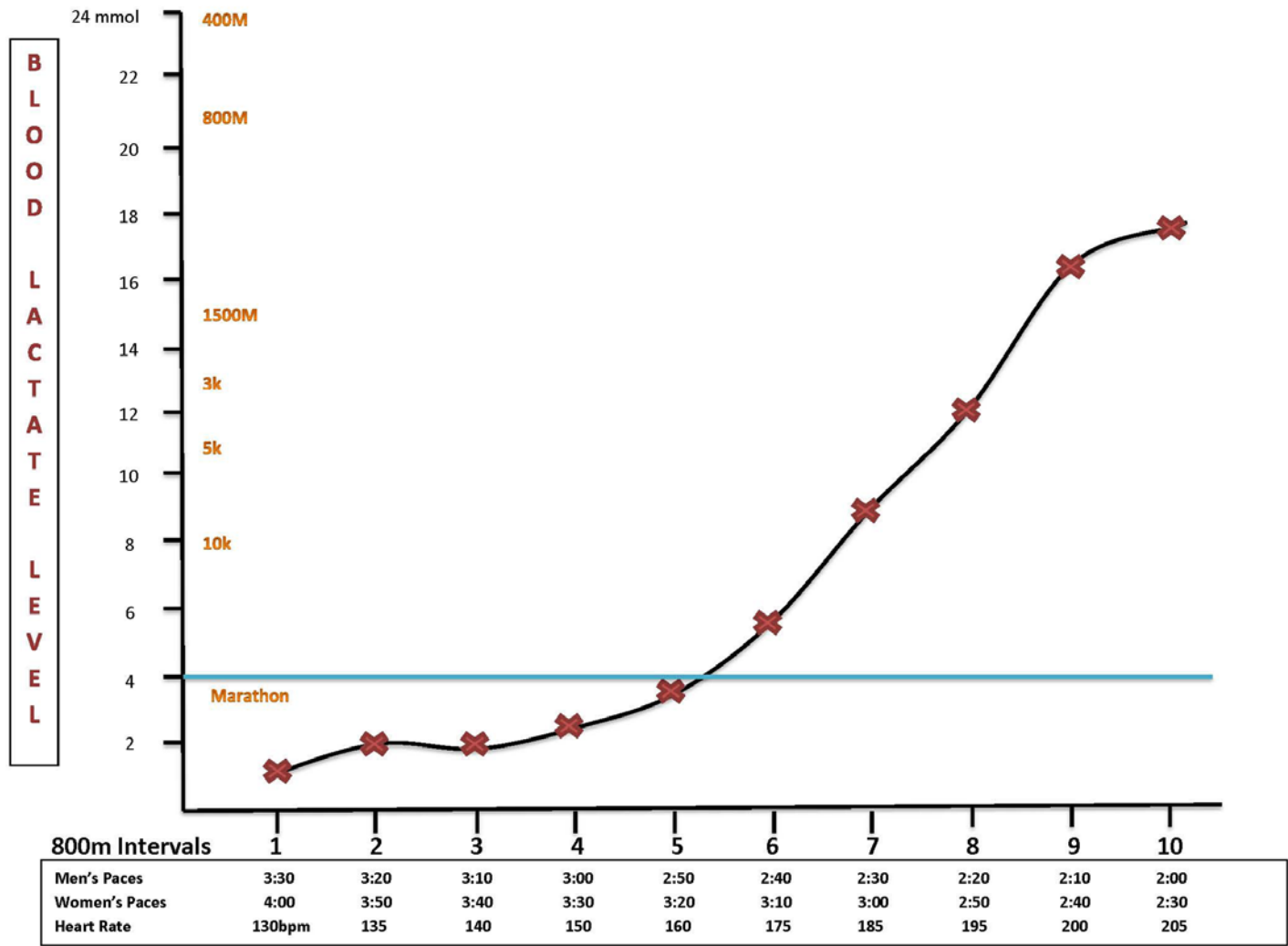
Training Modules

Race Pace Calculation - Current Fitness Level								VO2 Max Development							Merge Zone			
10k	8k	5k	3200m	3K	MILE	800m	VO2 Mile (100%)	99%	98%	97%	96%	95%	94%	93%	92%	91%	90%	89%
							3k/3200 RP			5k RP				10k RP				
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Lactate Threshold Development					Steady State Running										Aerobic	
88%	87%	86%	85%	84%	83%	82%	81%	80%	79%	78%	77%	76%	75%	70%	65%	
4:51	4:54	4:57	5:01	5:05	5:08	5:12	5:16	5:20	5:24	5:28	5:32	5:37	5:41	6:06	6:34	
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Training Modules





Setting Up Training

How do you determine what the athlete looks like or needs?

- VO_2 – Time Trial / Race
- Blood Lactate Profile Test
 - Multiple data points
 - Production and clearance



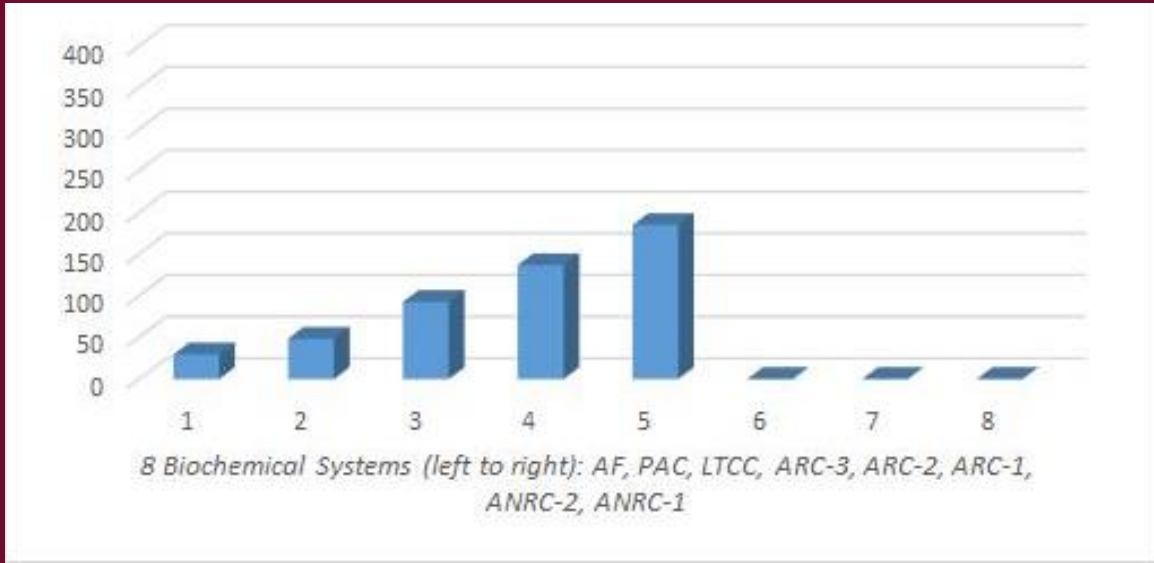
Variables Affecting Lactate

- Stimulus – overload, underload, appropriate
- Fueling - carbohydrates, fats, oxygen
- Genetics - > 10 mmol
- Lifestyle – stressors, sleep
- Health – sickness



Setting Up Training

Subject 1

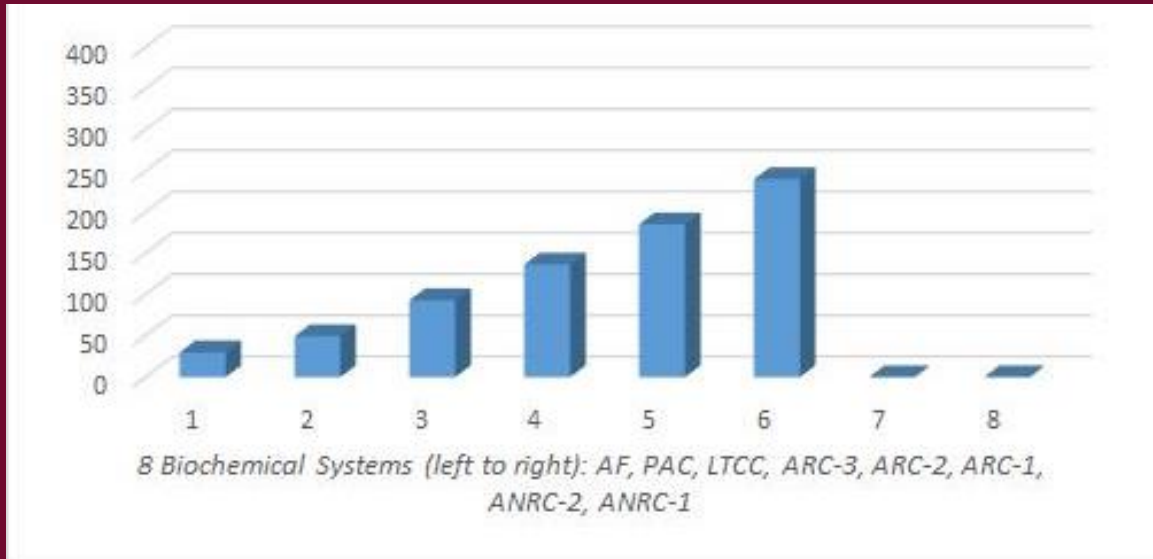


<u>Goal</u>	<u>BL mmol</u>	
3:50	2.2	
3:40	1.2	
3:30	2.0	
3:20	3.5	
3:10	4.6	
3:00	6.1	
2:50	9.7	
2:40	9.7*400	



Setting Up Training

Subject 2



<u>Goal</u>	<u>BL mmol</u>	
3:50	1.4	
3:40	1.5	
3:30	1.9	
3:20	2.9	
3:10	5.8	
3:00	7.2	
2:50	11.5	
2:40	14.4*400	



Setting Up Training

Subject 1

2014 PRs – 6k – 24:07

5k – 18:33

3k – 11:06

1500 – 5:09

2015 – 6k XC – 21:29



Setting Up Training

Subject 2

2014-2015

PRs –

6k – 23:23

10k – 39:16

5k – 18:46

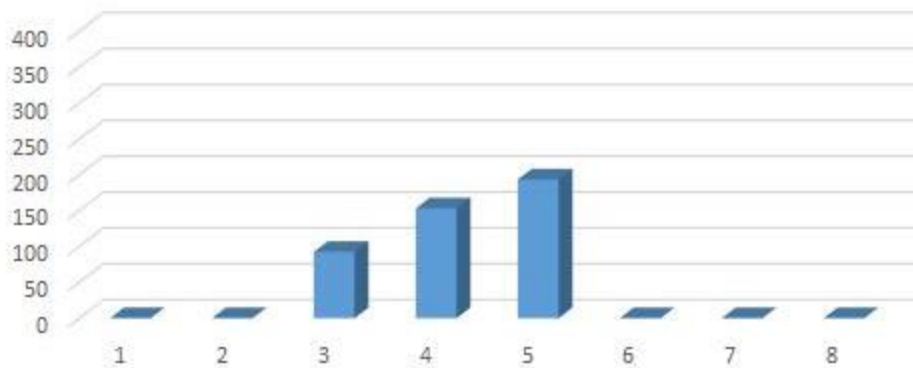
3k – 11:01

2015

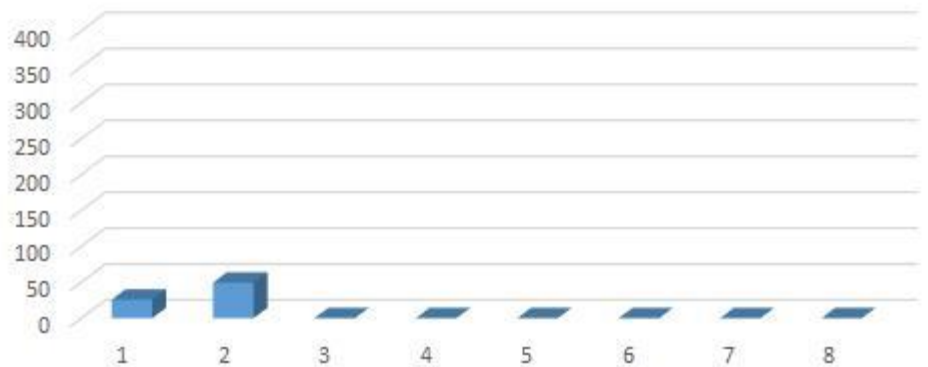
PRs -

6k XC – 23:39

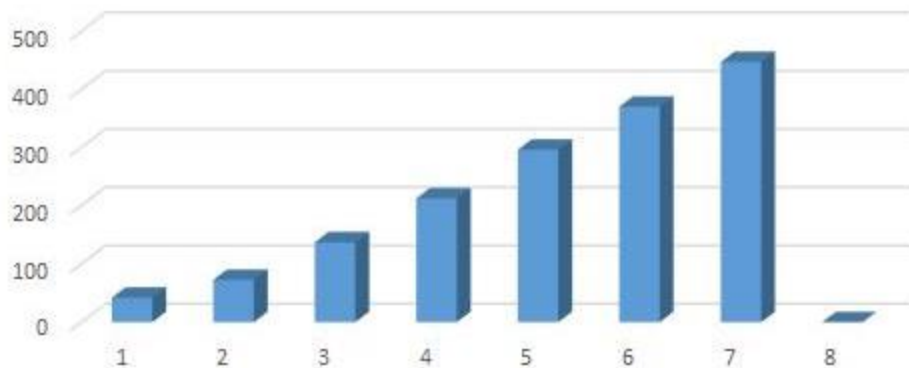
What went wrong?



8 Biochemical Systems (left to right): AF, PAC, LTCC, ARC-3, ARC-2, ARC-1, ANRC-2, ANRC-1



8 Biochemical Systems (left to right): AF, PAC, LTCC, ARC-3, ARC-2, ARC-1, ANRC-2, ANRC-1



8 Biochemical Systems (left to right): AF, PAC, LTCC, ARC-3, ARC-2, ARC-1, ANRC-2, ANRC-1



Setting Up Training

Could be multiple groups (2+)

How do you keep a team concept through individualized training?

Tone set by the coach.

Creativity to manufacture opportunities – get together / acknowledgements.

Invest in strong team leadership.



Want This Information?

Presentation

Charts

Exercise Physiologist's information

Come up to the front and put your name and email on the clipboard I have up front.