## Phasing in Triathlon

Dr Malcolm Brown MBE

## Dr Malcolm Brown BEd BA MA

Director of Sport:

Edinburgh University<br>Queens University<br>Ulster University<br>Leeds Metropolitan University

UK Athletics Coach (Endurance) 1990-2000 Leeds Triathlon Centre Coach 2004-2013<br>British Triathlon Coach 2006-2013<br>British Triathlon<br>Olympic Team Leader 2010-2012

## World Triathlon Championships Results

Medals 2009-2013
UK (21) [Leeds 14]
Australia (11)
Germany (11)
Spain (11)
USA (6)
France (6)
Canada (6)

## Triathlon Training Centres

## San Diego (USA) Leeds (UK)

History
Climate
Interest
Population
Sponsorship
World Champs
Medals
yes
yes
yes
yes
yes

6 (USA)
no
no
no
no
no

14 (21 UK)




## Alistair Brownlee (age 24)

Olympic Champion 2012
World Champion 2011 and 2009
World U23 Champion 2008
World Junior Champion 2006
European Champion 2011 and 2010


## Jonny Brownlee (age 23)

Olympic Bronze Medal 2012
World Champion 2012
World Sprint Champion 2011 and 2010
World U23 Champion 2010
World Junior Bronze 2008


## Non Stanford (age 24)

World Champion 2013
World U23 Champion 2012


## Tom Bishop (age 23)

World U23 Bronze Medals 2012 and 2011
World Junior Silver Medal 2010


David McNamee (age 25)

World U23 Silver Medal 2011

## Leadership and Coaching

Jack Maitland
Malcolm Brown

- Experienced coaches and former athletes (know the business)
- Fundamental principles and values
- Little ego
- Empower athletes by encouraging decision making and autonomy


## Leadership and Coaching Jack Maitland <br> Malcolm Brown

- Education has priority in formative years
- Curiosity
- Cross sports experience: best practice knowledge
- Open inclusive philosophy
- Settled in Leeds: in it for the long haul


## Training Environment: Structure

- Built over years (2004-2012)
- Low tech - Low cost
- Coach/Physiotherapist (2004-2006)
- Conditioning specialist (2007)
- Nutritionist (2008)
- Physiotherapist (2008)


## Training Environment: Culture

- "earn" additional services/competitions/trips
- No culture of entitlement
- Group is vital
- Fun is important
- Learn from older athletes
- Leeds - cold, wet, hilly


## Training Environment: Culture

- Grass is not greener elsewhere
- "Fast track" strategy from Junior to Senior
- Establish sound biomechanics and skills
- Increase training loads between ages 18-21 to world class threshold


## Building the Core team: Strategic and Operational (2006-2012)

## CRITERIA:

1. World class expertise or very close
2. Open, honest, trustworthy, discreet, loyal
3. No job too small inside or outside specialism
4. Ability to work across disciplines
5. Work beyond contract
6. Long term commitment

## Alistair Brownlee

- 8 year plan age $16-24$
- Clear vision and technical model
- Clear view of training methods
- Assess the athlete
- Assess the event requirements
- Clarify priorities at different ages and stages


## Alistair Brownlee

## Vision and Technical Model

- To run 10k in 28 minutes 800m in 1:56:00 200m in 26:0

Technical Model

- Posture
- Foot strike
- Rotations
- Hamstrings and Quads
- Drive
- Sprints versus endurance


## Progression

| Year | Age | Performance (T) | Race |
| :---: | :---: | :---: | :---: |
| 2005 | 17 | $34: 12$ |  |
| 2006 | 18 | $33: 27$ |  |
| 2007 | 19 | $33: 04$ |  |
| 2008 | 20 | $31: 30$ | $29: 35$ |
| 2009 | 21 | $29: 04$ |  |
| 2010 | 22 | $30: 00$ | $29: 15$ |
| 2011 | 23 | $29: 50$ |  |
| 2012 | 24 | $29: 07$ | $28: 32$ |
| 2013 | 25 |  |  |

## Percentage Distribution of Training



- Steady Run
- Tempo Run
- Race Pace Run
- Steady Bike
- Tempo Bike
- Race Pace Bike
- Swimming


## Alistair Brownlee

## Typical training week Feb 2012

| steady/ae | robic | tempo/hard/interval |  |  | S\&C/physio |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Monday | Tuesday | Wednesday | Thursday | Friday | Saturday | Sunday |
| 80 min steady run 120bpm | Easy Swim | Easy swim | Fast swim | Easy swim | Run session <br> 30 mins hard 160bpm | 4 hrs easy bike |
| Drills S\&C | 40 min easy run | 75 min easy run | 60 min easy run | S\&C | $3.5 \mathrm{hrs}$ <br> easy bike | 1hr 40 easy run |
| Hard Swim | 1 hr easy bike | 3.5 hr bike | 2 hr easy bike 20 min efforts within this | $60 \mathrm{~min}$ <br> easy run | $30 \mathrm{~min}$ <br> easy run |  |
| 2 hr easy bike | Track 15 mins hard 170bpm |  |  | $\begin{aligned} & 60 \mathrm{~min} \\ & \text { easy bike } \end{aligned}$ |  |  |

## Training Zones Running

| Zone | Race Pace |  |
| :---: | :---: | :---: |
|  |  | mins/secs per km |
| 1 | < marathon (42k) | $4: 20-4: 30$ |
| 2 | $>$ marathon (42k) | $3: 30-4: 00$ |
| 3 | $21-30 k$ | $4: 20-4: 30$ |
| 4 | $12-15 k$ | $2: 55-3: 00$ |
| 5 | $5-10 k$ | $2: 40-2: 50$ |
| 6 | $3-5 k$ | $2: 35-2: 40$ |
| 7 | $800 m-1500 m$ | $2: 30-2: 32$ |
| 8 | $200 m-600 m$ | $0: 30-1: 30$ |

## General Preparation

Aerobic
Anaerobic
Speed (alactic anaerobic)
Drills
Strength and Conditioning
Technique
Altitude Tent

## Specific Preparation

Aerobic
Anaerobic
Speed
Technique
Recovery
Drills
Strength and Conditioning
Race Preparation
Tempo Runs
Altitude Training Camp (St Moritz)

## Lessons Learnt

## 1. Volume of Training

(i) 3 Sports (a) Swim<br>(b) Run<br>(c) Cycle

(ii) Cross Training: Bike - Run

Run - Bike
Swim

## Lessons Learnt

2. Frequency of Training (sessions per week)

Triathlete
$7 \times 3=21$
excluding strength and conditioning,
technique, physio and massage

## Athlete

$7 \times 2=14$

## Lessons Learnt

## 3. Content of Training

Aerobic 98\% Aerobic 2\%
4. Complexity of Training

