

IAAF World Junior Coaches Conference Programme

Monday 28 July 2014

- 8h30-9h00** Registration at EMU Ballroom
- 9h00-9h30** Opening Ceremony
IAAF President **Lamine Diack**
- 9h30-10h30** Process of Long Term Athletes Development:
From Event Group to Senior Performance / Junior Level.
Malek El-Hebil (IAAF)
- 10h30-11h00** Coffee Break
- 11h00-12h00** Junior Elite Level Athletes:
Physiological Characteristics and Training Considerations
Dr. Randall L. Wilber (USA)
- 12h00-13h30** Lunch
- 13h30-14h30** Training of Elite Athletes
Build Up Phase I (15y - 16y); II (17y - 19y)
Helmar Hommel (GER)
- 14h45-15h45** Strength Training with Youth and Junior Athletes.
Dr. Keith Barr (USA)
- 15h45-16h15** Coffee break
- 16h15-17h15** Physiological and metabolic background of endurance
training with talented youth and junior athletes.
Prof. Dr. Ulrich Hartmann (GER)
- 17h30-18h30** Psychological aspects of age/development related training.
Dr. Craig Poole (USA)

Moderators: **Victor Lopez & Malek El-Hebil**

Simultaneous interpretation into English, French & Spanish
will be provided

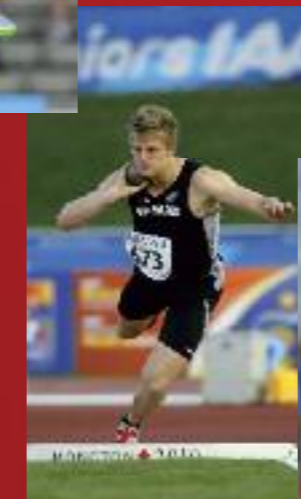


1st IAAF World Junior Eugene (USA) - 28 July 2014 Coaches Conference

University address:

1228 University of Oregon,
Erb Memorial Union,
EMU Ballroom, Eugene, Oregon.
44°02'41.9"N / 123°04'25.7"W
Free Bus Transport (Accreditation):
EmX buses at Dad's Gate
UO Bus station on East 13th Avenue
(routes 28, 73, 76, 78, 79x, 81; 98)

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The junior category in Athletics is considered as decisive in the athlete's training. It is a critical crossroads in the career of a young athlete, at several levels: biologic, auxologic, psychologic, biomotor, etc.

The IAAF invited a number of experts in various fields, whose knowledge, experience and input will further qualify our coaches in the specific features and characteristics of this category.

The overall focus of this conference is to keep coaches informed, bringing consistency and competence to them who play an essential part in the athletes' career.

University of Oregon - Erb Memorial Union (EMU) - Ballroom

Speakers



Malek El-Hebil (IAAF)

- Former Athlete and national coach in T&F
- Former FRMA & UAE Head Coach
- IAAF Development & Member Relations Department Director
- IAAF Senior Lecturer since 1986 educated approx. 2000 coaches & 1500 IAAF lecturers representing 150 countries.
- IAAF Kids' Athletics & Teens' Athletics programmes: Design and Implementation (Member of the expert panel; since 2006 Global Implementation)

- IAAF 'New Studies in Athletics' Editor in Chief
- IAAF High Performance Training Centers Former Senior Manager
- IAAF CECS Member of expert Panel for Evaluation & Finalisation.
- PhD Studies in Biomechanics & Bioenergetics - Master in Cognitive Psychology (France)

Process of Long Term Athletes Development:

From Event Group to Senior Performance / Junior Level.

Performance development in athletics is a long term training process. Every coach - who works on the long term - is challenged by the complexity of the preparation due mainly to permanent changes of the environment. The coaches' capability to overcome the challenges requires a clear understanding of what he has to do, when and how to do it, taking in consideration the auxology and the training principles prior to the specialization phase. Through his presentation, the speaker will try to provide the coaches with the appropriate knowledge and selected applications, emphasizing the core elements of the long term training process.



Randall L. Wilber PhD, FACSM (USA)

Former athlete and Coach in Cross-Country and Track
Senior Sport Physiologist US Olympic Training Center Colorado Springs
Chair of ACSM Olympic and Paralympic Sports Medicine Committee
Areas of specialisation:

- High Altitude Training
- Heat / Humidity Acclimatization
- Blood Chemistry Analysis
- Overtraining
- International Air Travel (jet lag)
- Exercise induced Asthma

Team USA athletes (T&F) he worked with: Jenny Simpson, Meb Keflezighi, Galen Rupp, Leo Manzano, Shalane Flanagan, Deen Kastor.

Team USA at OG Athens 2004; Beijing 2008; London 2012

Publications: 25 papers in peer-reviewed scientific journals;
Altitude Training and Athletic Performance (Human Kinetics 2004)

Junior Elite Level Athletes:

Physiological Characteristics and Training Considerations

The IAAF World Junior Championships will bring together the best junior athletes in the world

who are 16 to 19 years old. It is not unusual to see female and male athletes under the age of 20 competing in the Olympics or World Championships, including some who reach the podium. This presentation will focus on junior elite athletes and begins with an overview of their unique physical, physiological and psychological characteristics. The proper timing of "sport specialization" will be discussed, followed by a look at the increased risk of injury among junior elite athletes, including skeletal, muscular, female-specific (menstrual dysfunction), and psychological. Next, training recommendations for junior elite athletes will be made for sprint, endurance, strength and nutrition. Finally, strategies for dealing with "overtraining" and "underperformance" in junior elite athletes will be presented.



Helmar Hommel (GER)

Former National Coach of FRG (1973 - 2011) responsible for the areas of

- DLV Coach Education / Curricula
- Ongoing Coach Education: Publication "Lehrbeilage" Editor; ORG Congress & Congress reports
- Coordinator Biomechanics / Science / Movement Analysis (Photo sequences; Videos)
- DLV Coach Education for Foreign Coaches / Mainz & Cooperation with DOSB International Relations

IAAF Official Photographer (Photo sequence; Video) for OG 1976; EAA (EC 1974 1978)

IAAF "New Studies in Athletics" Co-Founder 1985; Co Editor 1986 - 1998

IAAF Biomechanics Projects 1986 - 1997 (JWC; WC; OG) Coordinator

Training of Elite Athletes: Build Up Phase I (15y - 16y); II (17y - 19y)

The necessity of a systematic long-term performance development to enable the growing athlete to achieve his individual peak performance or - if talented and developed in an appropriate setting - even international success will be demonstrated.

Basic conditions and entry requirements for the build-up training, training measures in the event groups for both phases of the build-up training in terms of a master plan for an age - / development related continuous performance development as well as challenges in the implementation will be provided.



Keith Baar PhD, MA, BSc (USA)

Associate Professor University of California, Davis
Department of Physiology and Membrane Biology and Neurobiology, Physiology and Behaviour

Areas of Specialization: Muscle Physiology
Teaching at University of California; Stanford University; Universidad Finis Terrae
Research with Australian Institute of Sports
Invited Speaker in USA and abroad (11 countries) with more than 70 presentations and lectures

19 research grants with external funding to date of ~\$6,895,000

Member of 4 American Journals and 1 UK Journal

Editorial Board of 4 American Journals

Scientific Advisor for USA Track & Field; Gatorade; Fb Clubs Chelsea and Paris Saint Germain;
English Inst. of Sport; Great British Cycling Team; Oklahoma City Thunder

More than 90 Publications with seven in applied athletics / training of elite athletes. 5 patents

Strength Training with Youth and Junior Athletes.

Skill is essential to performance. But at a certain level, everyone has skill. What sets one skilled athlete apart from another is their strength, speed, and power. Strength, speed and power are dependent on an athlete's muscle mass, their muscle type (fast vs. slow), their ability to send the right signals to the muscle from the brain (motor program), and the stiffness of the connective tissue that connects the muscles to the bones. When we train our athletes these are the things that we are trying to improve.

All, except an athlete's muscle type, can be improved with training. Therefore, the focus of training is to improve muscle mass, the motor program and connective tissue stiffness. However, if we focus only on performance we increase the risk of injury in our athletes. The primary goal of any strength training program is to decrease injuries, with a secondary goal to improve performance. This talk will focus on how to train to increase performance without compromising the health of the athlete.



Prof. Dr. Ulrich Hartmann (GER)

Studied biology and sport science at the universities of Bonn and Cologne / GER

Ph.D. from the German Sport University Cologne in 1985.

Awarded for extraordinary graduation 1985/86 "Medicine/Natural Science" at the German Sport University

Specific fields are focused in the area of training scientific issues in connection with practical performance diagnosis, computer-aided interpretations as well as the occurring relevant questions concerning this subject.

He is a member of the lecturing staff at the Coaches Academy in Cologne.

Monitored several years German National Teams, also in the preparation for different Olympic Games.

Author of about 95 papers as 1st and another 130 as 2nd and co-author.

Board member of the German Rowing Federation with the responsibility for coaches education and scientific projects.

For many years he is invited speaker in Germany and also abroad in more than 40 countries with more than 250 presentations and lectures

Physiological and metabolic background of endurance training with talented youth and junior athletes.

In training practice it is assumed; that for each sport and discipline the performance limiting factors are well known, that an exact demand profile is established and also a plan of a performance build up is existent. - But what is applied in practise are mostly phenomenological descriptions of the performance demand: p. e. the description of a MLD competitive race is mainly done by terms of training methodology and very rarely from the view of physiology. Those phenomenological based assumptions often lead to unique views and self-fulfilling opinions in test interpretation, training methodology and periodisation which have to be discussed critical.

Examining the literature there are only few findings of scientific based load profiles during competition and its corresponding specific adaptations in young talented or even highly trained athletes. In accordance with these results, further conclusions are drawn concerning training monitoring and training methods, and proposals given for further training in combination with sufficient explanations in adequate theoretical concepts.



Dr. Craig Poole (USA)

Ed.D. Physical Education

M.S. "Handedness, Eye Dominance and the Performance of Motor Skills."

B.S. Physical Education, Zoology

Since 2010 UASTF/OTC Coach

2010 - 2012 Head Coach/Director of USATF Residency Program Olympic Training Center Chula Vista

1980 - 2010 Women's Track Coach & Teacher in Sport Psychology Brigham Young University

1970 - 1980 Teacher of Science & Track Coach Skyline High Salt Lake City Utah

6 times Coach of the year MWC & 16 times Coach of the year WAC

Athletes Coached: Torie Bowie (LJ); Jeff Skeba (HJ); Lex Gilett (LJ); Amy Menlove (CE)

Creative work:

- Sport Psychology class designed to help women athletes in the psychological preparation for competition, stress management and relaxation, intervention and techniques conducive to high quality competition.
- Masters degree program in sports psychology
Presenter in USA (44); PRC (4); Denmark; Greece
22 Presentations

Current Projects:

- Hyper gravity and sports performance among women elite Track & Field Athletes
- An investigation into the relationship of body composition and Amenorrhea related to college women athletes
- Nutrition and body composition of women athletes

Psychological aspects of age / development related training.

The intent of this presentation is to address age-dependent psychological factors that affect the learning process of young track and field athletes over time. Just as providing different age-appropriate technical and physical training for younger athletes, coaches need to recognize developmental differences in individual learning styles with their young charges. The ability of an athlete to advance rapidly in skill development is highly dependent on the coach's awareness of each athlete's age-dependent way of acquiring skills. Utilizing this information, the coach can play a critical role in overcoming potential roadblocks to the learning process and accelerate the acquisition of performance skills.

