

# *Role of Science in Modern Coaching*



**‘Artist and Guru’**

**Neil Craig**  
**Australian Cycling Federation**

# *International Sporting Competition*



- ‘To be the best’ equates to fierce competition
- No deals - win / loss
- Huge financial cost
- Results are for public consumption

# *Evolution of Sport Science and Coaching*



- *1950's*

Scientists and academics - laboratory based

- *1960's and 1970's*

Scientific coaches and influence of Eastern Bloc

- *1980's*

Coach education and Sport Institutes

- *1990's*

Application of technology and information

# *Coach and Sports Scientist*

*The coach and sports scientist need to become aware of the problems and limitations with which each is faced. Each must become familiar with the body of knowledge of the other's discipline. In other words, they must educate one another.*

# COACH



*“The sports scientist should be wary of making broad leaps away from accepted training methods that have been developed by coaches and athletes after many years of trial - and - error learning”*

*James “Doc” Counsilman 1988*

# *Coach*



**“According to the theories of aerodynamics the bumblebee cannot fly because the size, shape and weight of its body in relation to its total wing-span make it impossible. But the bumblebee, being ignorant of these truths, *DOES* fly - and makes a little honey on the side”**

**Charlie Walsh  
Australian Track Cycling Coach**

# *Coach*



*“ The secret, the art of coaching, is knowing when to pull which particular piece of knowledge and experience out of the truck and use it”*

**Kevin Sheedy 1997**  
**Australian Football Coach**  
**Essendon Football Club**

# *Power of the Partnership*

## *Coach*

- Curious, evaluate and re-evaluate
- Quality Control: all on the same wavelength
- Wisdom binds together the technical and human perspective
- Have a passion
- Picture and hard decisions

## *Sports Scientist*

- Try coaching!
- Understand and learn about the sport or activity
- Keep up to date with cutting edge information
- Be prepared to commit to an answer
- “Be a sports scientist”
- Remember the “bumblebee”
- Have a passion



# *Sports Scientist*



*“Those who are enamored of practice without science are like a pilot who goes into a ship without a rudder or compass and never has any certainty of where he is going”*

LEONARDO DA VINCI