





# Rip Van Winkle Experiment

## What are the odds?

(5th Time's the charm)

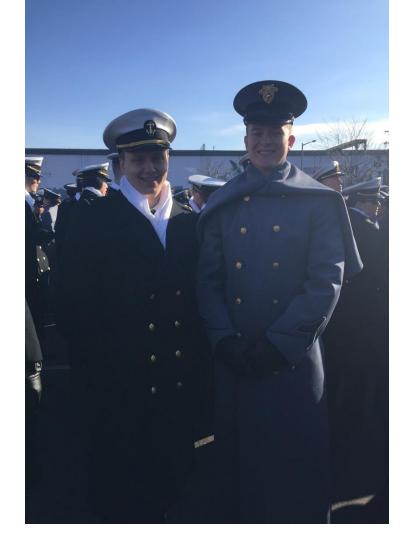
#### **Previous Drawings...**



#### **2023 Drawing . . .**



#### Word gets around fast:



## "You are not Worthy!"

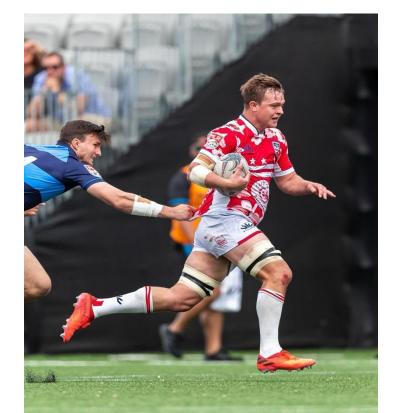
(but)

"Good Luck!"



@cwuathletics and @cwumrugby

### "Play a Real Sport"





"It can't be that tough my mom has done it a few times"



# It will be Groundhog Day

**Every Day!** 

#### <u>Baseline</u>

PMR MD

Spokane, Washington

via Seattle and Leavenworth

**Fast Twitch Sports (Football, Rugby)** 



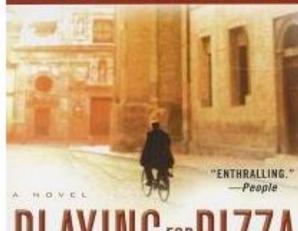








# INEW YORK TIMES BESTSELLER STORY CRISHAN



**PLAYING FOR PIZZA** 

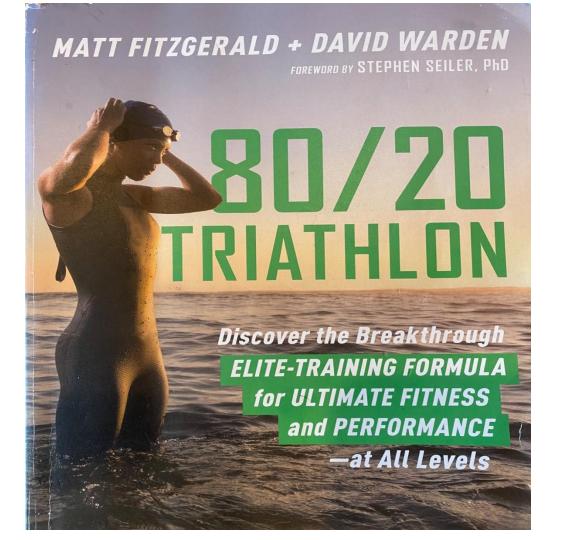
#### **Triathlon Resume**

+

Ironman Canada 2012
Xterra Off Road Triathlons
Empty Nester
Coaching Accessibility

# Coach or No Coach?

# The concept of paying someone to frustrate them



#### **Book Insert**

"Cutting edge research has proven that triathletes experience their greatest performance when they do 80 percent of their training at low intensity and the remaining 20 percent at moderate to high intensity."

"Benefits include reduced fatigue and injury risk - improved fitness, increased motivation and better race results."

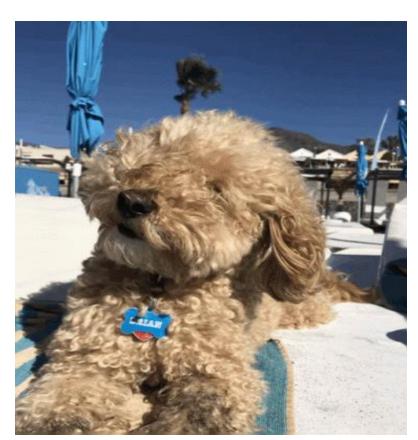
#### **My Interpretation:**

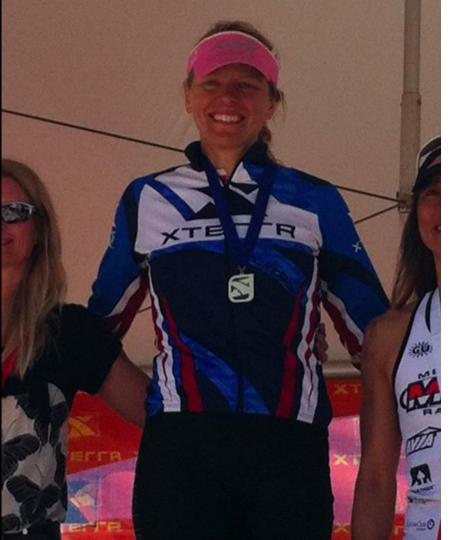
"Sometimes you need to slow down to go faster"

#### **Running Partner**

Emphasis on Trail Running and Anytime All Weather Workouts

#### **Running Partner**





#### **Training Advisor**

3 X Kona Participant

2008 Xterra World Champion

2012 2nd Alaska Airlines Double Competition

(Ironman WC time plus Xterra WC time)

#### **Swim Savings:**

YouTube

Instagram

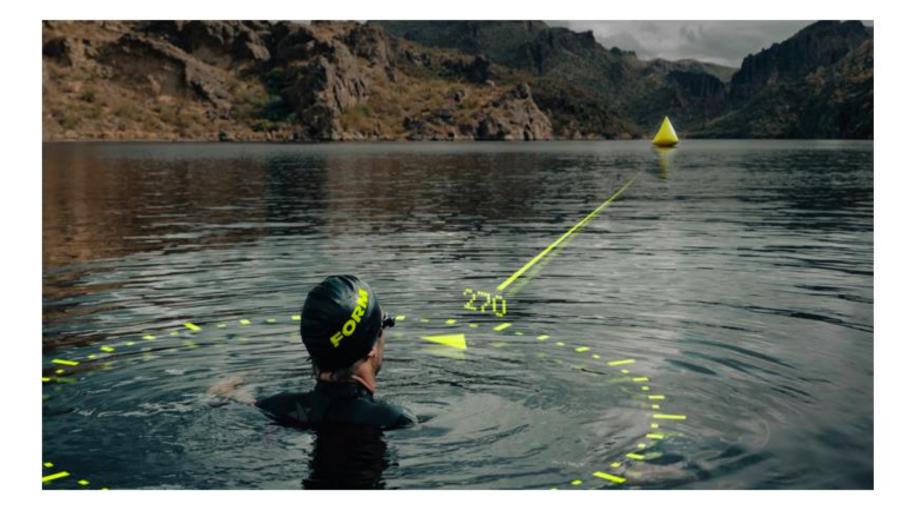
Heads Up Display Goggles - Compass, Body Position Feedback

Swim Skins (80 seconds) - (getting it off at the end?)

Practice Races: IM 70.3 CDA

IM 70.3 Canada

IM 70.3 Washington



#### PubMed Results

Item 1-1 of 1 (Display the 1 citation in PubMed)

1. Effect of fastskin suits on performance, drag, and energy cost of swimming.

Chatard JC, Wilson B.

Med Sci Sports Exerc. 2008 Jun;40(6):1149-54. doi:

10.1249/MSS.0b013e318169387b.

PMID: 18460989



#### Results:

IM 69.4 Coeur D' Alene

**IM 69.1 Canada Duathlon** 

**IM 70.3 Tri-Cities Side Stroke Addition** 

#### **Bike Savings:**

#### **Triathlon Bike / Aero Positioning:**

Biking Efficiency 23% (versus Road Bike positioning)

#### Improved Running Efficiency

Increased PF and decreased knee ROM improve stride length

Decreased hamstring activation conservation of energy

Decreased calf activation conservation of energy

#### Estimation of an Elite Road Cyclist Performance in Different Positions Based on Numerical Simulations and Analytical Procedures

Pedro Forte, 1,2,3,\* Daniel A. Marinho, 3,4 Tiago M. Barbosa, 2,3 Pedro Morouço, 4,5,6 and Jorge E. Morais 2,3

▶ Author information ▶ Article notes ▶ Copyright and License information PMC Disclaimer

#### Associated Data

Data Availability Statement

#### Abstract

performance in three different cycling positions. An elite level road cyclist competing at a national level was recruited for this research. The bicycle was 7 kg and the cyclist 55 kg. A 3D scan was taken of the subject on the competition bicycle, wearing race gear and helmet in the upright position, in the handlebar drops (dropped position) and leaning on the elbows (elbows position). Numerical simulations by computer fluid dynamics in Fluent CFD code assessed the coefficient of drag at 11.11 m/s. Following that, a set of assumptions were employed to assess cycling performance from 1 to 22 m/s. Drag values ranged between 0.16 and 99.51 N across the different speeds and positions. The cyclist mechanical power in the elbows position differed from the upright position between 0 and 23% and from the dropped position from 0 to 21%. The cyclist's energy cost in the upright position differed 2 to 16% in comparison to the elbows position and the elbows position had less 2 to 14% energy cost in comparison to the dropped position. The estimated time of arrival was computed for a 220,000 m distance and it varied between 7,715.03 s (2 h:8 min:24 s) and 220,000 s (61 h:6 min:40 s) across the different speeds and positions. In the elbows position, is expected that a cyclist may improve the winning time up to 23% in comparison to he upright and dropped position across the studied speeds.

The aim of this study was to use numerical simulations and analytical procedures to compare a cyclist's

Go to: >

Keywords: cycling, positions, analytical procedures, power, energy cost

Published online 2006 Mar 1.

J Sports Sci Med. 2006 Mar; 5(1): 25-32.

PMCID: PMC3818671 PMID: 24198678

The Effects of Bicycle Frame Geometry on Muscle Activation and Power During a Wingate Anaerobic Test

Mark D. Ricard, 8,1,\* Patrick Hills-Meyer, 2,\* Michael G. Miller, 2,\* and Timothy J. Michael 2,\*

▶ Author information ▶ Article notes ▶ Copyright and License information PMC Disclaimer

#### Abstract

The purpose of this study was to compare the effects of bicycle seat tube angles (STA) of (72° and 82°) on power production and EMG of the vastus laeralis (VL), vastus medialis (VM), semimembranous (SM), biceps femoris (BF) during a Wingate test (WAT). Twelve experienced cyclists performed a WAT at each STA. Repeated measures ANOVA was used to identify differences in muscular activation by STA. EMG variables were normalized to isometric maximum voluntary contraction (MVC). Paired t-tests were used to test the effects of STA on: peak power, average power, minimum power and percent power drop. Results indicated BF activation was significantly lower at STA 82° (482.9 ± 166.6 %MVC·s) compared to STA 72° (712.6  $\pm$  265.6 %MVC·s). There were no differences in the power variables between STAs. The primary finding was that increasing the STA from 72° to 82° enabled triathletes' to maintain power production, while significantly reducing the muscular activation of the biceps femoris muscle.

#### **Bike Savings:**

**Power Meter** 

Interactive Indoor Bike Training

# **TOTAL POWER**

Cyclists know that to become competitive they need to train with purpose. That means training with power. By connecting to reliable and accurate data, POWRLINK ZERO power meter pedals give riders the power and cadence metrics they need to track and analyze every ride. These metrics create a more complete power profile cyclists can use to unlock every last watt.

#### 325 WATTS





# Miscellaneous Bike Wattage Savings:

Aero Bike (The Bike itself) 25 watts at 45 kph (17 minutes in IM length)

Aero Bike Helmet 15 watts at 30 kph (30 to 60 seconds an hour)

**Aero Kit** 8 watts at 30 kph (2 minutes in IM length race)

**Shaved Legs** 15 watts at 30 kph (79 seconds average in 40km Time Trial)

Aero Calf Sleeves 12 watts at 30 kph

Water Bottle Position (:40s to 1:55s in IM distance)

Disc Wheels - variable but "biggest bang for the buck"

## Run Savings:

Athlete Weight (1.8 seconds to 3 seconds per pound per mile)

**Carbon Plate Energy Absorbing Shoes** 

**Smart Watch** 

Running Metrics/ Analysis Accessibility (e.g power, cadence, stride length)

Chest Strap Freedom

## **Running Speed and Fat Mass**

Nutrients. 2019 Mar; 11(3): 701.

Published online 2019 Mar 25. doi: 10.3390/nu11030701

PMCID: PMC6471649

PMID: 30934655

#### An Increase in Fat Mass Index Predicts a Deterioration of Running Speed

Laurence Genton, <sup>1,\*</sup> Julie Mareschal, <sup>1</sup> Véronique L. Karsegard, <sup>1</sup> Najate Achamrah, <sup>1</sup> Marta Delsoglio, <sup>1</sup> Claude Pichard, <sup>1</sup> Christophe Graf, <sup>2</sup> and François R. Herrmann<sup>3</sup>

▶ Author information ▶ Article notes ▶ Copyright and License information PMC Disclaimer

#### Associated Data

**▶ Supplementary Materials** 

Abstract Go to: ▶

A low fat mass is associated with a good running performance. This study explores whether modifications in body composition predicted changes in running speed. We included people who underwent several measurements of body composition by bioelectrical impedance analysis between 1999 and 2016, at the "Course de l'Escalade", taking place yearly in Geneva. Body composition was reported as a fat-free mass index (FFMI) and fat mass index (FMI). Running distances (men: 7.2 km; women: 4.8 km) and running times were used to calculate speed in km/h. We performed multivariate linear mixed regression models to determine whether modifications of body mass index, FFMI, FMI or the combination of FFMI and FMI predicted changes in running speed. The study population included 377 women (1419 observations) and 509 men (2161 observations). Changes in running speed were best predicted by the combination of FFMI and FMI. Running speed improved with a reduction of FMI in both sexes (women: β –0.31; 95% CI –0.35

Journal Article

ournal Article •

## Before:



# After:



### **Carbon Plate Effects on Running**

As a library, NLM provides access to scientific literature. Inclusion in an NLM database does not imply endorsement of, or agreement with, the contents by NLM or the National Institutes of Health.

Learn more: PMC Disclaimer | PMC Copyright Notice



Sci Rep. 2024; 14: 11903.

Published online 2024 May 24. doi: 10.1038/s41598-024-62263-0

PMCID: PMC11126714

PMID: 38789519

Technologically advanced running shoes reduce oxygen cost and cumulative tibial loading per kilometer in recreational female and male runners

<u>Amelie Werkhausen, <sup>⊠1,2</sup> Magne Lund-Hansen, <sup>1</sup> Lucas Wiedenbruch, <sup>1,3</sup> Klaus Peikenkamp, <sup>3</sup> and <u>Hannah Rice</u> <sup>1</sup></u>

▶ Author information ▶ Article notes ▶ Copyright and License information PMC Disclaimer

#### Associated Data

Data Availability Statement

Journal Article

### **Realistic Goals:**

Survive the Swim

Don't Blow up on the Bike

Finish before Cut Off



#### **DARK ARTS**

When estimating your performance for an IRONMAN event, please appreciate that it is certainly more art than science. It's a guesstimate and a lot of things have to fall into line for your 70.3 PB to be extrapolated to a reasonably estimated 140.6 time.

### **Last Word**

Time Consuming but "not that bad"

"Niggles" will happen - always be ready for work arounds

Be Careful!

Join a Club

Find a Partner

Get a Dog

# Thank You!

