

Cyclist Centered Fitting

“Staying on The Road”

Curtis Cramblett PT, CFMT, CSCS, Coach

Physical Therapist **20+ years**, physio educator

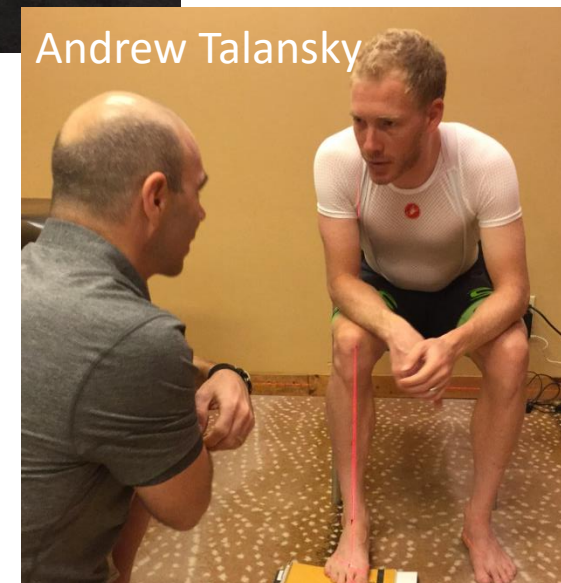
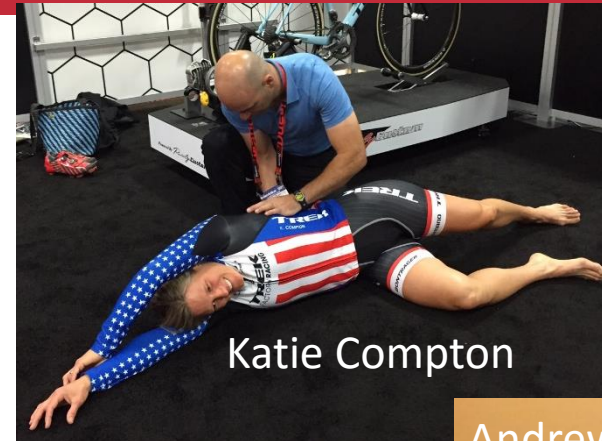
Trained: RETUL, FIST, SICI, Bike PT, Specialized, Bikefit.com

Multiple year Physio and fitter for **Garmin**,
multiple **Olympians**, World Champions

Chair Med of Cycling Bicycle fitting Task force

Board of IFBI

Cyclist / Racer **25+ years**



“Cyclist Centered Fitting”

Making Wise Fit Choices



Cyclists Goals

Where do we find these answers?

1. What is keeping our clients from accomplishing their goals?
2. During a fit how do if we know if we have done the **right thing**, in the **right amount**, in the **right place** that moves our clients toward their fitting goals?

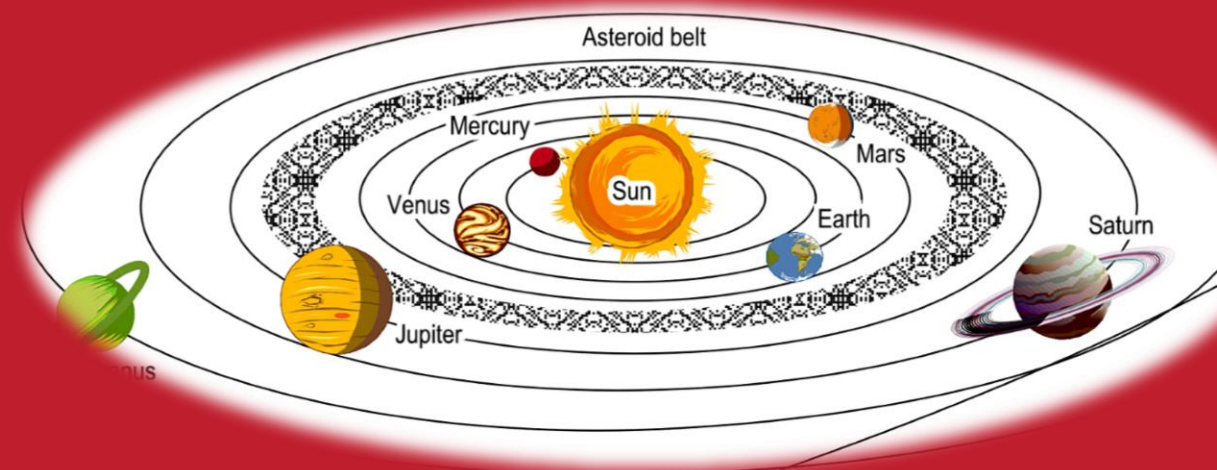


Ever had this happen?

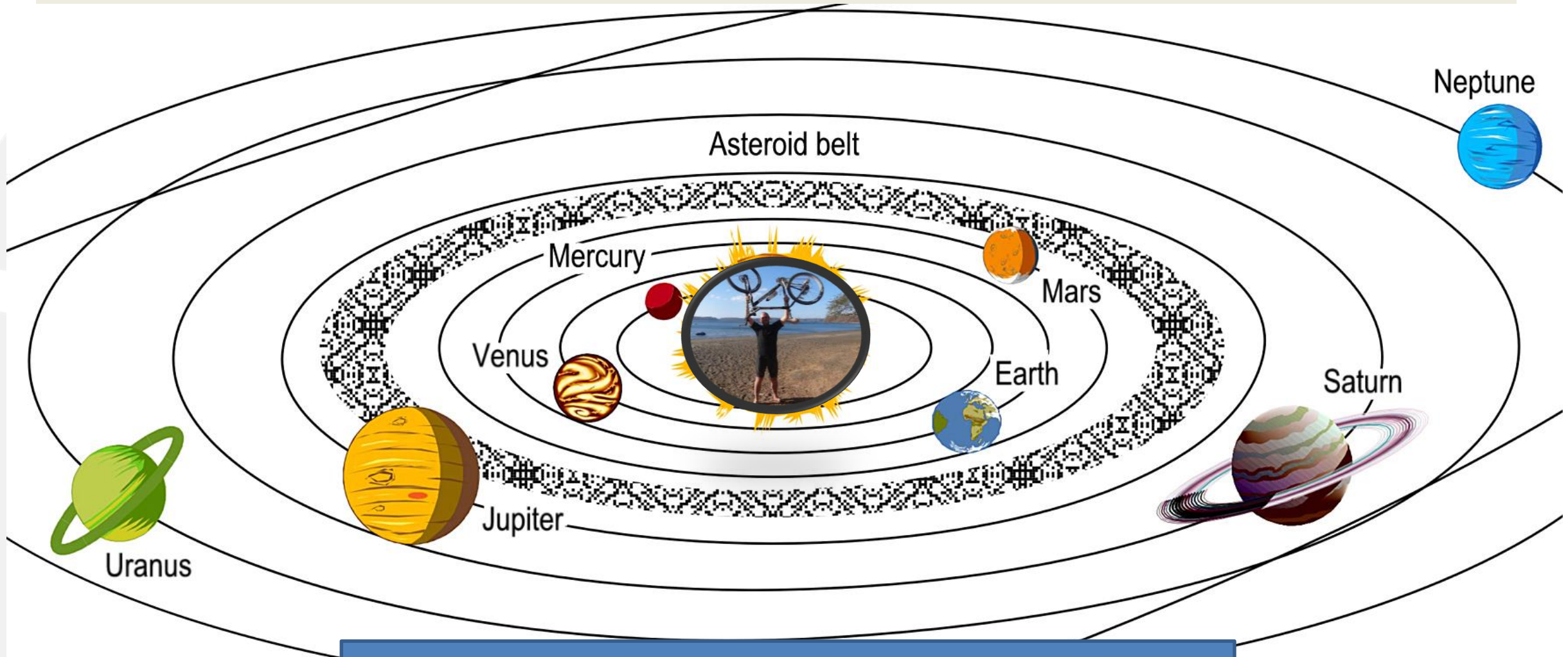


Step 1

Put our Cyclist First



Cyclist Centered Fitting



OUR GOALS = THEIR GOALS

Step 2

Identify Sign Posts

That point you
toward your cyclists goals



Fit Choices

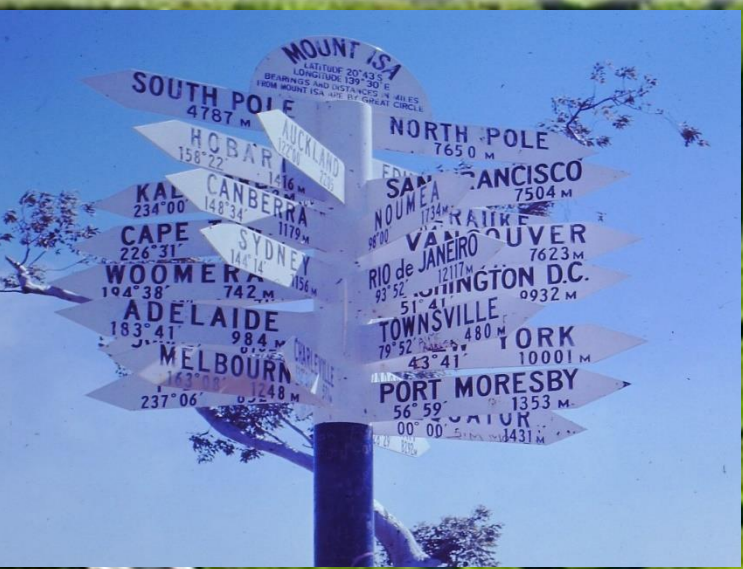
Sometimes the signs are obvious ...

and the path is easy to see



**And Sometimes It's Not
So Obvious**





Which way?

We Need to Focus



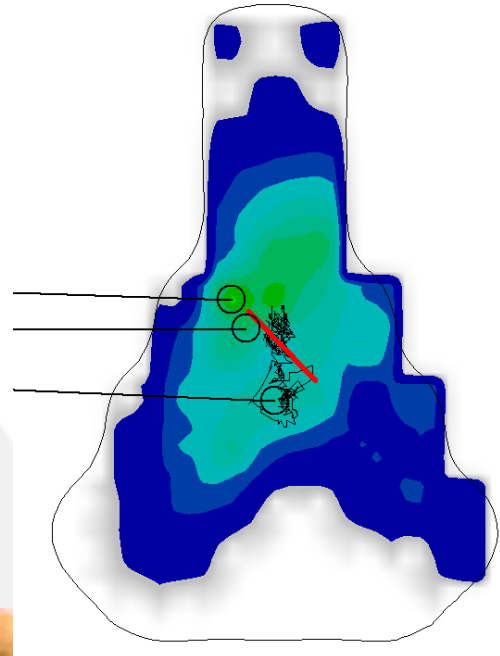
Measurement Title	1	2	3	Units	Range
Ankle Minimum	83	-4	79	deg	65 - 75
Ankle Maximum	108	-2	106	deg	90 - 100
Ankle Range	25	2	27	deg	20 - 30
Maximum Knee Flexion	115	0	115	deg	110 - 115
Maximum Knee Ext	66	0	66	deg	65 - 68

Head

Measurement Group:

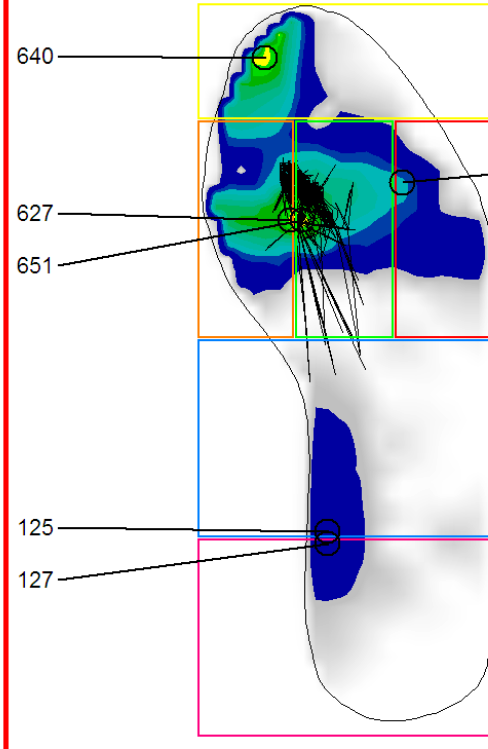
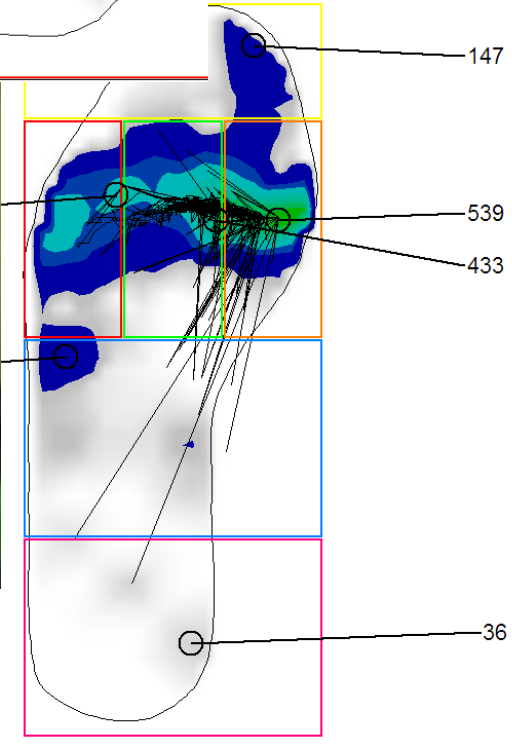
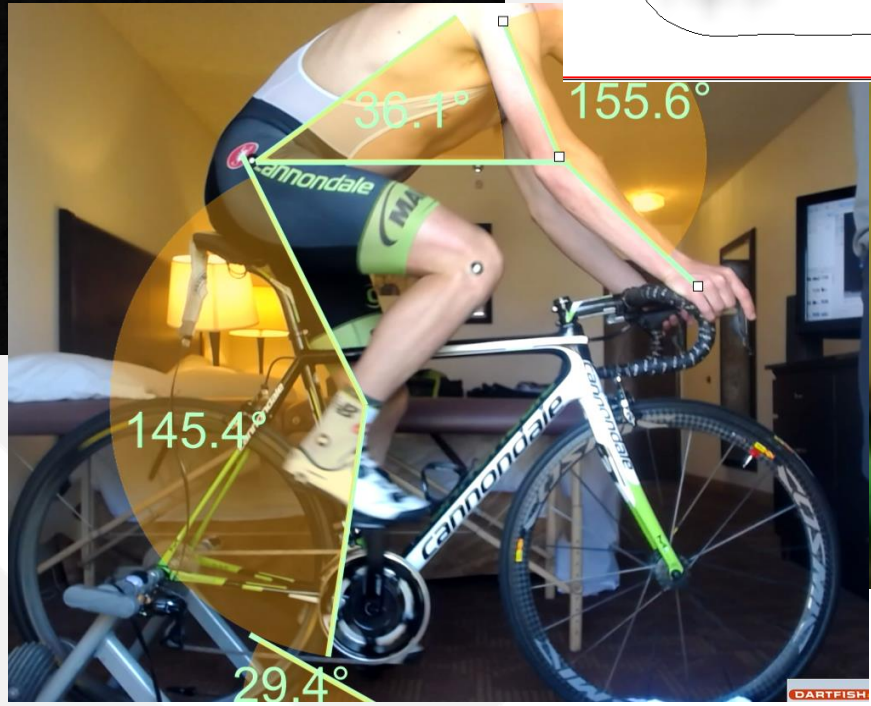
1: post self massage for abdomen (Right) 2: Difference 3: saddle fd 15 mm more (Right)

Measurement Title	1	2	3	Units	Range	
Hip Angle Closed						
Hip Angle Open						
Hip Angle Range	Foot From Level Mean	-21	3	-18	deg	N/A
Back Angle	Foot Float Angle Min	-13	0	-13	deg	N/A
Shoulder Angle to \	Foot Float Angle Mean	-11	0	-11	deg	N/A
Shoulder Angle to E	Foot Float Angle Max	-11	0	-11	deg	N/A
Elbow Angle	Knee Travel Tilt	3	1	4	deg	-3 - 3
Forearm Angle	Knee Lateral Travel	23	1	24	mm	0 - 30
Knee Forward of Fc	Hip Vertical Travel					
Knee to Foot Later	Hip Lateral Travel					
	Thigh Length					
	Shin Length					
	Hip to Wrist Vertical					
	Hip to Wrist Horizontal					
	Hip to Elbow Vertical					
	Hip to Elbow Horizontal					
	Cadence Avg					
	Cadence Max					



GP Manager Euser, Lucas [GP_20] 11.11.2011

• Nu





**‘..a wealth of information,
creates a poverty of attention...’**

Herbert Simon, economist

What do I do??



Evaluation / Collect Data

Evaluation

Collect
Data

Off bike
On Bike
Questions

Identify Sign Posts

Cyclists Goals



Relevant Data

Comfort

Speed

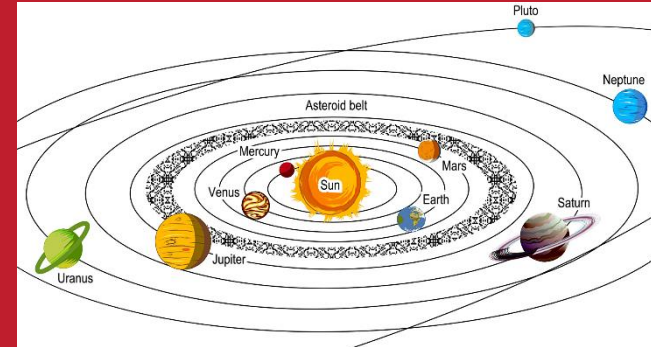
Other



Numbness

Heaviness

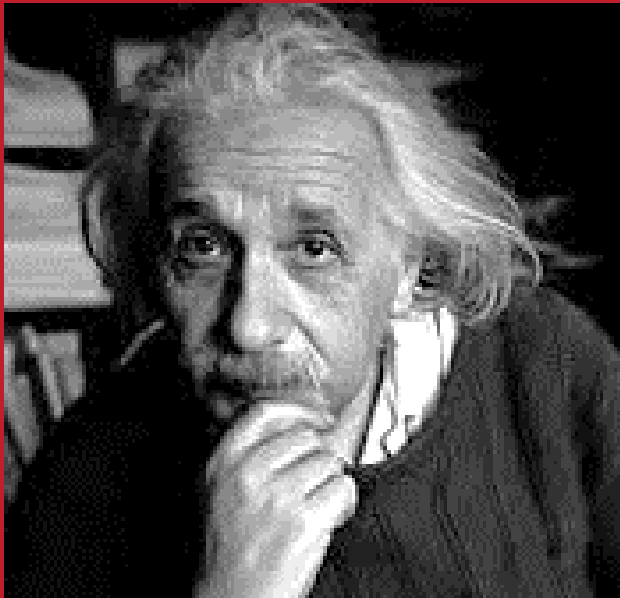
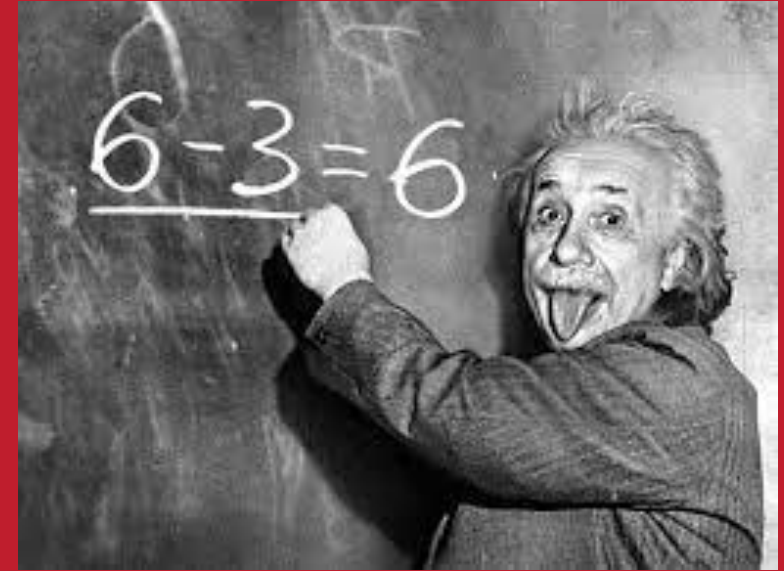
Step 1:



Step 2:



Step 3



Think Right!

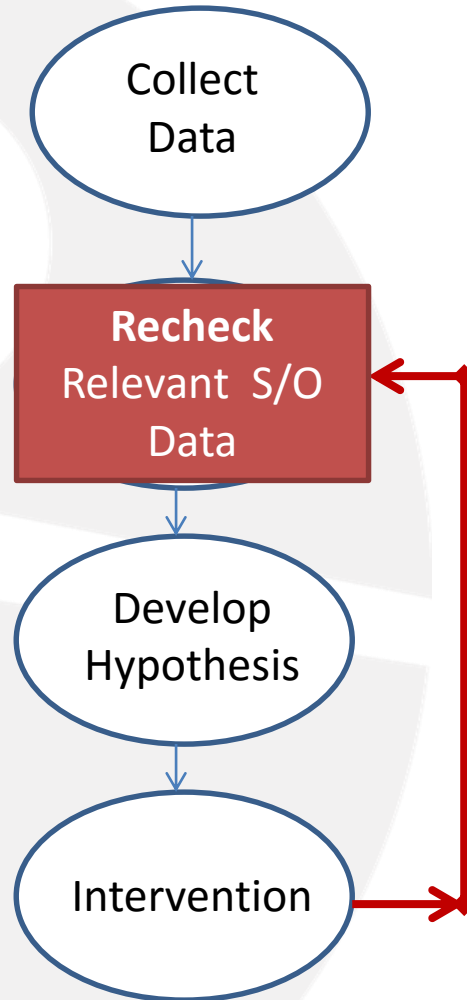
Evidence Based Fit

Evaluation

ID Sign Posts

Why, I think ...

Therefore I will...



LARGE quantity of Data
GOAL: Get rid of hand numbness


Feeling Wt on hands,
Elbows locked,
Shoulders up in ears

Seat angle,
stem length / drop
Tight Thoracic Spine


Change Bike (stem / seat),
Mobilize Thoracic Spine

Was I right ??

Hypothesis

Cyclist Goals	Sign Posts	Possible Causes
Hand Numbness 	Heavy on hands Elbows / Upper Traps Gebiomized (saddle / hands) Thoracic Stiffness	Stem – long / low Saddle angle -2.5 Thoracic Mobility

Hypothesis

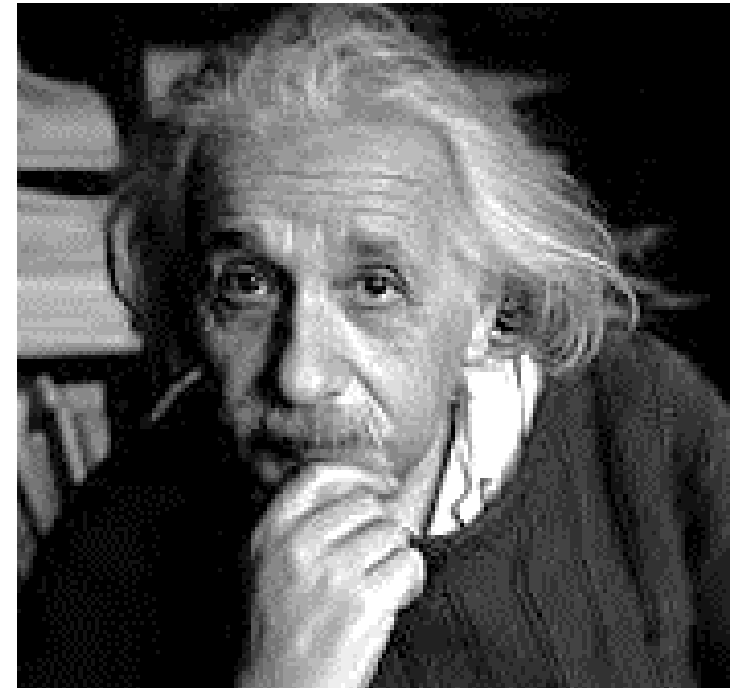
Cyclist Goals	Sign Posts	Possible Causes
Anterior Knee Pain LS Pain Faster 	Knee Tightness Valgus knee	1) Dyn Knee < 20d -> lower seat 2) 20 deg forefoot varis -> shim ** 3) Foot Mob / Str

Solution is an Evolution

Fitter & Technician
“Wrench”



Cycling Analysis
Professional



The Benefits

- Cyclist feels your focus on **their** goals
- Get to Why
- **Cyclist** goals accomplished more often and in the least amount of time