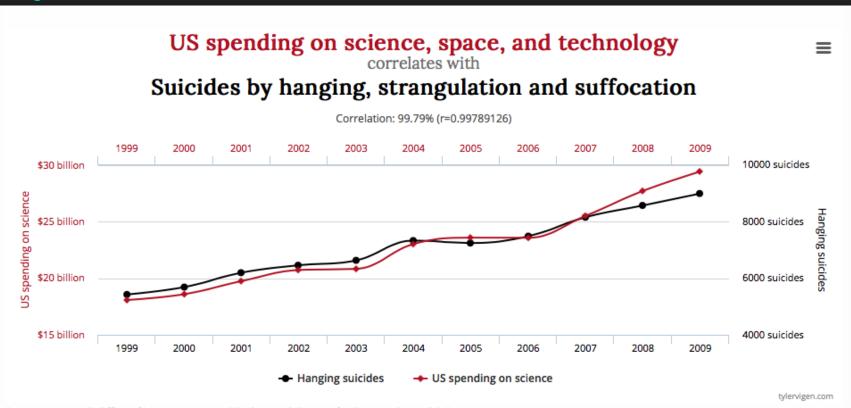
# Osteopathic diagnostics and EBM

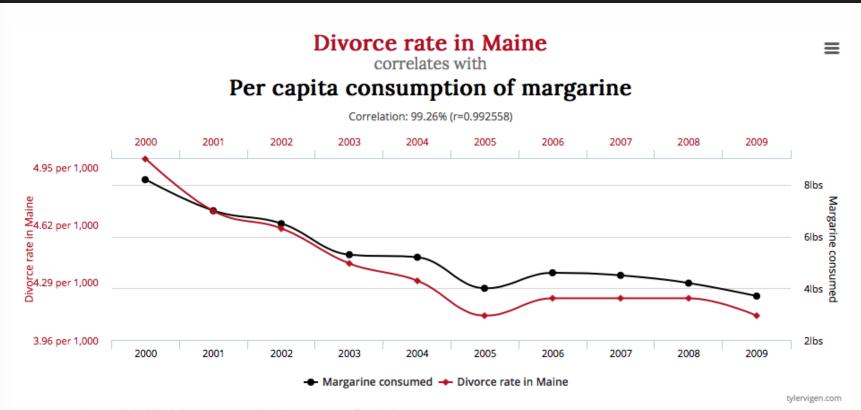
a clear challenge for the future By: Dr. Ost. Tim Daelemans www.osteopathy.academy

#### Never start a presentation with a graph...



Data sources: U.S. Office of Management and Budget and Centers for Disease Control & Prevention

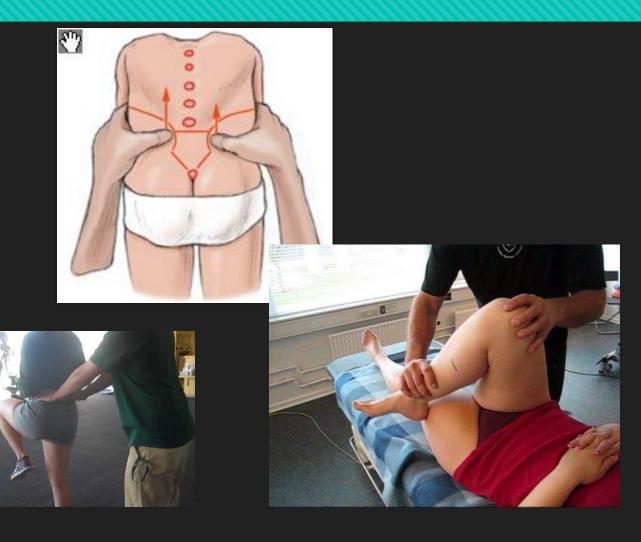
#### **Correlation vs Causality**



Data sources: National Vital Statistics Reports and U.S. Department of Agriculture

#### **Correlation is not Causality**

- A lot of the tests in the manual medicine field are correlation based tests
- I see 'test A' is positive therefore 'pathology/dysfunction B' exists.
- Is that so?
- Eg.: FTS, weight transfer test, Downing tests



### **Correlation is not Causality**

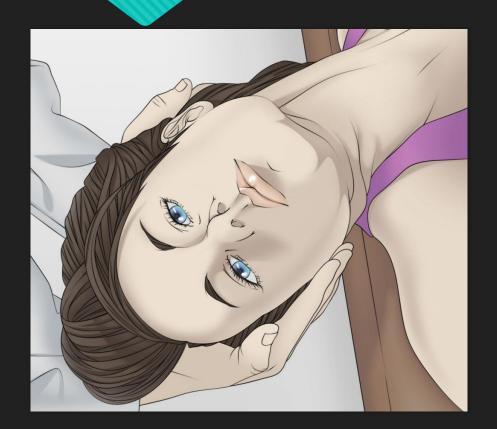
#### Let me clarify where we have a problem in our reasoning with an example: The laws of Fryette.

- Very often used in diagnosis of the spine
- There is amply evidence that these combined movements do not follow any laws. (\*)
- But we accept them. Why?
  - I do the testing
  - It shows a certain restriction (eg.: ERSIe)
  - I do the manipulation in the opposite direction
  - The mobility restores
  - So the test was right!
  - O Or maybe not ....
- It sounds logic
- But this assumption is as invalid as the following claim:
  - Women are solely responsible for global warming!



\*(Stoddard 1969, Mimura et al 1989), (Pearcy & Tibrewal1984; Plamondon et al 1988; Panjabi et al 1989; Vicenzino & Twomey 1993) demonstrated no clear patterns that are comparable to Fryette's laws."

#### What about validity and reliability?

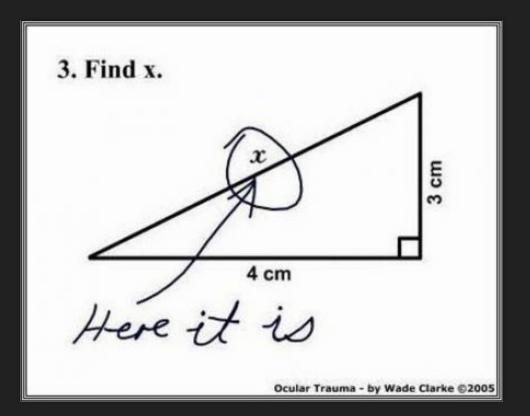


- Eg.: De Kleyn's test is that reliable?
- Or the red flag questions for infections and neoplastic processes?
  - Did you loose weight?
  - Do you have more pain at night?
  - 0 ....

#### WHAT do we teach our students as EP's?

#### • Differential diagnosis in:

- Morphological pathology (eg.: ACL rupture)
- Functional pathology (eg.: movement restriction of a cranial suture)
- Pathophysiology:
  - O Medical
  - O Osteopathic



#### WHY do we teach these subjects as EP's?

- We want our students to be able to :
  - O Detect green, yellow, red flags
  - Differentiate pathologies from each other
  - Make up a treatment plan
  - O In general: safety



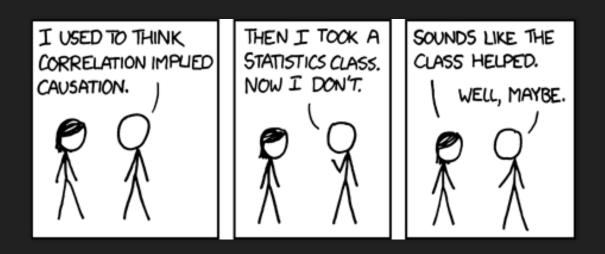
#### The challenge is not a problem

- The greatest challenge is:
  - Do we know what we teach the students?
  - Do we know why we teach those tests?
  - Do we know as EP's what the reliability of these tests is?
  - Do we know as EP's what the validity of these tests is?
- How much of these tests are being used by the professional osteopath in the field?



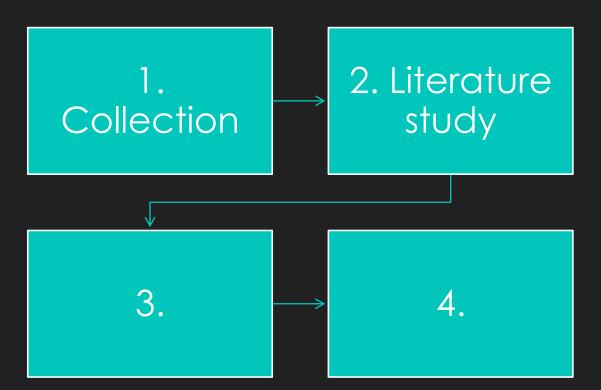
## Why do we need that data as EP's?

- Is it worth teaching these tests or diagnostic processes?
- Is it safe when we think it is safe?
- Is the treatment based on the right diagnosis?
- Maybe less is more?
- The professional osteopath needs to be well educated and be able to practice based on a reliable and valid examination method of the patient.

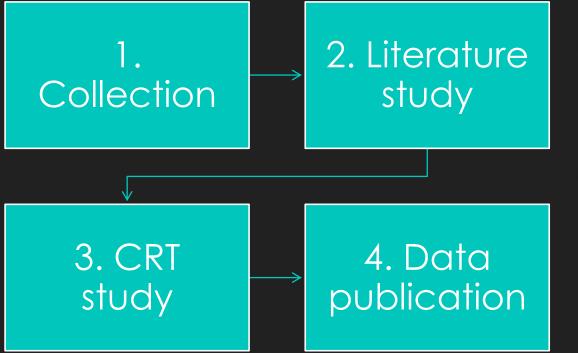


# The project proposal

- An academic collaboration inbetween the OsEAN EP's
- O What:
  - STEP 1: Collection of all clinical tests/ anamnestic protocols that are being thought
    - Medical / morphological tests / questions
    - O Osteopathic / functional tests / questions
  - STEP 2: Analysis of current literature findings per test / anamnestic protocol (reliability / validity)
    - This work will be devided over several schools and several dissertations
    - O Lack of liteterature on a test / anamnesis question does not mean exclusion



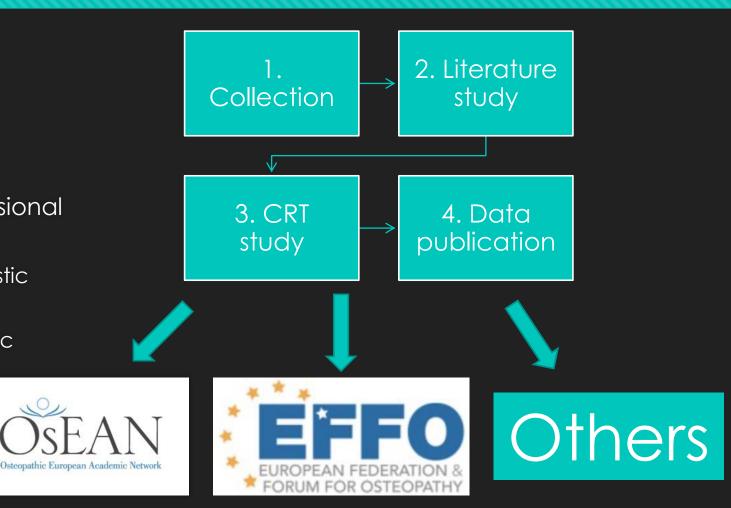
#### The project proposal



- STEP 3: CRT's need to be conducted on the tests and anamnestic protocols that remain unexplored in current literature
  - Again this is work for several institutions and several students / researchers.
- STEP 4: collection of all the data and describe per test or anamnestic protocol the :
  - The frequency of application in the working field
  - The scientific relevance

## What with the outcome of the study

- The results should be published and spread towards all osteopathic institutions.
- It can also be very helpful for professional organizations to defend
  - the working principals of our diagnostic reasoning
  - the first line access of the osteopathic profession



# Thank you for your attention.

#### **Questions?**

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