

Western University BootCamp 2019

Teaching EBM



Bootcamp 2019

Movie Trailer

A man wearing a brown cowboy hat and a black polo shirt is shown in profile, facing right. A woman with blonde hair in a ponytail, wearing a patterned top and a necklace, is shown in profile, facing left. They are standing close together, looking at each other. The background is a plain, light-colored wall.

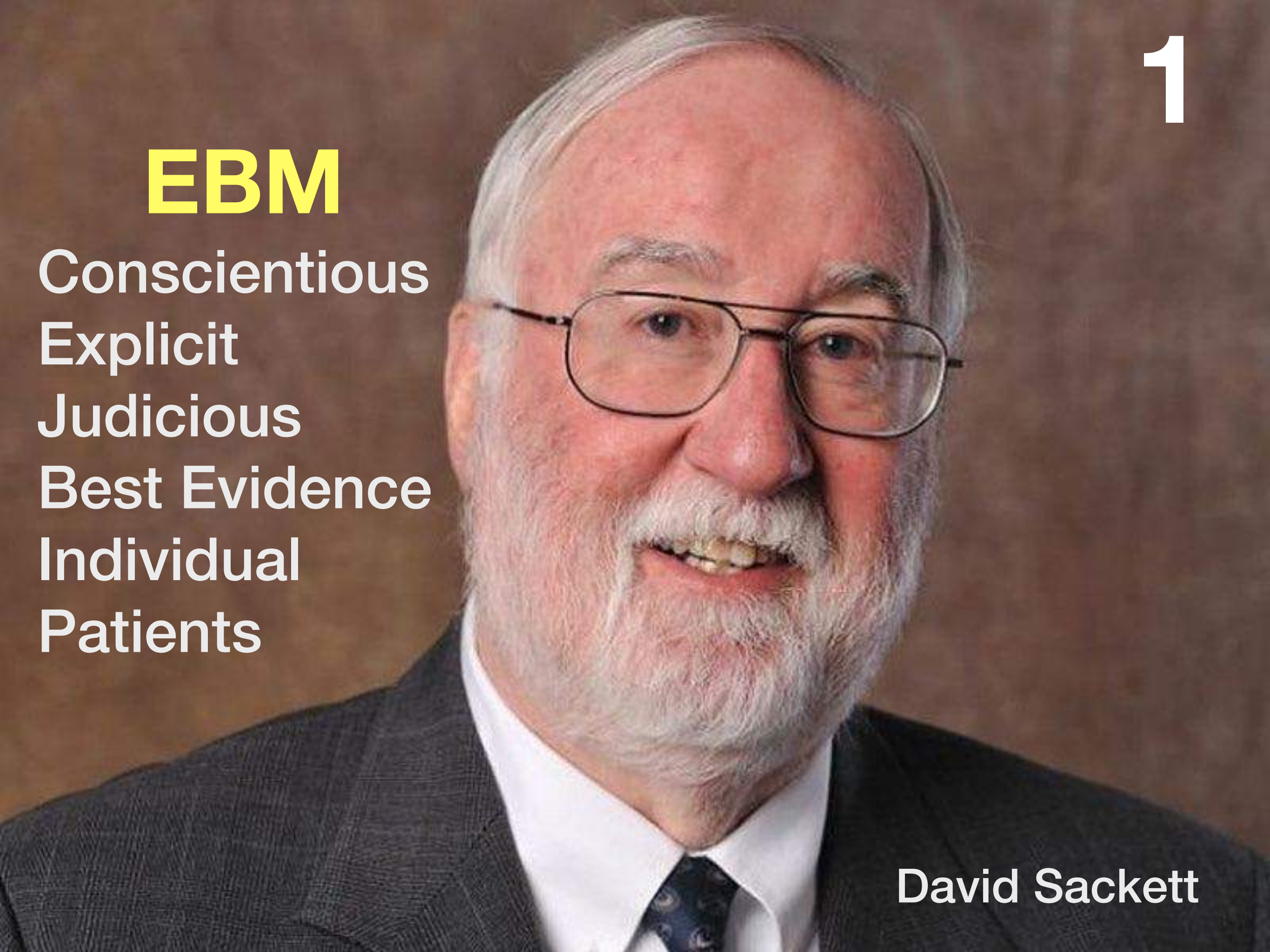
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EBM Basic Training

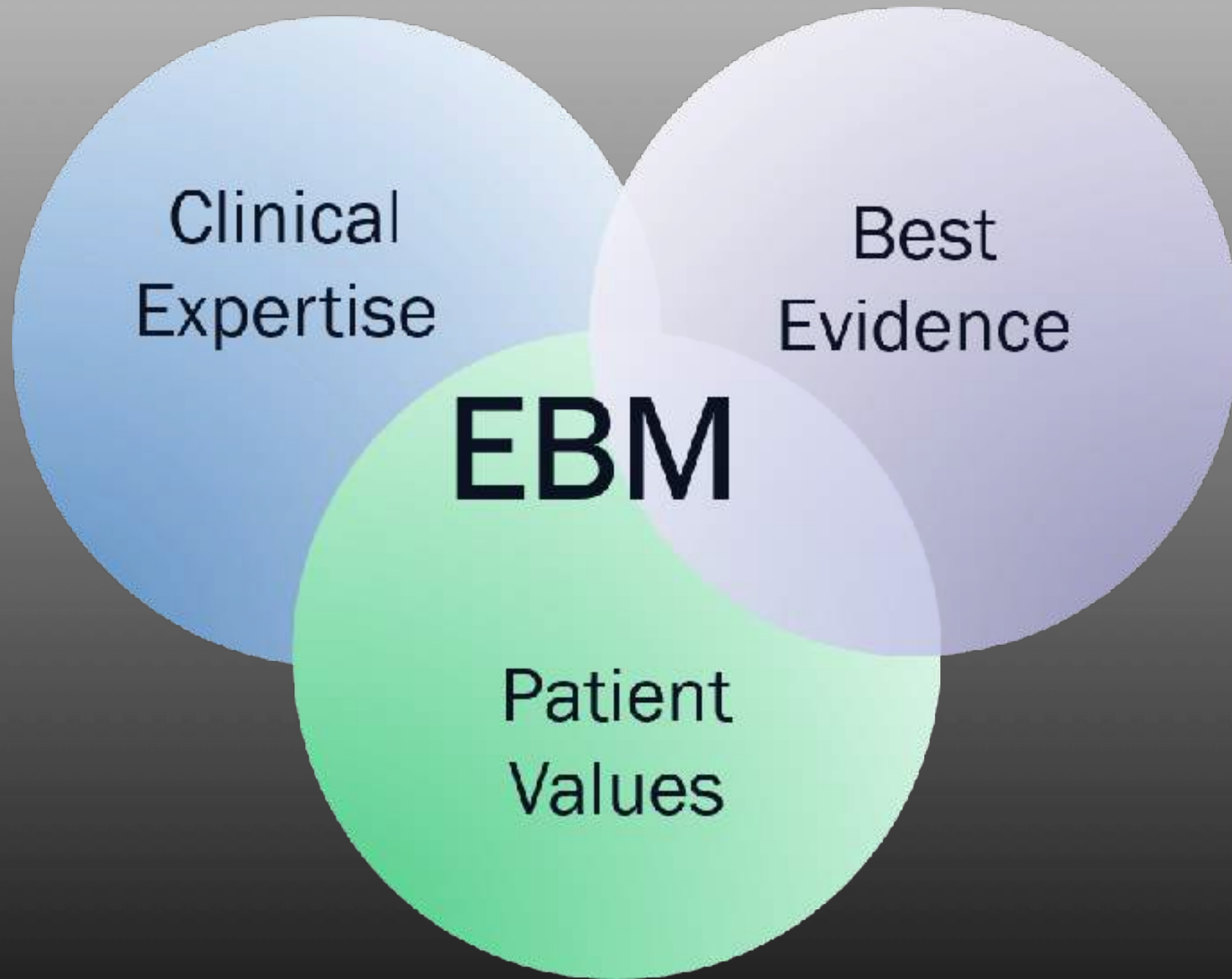


EBM

Conscientious
Explicit
Judicious
Best Evidence
Individual
Patients



David Sackett



2

P

I

C

O

Population

Describes a particular group of patients; may include primary problem, disease, or coexisting conditions

Example: Cardiac arrest patients

Intervention

Includes main intervention, prognostic factor, or exposure

Example: Who received CPR

Comparator

Describes the main alternative

Example: Compared with no CPR

Outcome

What is being accomplished, improved, measured

Example:

1. Neurologically intact survival
2. Survival to discharge
3. ROSC

PubMed



Trip

Levels of Evidence

Systematic Review

Appraised Topics

Appraised Article

RCT

Cohort Study

Case Report

Expert Opinion



Checklist



**SGEM:
Make it So**

Practice Changing? 5



NNT & NNH

Limits of EBM



BMJ Dec 2003

Emergency Medicine



Without EBM

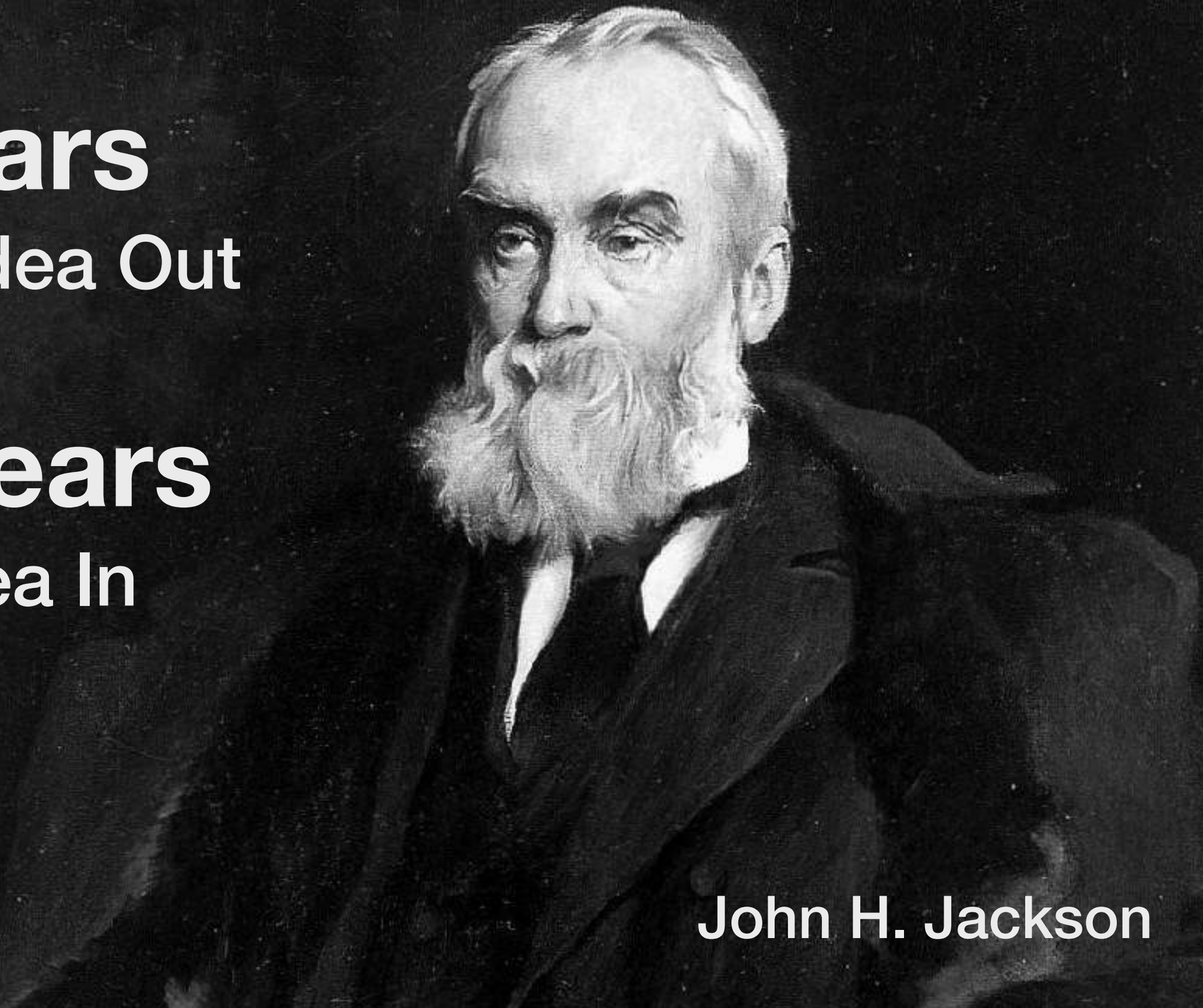
KT Problem

50 Years

Wrong Idea Out

100 Years

Right Idea In



John H. Jackson



Optimal Patient Outcomes Based upon Best Evidence



**Weakens
the
Mind**

**Forgetful
Learners**

**Trust
External
Sources**



**Appear
Omniscient**



Criticism Is Not New



Quality



Education/Original research

Emergency Medicine and Critical Care Blogs and Podcasts: Establishing an International Consensus on Quality

Brent Thoma, MD, MA^{a, c, e}, , , , Teresa M. Chan, MD, BEd^{e, f}, Quinten S. Paterson^d, W. Kenneth Milne, MD^g, Jason L. Sanders, MD, PhD^{b, e}, Michelle Lin, MD^{e, h}

Strategies



Education/residents' perspective

🔗 Five Strategies to Effectively Use Online Resources in Emergency Medicine

Brent Thoma, MD, MA^{a, b}, 🧑, ✉️, ✉️, Nikita Joshi, MD^{b, c}, N. Seth Trueger, MD^d, Teresa M. Chan, MD^{b, e}, Michelle Lin, MD^{b, f}

Awareness

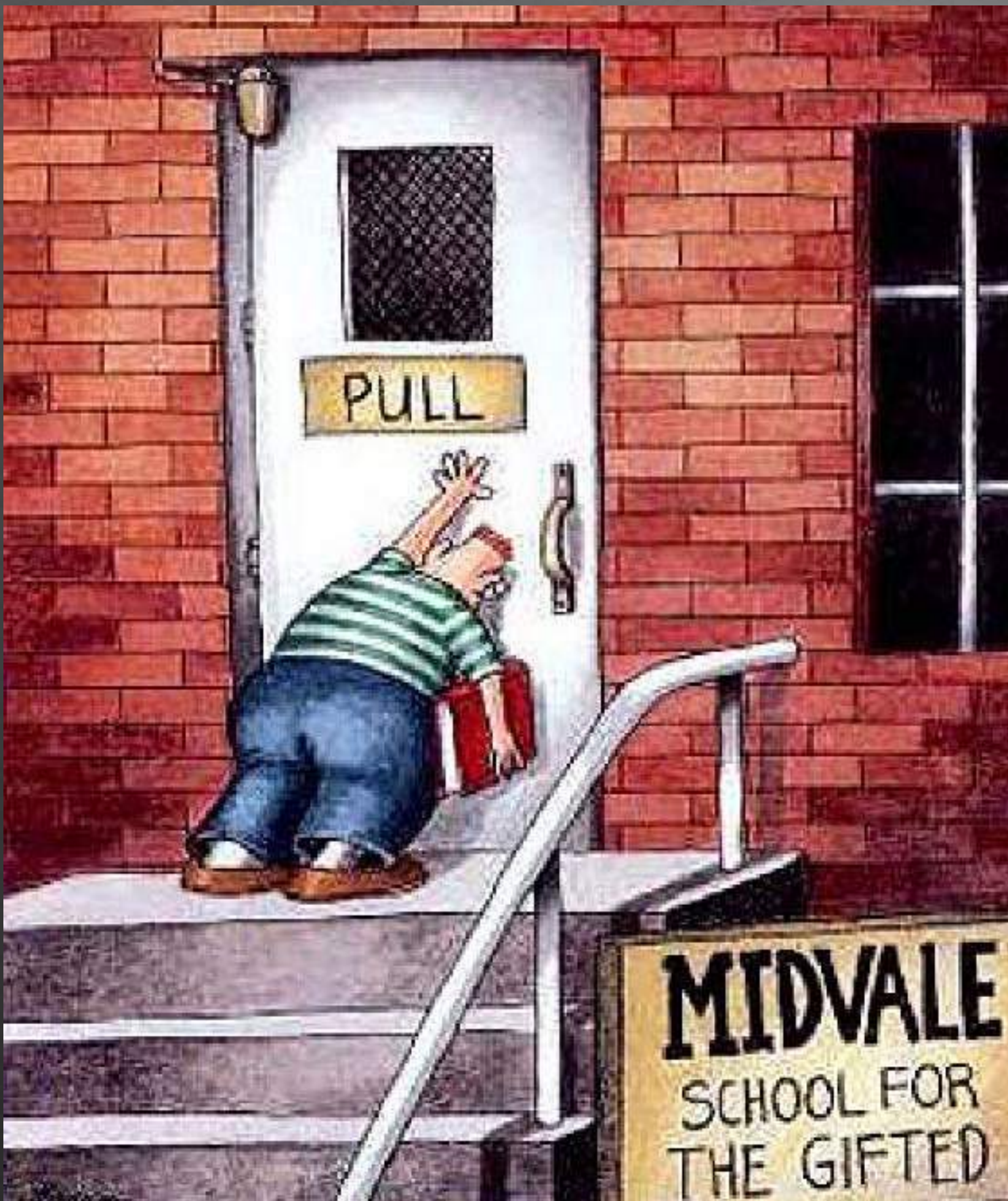


The impact of social media promotion with infographics and podcasts on research dissemination and readership

Brent Thoma  (a1), Heather Murray (a2), Simon York Ming Huang (a1), William Ken Milne (a3)  ... 

<https://doi.org/10.1017/cem.2017.394> Published online: 13 September 2017

Teaching Clerks EBM



**Stimulate
Involved
Respect
Recognize
Skepticism**

NNT=1

NUMBER NEEDED TO TEACH

Viva la Evidence

“a 21st century clinician who cannot critically read a study is as unprepared as one who cannot take a blood pressure or examine the cardiovascular system”

BMJ 2008;337:704-705



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GIGO



RCT: Ingredients

1.Right Patients

2.Randomized

3.Concealed

4.ITT

5.Consecutive

6.Similar

7.Unaware

8.Treated Equal

9.Follow-up

10.POO

11.Large and Precise

