

RAISING THE BAR ON ORTHOPEDIC RESEARCH

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CURRENT STATE OF ORTHOPEDIC RESEARCH

- **Research has become very expensive**
- **Medical Research has been shanghaied by cell physiology and molecular biology**
- **The Medical School/Teaching Hospital drive to be profitable has eliminated unfunded research**
- **Clinical Research is driven mainly by companies looking for a profit or PhD's looking for a patent. NIH grants can't compete with cell physiology and molecular biology**

THE REASONS WE ARE SEEING SO LITTLE TRANSLATIONAL (CLINICALLY RELEVANT) RESEARCH

- **The current emphasis is on cellular and genetic focus to the exclusion of their relationships to tissues and organs**
- **Funding is hard to get. Medical research acts like a business**
- **Publish or perish**

CRITICAL QUESTIONS GO UNANSWERED

- **Where's the evidence a procedure works or is appropriate?**
 - **Bunions and shoulder surgery**
 - **Unnecessary surgery**
 - **Why are sham surgery and acupuncture successful in curing many patients?**
- **What's best? The absence of prospective, comparative studies is because advocacy pays better**

WE NEED A CULTURAL CHANGE

- **Research should be problem-based and funding needs to be from unbiased sources**
- **The conflicts of interest in clinical research studies has made them a business**
- **We desperately need the evidence that what we do clinically is appropriate and a good value**
 - **David Sackett: What are the results and will they help me in caring for my patients? EBM**
 - **Henry Cowell, Geoff Norman and ortho evidence**
- **This cultural change needs to involve institutions as well as individuals**

WE NEED A CULTURAL CHANGE

- **How do we minimize the conflicts of interest in research studies and in clinical practice that make them a business?**
 - **Medical Schools need to be funded differently**
 - **AMC's and industry used to support medical schools and clinical faculty**
- **How do we promote transitional research?**
 - **Fund**
 - **Create relevant NIH study sections**
- **How do we put cellular and molecular biology in perspective?**
 - **Change patent laws to preclude natural actions**
 - **Move basic scientists to Arts and Sciences faculty**

WE NEED A CULTURAL CHANGE

- **How do we explain chiropractic, homeopathy, acupuncture, and sham surgery's effect in many patients?**
 - **Need to embrace the mind/body concept**
 - **Need to define in which patients the placebo effect is likely to work**
 - **Requires changing the culture at the NIH Center for Complementary and Alternative Medicine**