

21. Development of an Undergraduate Medical Curriculum: the McGill Experience.

Fleischer DM, Posel NH. *Academic Medicine* 2003; 78:265-269

-This is an extraordinary account of one medical school's experience in adopting "an electronic curriculum". Not all of the medical curriculum online *per se*, but the article outlines how the school divided their program into 4 themed segments, each with a technological component appropriate to the level and the content. Not only is their experience pertinent to our situation *vis-à-vis* the introduction of technology in pedagogy, but I think there is value in looking at their curricular themes in terms of application to our program. A good read full of interesting parallels to our program.

22. Can the future of medicine be saved from the success of science? LeBaron S.

*Academic Medicine* 2004; 79: 661-665

-In chiropractic we often lament the unfortunate polarization of our profession into what are commonly considered philosophy and science "camps". While much of this is esoteric to the chiropractic profession, there nonetheless is a rough equivalent of this polarity in the medical profession between the humanists and the scientists. Medical care needs to be balanced between the scientific/biological needs of the patient and the humanistic aspects of the doctor-patient relationship. As the title suggests, medical science is a very powerful force in shaping modern medicine and has resulted in concerns for the art and philosophy of medical care. Sound familiar? The author describes the need for balancing clinical knowledge and medical wisdom.

23. An update on master's degrees in medical education. Cohen R *et al.* *Medical*

*Teacher* 2005; 27: 686-691

-Many of our faculty members are currently engaged in graduate studies related to professional health education. Others may be considering enrolling in a certificate level program or a graduate school program. This article reviews the 21 known master's level programs in medical education in the world (only 6 are in the US). Of these, at least 13 have both online and face-to-face tracks, and one can *only* be completed online (University of Cincinnati). For those considering a graduate degree, there is an increasing variety of programs available.

24. Chiropractic as spine care: a model for the profession. Nelson CF *et al.* *Chiropractic and Osteopathy*. 2005; 13:9-26

-This paper outlines "a model for the chiropractic profession to establish cultural authority and increase market share of the public seeking chiropractic care". The 8 authors (one of whom is our own Dr. Gert Bronfort) outline their concern that our profession has "failed to define itself in a way that is understandable, credible and scientifically coherent" and propose that it is for this reason that the profession has not achieved the level of cultural authority enjoyed by other primary health professions. This is a long and well constructed paper which presents a compelling argument for basing the profession's identity on the "spine care model". The future direction of the profession continues to be a hotly

debated subject and reading this paper will provide you with a well-documented perspective which can only enrich this debate.

25. Where do we go from here? Chiropractic and the Biopsychosocial Model.

Lovejoy A. ICA Review 2005 (Spring); 40-46

-Here's another perspective on the ongoing debate about the future of our profession. Dr. Lovejoy is a faculty member at Cleveland Chiropractic College (Kansas City) and presents, not so much a model of chiropractic as a philosophic framework for developing a model. In contrast with Nelson *et al*'s well documented Spine Care Model, Lovejoy's orientation appeals more to the humanistic and traditional chiropractic care model. His reference list is largely based on the two Palmers, Stephenson, and Barge. While this is not an academically rigorous paper, its importance lies in the fact that this is a chiropractic world-view that simply won't go away. It's only my opinion, but I believe that a successful and widely accepted chiropractic model will somehow and in some way have to reconcile the underlying issues that continue to make models like Lovejoy's appealing to a significant number of our profession.

26. Competency based teaching: the need for a new approach to teaching clinical skills in the undergraduate medical education course. Sanson-Fisher RW *et al*. Medical Teacher 2005; 27:29-36

-Historically, in medicine, the learning of clinical skills has probably occurred serendipitously throughout the lengthy and varied period of clerkship and internship. These days, however, for a number of reasons including fewer hospital admissions and shorter stays, it has become more challenging to ensure that medical graduates have achieved the necessary level of clinical competence. A proposal is described to identify the minimum core list of clinical competencies and develop an assessment protocol for these competencies. This list can vary greatly (116 competencies at the University of Dundee, 26 at the University of Sheffield). There are interesting parallels with our own current initiatives to create a compendium of cases studied throughout our curriculum and to subsequently use this list to create a core group of cases for common use.

27. When clinical medicine collides with religion. Hall DE. Lancet 2003; 362:s28-29

-This is an interesting 2 page essay on a subject of increasing importance in the practice of all healing arts: the ethical conflict that occurs when the worldview of patients is in conflict with the prevailing standards of care. Medical practitioners are more likely to encounter this dilemma when engaged in urgent care or end of life care. Luckily, chiropractors are often spared such dramatic ethical situations but we can learn from the experience of medicine as it is forced to deal with some difficult issues.

28. How we changed from paper to online education: teaching immunization delivery and education. Lancaster CJ *et al*. Medical Teacher 2005; 27:682-685

-As we slowly enter the age of on-line educational technology there are many questions, such as why are we doing this, how do we do it, how do we know its better than what we are currently doing, and once we're on-line, how do we assess our program? Lancaster *et al* tackle all of these questions and offer candid advice on "lessons learned" from their project to create a 3 hour on-line module on immunization. It's an enlightening and interesting read which shows how important on-line delivery can be, and at the same time describes how the process, done properly, can be complicated.

29. Is your practice really that predictable? Nonlinearity principles in family medicine. Katerndahl DA. *J Family Practice* 2005; 54:970-977

-The author states that modern medicine has been built around a linear model of knowledge and behavior (in other words, ordered and predictable; i.e. every effect has a clear cause and there is a predictable response to intervention). Coming as no surprise to practicing DC's, he states that reductionistic and linear models only account for about "30% of whatever outcomes we are investigating." In other words, well defined pathology often follows a linear and predictable model, but non-pathologic deviation from health (including health itself) does not follow a linear model (and is thus termed nonlinear). On a practical level this accounts for the oft-heard medical advice, "wait 2 weeks and if you still have these symptoms come back to see me". In other words, if there is pathology, eventually it will appear linear and allow predictions to be made. Chiropractors may deal with this phenomenon differently. I may be going out on a limb by suggesting this, but I wonder if our profession has exploited this nonlinearity phenomenon by inventing or creating health models (i.e. some of our "systems") which do not rely on reproducible and demonstrated predictability, but which allow for unique and often proprietary interpretations of nonlinearity. Interesting reading and it certainly gives pause for thought as to how this phenomenon occurs within the practice of chiropractic.

30. Four teaching maxims that endure. McKeachie WK. *Teaching Tips*, June 2003

-And now for something completely different: here is a simple one page summary of McKeachie's original article, which was published in *Teaching of Psychology* 1999; 30:40-44 (which itself described an article by William James, "Talks to Teachers and to Students", published in 1899). It's a neat little 2 minute read. Evidently, some things never change and it is interesting and motivating to see that these four themes have remained "stable" over such a long period of time.