

# TIED FOR 1<sup>ST</sup> PLACE WINNER – HISTORY ESSAY COMPETITION

## AVITARS AND SIMULACRA.

Michael E. Moran, M.D.: Arizona Institute of Urology, Tucson AZ and  
Curator, American Urological Association's William P. Didusch Center for  
Urologic History, Lythicum, MD.

(Presentation to be made by Dr. Moran)

**Introduction:** Interactive, voice-activated surgical systems are being utilized in the performance of laparoscopic radical prostatectomy using the Aesop® system, in addition more voice recognition software is beginning to impact upon office overhead (Dragon Naturally Speaking™). Wolfgang von Kempelen would gain notoriety for his 1769 android, the Automaton Chess Player, also called the Turk. His interests eventually switched to the animation of human speech.

**Methods:** von Kempelen has been written about extensively and these sources were available to investigate the mechanical forerunner of mechanized/electronic thought and the age of electronic computers. The reaction by society to von Kempelen's chess playing automaton is significant and reflects mankind's fascination with technology recapitulating human functions.

**Results:** Details regarding the Turk exist with great detail on the specifics of this device. The original, sadly no longer exists. This device was pitted against some of the shrewdest chess players of the age, including Benjamin Franklin and Napoleon. Scientists, philosophers and even Edgar Allen Poe wrote commentaries regarding a machine's ability to think. Eventually, 85 years of the Turk perplexing some of the finest minds in Europe and America would pass, before the "trick" of the human deciding the chess moves was released. This in no way minimizes the machined technology capable of moving chess pieces in response to the opponent's moves.

**Conclusions:** The Turk's widespread appeal and the response of society in the early 1900s clearly demonstrates man's fascination and deep-seated beliefs in our own abilities to improve upon human performance. Robert Willis wrote, "It (the Turk) cannot usurp and exercise the faculties of the human mind." Ninety-seven years later, Deep Blue, IBM's supercomputer beat Gary Kasparov, the reigning world chess champion. Though the Turk no longer exists, von Kempelen's extraordinary speaking machine still exists in the Deutches Museum in Munich and it still sounds like the voice of a little child. The ability of engineered voice synthesis to adapt to the environment that urologist's work in daily life is just beginning to approach the science fiction predictions, exemplified by Arthur C. Clarke's HAL 9000, *"I feel much better now, I really do!"*



# TIED FOR 1<sup>ST</sup> PLACE WINNER – HISTORY ESSAY COMPETITION

## THE HISTORY OF MEDICAL CASTRATION

Anthony H. Horan, M.D.: Delano, CA  
(Presentation to be made by Dr. Horan)

**Introduction:** In the late 1950's, G.W. Harris of Britain had done a series of experiments with minute amounts of a substance from the hypothalamus (corticotrophin releasing factor, CRF) that caused the release of ACTH from the pituitary. In the winter of 1962, the speaker wrote a paper required by his medical school on a physiologic topic; it was hypothalamic releasing factors. The names of A.V. Schally, PhD, and R. Guillemin, M.D. PhD recurred in a series of papers which sought the peptide structure of CRF. This seemed a better approach than Harris's; get the structure, make a lot of it, and find out the functional properties of it. A letter to Schally which asked for a summer job received a positive reply.

**Materials and Methods:** In the June of 1962, the speaker drove down to work as a technician at the laboratories of Drs. Schally and Guillemin at Baylor Medical College in Houston. The job was to do bioassays of fractions derived from the hypothalamus of a great many pigs by Dr. Schally and find out which one had the CRF. Dr. Guillemin had a second laboratory in France where he was due in July. Before he left he scheduled an interview with the speaker. At the meeting, he said he had read a paper by S.M. McCann of the University of Pennsylvania the night before and that McCann had "scooped" him when he discovered the existence of LHRF in the hypothalamus. He said that twice. He left for France the next day. During the ensuing 15 years, this duo split up and competed to find the structure of LHRF as described in the book, The Nobel Duel, by Nicholas Wade. They did discover it almost simultaneously and were awarded the Nobel Prize for Medicine and Physiology. Dr. Guillemin's prize was for the discovery of somatostatin as well.

**Conclusion:** Dr. Guillemin's M.D. degree and clinical experience in Ob.Gyn. was critical in spotting that CRF should be abandoned for LHRF. The discovery of the structure of LHRF had its greatest effect in Urology. The LHRF agonist-antagonists Lupron and Zoladex extended cancer specific life by making possible truly early androgen ablation. Before their availability, the complications of estrogen and the psychological burden of castration had made truly early androgen ablation rare. Castration was done in the 'old days' only after painful boney metastases appeared. The life extension was statistically invisible. Now it appears to many students of prostate cancer that the gains in 'death rate' in the last 30 years should be ascribed to mostly to early androgen ablation and not the prevention of metastases by early excision. The recent approval of a true pure antagonist from France, Firmagon, may improve 10 year mortality rates even more.

**Source of Funding:** None

## 2<sup>ND</sup> PLACE WINNER – HISTORY ESSAY COMPETITION

### HIDDEN IN PLAIN SIGHT.

Michael E. Moran, M.D.: Tucson, AZ  
(Presentation to be made by Dr. Moran)

**INTRODUCTION AND OBJECTIVE:** The modern urologist can no longer be just a great clinician. In order to succeed in the modern working environment the urologist must be an amalgamation of a great diagnostician, a dexterous surgeon, an astute businessman, a politician, a fiscal analyst, an adaptive futurist, and a shrewd marketing manager.

**METHODS:** A review of published books and literature on the evolution of marketing, advertising and the ethical implications of these methods was utilized to develop an understanding of how these techniques were morphed into current application of urologic practice. Particular emphasis was paid into the historical transformation of the practice of urology prior to and after the “FTC vs. AMA” landmark decision during the Carter administration. How commercialism has been introduced into urologic practice and medicine in general virtually stems from Judge Barnes’ ruling. Articles in the urologic literature were cross-referenced to transcripts and interviews with active participants from this landmark case.

**RESULTS:** Several books and articles outline the battle between the FTC (Federal Trade Commission) and the AMA (American Medical Association) on the restrictive nature of organized medicine in a supposed free market environment. There have been five published articles regarding urology and marketing or advertising. Two of these papers discuss direct to consumer (DTC) advertising by pharmaceutical companies and really do not address practice issues. Three address urologic marketing but there is no significant data presented and they add nothing but discussion of the ethical implications of marketing. The original transcripts and discussions of the participants of the law suit add more to the philosophical discussion than any recent article. Even the American Urological Association’s Code of Ethics merely anticipates the potential ramifications and provides for some admonitions.

**CONCLUSIONS:** The slippery slope of marketing is comparable to Pandora’s nefarious box. Though the ethical consequences of a “free market” economy now apply to the practice of medicine and urology, remarkably little has been written about the consequences following in the wake of the 4-4 Supreme Court decision favoring the Federal Trade Commission’s ruling opening medicine to marketing in March 1982. Perhaps as in the ancient Greek myth, the last “evil” held within, “hope” is the only thing keeping medical practice from devolving as predicted by the American Medical Association’s expert witness, Dr. Michael Halberstam who quoted “I think that advertising can’t help but erode and eventually destroy the concept of professionalism.” Article 6 of the American Urological Association’s Code of Ethics states “Any advertising I use will be honest and straightforward, not false, misleading, fraudulent, extravagant, or deceptive.” That is a tall order for ethics.

**Source of Funding:** None