



A Tribute to Fred Kaplan -J Bernstein, MD



Writing a tribute to Fred Kaplan is easy. It's much less easy writing something that has not been said first by the NY Times¹, the BBC², Newsweek magazine³, ABC Television⁴, CNN⁵, the NIH⁶, the Lindback Foundation⁷,

Philadelphia Magazine⁸, The OREF⁹, ASBMR¹⁰ and Arthritis Foundation¹¹, to name a few.

So let me begin with the personal. Because I did not attend Penn Med¹², I met Fred for the first time as a resident. Over the ensuing years, Fred has become my friend and mentor, teaching me many things, almost always¹³ by

⁸ Fred was cited in Top Doctors in Philadelphia in 1991, 1994, 1996, 1999 and 2000

⁹ Fred won the Johnson & Johnson Award in 1994 from the OREF.

¹⁰ Fred was given The Presidential Award in 1999

¹¹ Its Quality of Life Advocacy Award went to Fred in 1999

¹² My preliminary application to the class of 1989 was unceremoniously rejected by the chairman of the admission committee--one Fred Kaplan. To this day, Fred insists it was a clerical error, saying "It had to have been a mistake. We always try to get the \$50 supplemental application fee before sending the rejection letter."

¹³ One major exception to the teaching-by-example model comes to mind: I asked Fred to write the introduction to *Musculoskeletal Medicine* and give some explicit advice to students. He presented a list of 10 aphorisms. These are *echt* Fred that I reproduce the list here:

- *Clinics are laboratories, laboratories of the highest order.*
- *Physical diagnosis skills are timeless. Learn them, practice them, and teach them to others.*
- *The greatest discoveries are made not within a field but at the boundaries of a field and within other fields. Step outside and*

¹ "Finally, With Genetic Discovery, Hope for Escape From a Prison of Bone." NY Times 5/9/06

² A BBC special on Fred's work won multiple awards including The Wellcome Trust and Royal Television Society Educational Awards.

³ Fred received *The Giving Back Award - 15 People Who Make America Great* from Newsweek Magazine (2006)

⁴ Fred was featured on PRIMETIME: Medical Mysteries 8/16/06

⁵ CNN reported on Fred's work on February 12, 2001

⁶ Fred received The National Research Service Award in 1981

⁷ In 1988, Fred won Lindback Award for Distinguished Teaching



example¹⁴. On only three¹⁵ occasions Fred gave me explicit advice, and I would like to share these episodes, for they tell.

glimpse the future.

- *One never knows when the future will intrude to question the present. When the discussion strays from the text, pay attention.*
- *Don't expect to learn everything, but try hard to learn something. Keep asking questions.*
- *If you want to be a top practitioner of musculoskeletal medicine, try first to be a knowledgeable doctor. A broad knowledge of internal medicine, pharmacology, molecular biology, pediatrics, radiology, neurology, genetics, epidemiology and psychiatry will also be relevant. Likewise, subscribe to a general medical journal and read it.*
- *Knowledge alone is not enough. Caring is part of the cure.*
- *Learn to communicate and take time to communicate well. When the patient returns home from a visit to your clinic or office, the family will most certainly ask: "What did the doctor say?"*
- *There isn't a condition known to man that surgery can't make worse.*
- *Old textbooks in a dumpster may be a sign of progress.*

¹⁴ One example that Fred's collaborators know well is that the essence of writing is re-writing. Who among us has not handed him a manuscript for signature, only to get it back covered in red ink? Bruce Monaghan jokes that you simply stop sending drafts to Fred when he has re-written not only everything that you have written, but started to re-write the very prose that he himself has inserted.

¹⁵ Actually, there were 4 instances, but the first piece of advice I got from Fred was also shared by at least 6 other people: "Be nice to Barb (Weinraub). She runs this place."

The first was when I once ran to his office, late for a meeting and full of apologies. I explained that I stopped by a patient's room and was harangued with questions. Fred's response was "if you are ever want to get out of a patient's room in a hurry, just ask 'How can I help you?' and then sit down and shut up". You can leave quickly and your patients will be left happy¹⁶. To be sure, "sit down and shut up" lacks the cachet of, say, *Primum non nocere* but after a dozen years of practice, I've seen that it's a guiding principle of medicine.

The other two times Fred gave me explicit advice, the message was the same: *Follow your enthusiasm*. A few years ago, I published some work with Fred on osteoporosis, and I wondered whether to continue in that area¹⁷. Another instance was when I was asked to direct a new course for the medical students.

¹⁶ This was proven ("Resuscitating the physician-patient relationship: emergency department communication in an academic medical center" *Annals of Emergency Medicine*, 44(3): 262-267 2004) albeit without naming it, correctly, as Kaplan's Law.

¹⁷ I never did any further work in this area, following the good advice from Gerry Williams, who told me "Don't write about diseases you don't want to see in the office". It seems Gerry had a friend who made the mistake of writing about post-op RSD - and now has a waiting room full of other doctors' post op RSD cases.



Both times, Fred told me to pursue that which excited me, advice that he has followed himself. You can easily see Fred's enthusiasm for his work, with even a casual glance at his CV¹⁸. Let me share three highlights.

To start, consider that in 1981 Fred won the DeForrest Willard award. As we all know, the DeForrest Willard award is not a research prize and it's not a teaching prize: it's a clinical surgery prize. I think it's sort of funny that the guy who has received millions in funding for knowing everything about the molecular genetics of FOP also knew that the 2.7 drill bit goes with the 3.5 screw¹⁹. But the real lesson is that Fred is a devotee of excellence. Imagine it's 1980, and you are Fred Kaplan. You have decided that you are not going to be an operating surgeon. Still, there is one more year of residency to complete, and you have a choice—you can either mail in your performance²⁰ or you could embrace the task and do it well. We know what Fred did²¹; what would you have done?

¹⁸ I recommend only a casual glance: it's 63 pages long.

¹⁹ At least I think it does...

²⁰ Back then, you could serve your entire 5th year at outside hospitals.

²¹ Fred has never told me this

The second interesting fact is that Fred was not always a practitioner of Molecular Orthopedic Medicine²². In 1989, 8 years (!) after completing his residency, already an associate professor, Fred went back to school, so to speak, serving as a fellow in Human Genetics and Molecular Biology at CHOP. To those readers too young to remember the days when rotator cuff tendinitis was a non-operative lesion, taking this fellowship may not seem like an astounding achievement, but I can assure you that it speaks of miraculous bravery. Sure, some of the credit is due²³ to Carl Brighton (the chair of orthopedics) and Mike Zazloff (head of Genetics at CHOP) but Fred's ability to see this opportunity and seize was genius.

Fred's CV also shows his talent for collaboration: he has written papers with more than 300²⁴ co-authors²⁵. The Talmud answers

directly, but I suspect that his concern for patients prevented him from giving it anything less than 100%. Then as now, concern about the patients was certainly his prime motivation.

²² Granted, for much of his career there was no such field...until he founded it!

²³ I know that the credit is due here because Fred is always quick to point this out.

²⁴ students and residents—it's not too late to get on this list! How will you



the question, “Who is the wise Man?” with “He who learns from all people”²⁶. Part of Fred’s magic is that he learns from all.

Dr Kaplan is in many ways like another orthopedic surgeon named Frederick. That other Frederick was also a teacher, a collaborator with endocrinologists, and a champion of student participation in research. This other Frederick, Frederick Banting, won

explain it to your grandchildren that you could have worked with Fred and did not?

²⁵ A partial list: Ahn J; Alavi A. ; Altherr MR; Anday E; Aronchick JM; Attie M; Audet P; Audi L; August CS; Axel L; Baker L; Banas MP; Barth RW; Bayever E; Belik J; Benoit R.; Bernstein J; Berry GT; Bilker WB; Billings PC; Black J. ; Bocccon-Gibod L; Boden SD; Bora FW Jr. ; Boskey AL; Boytim MJ; Brager MD; Brighton CT; Buckley; Burg F. ; Campbell JT; Carmichael RA; Caron R; Castault F; Cheatle M; Cheng G; Chiu G; Christofersen M; Clemens TL; Cohen RB; Connor JM; Connors S; Cook AL; Craver R; Crofford LJ; Crosby LO; Culp RW; Dalinka MK; Davidson R; Deardorff MA; Deirmengian GK; Delai P; Delai PLR; Delatycki M; Deren JA; Didenko B; Doering J; Dormans JP; Drummond D; Economides AN; Eddy MC; Einhorn TA; Ellis J. ; Elmariah; Emanuel B; Emerson SG; Epstein DM; Epstein FH. ; Epstein S; Erol B; Emall AN; Esterhai J; Fallon MD; Fallon MD; Fandl JP; Farber JM; Fardau M; Faust RA; Feldman G; Fenstermacher DA; Finkel G; Fiori J; Flannery DB. ; Folkman J. ; Ford JC; Forstedt DB; Freedman KB; Fuhrman J; Gannon FH; Gardner RJM; Gear AJ; Glaser DL. ; Goldmann D; Goldstein S; Goll SR; Gonzalez IL; Graf D; Greenspan R; Gregg J; Gregory S; Grigoriadis AE; Grisso JA; Grunwald Z; Gupta R; Haddad JG; Hahn GV; Hamer L; Harland RM; Harper K; Hayes WC; Hebel A; Hegyi L; Helpin M; Hoffman S; Holmes JR. ; Hozack WJ; Hume D; Iannotti JP; Jan de Beur S; Janoff EB; Johnson LO; Kamoun M. ; Kantanie SL; Karp JS; Katz M; Katz MJ; Keane MG; Keaveny TM; Kelepouris N; Kelsey J; Keon TP; Keough K; Khurana JS. ; Kiebzak G; Kimble RD; Kitterman JA; Kressel HY; Kuhn JL; Kundel HL. ; Kuo JS; Kussmaul; Kusumi K. ; Lanchoney TF; Lane JM; Lash AT; Le Merrer M; Lee VM-Y; Leone VJC; Levine M. ; Levitz CL; Levy CE; Li M; Lipiello L; Liu X; Lodato RF; Lowe RA. ; Luchetti W; Luessenhop CP; Luyken FB; Lytle CR; MacEwen GD; Maguire TG; Mahboubi S; Malinin G; Marinelli DL; Marion MJ; Martin SJ; Martin T; Mathur S; Mayo GL; McAllister WH; McCluskey W; McPherson JD; Mennuti MT; Michelson JD; Mitchell D; Mitchell DG; Modi WS; Mohler ER; Monaghan BA; Morhart P; Moriatis JM; Morrison G; Muenke M; Muller JL. ; Murray J; Netter F. ; Nixon JE; Nussbaum BL; O’Brien ML; O’Hara I; O’Brien LA; O’Connor JP; Okereke E; Olmsted EA; Oreffo ROC; Pacifici M; Passloff ES; Patel JB; Peeper J; Pereira GR; Pertschuk MJ; Petrik E; Phillips CD; Pignolo RJ; Plockin SR; Pollack SR; Port J; Prauner R. ; Price JH; Raffensperger EC. ; Rao VM; Reitz M; Reynolds C; Rindfleisch L; Rocke DM; Rogers JG; Rosen V; Rosenberg A; Rosenberg HR; Rosenfeld SR; Ross J; Ruddy R; Sable D; Sagar Y; Sando A; Sando N; Santilli C; Sawyer J; Scarlett RF; Schaeffer J. ; Schaffer AA; Scherl JD; Schlesinger S; Schmidt R; Schultheis LW; Schumacher HR; Seaneux HN; Seifried B; Selig AM; Sellinger B; Selzer ME; Senior J; Serrano de la Peña L; Shafritz AB; Shah FB; Shah S; Shanahan CM. ; Shore EM; Shugart YY; Shulkin I. ; Shusterman NH; Silberberg D; Silveri CP; Silverton SF; Simpson EL. ; Singer FR; Slap GB; Smith RM; Soffer SR; Soriano S; Sovinsky L; Spindler K; Spinner NB; Spritzer CE; Stahl N; States L; Steinberg DR; Steinberg ME; Steinmann WC; Stevens CE; Strear CM; Strom BL; Suda RK; Sylvester J; Tabas JA; Taub R; Terry L; Testart H; Thompson LD; Tracy MR; Triffitt JT. ; Tucker J; Udell J; Ulled A; Unger AS; Urbasnek M; Urtizberera JA; Valentine BA; Vanbeek A. ; Virdi AS; Wagner EF; Wagner MJ; Wallace K; Wang L; Wang Z-Q; Wasmuth JJ; Wasserstein AG; Wehrl FW; Wells; Westermarck A; Whyte MP; Williams JL; Wilson JM; Wisneski R; Witzleben CL. ; Wivel A; Wollner N; Wozney JM; Wu Y; Xu M; Yandow SM; Yeh GL; Young B; Zackai EH; Zaleske DJ; Zasloff MA; and Zimmerman R

²⁶ Fred helped establish a prize for “Medical Student Teaching by an Allied Health Professional”, the first recipient of which was our own Tony Searles. As Fred told me, “A teacher is one who teaches”—ie, it’s not the title that makes you a teacher.

the 1923 Nobel Prize for his discovery of insulin. I can’t predict when the Nobel Committee will act, but every year when the awards are announced, I open the paper like Charlie Bucket opening a Wonka bar, eager to see if this is the year that Fred gets the call²⁷.

That call will help even an old score. In 1893, William Osler left Penn Med and went down to Johns Hopkins to do a thing or two there. Hopkins promised to send us a “doctor to be named later”. History records this as one of the most imbalanced trades in history, right up there with the Red Sox sending Babe Ruth to the Yankees. But the books of history are not closed. In 1976, a freshly minted Hopkins grad, Fred Kaplan, came up to Philadelphia and that story is unfolding in front of our eyes.

You heard it here: the “Osler for Kaplan” trade will indeed be remembered as one of the most imbalanced trades ever—but as a steal for Penn.

²⁷ When the head of NASA called Fred to join a study group looking at the musculoskeletal effects of weightlessness, Kai, his secretary deflected the call saying, “I am sorry, he is teaching medical students now; he can’t be disturbed.” (Good for NASA—they called back.) Somebody needs to tell Kai that if somebody with a Swedish accent calls one October morning, she is allowed to interrupt the lecture.