

# Mentors

The recent PaleoNet post from Phoebe Cohen about the upcoming Paleontological Society networking and careers event (see [here](#)) got me thinking. The event features a panel discussion provided by a group of experienced academic paleontologists all of whom were referred to as “mentors”. What is a mentor? How do mentors differ from supervisors, teachers and colleagues? And how do you know when you’ve found a mentor?

The dictionary definition, I’m afraid, isn’t much help.

Most dictionaries define the term succinctly as a “trusted friend and adviser”, especially in juxtaposition to someone less experienced and/or knowledgeable. We all have, and will have, many

friends and an even larger number of colleagues at each stage of our careers, but we’ll only have a few true mentors. Thus, these designations seem misleading. The true sign of mentorship is trust.



Mentorship goes well beyond the standard social relations we have with friends. Of course, this is not to say friends are either unimportant or untrustworthy. Only that, for the most part, we don’t tend to choose our friends in order to advance us in any particular area of our lives. Friends can, and often do, help us accomplish particular goals in our lives. But to me this is a fortuitous by-product, rather than a necessary condition, of friendship. Indeed, our friends can lead us down paths that make accomplishing our life goals more difficult as often as they can make it easier.

Mentorship also goes beyond the (largely) transactional relations we have with most of our teachers. In most cases teachers feel a responsibility to impart the course information to the students and, in many cases, they will go to great lengths to meet that expectation. But in most academic course programs this represents part of a transaction mediated through the college or university. The university hires the teacher to teach, the students pay the university a fee to be taught. The telling character of this relationship is that, in most cases, the teacher feels no responsibility to provide the student with instruction or support in areas outside the topic being taught. In some cases the teacher might supply a student with a letter of reference for a further prospective job or university placement, but this hardly qualifies as mentorship.

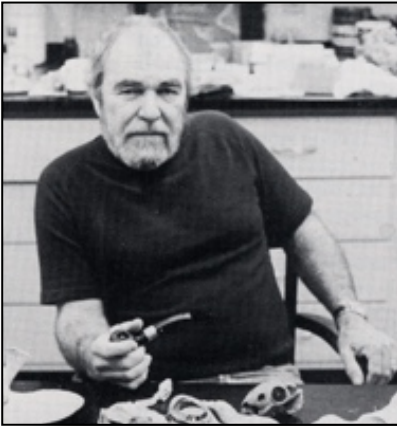
Academic supervisors often serve as mentors in a limited sense, and on occasion can tip over the (ill-defined) line into true mentorship. But all-too-often it takes the form of another transactional relationship. In large academic departments undergraduate students are typically assigned academic advisors or tutors whose role is to “look after” the student while they are in the department’s course program. So long as the interaction remains formal and infrequent the more holistic aspects of true mentorship rarely come to the fore. The academic supervisor provides a service to the student as part of their professional duty. Of course, on occasion the student’s needs are, or situation is, such that deeper engagement on the part of the supervisor is required. But even in such extreme cases the service-provision aspect of the interaction is rarely overcome.

The hallmark of true mentorship is its deep, yet informal, character. You don’t apply to become someone’s protégé. By the same token, “mentors” don’t select mentees at the beginning of a school term from a pool of available candidates. Like a fine wine, the mentor-protégé relation develops over time as a result of the frequency and quality of interactions that occur between the participants. Contrary to the dictionary definition, true mentorship is rarely, if ever, a matter of advice per se. Rather, it’s grounded on the informal transfer of knowledge about aspects of a field of study, an institution, and/or a professional community that lie well outside the facts and figures of academic instruction. Moreover, true mentorship is grounded on a mutual exchange of psycho-social support that’s difficult to define objectively, but unmistakable when present. The protégé gains valuable knowledge, understanding and insight into the more intangible – but no less important – aspects of the communities they wish to become part of and be accepted by. The mentor gains a receptive audience for the information/experience they possess and the satisfaction that comes from rendering assistance to someone whose life they have become part of. Often the impetus for becoming a mentor is to fulfill a perceived personal debt to former mentors from the time they themselves were the protégé.

Unlike simple friendship, mentorship can, at times, involve much criticism. Yet, unlike simple supervision, the mentor wields no power within the mentor-protégé relationship to force the protégé to do anything. Whatever

influence the mentor has over the knowledge, attitudes and actions of the protégé, those must be acquired and/acted upon, or rejected by the protégé freely and without any sense of coercion. In this sense it is a mistake to conceptualize a true mentor-protégé relationship as a one-sided exercise in inter-personal power dynamics. Indeed, while a protégé might well enter into a mentoring relation in what they perceive to be a relatively powerless state, the purpose of mentoring in its purest sense is not to train or guide them *per se*, but to empower them through informal training and guidance. The result of being mentored successfully is to increase one's independence rather than reinforce subservience.

I suppose it's possible to complete an academic career without having been mentored by someone at sometime along the way. But I think it's unusual. Most academics can point to several turning points in their careers that were facilitated in one way or another by mentors. My own career certainly has been. Consequently, I'd like to take this opportunity to thank those who have mentored me over the years, though one – arguably the most important – is no longer here to receive that acknowledgement.



Bob H. Slaughter

Bob was undoubtedly the most unique, iconoclastic, unconventional, generous and supportive person I ever had the good fortune to meet. In 1978 I arrived at Southern Methodist University's MSc program on probation, after a lackluster academic record as an undergraduate geoscience major at the University of Missouri. Having spent two years teaching high-school science in Dallas, Texas I was scared to death I wouldn't be able to re-enter academics and compete successfully alongside my younger and — undoubtedly smarter — fellow MSc students. But I was determined to try. One day, a few weeks after arriving on campus, I approached Bob, who seemed to be the only paleontologist around, and more-or-less demanded he give me a research project to work on in the spare time I'd have outside my classes. Although he had no particular reason to do so, Bob took me to a lab and showed me slab of chalk with some unusual teeth sticking out of the matrix. I could have that as a project, provided I was able to

research what sort of teeth those were and identify them correctly. They turned out be the teeth of the Cretaceous pavement-tooth shark, *Ptychodus rugosus* Dixon, which I studied, reconstructed the dental arcade of about which I wrote my second scientific, and first single-authored, article. Oddly, I was never a formal student of Bob's having been lured away from vertebrate paleontology by other SMU faculty members and, ultimately, by micropaleontology. But I never lost my interest in VP and, as my formal advisor was hardly ever on campus, Bob was the one who taught me, inspired my love of all paleontology's aspects, and set my feet firmly on the path I would follow henceforth in my so-called career as well as, to a large extent, in my life. What did I learn from Bob? Everything that really mattered, and much more besides.



Emile A. Pessagno

Emile was my PhD supervisor and a world-renown planktonic foraminifer and radiolarian biostratigrapher and taxonomist. My own research interests lay well beyond these topics *per se*. But Emile, much to his credit, insisted that all his students learn not just the fundamentals, but the detailed theory and application of these critical aspects of paleontology. I had no objection to this instructional program. But my other research interests ranged so far from these areas, it often left Emile and I with little to talk about regarding the details of my research project. In addition, much of my time was spent away from the university campus at the nearby Atlantic Richfield Co. (ARCO) research facility where I held several consulting and software-development contracts. I'm sure such extra-curricular activities were not typical of

Geoscience graduate students. Quite probably they were contrary to university policy. Nevertheless, Emile understood my family situation at the time and allowed me the freedom I needed to get through my PhD program while, at the same time, make financial ends meet. I never became the taxonomist and biostratigrapher Emile's program was set up to produce. But the training in these areas I received from Emile stood me in good stead not only to understand how important these topics were to the the practice of paleontology, but how they could be incorporated usefully in the quantitative analysis of palaeontological data. All my subsequent work with paleontological databases, high-resolution stratigraphic and extinction boundaries and various forms of graphic correlation began in Emile's classroom.



Tim R. Carr

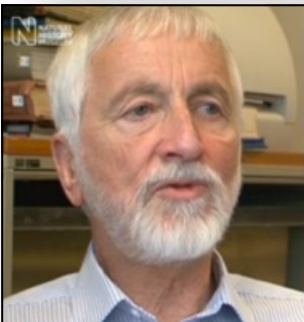
Tim had just arrived at the ARCO Research Lab from the University of Wisconsin where he'd completed a PhD in conodont paleontology. We met at one of Bob Slaughter's Friday afternoon "seminars" at a local Dallas bar not far from the SMU campus. That meeting led to an invitation to visit Tim at the ARCO lab, which led to our having regular discussions about current paleobiological research, which led my being offered ARCO contracts to write reports about useful morphometric methods for sediment-particle and porosity analysis and to develop new morphometric software, which led ultimately to Tim encouraging me to apply for, and be awarded, a post-doctoral position in the University of Michigan's prestigious Michigan Society of Fellows program under the supervision of Tim's fellow UoW student, Jennifer Kitchell who was, by then, a member of the UM Geoscience Faculty. Tim's interests and enthusiasms for paleobiological research and morphometrics sustained me intellectually during my PhD years and his support in the lab brought the contracts my way that sustained me financially.

More importantly, though, through Tim and his colleagues at ARCO I saw that commercial work in paleontology had its own unique character, challenges, joys and disappointments which mirrored those of academic life.



John Whittaker

John was Head of the Micropalaeontology in The Natural History Museum's Palaeontology Department when I arrived in 1993. I don't think he knew quite what to do with an expat American paleobiologist who was far more interested in general morphological and extinctions-related research problems than foraminiferal taxonomy and systematics. But John was unfailingly welcoming, encouraging and supportive, both of myself and my research interests, even when others in his group, not to mention the larger department, were far less so. This extended throughout the time I worked under his supervision and continued when, after 1999, he worked under mine, first as Associate Keeper of Palaeontology and then, in 2000, as the NHM Keeper of Palaeontology.



Paul Henderson & Richard Lane

Paul and Richard are considered together here since they were successive NHM Directors of Science under whom I served as Keeper of Paleontology. Although they were my direct supervisors and neither was a paleontologist, the guidance and support they gave to me in my administrative role were a large part of the reason I was able to make that role successful. Both also had a knack for forming and leading a team of senior scientist-administrators with grace, style, fellowship, good humor and a

palpable sense of shared purpose.

If you're young and just starting out in this business, be on the lookout for those who might make good mentors. Your career, and you personally, will benefit in ways you can scarcely imagine. If you're in the middle of your careers, be mindful of what a good mentoring relationship is all about and strive to live up to that standard. Like your own protégés, you too will benefit in ways you can scarcely imagine. And if you're towards the end of your career, as I am, take the time to thank the mentors who helped you along the way. The time will come when some won't be there to thank personally so don't leave it too long. You probably contributed to their lives, and their careers as much as they contributed yours, albeit in different ways. But that's beside the point. If you have any difficulties sitting down to write that letter or make that call, just try imagining how things might have turned out if they hadn't been there for you.

**Norman MacLeod**

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