

# Reflections on the mentor-mentee relationship: a symbiosis

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## INFO

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## LETTER

Residents in laboratory medicine need to develop the proper skills to become true clinical scientists for the mid-21<sup>st</sup> century. A key figure towards expertise is the mentor, who is responsible for the motivation and guidance of the young scientist from the moment of their landing in the laboratory.

It is essential for the mentor to assure the expertise of the mentee in the different areas of wisdom in laboratory medicine, which encompass laboratory organization and management, analytical techniques (instrumentation and methodology) and clinical outcomes (pathophysiology, test usefulness and appropriateness and result interpretation) (1). Towards this purpose, not only should the mentor guide the young scientist along the residency path, but also check and proof that the required concepts, aptitudes and abilities were properly acquired and integrated.

Every year, new analytical tools and devices are developed, and more sensitive and accurate biomarkers are brought from the bench to the clinic, so it is of utmost importance not only for the young clinical scientists but also for their senior mentors to keep up to date. Sail or sink.

The otherwise called ‘advisors’, ‘coaches’ or ‘counsellors’ also need to motivate and encourage their mentees to be involved and master the three basic pillars of laboratory medicine: healthcare, research and teaching. Each of them is absolutely essential, and to outstand in our medical field, none of them should be forgotten (Figure 1). With no doubt, we all agree that patient care and safety are our ultimate goal and the reason we (laboratory professionals) wake up every day -earlier and more accurate diagnostic strategies, better prognostic tools and improved means to check the effectiveness of treatments and prediction of relapse. However, no excellence may be reached if not involved in scientific research and the transmission of knowledge to others.

Besides the need of technological development in our field, the active participation of a young scientist in research projects and scientific

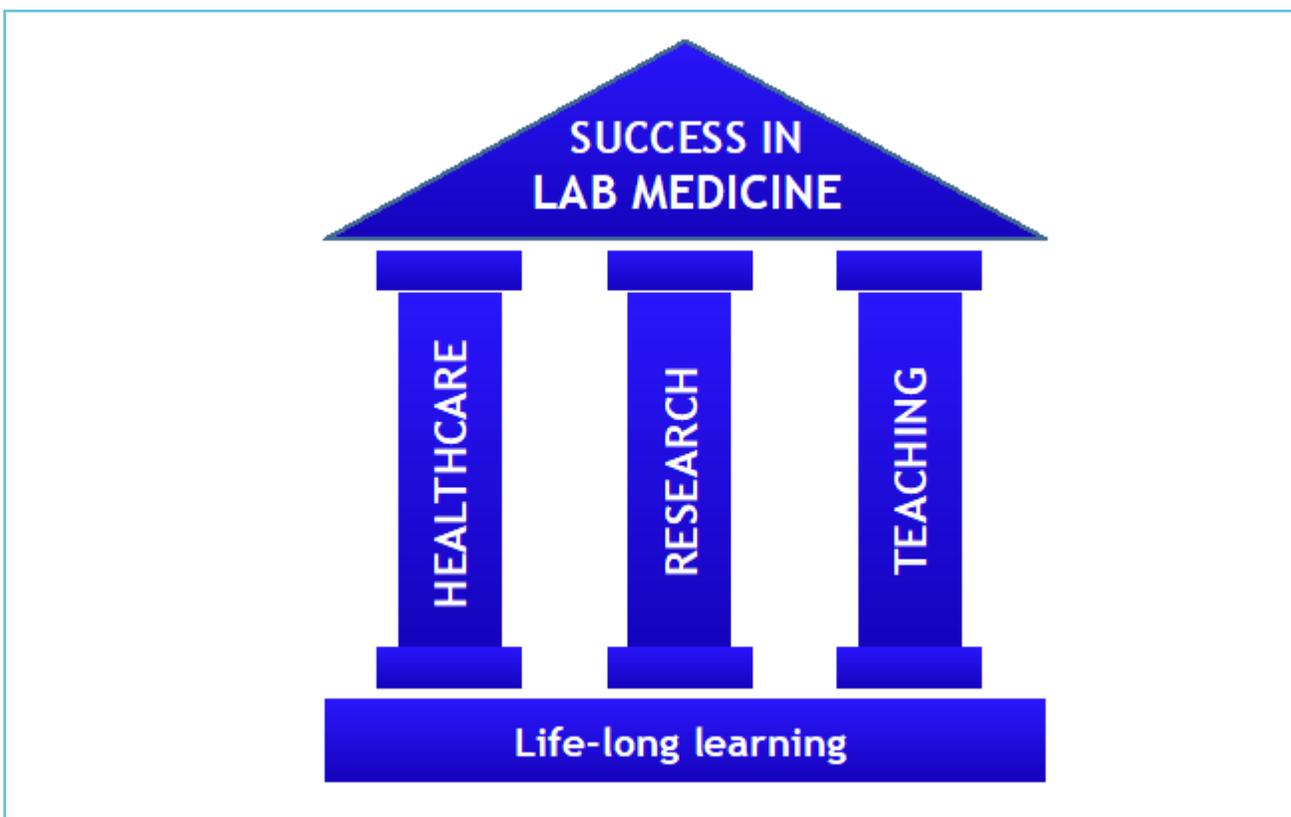
discussions makes a resident more independent and gives them a powerful and critical thinking.

Those who do not participate in research themselves are forced to believe what others say or tell them. Investigation may also help in-house method development and translate into interesting economic benefits for the whole institution itself. Nevertheless, the taking-off and specialization of a young scientist in research are usually of extreme toughness, so the aid of the mentor is highly appreciated.

And teaching. By preparing lectures to a big audience, giving a presentation to our closest colleagues or simply by explaining basic concepts to students, a laboratory professional strengthens their knowledge on a specific topic.

As we prepare those explanations and anticipate possible questions, further concepts appear, and it is easier to secure them in our minds.

Figure 1 Pillars in Laboratory Medicine



Knowledge, advice and benefits do not flow only one-way from the (senior) mentor to the (young) mentee, but the profits do also travel the other way around. Teamwork. Mutual growth. A proper mentorship represents a full commitment and creates an environment of trust and enrichment; a climate of collaboration between two professionals with common interests; a long-term biological interaction between two living organisms. An explicit and respectful alliance.

Thanks to an altruistic, generous and patient personality, the mentor learns from the mentee's questions and novel ideas, and is intellectually stimulated as a result of the exposure to new information or to the relearning of past material; rejuvenation (2).

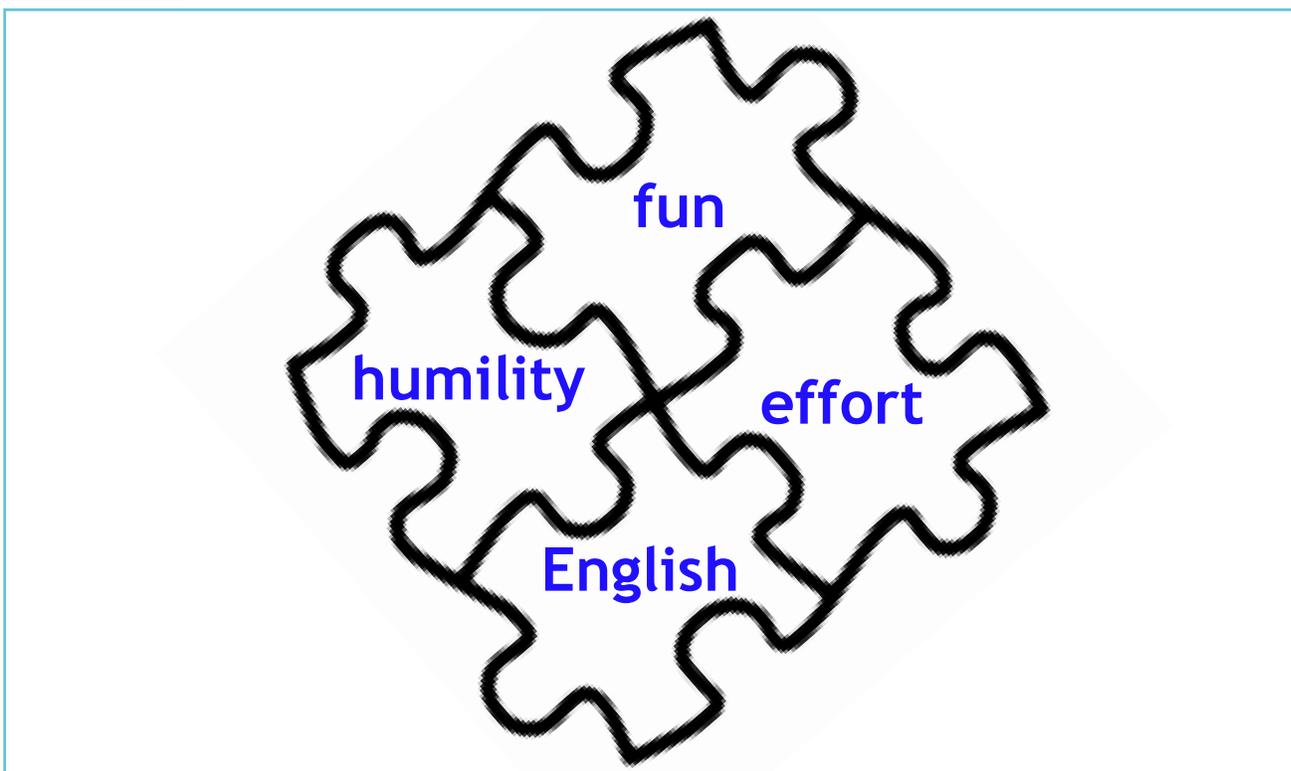
The engagement and participation of both senior and junior professionals in academic projects is also of substantial interest for the institution. The preparation of courses, the publication

of research findings, the introduction of newly-described analytical procedures and biomarkers in the laboratory and the participation in clinically-focused meetings or committees, among other, helps to create this climate of well-being and enthusiasm for both. A great example of such win-win situation may be found in a previous manuscript on this journal (3). The mentor shapes the mentee, who in turn does shape the mentor.

This two-way street demands attentive listening, defying the mentee with increasingly complex challenges, giving them autonomy, let them take risks and face both wins and failures (4,5). This atmosphere requires a fluid communication with emotional support and psychological encouragement.

In addition to personal fulfillment, a publication for the mentee (whether article, book chapter, poster or oral communication in a congress) is a publication for the mentor; an award for the

Figure 2 Requirements for good residency training



mentee turns into a recognition for the people who made that possible and a grant or internship for them turns into a considerable opportunity for all the working group.

Besides the guidance by a mentor, additional key contributions need to be made by the mentee him- or herself. According to Dr. A. Buño (Hospital La Paz, Spain), a successful residency and career in laboratory medicine requires fun, effort and humility.

We could also add that proficiency in the English language for non-English speakers means a great leap for them (Figure 2).

Fun is, by far, the most important. Happy, proactive and passionate residents (not surprisingly) get luckier. Inspiration comes with fun. After all, a laboratory professional spends large amounts of time at work, so it is great advice to have as much fun as possible there. Effort: although it does not guarantee success, it has proven to be a great source of confidence. A smooth sea never made a skilled sailor, so no effort translates into no gain.

And in regard to humility, scientists need to identify their limitations, value group work as well as individual collaborations, help others and not be afraid of making mistakes. Humans are

error-prone, so residents are too. It is humility itself what enables the learning process. If own failures are not recognized, progress and growth are inconceivable.

Embarking in a mentorship program will (surely) provide greater confidence and career satisfaction for the mentor, along with stronger connections within the clinical biochemistry community. And for the mentee, success may be reached in any part of the world by integrating all the above-mentioned abilities, effort, enthusiasm, and with the irreplaceable feedback and advice from a trusted mentor. It just requires having fun.

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