

## Editorial

# Life is a marathon – for 80 years and not 42 km ... and for growing a h-index if you are a scientist

The pre-Socratic Greek philosopher Heraklit from Ephesos (540–480 B.C.) pointed at: *Pánta Rhei* – everything flows (Ek ton Herakleitu tu Ephesiu, in *Poiesis philosophos*, 1573, ed. by H. Stephanus). The “Stream of Consciousness” was already mentioned in a previous Editorial of this journal (no. 3); introduced in one landmark in modern literature, “*Ulysses*” (1922) from James Joyce. This basically means a stream of thoughts and impressions. Yet, the entire life is such a stream – a seemingly endless marathon of thoughts, impressions, sensual perceptions, and conclusions – not 42 km long, but 80 years and hopefully more.

A scientist may publish, on average, about 200 papers during his life. With an average size of eight pages per paper, this adds up to something like 400 m “total publishing length”. Running such a distance at a world record time is about 43 s. Yet, making and even reading it, takes much longer ... it is an entire life footprint. Is not, therefore, scientific publishing almost like running a life-long marathon? We try to improve our scientific impact and citation record all over our professional time. Finally, to have a growing h-index and comparison of this scientific measuring bar is almost like the listing of the best marathon running times. It opens gates to funding, honors, awards ... simply to professional success, such as the world record times of a good long-distance runner (see Figure 1 below). Thus, sports-type and elite thinking has entered the sciences and chemical engineering; basically, forever, yet much more pronounced in the last decade or so. The increasing number of scientific activities and increasing demand for evaluation simply demand for fast, and in a way, quantitative-based decision making. The rules are clear to everyone – thus, no complaints, as sportsmen should not complain about why the marathon is not 45 km long, but is as. Actually, the length known today (42.195 km) has been so since 1924; before there was variation and arguing about distance.

Vice versa, a marathon resembles the entire private life. It is a totality of emotions and thoughts under one umbrella. Between 1 and 15 km, youth is given. Full of energy we have a great start and continue at high speed; yet we also fight for orientation and stability. Between 16 and 35 km, maturing to an adult occurs – still very strong, but being unshielded, we have now to face and solve problems alone. Between

36 and 42 km, old age starts – pain and resignation come, but also calmness and wisdom. Yet, when the finish comes in sight, reincarnation takes place and gives much of the energy back. Having finished, the next marathon is round the corner and soon after, we need to prepare for that.

As one more example of such reflections about time, distance and sensual flows, even the marathon sport on its own has a noticeable time development. As Figure 1 shows, the marathon world record times over the years seem to have three phases – “youth” (1900–1950), “adult” (1950–1990) and “old age” (1990–today); from the winner John Haynes, from the USA, in the marathon of the IV Olympic Games in 1908 in London, until the currently fastest man Patrick Makau Musyoki from Kenya (record in 2011 in Berlin). Clear periods of substantial reduction in the official world-record times can be noted, while other periods have a calmer development (like the recent past) or no development (as inevitably for the time during, before and after the two World Wars).

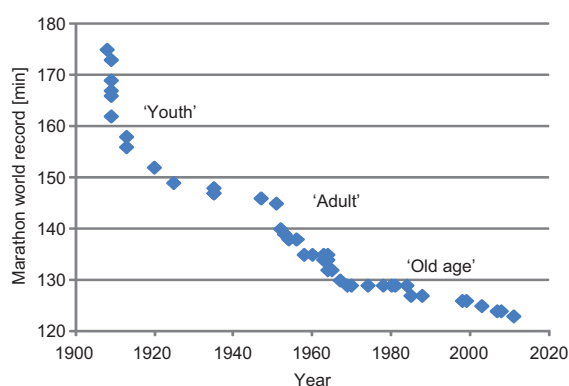


Figure 1

There is, however, one big difference between private life and marathon running, as compared to scientific life – fortunately, as a scientist, one can be reborn more often than in true life. I made such a plot about my publishing history (see Figure 2). It shows two “births” besides the “adult phase”. One was in 2004–2005 and, fortunately there was one again, in 2012. This fits two major events in my professional life – the approval to Director R&D/part-time professor and later to full professor.

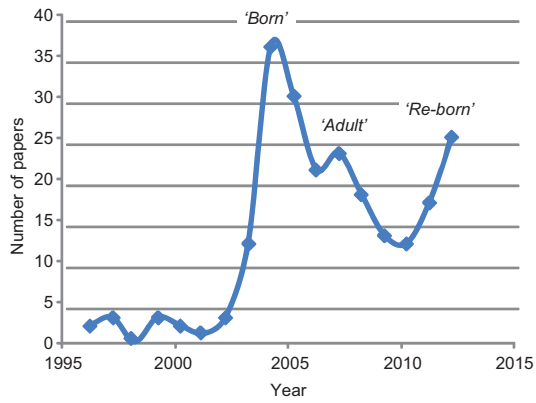


Figure 2

After all of these reflections, what remains for me is that running is so much fun – first energy-taking and later then refreshing – yet, being refreshed means living.

“Scientific runs” can give the same feeling, including those of an Editor-in-Chief of a new journal, and a feeling of being alive.



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