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This is a post-peer-review, pre-copyedit version of an article published in

Journal Clinical and Translational Imaging

The final authenticated version is available online at

DOI <https://doi.org/10.1007/s40336-022-00530-8>

CITATION Nesterov, S.V. “It is folly to measure the true and the false by our own capacity” —M. de Montaigne. *Clin Transl Imaging* (2022). <https://doi.org/10.1007/s40336-022-00530-8>

"It is folly to measure the true and the false by our own capacity"—M. de Montaigne.

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Short title: Montaigne for the NM department.

Word count: **535**

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Key Words: *nuclear medicine department, lean management, transformational projects, evidence-based management, scientific method, Michel de Montaigne, management illiteracy, skepticism, critical thinking*

The paper complies with Ethical Standards

Funding: the paper received no funding

Conflict of Interest: The Author owns the company AATE Consulting Group Oy, which provides teaching and consulting services on project management and organizational behavior.

I thank Dr. Burrioni for carrying on the discussion (1), which I considered wrapped up long ago. Doubtfully, I thought we had a subject where researchers could have different opinions.

In science, we operate with a particular methodology to understand the world around us. Or it is not science (2). There are 8.8 million researchers worldwide – the number of people close to the population of Austria. We all go a long way to establish the facts of the world. High price global taxpayers pay for that—2.2 trillion USD annually, or five GDPs of Austria. And we are accountable for the things we do. The way we think and approach reality significantly differs from "faith"—"great" or not-so-great: our methods constrain us.

Already in the first letter, "*Humbug in NM department*" (3), I stated that we do not have facts that the Toyota manufacturing approach works in the NM department. Not impossible, a pharma analogy might help Dr. Burrioni understand the idea. Indeed, we do not use medical compounds based on our faith there. Do we use them because the compound likely works in pigeons or squirrels? Indeed, not. Out of eight drug candidates that finally made it to clinical trials (i.e., on human participants), only one will receive marketing approval (4). Then, we can use it to benefit patients.

The same approach applies to management methods. Indeed, it is doubtful that 50% of the personnel of the "more agile" departments will perish due to some fancy managerial schtick; however, the adverse organizational effects are possible, and I covered them earlier (3).

Returning to the central message of the last comment (1) and the faith in younger generations that will "overcome" and "know how to discriminate" but need to be "provided with tools to improve." I do not know what "ascetics" Dr. Burrioni summons to come down from what columns; neither I see how these columns connect with the barriers we "should break," but all the listed inequalities we have and leave to younger generations are facts. Hardly any reasonable person can be insulted by them. Anyone in doubt can read BMJ's "*TIME'S UP Healthcare: Can we put an end to gender inequality and harassment in medicine?*" (5), followed by a list of references.

Is the "new generation of health workers" capable of overcoming power and gender inequalities? Hopefully, the next generations will be at least as capable as those before them. Yet, instead of loading them with the "Naruto tools" (1), I suggest following Michel de Montaigne's advice. "...*There is nothing like alluring the appetite and affections; otherwise, you make nothing but so many asses laden with books; by dint of the lash, you give them their pocketful of learning to keep; whereas, to do well, you should not only lodge it with them but make them espouse it.*" Not loading but helping them internalize

the methods to acquire and test the knowledge—exactly how science works. To Montaigne, whose words I used for the title, it was evident in the 1570s when he started publishing his "Essays."

It should be clear to us 450 years later, yet after this beautiful epistolary interaction, I am not entirely convinced that it is so.

References.

1. Burrioni, Luca (2022): "We ask the ascetics to come down from the columns...". In *Clin Transl Imaging*. DOI: 10.1007/s40336-022-00518-4.
2. Nesterov, Sergey V. (2022): Breaking the "pear dime?". In *Clin Transl Imaging* 10 (2), pp. 237–238. DOI: 10.1007/s40336-021-00473-6.
3. Nesterov, Sergey V. (2021): Humbug in a nuclear medicine department? In *Clin Transl Imaging* 9 (4), pp. 399–401. DOI: 10.1007/s40336-021-00438-9.
4. Yamaguchi, Shingo; Kaneko, Masayuki; Narukawa, Mamoru (2021): Approval success rates of drug candidates based on target, action, modality, application, and their combinations. In *Clinical and translational science* 14 (3), pp. 1113–1122. DOI: 10.1111/cts.12980.
5. Acholonu, Rhonda; Mangurian, Christina; Linos, Eleni (2019): TIME'S UP Healthcare: Can we put an end to gender inequality and harassment in medicine? In *BMJ* 364, 1987. DOI: 10.1136/bmj.1987.