Metabolites

Join us as we engage with our *Metabolites* Exceptional Reviewer 2024, Dr. Federico Maria Rubino, to discuss his scholarly insights and journey as a reviewer for *Metabolites* (ISSN: 2218-1989).

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Interests: analytical chemistry; mass spectrometry; toxicology; heavy metals; redox biomarkers; workplace contaminants

The following is an interview with Dr. Federico Maria Rubino:

1. Can you briefly introduce yourself and the main content of your current research? Additionally, could you share some emerging research directions in this field?
I am a scientific professional in my mid-sixties, with forty years of experience in academic and applied research, mainly in the health sciences. My lasting research interest is the application of mass spectrometry to wide-ranging issues of biomedical research and its application to workers' protection from occupational hazards. The technical opportunities that I have had the chance to witness in my professional life are astounding, and faster, deeper, and more extensive applications are far more possible than we might imagine.

2. When and how did you first become aware of the *Metabolites* journal? What attracts you most about this journal?
I came to know the MDPI *Metabolites* journal through the network of MDPI scholarly journals, by receiving requests to review submitted draft articles. MDPI journals, and, among them, *Metabolites*, are an emerging platform for dissemination of experiences and discovery in most fields of fundamental and applied science. Publishers only supply the virtual space, the salon is all for us: editors, authors, and those of us who double as authors and reviewers, depending on the circumstances. The MDPI editorial staff are among the kindest I have had the chance to collaborate with, as an author and reviewer. We, as practicing scientists in all fields, should take this opportunity to improve the intellectual and ethical quality of scientific work and its communication through the facilities that MDPI offers.

3. Which qualities do you think reviewers need?
Being invited to review drafts of submitted scientific articles is a burdening honor, full of responsibilities and devoid of privileges. There is no obligation to fulfill this role, unless one is prepared to do one's best in terms of the ethical and professional sides of this task. A reviewer has in their hands the work of many persons, colleagues somewhere in the world, which reflects their professional and personal pride and their human relationships within a collaborating group of professionals. Kindness is the main quality. Even the sloppiest of manuscripts is the result of professional work that should not be shamed, poor as it may be. The authors are not virtual unknowns, just names on the first page. They are persons, hitherto unknown professional colleagues, the work of whom needs to be managed respectfully, as one would do with that of those one might meet at the coffee machine and the canteen tables. Competence in specific fields is a quality that can be built over time, according to needs, and has intellectual humility as its pre-requisite.

4. What are the key factors and aspects that you consider most when reviewing a manuscript?

I am there to understand, learn, and only then, later, offer my comments. No reviewer is ever able to be as learned on the topic as the professionals who actually did the job. I fully trust the authenticity of reported data. It is none of my business looking for "plagiarism" or false claims. Any flaw, if any, indeed, is within the remit of the personal and professional conscience of the authors, not mine. I read drafts as I would read published literature: what will an interested (or, even, a casual) reader grasp from it? Is there anything that can be improved? Can the data and results be useful, to the point that they can be re-elaborated into new knowledge? May I share with these colleagues an original point of view on their work? How can I convey my comments in the kindest (first!), clearest, most useful way? Is there a way to encourage the authors to carry out further revision efforts? I try to put myself in the authors' shoes: which words would I accept as constructive? What would I not accept, but see as disruptive comments?

5. Based on your rich reviewing experience, could you please share the common problems that authors face?

As both an author and reviewer, I know that no scientific research develops in the Parnassian world of perfectly equipped, functioning laboratories, with fair, enthusiatic collaborating colleagues, supervisors, and staff. Research, fundamental or applied, is developed in the real world of existing facilities, of real-life professional and personal relationships, of budgeted time and resources, and most often, of strain and fatigue. Publishable articles are the product of research, and as all finished goods of craftsmanship and manufacturing, they are the best compromise of demands, tasks, resources, and available time in specific situations. Conveying a "positive" sense of a task being accomplished, results are the intended aim of scientific publishing, and no failure is allowed. It is not we, the scientific professionals, who set the rules. We do our best under rules, implicit and declared, that none of us are ever able to modify. No literature survey is ever complete, no experiment can be replied to or expanded on, after the allotted grant, time, and resources are expired, and people often move away to their next professional commitment. Data elaboration and result presentation rely on authors' available resources, skills, and available time. The time used for drafting, developing, and revising in in conflict with the excessive burden of numerous professional tasks. Increasingly limited time is allotted for improving drafts, which is achieved by taking advantage of useful reviewers' comments, and yet, "the paper must come off in time".

6. Do you have anything to say/share with early career researchers?

Conducting research is a professional job, not a volunteer mission. Professionals strive for fair recognition, and persons for pride. The task of reviewing will demonstrate personal character and helps us recognize personal biases and improve. As one of my early mentors, a gentleman and a scientist, once said to me: "*What's the point of doing research if it doesn't make us better men?*" Issuing responsible judgment, that is, reviewing, is a fundamental piece in building one's mosaic of character over a professional and personal lifetime. It is a desirable by-product of contemporary research, the expansion of article numbers, that recruits increasingly younger and more diverse professionals into this task. An advantage is that younger researchers may put themselves more easily in the authors' shoes than seniors can. Thus, they can avoid the worst pitfalls in the reviewing task: complacency, arrogance, shallow judgment, self-aggrandizing comments, and laziness. At some future time, which is in the reach of their professional lifetimes, they will witness deep changes in the task of reviewing, to the point that open-platform discussion will be the standard of scientific communication. Emerging publishers will likely be at the forefront of this movement, by offering to our category of intellectual workers more opportunity to be agents of change in an increasingly difficult world.