Rewarding the Achievements of Young Scientists

McNutt tackles the difficult issue of research merit, especially for young scientists, and suggest a number of alternative criteria for assessing merit, to replace bibliometrics (Science 2014; 346:1155). The Editorial reminds me on what Churchill once said about political systems: "democracy is the worst form of government except for all those other forms that have been tried". The shortcomings of bibliometrics are well-known but their correlation with scientific impact is beyond doubt; bibliometrics alone are the strongest predictors of future Nobel prizes, as we also discussed elsewhere (see Nature 2011;478:419). Are the newly proposed parameters likely to be better or worse than bibliometrics? Here are my comments: willingness to take risks (this criterion is vague and difficult to quantify, for comparing young scientists; the risk is likely reflecting the Supervisor's own projects, not the young scientists themselves); ability to work as part of a diverse team (is this attribute good or bad? Most of the audacious scientists that I know, they want to lead, not to be part of a team); creativity in complex problem solving (this may take years before you see any outcome, if there is one) and work ethic (this should not be a criterion for high impact work; I do not know of a single scientist who has been awarded a big prize for his/her hard working habits). I am afraid that the best (and of course, not perfect) way to assess impact in the young is still to read their first-author contributions for content, see if any of their work has translational impact or potential and combine these evidences with some form of bibliometric analyses. Yours Sincerely, Eleftherios P. Diamandis, MD, PhD, FRCP(C), FRSC