



# Road to Academic Research Excellence in Gulf Private Universities

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## Abstract

In this study, we analyze first the origins of excellence strategy are evoked, highlighted by the European Community in the prolongation of its 2000 Lisbon Agenda affirming the Strategic. Second, we analyze excellence in Omani national research strategy 2008–2020 then excellence in the Private University research strategy where we discussed why the predominant use of excellence criteria has bias and risk. A pyramid of research skills exists where researchers and the laboratory of excellence are at the vertex: we wonder about the relationship that should be developed between the base and the top of this pyramid, from equity and efficiency perspectives. Finally, we propose a reflection on good practices to reach top-level research, emphasizing collaborative ethics and shared values. We ask then the question of researchers' responsibilities, especially those who are well-known, in raising the whole society's capacity to progress through intelligence and knowledge.

## Keywords

Research • Excellence • Strategy • Private university

## Highlights

- Excellence in Omani national research strategy 2008–2020 was analyzed
- Then, excellence in Private University research strategy was discussed (why the predominant use of excellence criteria has bias and risk).

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- Finally, a reflection on good practices to reach the top-level research, emphasizing collaborative ethics and shared values, was proposed.

## 1 Introduction

The Research and Innovation Development (R&ID) in a Private University in a Gulf country conducts a study to determine how to measure research excellence, particularly regarding interdisciplinary applied research for development. In this paper, the literature review results as part of the study will be utilized to present the main debates in evaluating research, including impact, peer review process, measurement tools used as indicators, and criteria for assessing excellence in research.

## 2 Analysis

A. *Excellence: from the managerial vision of Lisbon strategy to Europe 2020 strategy*

The Commission developed in March 2010 Europe 2020 strategy. This new project, aiming for “smart, sustainable, and inclusive growth” is organized around three axes: innovation, increasing employment rate, and growth sustainability. It offers several target figures, as an overall employment rate of 75% (5% more than Lisbon Strategy), a research budget equivalent to 3% of GDP (resumption of the previous target, reaffirmed despite the context of deficit reduction and crisis), a 25% reduction of poverty, and a reduction of school failure from 15 to 10%. Furthermore, the Europe 2020 strategy reaffirms the ambitions of the “energy-climate package” adopted in 2008. Since adopting this strategy, some countries' economic situation has deteriorated further, with a lingering recession, rising debt,

unemployment, and poverty increase. So, we need to rethink the method that has clearly shown its limits.

B. *Excellence in national research strategy 2008–2020: case study the national research strategy in the Sultanate of Oman (from the Research Council)*

In order to achieve the vision by 2020 and overcome research excellence gaps, strategies that address specific goals were selected; major qualitative goals are enumerated below:

- Lead in research by continuously tracking local and international scientific and social trends and responding to them by adapting research excellence areas.
- Create cutting edge research in oil and gas-related fields.
- Increase research activity in diverse strategic areas of interest.
- Create strength in policy research for informed decision making.

C. Excellence in Gulf Private University Research Strategy

1. **The effects of scientific priorities display on creativity**

The choice of priority themes is well justified by societal challenges that research must help solve (Wright 2007). However, putting teams' fierce competition on priority axes projects has negative consequences. In all cases, it introduces unnecessary relevant distortions between stakeholders, which could lead to an opportunistic reshaping of teams or units and generally individualistic behavior. The reduction, or even disappearance, of recurrent resources concerning targeted funding is particularly detrimental to teams working on specific areas and specializations (Bak and Kim 2015) or new themes that break free from the call for proposals and international comparisons. Moreover, how to handle a gateway for unexpected discoveries that undoubtedly smack scientific serendipity, calling for some degree of investigation freedom, which may occur in emerging structures not classified under excellence categories? Creativity needs a freedom space that allows taking risks from the government as well as individuals sides, involving not being confined to only "in fashion topics" but also supporting researchers who open new paths, running counter to dominant themes current (O'Gorman et al. 2006) and (Marcella et al. 2017). Support possibilities at many risks have decreased significantly: activity changes are heavily penalized by the current funding patterns and the urgent need to achieve a rapid investment return.

2. **Which criteria assessing "excellence"?**

Justification and evaluation of excellence involve the multiplication of expert committees set in place at all levels, which has a high cost, not least by the time they require and cut from research activity time. Moreover, recognition of excellence in research is based itself on ambiguity. Even if we stick to the definition given above, excellence is generally determined from appraisal, often based on current work, which means, in extreme cases, to recognize as excellent only what is already achieved and not what is in the way of achievement. Furthermore, excellence is seldom evaluated in-depth, taking the example of the end of a research contract; this fact reduces learning processes and the need for improvement while expecting evaluation feedback. Also, evaluating excellence in individuals, teams, institutions, research projects, etc., by a recognized ranking adopted in research institutions mostly dodges a deep reflection about the choice of excellence criteria (Belcher et al. 2016). Evaluation time and criteria discussions between evaluators are paradoxically reduced, almost in the same proportion as the increase in evaluation operation number (Hammersley 2008). Implying that assessors' postulated excellence is sufficient (Yates 2016), although risks are evident, namely: evaluators' specialization, de-contextualization of assessors, over-representation of certain disciplines (Beerkens 2013) and criteria opacity (Roebber and Schultz 2011; Petit-Zeman 2003). Gulf Private University (Department of Research and Innovation) works on offering an instructive example through appealing "gold standard" methods of evaluation: It is planned to activate skills variety, gather them in a single high-level jury (Wooding and Grant 2003; Ware 2011; Smith et al. 2011). The objective of identifying supposed "Excellent" researchers is largely in its way of achievement. Nevertheless, slight selection biases were notable: candidates operating in the best context are the most benefited; "in fashion areas" of research have all the favors and preferences. A perfect assessment will, indeed, never be possible (Boaz and Ashby 2003)!

3. **Limits of excellence strategy**

The fact that there is a pyramid of skills in the research community must be considered, where researchers and laboratories known as "of excellence" constitute the pyramid vertex. Although, if we do only finance proclaimed excellence, the pyramid base will not have the means anymore to operate, and in extreme cases, excellence will kill the rest! This, indeed, could most likely be fatal to excellence itself. Instead, halfway-research between pyramid base and vertex must not be underestimated. Exploratory research at pyramid

edges, often full of uncertainty, is edifying; we precisely need to clear new methods before becoming standardized. A wide base, far from being an obstacle to innovative and effective research emergence, is, on the contrary, essential to the pyramid vertex. This latter, based on the work of all research stakeholders, will only rise further. The pyramid height is born from the conjunction between talents and opportunities: this is exactly what should be cultivated everywhere by breaking a static and de-motivating model that stops many researchers from engaging in projects considered too ambitious for them. Rising and descending interactions between base and vertex must be questioned because excellence is multifaceted. The visible excellence, located at the pyramid vertex, adds a “niche excellence” or “hidden excellence” established in the middle of the same pyramid, thus, less considered. The development of highly dynamic research areas was often preceded by periods, sometimes very long, where only a few researchers have been active apart from financing channels and international competition. This “excellence of niche,” which needed to be well identified and efficiently protected, could become one of the highly dynamic research of the future. It is also necessary to reserve a place for “sharp” or a little bit visible topics, whose disappearance would be a very damaging loss to intellectual heritage and expertise. Undisclosed high-level research can exist in teams closely working with (Olmos-Peñuela et al. 2014) protected by the imperatives of secret in economic competition. However, this form of excellence is essential to companies, although it is considered sparsely visible in terms of public sector evaluation criteria. The current context implies an urgency to share all over the Gulf countries' scientific activity fruits and be attentive to diverse businesses' needs. Innovation often emerges from laboratories set outside of most prominent institutions: very high-level scientific production only prospers from royal roads characterizing Gulf Countries elites, formed by preparatory classes and major prestigious schools. Technology sectors, International Telecommunication Union (ITU), and engineering schools of moderate importance are pathways for all scientists who find jobs relevant to societal needs. The development of high-level research needs a fertile ground in a specific geographical area (university laboratories, engineering schools, business and industries basins, and cultural implementations) (Chai and Shih 2016): diversity of skills causes a wealth of leading research ensembles; MIT in the United States is a good example of such.

#### 4. How to create and stimulate high-level research at Private University?

The legitimate ambition of research financed by public funds is to reach a very high level. However, to achieve this target,

it must be taken into consideration that leading research production has naturally non-programmable dynamics. This research is not completely limited to a research landscape, static, and sized by an exact time–space evaluation. It is primordial to stimulate conditions to attract top researchers to the Private University of Gulf Countries laboratories. Passionate spirits about research exist everywhere; the brightest and most creative researchers will not only be encountered in the most prestigious universities; laboratories “of excellence” can occasionally turn into fortresses. The starting situation is not an absolute determination. This is why it is important to ensure a multiplicity of proving-grounds, maintaining pools of expertise, and connecting them. The possibility of mobility for all researchers and responsiveness and adaptation to new situations is essential to intellectual enrichment. Private Universities must facilitate trajectories that skew and may change, avoid premature specialization, generally speaking, create conditions for the orientation to be rethought throughout the career. Conversely, when research is initiated, Private Gulf Universities must ensure its development conditions, especially its sustainability. Short and medium-term projects should be able to be extended when they lead to interesting findings. Generally, the skills of high-quality teams must be nourished. Nevertheless, the call for proposal logic frequently leads to look for themes obeying novelty more than creates skills effective mobilization conditions (Goldfarb 2008). Research construction based on duration is neither opposed to responsiveness nor to new situations adaptation.

#### 5. Excellence exemplary in the disclosure of Science at Private University

Nowadays, Omani and Gulf Countries society, standing for knowledge and intelligence, face great challenges in energy, environment, and health areas, where science has a crucial role to play. For example, in the Sultanate of Oman, people with strong and solid scientific knowledge levels are insufficient. It is necessary to expand this basis forming the pyramid base whose vertex is research at its highest level, which deploys relatively in tension to other country needs such as strengthening national capacities (“capacity building”). Indeed we must not underestimate the population's reluctance about science (Berlemann and Haucap 2015) (and even science stakeholders). Scientifically, proven findings are challenged by individual opinions (Fife 1979); many benefits of technologies for everyday life are getting forgotten or ignored. However, it is obviously entitled to expect scientific work at all levels to address the societal challenges of the future. Research stakeholders, regardless of their level, have an obligation to raise societal scientific culture. It is clear that special attention has to be directed to youth

**Table 1** Oman's current research productivity and quality indicating the need for a radical strategy to build excellence in any field (from The Research Council—Sultanate of Oman)

Performance Indicator	Today	2020	Strategic Gap		
			Low	High	High
Nb of researchers in strategic areas	Low	High	Low	●	High
Nb of strategic research centers	Low	High	Low	●	High
Nb of publications in scientific journals per million inhabitants	47	728	Low		● High
Nb of citations per paper	Low	11	Low		● High
Nb of patents per million inhabitants	0.08	134	Low		● High
% of R&D spending on strategic grants	Low	High	Low	●	High

(Valencia et al. 2015; Németh 2014): for example, Omani private University students, because they are the force pipelines that will take over tasks of today's researchers and engineers (Hossler et al. 2001; Hossler 2001); but technical and scientific occupations attractiveness is insufficient. In this respect, visibility and exemplarity of a model representing the most prestigious laboratories and the most recognized researchers involve some responsibilities. Research and scientific approaches disclosure to the public is a necessity (Ismail et al. 2015). Some Nobel laureates, fields medals, or other great rewards (big prizes for women scientists, etc.) have well understood and largely contributed to spread a positive image of science and transmit its taste to the greatest possible number of public.

#### D. Recommendations and conclusions

The present study aimed to present the main debates in evaluating research, including impact, peer review process, measurement tools used as indicators, and criteria for assessing excellence in research in the Sultanate of Oman. Its overuse has trivialized the meaning of the term “excellence” in any and all contexts. The analysis helped us to generate an overview regarding the research progress through the private Omani Universities. Thus, a couple of recommendations would be beneficial to help these universities reach the excellence level. It would be better to limit its use in terms of research operations, substituting the concepts of quality (Kooli 2019), high-level work, and competitive capacity instead. Any benefit, selection, award, bonus, or allocation of credits based on excellence criteria implies adopting strict, transparent evaluation procedures, especially regarding the publication of results and the beneficiaries' names. Excellence, by definition, implies differentiation. Therefore, the evaluators must be required to uphold the principles of excellence in their evaluations. Moreover, an evaluation must be based on quality criteria and not exclusively on bibliometric indicators. The policy of excellence and the associated funding must provide sufficient means in terms of basic support and human resources for high-quality teams that do not necessarily meet the prevailing criteria of

“excellence.” High-level research relies on reacting quickly to new topics that may be highly original and far removed from the usual investigation paths. This capacity for rapid adaptation should be fostered by the decision-makers, facilitating teams' mobilization to work on these topics (encouraging mobility, reactivity in funding). We must ensure the sustainability of high-level research over time. Too often, the calls for proposals encourage applicants to pursue only the newest topics, which are determined more in terms of fashionability than the good use of available resources. Short- and medium-term projects that have produced promising results should have the possibility of being extended. More generally, we must maintain the skill levels of high-quality teams. The competition induced by the race for excellence can lead to increased misconduct in the laboratories. We must be aware of the importance of ethics in training research personnel and implementing the appropriate training mechanisms (Conroy and Smith 2017). Finally, researchers recognized for their “excellence” have a particular duty toward the scientific community and the general public. They are seen as models, and their high profile comes with a responsibility to share their research and, more generally, their scientific approach, with the young generation, the general public, and policy-makers.

## References

- H.-J. Bak, D.H. Kim, Too much emphasis on research? An empirical examination of the relationship between research and teaching in multitasking environments. *Res. High. Educ.* **56**, 843–860 (2015). <https://doi.org/10.1007/s11162-015-9372-0>
- M. Beerens, Facts and fads in academic research management: the effect of management practices on research productivity in Australia. *Res. Policy* **42**, 1679–1693 (2013). <https://doi.org/10.1016/j.respol.2013.07.014>
- B.M. Belcher, K.E. Rasmussen, M.R. Kemshaw, D.A. Zornes, Defining and assessing research quality in a transdisciplinary context. *Res. Evaluat.* **25**, 1–17 (2016). <https://doi.org/10.1093/reseval/rvv025>
- M. Berlemann, J. Haucap, Which factors drive the decision to opt out of individual research rankings? An empirical study of academic resistance to change. *Res. Policy* **44**, 1108–1115 (2015). <https://doi.org/10.1016/j.respol.2014.12.002>

- A. Boaz, D. Ashby, *Fit for Purpose? Assessing Research Quality for Evidence Based Policy and Practice* (ESRC UK Centre for Evidence Based Policy and Practice London, 2003)
- K. Ceulemans, I. Molderez, L. Van Liedekerke, Sustainability reporting in higher education: a comprehensive review of the recent literature and paths for further research. *J. Clean. Prod.* **106**, 127–143 (2015). <https://doi.org/10.1016/j.jclepro.2014.09.052>
- S. Chai, W. Shih, Bridging science and technology through academic–industry partnerships. *Res. Policy* **45**, 148–158 (2016). <https://doi.org/10.1016/j.respol.2015.07.007>
- J.C. Conroy, R. Smith, The ethics of research excellence. *J. Philos. Educ.* **51**, 693–708 (2017). <https://doi.org/10.1111/1467-9752.12249>
- J.D. Fife, Improving the use of higher education research. *Res. High. Educ.* **10**, 189–192 (1979). <https://doi.org/10.1007/bf00976229>
- M. Gaillard, De la strategie de Lisbonne a la startegie Europe 2020, vie-publique.fr (2013)
- B. Goldfarb, The effect of government contracting on academic research: does the source of funding affect scientific output? *Res. Policy* **37**, 41–58 (2008). <https://doi.org/10.1016/j.respol.2007.07.011>
- M. Hammersley, Troubling criteria: a critical commentary on Furlong and Oancea’s framework for assessing educational research. *Br. Edu. Res. J.* **34**, 747–762 (2008). <https://doi.org/10.1080/01411920802031468>
- D. Hossler, Finding (more) fruit on the vines: using higher education research and institutional research to guide institutional policies and strategies (Part II). *Res. High. Educ.* **42**, 223–235 (2001). <https://doi.org/10.1023/a:1026529721018>
- D. Hossler, G.D. Kuh, D. Olsen, Finding fruit on the vines: using higher education research and institutional research to guide institutional policies and strategies. *Res. High. Educ.* **42**, 211–221 (2001). <https://doi.org/10.1023/a:102657760>
- N. Ismail, M.J.M. Nor, S. Sidek, A framework for a successful research products commercialisation: a case of Malaysian Academic Researchers. *Procedia Soc. Behav. Sci.* **195**, 283–292 (2015). <https://doi.org/10.1016/j.sbspro.2015.06.163>
- C. Kooli, Governing and managing higher education institutions: the quality audit contributions. *Evaluat. Program Plann.* **77**, 101713 (2019)
- A. Kuzhabekova, D.D. Hendel, D.W. Chapman, Mapping global research on international higher education. *Res. High. Educ.* **56**, 861–882 (2015). <https://doi.org/10.1007/s11162-015-9371-1>
- R. Marcella, H. Lockerbie, L. Bloice, C. Hood, F. Barton, The effects of the research excellence framework research impact agenda on early- and mid-career researchers in library and information science. *J. Inform. Sci.* (2017). <https://doi.org/10.1177/0165551517724685>
- B. Németh, Research and development of adult education through higher education institutions: a challenge and perspective for better adult learning and education. *Procedia. Soc. Behav. Sci.* **142**, 97–103 (2014). <https://doi.org/10.1016/j.sbspro.2014.07.594>
- C. O’Gorman, O. Byrne, D. Pandya, How scientists commercialise new knowledge via entrepreneurship. *J. Technol. Transf.* **33**, 23–43 (2006). <https://doi.org/10.1007/s10961-006-9010-2>
- J. Olmos-Peñuela, E. Castro-Martínez, P. D’Este, Knowledge transfer activities in social sciences and humanities: explaining the interactions of research groups with non-academic agents. *Res. Policy* **43**, 696–706 (2014). <https://doi.org/10.1016/j.respol.2013.12.004>
- S. Petit-Zeman, Trial by peers comes up short. *The Guardian*, 16 (2003)
- P.J. Roebber, D.M. Schultz, Peer review, program officers and science funding. *PLoS ONE* **6**, e18680 (2011). <https://doi.org/10.1371/journal.pone.0018680>
- S. Smith, V. Ward, A. House, “Impact” in the proposals for the UK’s research excellence framework: shifting the boundaries of academic autonomy. *Res. Policy* **40**, 1369–1379 (2011). <https://doi.org/10.1016/j.respol.2011.05.026>
- J. Valencia, J. Macias, A. Valencia, Formative research in higher education: some reflections. *Procedia. Soc. Behav. Sci.* **176**, 940–945 (2015). <https://doi.org/10.1016/j.sbspro.2015.01.562>
- M. Ware, Peer review: recent experience and future directions. *New Rev. Inform. Netw.* **16**, 23–53 (2011). <https://doi.org/10.1080/13614576.2011.566812>
- S. Wooding, J. Grant, *Assessing Research: The Researchers’ View*, DTIC Document (2003). ISBN: 0-8330-3480-4
- T.S.A. Wright, Developing research priorities with a cohort of higher education for sustainability experts. *Int. J. Sustain. High. Educ.* **8**, 34–43 (2007). <https://doi.org/10.1108/14676370710717571>
- L. Yates, Is impact a measure of quality? Some reflections on the research quality and impact assessment agendas. *Eur. Educ. Res. J.* **4**, 391–403 (2016). <https://doi.org/10.2304/eej.2005.4.4.5>
- L. Zhang, W. Bao, L. Sun, Resources and research production in higher education: a longitudinal analysis of Chinese Universities, 2000–2010. *Res. High. Educ.* **57**, 869–891 (2016). <https://doi.org/10.1007/s11162-016-9410-6>