HAS
Seminar Series 2024

Published on: 18 October 2024

Stanford/Elsevier's Top 2% Scientists Ranking (2024): Self-Reflection on Gender and Ethnic Inequalities

Author: Dr Solomon Habtemariam

1. The Ranking process and methodology

As readers may be aware, there is now an emerging world ranking of scientists by Stanford University/Elsevier based on career-long data and the latest one year data (2023) on publications/ citations. The list is large including the top 100,000 scientists by c-score (with and without self-citations) or a percentile rank of 2% or above. The methodology applied is as follow: "Scientists are classified into 22 scientific fields and 174 sub-fields according to the standard Science-Metrix classification. Field- and subfield-specific percentiles are also provided for all scientists with at least 5 papers. Career-long data are updated to end-of-2023 and single recent year data pertain to citations received during calendar year 2023. The selection is based on the top 100,000 scientists by c-score (with and without self-citations) or a percentile rank of 2% or above in the sub-field. This version (7) is based on the August 1, 2024 snapshot from Scopus, updated to end of citation year 2023. This work uses Scopus data. Calculations were performed using all Scopus author profiles as of August 1, 2024."

2. My ranking position at the very top-end of the top world 2% scientists league

In the previous release of ranking by Stanford University/Elsevier some two years ago (November 2022), I achieved recognition in both categories of career-long and one year (2021) leagues. I am delighted again now to achieve the top 2% world scientists status both in career-long and the year-impact categories. My global ranking position is as follows:

Ranking entry in the World Top 2% Scientists under career-long league: Habtemariam Solomon

Composite Score Rank – Self citation excluded—World ranking of 20,654

Composite Score Rank- All citations - World ranking of 18,538

Top ranked subfields - Medicinal & Biomolecular Chemistry, Pharmacology & Pharmacy, and Chemistry

This shows an improvement of my league position from two years ago by 16,834 places (by composite score excluding self citation) or 12,762 (by composite score). I also congratulate 22 other colleagues within my institute (University of Greenwich) who achieved this status in the career-long entry. Despite my official title/post in my post-92 university being Principal Lecturer (teaching), my achievement represents the top/best ranking for my institution (see page-2).

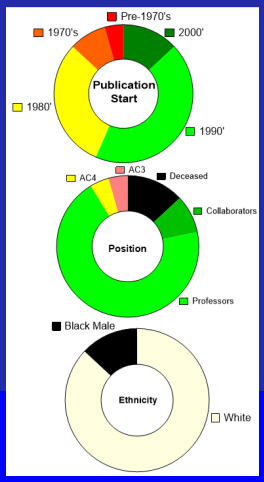


INSIDE THIS ISSUE

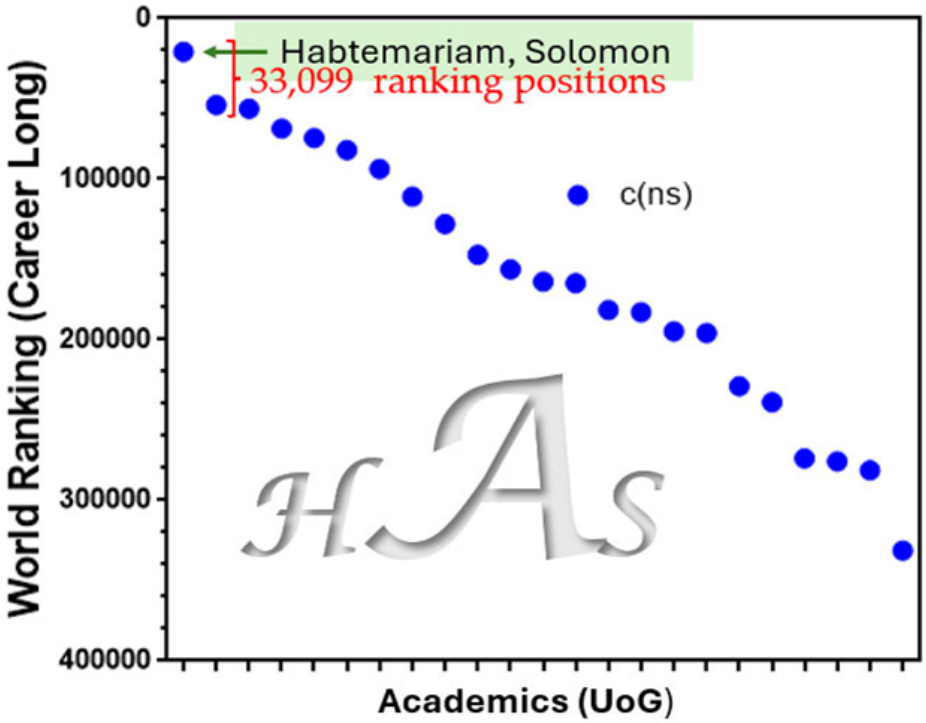
Ranking methodology 1
My own ranking 1
Ranking of other university colleagues 2
Gender inequality.....3
Ethnic inequality 3
Other influencing factors 4
Conclusion 4

WORLD SCIENTISTS RANKING

- Citations
- Gender
- Ethnicity
- Research
- Finance
- UK Universities



World 2% status achievers - career-long ranking data for composite score excluding self citation.



World ranking of Solomon Habtemariam & other University of Greenwich (UoG) Academics.

One year (2023) ranking: The league table displayed 223,152 academics

Ranking entry in the World Top 2% scientists under one year (2023) league:

Habtemariam Solomon

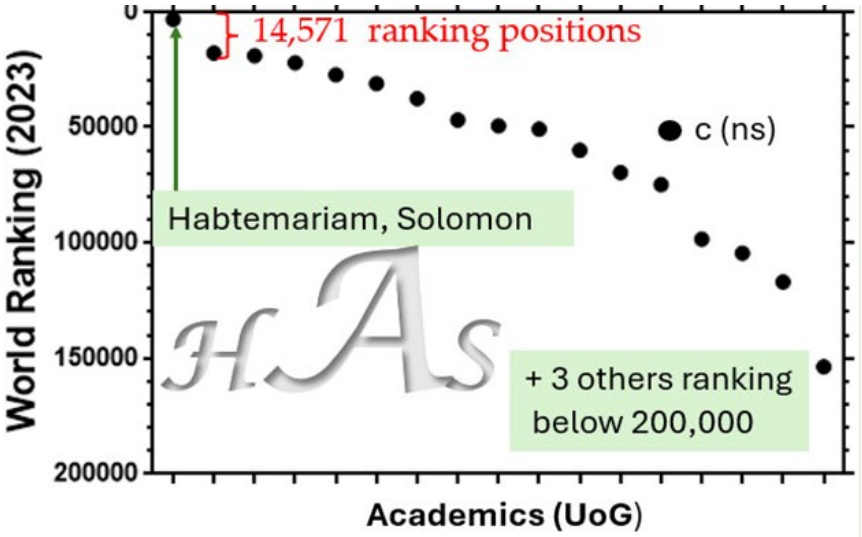
Composite Score Rank – Self citation excluded—World ranking of 3,272

Composite Score Rank- All citations - World ranking of 3,671

Top ranked subfields - Medicinal & Biomolecular Chemistry, Pharmacology & Pharmacy, and Chemistry

This shows an improvement of my league position from two years ago by 162 places (by composite score excluding self citation) or 122 (by composite score). I also congratulate 20 other colleagues within my institute (University of Greenwich) who achieved this status in the one year (2023) league. Here too, despite my post in my post -92 university being Principal Lecturer (teaching), I achieved yet again the top/best world ranking in my institution (see below):

One year (2023) ranking data for composite score excluding self-citation

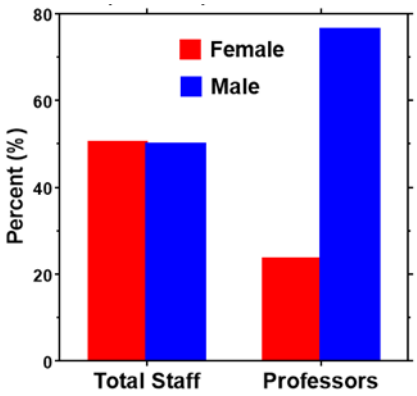


World ranking of Solomon Habtemariam & other University of Greenwich (UoG) of Academics.

3. Analysis of results

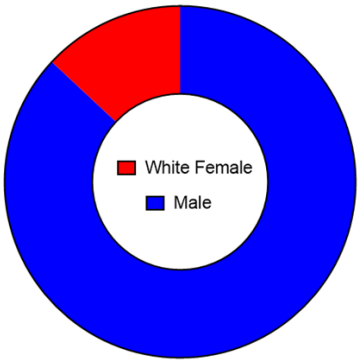
3.1. Gender

In my own university, the most recent HESA data (2023/23) release shows that there were 1,070 academics in open-ended permanent contracts. The data shows no gender gap – in fact, there were more female (no matter by small number) than male academic staff. I congratulate my university in this achievement as there were more male academic staff than female in the sector in 2022/23 - 44% of full-time academic staff were female. Over the past 10 years, the professorial headcount in my university also dramatically increased both for men and female academics in line with the sector - well done goes again to my university. We still have a big gender gap in professorial recognition, however (image right).



University of Greenwich (HESA 2022/23 data) Gender profile of academic staff in open-ended permanent contracts.

Our sector data (HESA 2022/23) shows all female staff accounted for 50% of full-time staff workforce but 66% of them were part-time staff. We simply live in a society were, even in academia, our female colleagues face difficulties on many fronts. Some data (e.g., Women in Science - UNESCO) suggest that less than 30% of the world's researchers are women. This reality is evidently shown in the world 2% scientists ranking – well acknowledged by the league providers too. In my university, the representation of female (all white) academics in the career-long league was just 13.04% (image right).



World 2% scientists ranking of University of Greenwich academics: Gender imbalance

3.2 Ethnicity

When I joined my university over 2 decades ago, professorial promotion, as with many UK universities, was seen as a route to joining an exclusively white elite membership club. The recent HESA data (2022/23) breakdown for academic staff on open-ended permanent contracts in my university showed that white staff constitute 63.55% of the workforce but their share of professorial position was 70.59%. However, we have increased the professorial staff density of Black, Asian and Minority Ethnic (BAME) academics over the years - a growing trend in many UK universities where getting the professorial headcount (quantity) of BAMEs was taken as a mission. The sector data in the recent HESA publication shows:

"The number of academic staff who declared their ethnicity as White fell by 1% in 2022 while the number of Black academic staff rose by 18%. The number of Black academic staff with the contract level of 'Professor' rose by 25% but represented only 1% of all professors."

How this good trend translates to resolving difficulties academics of colour are experiencing in mostly White Research Space of our universities remains to be seen. Our 2% world scientists recognition in my university shows the BAME's representation as 13.04% (only as black male) versus their workforce proportion (Black, Asian and mixed – even excluding other and not known category) of 28.51% (HESA 2022/23).

"Of those listed under the University of Greenwich in world 2% scientist league (career-long), 13.04% were black male academics."

Female academics:

The less recognised 50% workforce

White academics:

63.55% of the workforce have the professorial share of 70.59%

We have similar data for the one-year (2023) ranking that confirms the ethnic & gender inequality in this league appearances. At personal level as non-professorial black academic in my post-92 university:

In the career-long ranking, the difference in my ranking position between the top performer (myself) and the second best (established professor) was 33,099 (with self-citation exclusion) or 42,730 (total citations) positions.

In the one-year (2023) ranking, the difference in ranking position between the top performer (myself) and the second best was 14,571 (with self-citation exclusion) or 16,383 (total citations) positions.

My own journey as an academic is similar with many BAMEs in the UK who are known to face considerable challenges in their careers, representation in senior professorial positions and a pay/salary gap. Numerous data (see example) explicitly shows this conclusion:

"Close analysis revealed that the increases in education staff recorded as BAME were primarily at junior level and through 'teaching only' contracts. Under-representation was most extreme for those categorised as black and Asian/Asian British Bangladeshi."

I made this ranking position representing my post-92 university with great degree of self-motivation, self-funding most of my research and even when my publications are not relevant to my career progression. This kind of league appearance however gives pride and inspiration both to myself and under-represented groups in the UK academia.

3.3. Other influencing factors

In my discussion forum, we are assessing complex factors that influence university league positions. The UK Research Assessment Exercise (REF) is undoubtedly one of them – We have seen an increase in output across institutions over the years but the long-term effect of this exercise on productivity, particularly in teaching-based universities, remains to be seen. Among the other hot topics of the year is the increased financial pressures that UK universities are facing which will also impact research output. Beyond bibliometric indices, universities must address the various complex league parameters with variable degree of strategic priorities and relevance to their financial stability … who are the winers and losers in these games will be sources of inspiration for our future analysis.

4. Conclusion

Citation metrics are widely used in the world rankings of universities and scientists. Citation misuse has been cautioned too but they remain to serve as critical indicators of academic paper/publication quality. In this world 2% scientists ranking, the composite indicator which measures impact (citations) was largely used but data is also available on productivity for the indicated academics. The positive correlation between citation impact and journal impact factor (JIF) is not established but both are critical in research quality assessments as outlined in my previous newsletter. The career-long data, at best, may indicate to what extent citations are used as a measure of academic quality in our universities. In my own university, a small fraction of academics in professorial position are recognised in this league (also in the 2023 entry). The two non-professorial colleagues in this league in current employment at Greenwich are black (top performer) and a female; both in the under-represented group in our reward system and the world 2% scientists leagues. It is like a choice between the rock and hard place: ***should I believe on the basis of this data that BAME and female academics are less-valued within my university or perhaps publication matrices are irrelevant to their recognition? Is my curiosity not to discard unusual observation/data as outliers blinded me from believing in the rigorous and transparent recognition system enshrined in the policy document of every UK university?*** … Follow me on:

Citation impact:

Relevant to BAME academic recognition?

Statistics:

Some outliers represent true values





Dr Solomon Habtemariam is a Founder/Owner of Pharmacognosy Research & Herbal Analysis Services UK & Principal Lecturer at the University of Greenwich

Cite this article: Habtemariam, S. (2024). Stanford/Elsevier's Top 2% Scientist Rankings (2024): Self-Reflection on Gender and Ethnic Inequalities. *Herbal Analysis Services (HAS)* 18 October, **2024(1)**, 1-4.