



23rd November 2020

Dr Elisa De Ranieri
Editor in Chief
Nature Communications
By email: e.deranieri@nature.com

Dear Editor,

We are writing to express our concerns about the article published in Nature Communications by AIShebli and colleagues titled “The association between early career informal mentorship in academic collaborations and junior author performance”.¹

The methodologies and definitions employed by the authors are inappropriate and subsequent interpretations become elusive due to the well-documented gender biases in research. We noticed many issues that need to be adjusted for potential confounders, and for inferring causal relationships from association analyses that do not provide the basis for the authors to reach the conclusions presented in their article.

The authors’ conclusion that having female mentors is detrimental to the career development of young scientists not only undermines the contributions of female scientists and academics but stands to reverse the recent efforts of numerous academic institutions, funders, and national and world academies in ensuring diversity and gender equality in science.

Science has benefited from the significant advancements and contributions of women scientists in many areas. There is much evidence indicating that the active participation of female scientists in the mentoring process promotes the career growth and success of young scientists (both males and females). Despite these contributions, women continue to be significantly disadvantaged by the unconscious biases that influence the perception of women’s abilities limiting their success in the long run by affecting their job opportunities (and pay scale), grant opportunities, and publication citations. For example, in the field of biology only 1 in 3, and less than 1 in 5 assistant professors and professors respectively are women². Whilst some of the reasons underlying these cumulative disadvantages have been discussed and strategic solutions proposed by institutions globally, misinterpretation and unjust conclusions by AIShebli and colleagues could create a major setback in these global efforts. In particular, the conclusion that being mentored by female mentors or having female mentees could decrease ‘the impact of women who pursue a scientific career’ should be rectified.

The World Academy of Sciences (TWAS) Young Affiliates Network (TYAN) consists of ~300 accomplished young scientists from 68 countries. Many of our members (both male and female) have personally benefited from being mentored by female scientists and therefore feel strongly that the unsupported conclusions of the article by AIShebli and colleagues further exacerbates the gender-related inequalities in science. Whilst we believe that research into understanding the impact of collaboration and mentorship is important, our call is to encourage

¹AIShebli, B., Makovi, K. & Rahwan, T. The association between early career informal mentorship in academic collaborations and junior author performance. Nat Commun 11, 5855 (2020). <https://doi.org/10.1038/s41467-020-19723-8>

²Nelson DJ (2007) A National Analysis of Minorities in Science and Engineering Faculties at Research Universities. Available at http://faculty-staff.ou.edu/N/Donna.J.Nelson-1/diversity/Faculty_Tables_FY07/FinalReport07.html. Accessed January 20, 2014.

those that will close the gap to encourage diversity and promote gender equality rather than those that drive further divide.

We believe that there is a pressing need to increase not only awareness but also dialogue on addressing gender inequality. To this end, Nature Communications has the responsibility in ensuring that the study by AlShebli and colleagues has been conducted robustly, interpreted appropriately and importantly, contributes constructively to the on-going discussions that address the gender inequalities in the scientific community.

Yours sincerely,

TYAN Executive Committee and members
(Signatories indicated below)

Signatories:

No.	Name	Position	Affiliation	Country	Email
1.	Pablo Bolaños Villegas	Associate Professor	University of Costa Rica	Costa Rica	pablo.bolanosvillegas@ucr.ac.cr
2	Warshi Shamila Dandeniya	Senior Lecturer	University of Peradeniya	Sri Lanka	warshisd@agri.pdn.ac.lk
3	Franco M. Cabrerizo	Professor	National University of San Martín (UNSAM). National S&T Research Council (CONICET)	Argentina	fcabrerizo@intech.gov.ar
4	Encieh Erfani	Assistant Professor	Institute for Advanced Studies in Basic Sciences (IASBS)	Iran	erfani@iasbs.ac.ir
5	Sok Ching Cheong	Senior Group Leader	Cancer Research Malaysia	Malaysia	sokching,cheong@cancerresearch.my
6	Marvadeen Singh-Wilmot	Lecturer	University of the West Indies	Jamaica	marvadeen.singhwilmot@uwimona.edu.jm
7	Collet Dandara	Professor	University of Cape Town,	South Africa	Collet.dandara@uct.ac.za
8	Yusuf Baran	Professor	Izmir Institute of Technology	Turkey	ybaran@gmail.com
9	Bolanle Ojokoh	Associate Professor	Federal University of Technology, Akure	Nigeria	baojokoh@futa.edu.ng
10	Roula Abdel-Massih	Professor	Dept. of Biology, University of Balamand	Lebanon	roula.abdelmassih@balamand.edu.lb

11	Subhabrata Chakrabarti	Associate Director	L V Prasad Eye Institute, Hyderabad,	India	subho@lvpei.org
12	Kok-Keong Chong	Professor	Universiti Tunku Abdul Rahman	Malaysia	chongkk@utar.edu.my
13	Mauricio F. Erben	Professor	Universidad Nacional de La Plata	Argentina	erben@quimica.unlp.edu.ar
14	Jalila Ben Salah-Abbes	Associate Professor	Higher Institute of Biotechnology of Monastir, University of Monastir	Tunisia	Jalila.bensalah@yahoo.fr
15	Patricia Zancan	Associate Professor	Universidade Federal do Rio de Janeiro (UFRJ)	Brazil	pzancan@ufrj.br
16	Eva Acosta Rodríguez	Associate Professor - Independent Researcher	Universidad Nacional de Córdoba. CONICET.	Argentina	
17	Andrea Paula-Lima	Associate Professor	Universidad de Chile	Chile	acpaulalima@u.uchile.cl
18	Yraima Cordeiro	Associate Professor	Universidade Federal do Rio de Janeiro	Brazil	yraima@pharma.ufrj.br
19	Eugenie Kayitesi	Associate Professor	University of Pretoria	South Africa	eugenie.kayitesi@up.ac.za
20	Rolando A. Gittens	Research Engineer	Instituto de Investigaciones Científicas y Servicios de Alta Tecnología (INDICASAT AIP)	Panama	rgittens@indicat.org.pa
21	Amal Amin	Associate Professor	Nanostructured polymers-Center of Excellence- National research center - Cairo- Egypt	Egypt	aamin_07@yahoo.com
22	Haikel Jelassi	Professor	National Centre for Nuclear Science and Technologies	Tunisia	haikel.jelassi@gmail.com
23	Peter C. Okafor	Professor	University of Calabar	Nigeria	pcokafor@unical.edu.ng
24	Fathiah Zakham	Postdoctoral researcher	University of Helsinki	Finland	fathiah.zakham@gmail.com
25	Victorien Dougnon	Senior Lecturer	University of Abomey-Calavi	Benin	victorien.dougnon@gmail.com

26	Maher A Kamel	Professor	Alexandria University	Egypt	maher.kamel@alexu.edu.eg
27	Adejuwon Adewale ADENEYE	Professor	Lagos State University College of Medicine	Nigeria	adejuwon.adeneye@lasucom.edu.ng
28	Shymaa Enany	Associate Professor	Suez Canal University	Egypt	shymaa21@yahoo.com
29	Ronald Vargas	Professor / Researcher	National University of San Martín (UNSAM). Chascomus Technological Institute (INTECH). National S&T Research Council (CONICET)	Argentina	ronaldvargas@intech.gov.ar
30	Ahmed A. Al-Tabbakh	Assistant Professor	Al-Nahrain University	Iraq	tabbak2013@gmail.com
31	Federico D. Brown	Professor Doutor	Universidade de São Paulo	Brazil	fdbrown@usp.br
32	Karen Castillo	Researcher	Centro Interdisciplinario de Neurociencia de Valparaíso, Chile	Chile	karen.castillo@cinv.cl
33	Mauricio Calderón	Professor and researcher	Universidad Andres Bello (Santiago)	Chile	mccaldera@gmail.com
34	Ramesh Subramaniam	Professor	University of Malaya	Malaysia	ramesh@um.edu.my
35	Yin Li	Professor	Institute of Microbiology, Chinese Academy of Sciences	China	yli@im.ac.cn
36	Basanta Raj Adhikari	Assistant Professor	Institute of Engineering, Tribhuvan University, Nepal	Nepal	bradhikari@ioe.edu.np
37	Pablo González	Associate Professor	Pontificia Universidad Católica de Chile	Chile	pagonzalez@bio.puc.cl