

A diverse view of science to catalyse change

Valuing diversity leads to scientific excellence, the progress of science and, most importantly, it is simply the right thing to do. We must value diversity not only in words, but also in actions.

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Diversity, Equity, Inclusion

Diversity

(i) ethnic or national origins, skin colour or nationality, (ii) gender, gender identity and gender expression, (iii) sexual orientation, (iv) background (socio-economic status, immigration status or class), (v) religion or belief (including absence of belief), (vi) civil or marital status, (vii) pregnancy and maternity, paternity, parental leave and (viii) age and (ix) disability

Equity

The fair treatment, access and opportunity that leads to the advancement of all peoples. Improving equity means increasing justice and fairness within the processes of institutions or systems, as well as communication and sharing of resources.

Inclusion

The act of creating an environment in which any individual or group feels (i) welcomed, (ii) safe, (iii) supported, (iv) respected and (v) valued to participate.

Marginalized Scientists

Marginalized Scientists

Scientists who are at the periphery of social, economic and scientific discussions.

Implicit bias

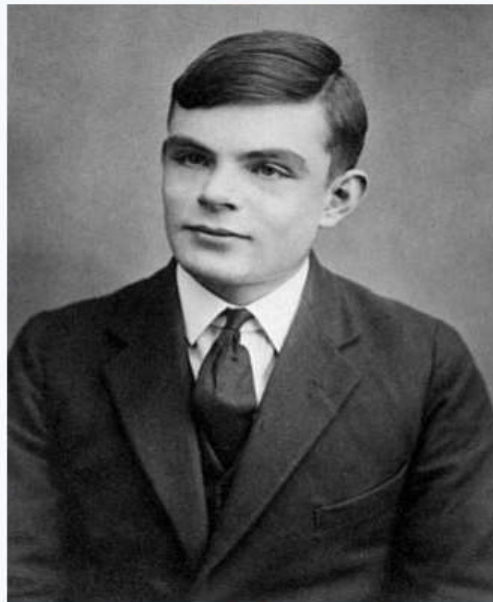
People are not neutral in judgement and behavior, but instead have experience-based associations and preferences or aversions without being consciously aware of them.

Rosalind Franklin



Contribution for
discovery of the
structure of DNA

Alan Turing
OBE FRS



Computer science and AI
(Turing Test)

Olga D. González-Sanabria



Batteries for
International Space Station

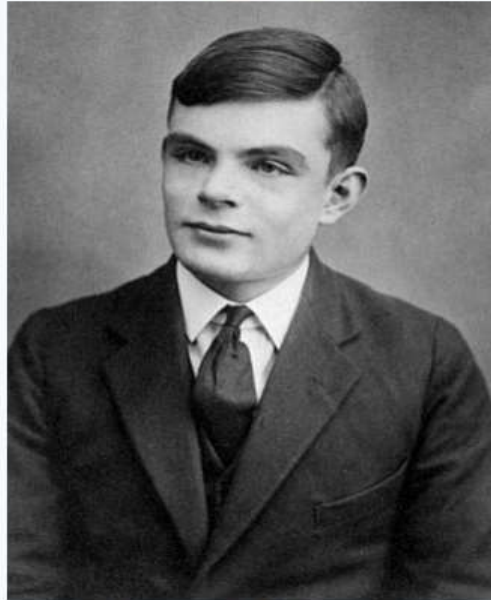
Marginalized Scientists

Rosalind Franklin



Gender bias: key contribution was not recognized, even it helped Watson and Crick won Nobel Prize

Alan Turing
OBE FRS



Convicted indecency by British government for homosexuality. Suicide

Olga D. González-Sanabria



Gender and Nationality bias

Being biased for not conform to the cultural expectations of how scientists should look and behave

Supporting Marginalized Scientists

FOR

(i) Current and future scientists, (ii) students, mentors and educators, (iii) science communicators, (iv) publishers and (v) science policy makers.

NEED TO

- (1) Provide marginalized scientists and their allies with a space to talk about their approach towards scientific advancement, mentorship and how to challenge systemic injustice
- (2) Provide actionable advice to implement equity in academia and related businesses and organizations.

Supporting Marginalized Scientists

Mentorship

Supporting the personal and professional growth, development and success of scientists through the provision of career and mental-health advice.

Online peer communities

Scientists can increase their visibility and use their platform to promote marginalized colleagues.

Financial support

Scientists and scientific organizations need to create and promote equitable financial aid opportunities that support marginalized scientists in career development and be mindful of the costs of participating in networking events.

Effective inclusion and diversity support

These systems can identify, and address the negative experiences of marginalized researchers

Recognizing the work of marginalized scientists

(i) Reading their work, (ii) engaging in their discoveries, (iii) cooperating in joint research projects, (iv) citing their work and (v) nominating them for leadership positions and awards

Summary

All scientists can contribute to reducing the impact of implicit bias by accepting, learning, and identifying their own biases through active and continuous self-assessment.

Reducing the inequalities in STEM requires a data-based, holistic approach to DEI. We all need to become advocates of marginalized scientists and give them equitable opportunities to advance their careers because it is ultimately the right thing to do. Additionally, the result will not only be a broader pool of future talents, but also an unprecedented level of excellence that a more colourful and inclusive scientific community can attain.