
Belonging in Bioinformatics

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 Computational biologist

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 Pronouns: They/She

 Research interests: Long Read
Sequencing Technologies

Overview

- What does “diversity” and “inclusion” mean?
 - Obstacles
 - Important Initiatives
 - Actionable Tasks
 - Reading Material
-

Addressing Racism

Seat at the table

Addressing
implicit biases

Dismantling
harmful structures

Being actively
anti-racist

Hurdle

Addressing racism
compromises high standards

Ignoring
ethical and societal
implications of
bioinformatics analyses

What To Do

rm -rf harmful
standards and expectations

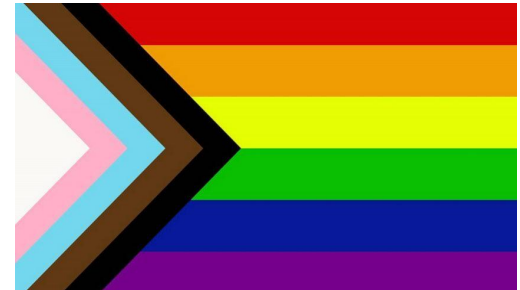
Communicate with people,
and collaborate with
researchers outside your field

Addressing Equity

- Understand that everyone has different needs
- **Everyone** has **access** to **what they need**
- Everyone can participate and contribute without a worry of prejudice and stigma.



Source: lhheblog.files.wordpress.com/2018/01/final-image-diverse-people.jpg



Pride Flag by Daniel Quasar

Hurdle

Focus on hiring and
forget about **retention**

What To Do

- ❑ Mentorship
 - ❑ Career advancement
 - ❑ Financial support
 - ❑ Networking opportunities
-

Lack of **regular** recognition and appreciation

Core services: Reward bioinformaticians

Jeffrey Chang

08 April 2015

Biological data will continue to pile up unless those who analyse it are recognized as creative collaborators in need of career paths, says Jeffrey Chang.



PDF



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Subject terms: [Computational biology and bioinformatics](#) • [Research management](#) • [Careers](#)



Illustration by Paul Blow

- ❑ Touch-base meetings
- ❑ Regular feedback
- ❑ Non-work related meetings





Community-Building Initiatives



- The Black Women in Computational Biology Network
- Website: blackwomencompbio.org
- Twitter: [@blkwomencompbio](https://twitter.com/blkwomencompbio)

- Women in Bioinformatics & Data Science LA
- Website: womenbioinfodatascla.github.io
- Twitter: [@BioinfoLa](https://twitter.com/BioinfoLa)

- Indigenous Voice in Computational Biology (Webinar Series)
- Website: bit.ly/2IFcTzK



Take-Away:

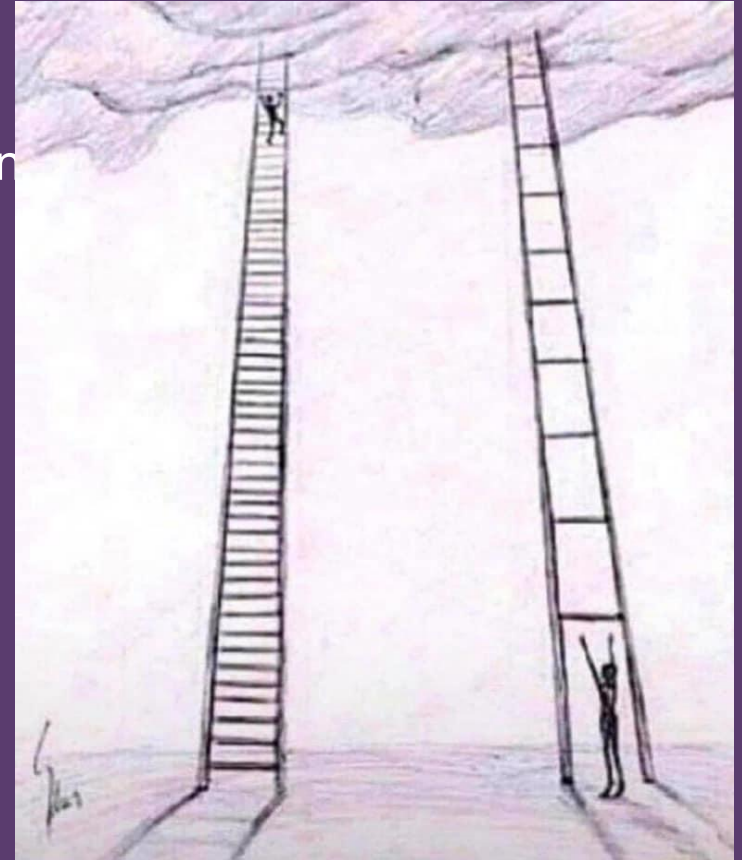
- ❖ **Language matters**
 - ❖ Avoid sugar-coating
 - ❖ Replace diversity with **racism** and inclusion with **equity**
- ❖ **Discrimination is not always overt.**
- ❖ **Reflect on personal actions**
 - ❖ Address ~~unconscious biases~~: unaddressed conscious biases
 - ❖ Prioritise self-education

❖ **Build a relationship**

- Provide support and encouragement with confidence.
- Create psychological safety.

❖ **Amplify students and researchers working in Low Middle Income Countries (LMICs)**

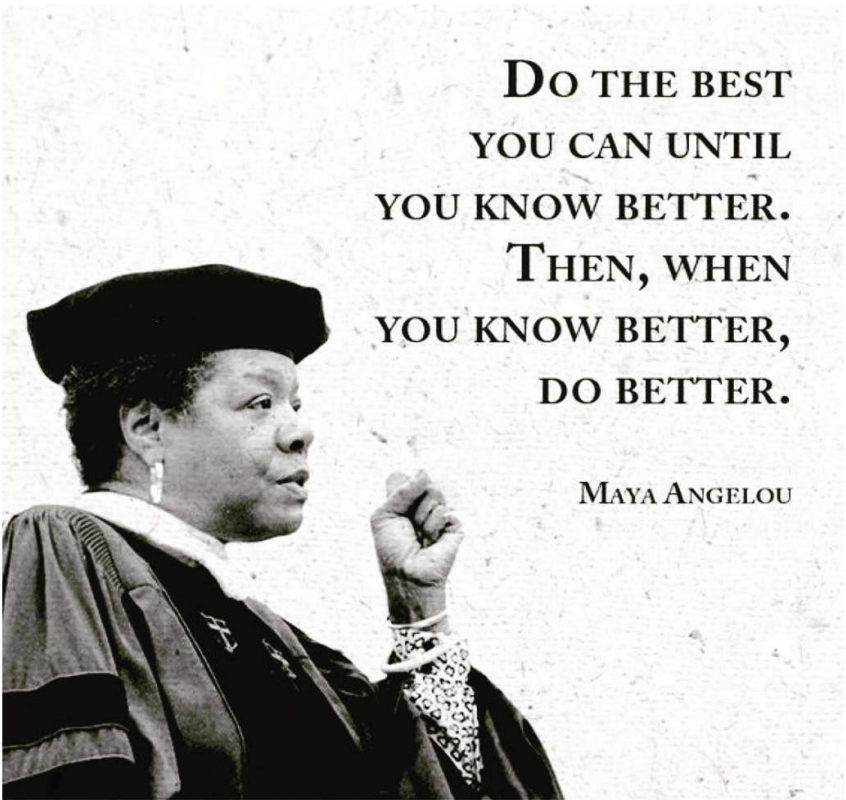
❖ **Collaborate and share resources with people in LMICs**





Recommended Readings:

- ❖ **Ten Simple Rules for Building an Anti-Racist Lab**
by Dr. Bala Chaudhary & Professor Asmeret Asefaw Berhe – journal.pcbi.1008210
 - ❖ **Lessons from Microbes: What Can We Learn about Equity from Unculturable Bacteria?** by Dr. Brendon L. Montgomery – t.co/kuPGFxjVo7
 - ❖ **To learn inclusion skills, make it personal** by Professor David Asai – nature.com/articles/d41586-019-00282-y
 - ❖ **Redesign open science for Asia, Africa and Latin America** – go.nature.com/2UmUJoW
 - ❖ **The Diversity–Innovation Paradox in Science**
by Hofstra, Kulkarni, et al (2020) – pnas.org/content/117/17/9284
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DO THE BEST
YOU CAN UNTIL
YOU KNOW BETTER.
THEN, WHEN
YOU KNOW BETTER,
DO BETTER.

MAYA ANGELOU

Thank You



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github.com/Nazeefa/bioinfo_nf
