## **Belonging in Bioinformatics**

Nazeefa Fatima





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Computational biologist

🏠 Uppsala, Sweden 📙

Pronouns: They/She

Research interests: Long Read Sequencing Technologies

### Overview

- What does "diversity and inclusion" mean?
- Obstacles
- Actionable Tasks
- Reading Material

Addressing Racism

Dismantling harmful structures

Being actively anti-racist

Seat at the table

Addressing implicit biases

#### Hurdle

## What To Do

Addressing racism compromises high standards

rm -rf harmful standards and expectations

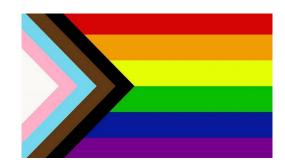
Ignoring
ethical and societal
implications of
bioinformatics analyses

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

Pride Flag by Daniel Quasar

#### Hurdle

#### What To Do

Focus on hiring and forget about **retention** 

- 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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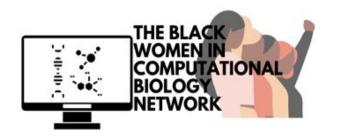
Subject terms: Computational biology and bioinformatics • Research management • Careers



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



# Community-Building Initiatives







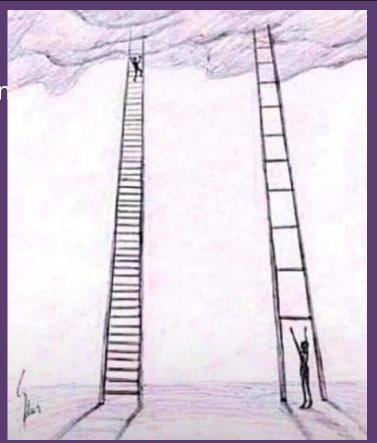
- → The Black Women in Computational Biology Network
- → Website: blackwomencompbio.org
- → Twitter: @blkwomencompbio
- → Women in Bioinformatics & Data Science LA
- → Website: womenbioinfodatascla.github.io
- → Twitter: @BioinfoLa
  - → Indigenous Voice in Computational Biology (Webinar Series)
- → Website: **bit.ly/2IFcTzK**



- 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

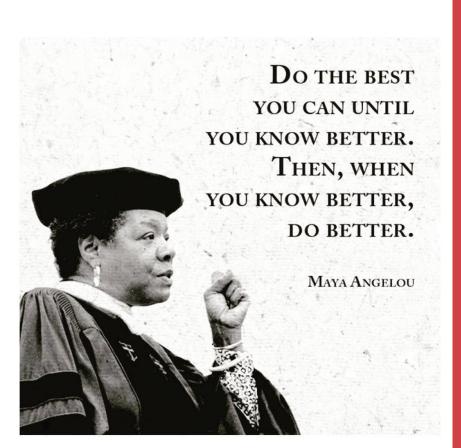
- Provide support and encouragement with confidence.
- Create psychological safety.
- Amplify students and researchers working in Low Middle Income Countries (LMICs)
- Collaborate and share resources with people in LMICs





#### **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



## **Thank You**

灯 Twitter: @\_nazeefatima

linkedin.com/in/nazeefafatima

github.com/Nazeeefa/bioinfo\_nf