Definitions of various types of bias

**GENDER BIAS**

Gender bias refers to a person receiving different treatment based on the person’s real or perceived gender identity.

**IMPLICIT RACIAL OR ETHNIC BIAS**

Implicit racism is an automatic negative reaction to someone of a different race or ethnicity than one’s own. Underlying and unconscious racist attitudes are brought forth when a person is faced with race-related triggers, including preconceived phenotypic differences, or assumed cultural or environmental associations.

**INSTITUTIONAL BIAS**

Institutional bias refers to bias that occurs due to the reputation of the institution - the size, type, or location of the institution or prior research conducted by that institution.

**AGEISM**

Ageism is the tendency to have negative feelings about another person based on their age.

**CRONYISM**

Cronyism is a type of favoritism - favoring a person not because they are doing the best job but rather because of some extraneous feature, like membership in a favored group, personal likes and dislikes, etc. Cronyism is a more specific form of favoritism, referring to partiality towards friends and associates. Studies have shown that prior affiliation with a reviewer considerably increased a researcher’s chances of funding, and that panel debate may fail to counter crude forms of cronyism since panels often cover a wide area of research, and each specific area is only represented by a few experts, so the other members may defer to the experts’ knowledge. Members of funding panels may also benefit directly from their membership. One study noted that panel members submit more applications and have more grant awards.

**INNOVATION BIAS**

Like confirmation bias, this involves ignoring aspects of a scenario that disagree with past experiences and highlighting aspects that already agree with us. Something that says, ‘Stick with the old, distrust the new’. Numerous studies have shown that innovative proposals may have less preceding work supporting them, and hence receive less praise from reviewers. Innovative proposals from young researchers may suffer a ‘double disadvantage’: lacking previous work, both because of their novelty and the researcher’s shorter track record.

Risk aversion may also affect the preparation of applications, as one study suggested that falling success rates leads to conservatism because of the perceived increased risk associated with innovative proposals.
EXPERTISE BIAS

Reviewers with more expertise in the applicant’s field are likely harsher with their evaluations, even on work that is highly innovative.

CONSERVATISM BIAS

Conservatism bias occurs when people maintain their prior view without properly incorporating new information. It is very similar to Anchoring Bias, such that people are over-reliant on the first piece of information they hear. You consider your original opinion and the information that formed to be quite meaningful, but new information learned after the opinion has been formed is not as important. The consequence of this is that likely you acted based in old information but aren’t willing to take action on new information that may conflict with it.

With respect to peer review, this can be seen as low support for innovative research, as the peer review process leans more strongly towards incremental research and discourages research into unexplored approaches.

CONFIRMATION BIAS

Confirmation bias is the tendency to search for, interpret, favor, and recall information in a way that confirms or supports one’s prior beliefs or values. It is an important type of cognitive bias that has a significant effect on the proper functioning of society by distorting evidence-based decision-making. People display this bias when they gather or remember information selectively, or when they interpret it in a biased way. For example, a person may cherry-pick empirical data that supports one's belief, ignoring the remainder of the data that is not supportive. People also tend to interpret ambiguous evidence as supporting their existing position.

OTHER:

AFFINITY BIAS

Affinity bias, also known as similarity bias, is the tendency people have to connect with others who share similar interests, experiences, and backgrounds.

ANCHORING BIAS

The anchoring bias is similar to both the halo and horn bias – this is the tendency to rely too heavily on one trait or a SINGLE piece of information.

THE HALO EFFECT

The halo effect is the tendency people have to place another person on a pedestal after learning something impressive about them. The opposite of the Halo Effect is the Horn Effect – this is an unconscious bias which causes the perception of an individual to be unfairly influenced by a single negative trait – for example, if an individual uses a particular phrase that we don’t like, we may subsequently begin disliking a lot of the things they say as a result.
NAME BIAS

Name bias is the tendency people have to judge and prefer people with certain types of names — typically names that are of Anglo origin.