**Strategies to Reduce Stereotype Threat\***

**Level the playing field** – convey high standards and assure students that they have the ability to meet these standards; frame any critical feedback that is given as reflective of the high standards and your confidence that the student can meet those standards (Cohen and others, 1999; Cohen and Steele, 2002). Also, indicate that an effort has been made to avoid or eliminate gender, ethnic, and cultural bias in examinations.

**Educate about false STEM stereotypes** – for example, the falsehood that women have greater difficulty with spatial and quantitative reasoning than men (Johns and others, 2005).

**Facilitate cross-group interactions** – design class activities which promote interaction between genders and minorities, including assigning students to lab and field groups rather than allowing self-selection (Mendoza-Denton and Page-Gould, 2008; Steele, 1997; Walton and Carr, 2012); jigsaw exercises can be an especially effective technique for accomplishing this (Aronson and Patnoe, 1997; Cohen, 1994).

**Replicate the Obama Effect** – that is, seeing an example of someone who defies common stereotypes (Marx and others, 2009; Aronson and others, 2009). This can be accomplished by including pictures of geoscientists from stereotyped groups (e.g. women, people of color) in lectures, videos, and other course material (Murphy and others, 2007; Beilock, 2010), and by providing web links to biographical information and videos of stereotyped groups, including successful former 2YC students.

**Provide students with information to manage stress** – see handout adapted from Beilock (2010)

**Promote a growth mindset regarding intelligence** – teach students that their brain is like a muscle, its functioning improves with exercise – new neurons develop and new neural pathways can form; intelligence is not fixed, but can grow with effort (Aronson and others, 2002; Blackwell and others, 2007)

**Encourage values affirmation** – have students reflect on their core personal values and their many skills, then write about them; affirmations are especially useful before high-stakes assessments (Cohen and others, 2006; Martens and others, 2006; Miyake and others, 2010).

**Support students sense of belonging** – teach students that worries about belonging in college are normal, not unique to them or their group, and will dissipate with time (Walton and Cohen, 2007, 2011).

**Remove potential triggers** – avoid asking students to report a negatively stereotyped group identity immediately before taking a test (Steel and Aronson, 1995; Danaher and Crandall, 2008).

\*Adapted from “Empirically Validated Strategies to Reduce Stereotype Threat” compiled by Greg Walton, Geoff Cohen, and Claude Steele in May, 2012. (http://www.stanford.edu/~gwalton/home/Welcome\_files/StrategiesToReduceStereotypeThreat.pdf).