

CHANGING YOUR BRAIN

THAYER ROBINS



# Balance your body to heal your brain

PART 2 OF 4

## Exercise body and brain by challenging your balance

Stimulating your balance system on a regular basis is vital for your ability to stay upright. That's easy to understand. What's less apparent is how stimulating balance helps maintain the health of numerous brain and sensory systems, and your entire voluntary muscle system.

To clarify why this is so, let's take a quick look at the two-step process our balance system uses to keep us upright.

### Step 1: Input and Analysis

Our brain receives balance information from three primary sources: vision; vestibular organs (which reside in our inner ears); and proprioception, a sensory system that tells your brain where the various parts of your body are located and how they are being affected by gravity.

Our brains are constantly coordinating and analyzing these inputs, determining the current state of our balance and whether any adjustments are needed.

When one of these inputs is weak, the brain can ramp up the others a bit to compensate. But only in the case of loss of vision can the brain, on its own, come close to normal balance with just two of these inputs.

Though the importance of these three primary inputs is not in question, researchers are finding other mechanisms that contribute to our perception of balance, and thus are stimulated when we stimulate balance.

For example, the tongue plays a significant enough role that it can be

used to retrain balance in cases where all but a small percentage of the vestibular mechanism is damaged.

### Step 2: Muscular Correction

Obviously, determining we are off-balance and about to fall is not enough. The next step involves exercising control over our voluntary muscles—our only mechanism for correction.

For this mechanism to work, the brain must have clear, unimpeded communication with those muscles able to make the needed corrections, and each muscle must be working well enough to respond quickly and with just the right amount of force.

Ideally, the brain has every muscle in your body "online" and ready to make adjustments. The fewer muscles your brain has available for this purpose, the more difficult it will be to make the needed corrections, and the greater the strain on both the brain and the muscular system.

Both of these two steps (input and analysis, and muscular correction) need regular stimulation in order to achieve and maintain healthy function. By giving them this stimulation, you're also contributing to the health of the numerous systems involved.

Because of this, a program of appropriate balance exercises can make a powerful contribution to overall brain and body health.

*For more on balance and brain function, look for past columns at <https://medium.com/laney-tower> (click "Resources").*

# BOSS fetes graduates



Building Opportunities for Self-Sufficiency (BOSS) honors graduates of its Career Training and Employment Center (CTEC) at the First Unitarian Church. (Photo by Thomas Millins)

"The CTEC program has exceeded BOSS's expectations . . . because of the quality of life changes BOSS has seen among the men, women, families, and community being served," said emcee Arnold Perkins at the graduation Oct. 26 in Oakland.

CTEC partners with the Alameda County Probation Department with the goal of helping citizens returning from incarceration find jobs and reduce prison recidivism.

Special guests included Rep.

Barbara Lee, Oakland Mayor Libby Schaaf, State Sen. Nancy Skinner, and motivational speaker Kemba Smith. The 84 graduates of the CTEC education and training curriculum are now employed in the community, according to a BOSS official.

The Oakland Interfaith Gospel Choir performed following remarks by BOSS Executive Director Donald Frazier. For more information on BOSS and CTEC, go to [self-sufficiency.org](http://self-sufficiency.org).

## EVENTS CALENDAR

**JOB FAIR**  
NOV. 13 / 11:30 AM - 1 PM

**Laney Tower, Room T-201**  
Have questions about where to find a job? Want to check out available openings? Discover some of the opportunities open to students at the Laney Employment Service's annual Job Fair! Company reps will be present to answer any questions.

**CAL STATE APPLICATION WORKSHOP**  
NOV. 13 / NOON - 1 PM

**Laney Transfer Center Room T-201**  
Join a representative from California State University of the East Bay for a presentation of the application process to Cal State schools.

**MASS MEDIA GUEST SPEAKERS**  
NOV. 15 / 2:30 PM - 3:45 PM

**Laney College, Room B-265**  
KPFA radio producer of "UpFront" Corinne Smith and intern/researcher/producer Justin Gold will speak at the Survey of Mass Media class about the listener-sponsored station and its role in alternative media. Contact Burt Dragin at [bdragin@peralta.edu](mailto:bdragin@peralta.edu) for more info.

**UC APPLICATION WORKSHOP**  
NOV. 20 / NOON - 1 PM

**Laney Transfer Center Room T-201**  
Join a representative of the University of California, Davis in a presentation of the application process for UC schools.

**QUEER BRUNCH**  
NOV. 21 / 10 AM - 1 PM

**Student Center, Room 401, 4th Floor**  
Join us on the 3rd Wednesday every month to enjoy another day of free brunch! Many varieties of pastries as well as coffee, juice and yogurt will be available. All are courtesy of the Laney Culinary Department team!

**ECO ART MATTERS GALLERY EXHIBIT**  
NOV. 21 / NOON - 5 PM

**June Steingart Gallery**  
Join us for the opening of the Eco Art Matters Class Exhibition. The exhibit runs through Dec. 12 and features artwork made by the students of the Eco Arts Program. The gallery is located in the lobby of the Tower building

**LANEY QUEERS OFF THE GRID**  
NOV. 23 / 5 PM

**Laney College flagpole**  
Meet us at the flagpole in front of Laney at 5 p.m. every fourth Friday for OMCA's Off the Grid! Admission to OMCA is free for Laney students with ID, so please remember to bring your student ID with you!

**MANUFACTURING JOB FAIR**  
NOV. 27 / 3:30 PM - 5:30 PM

**Laney College Student Center**  
Want to learn about getting a job in the Trade/Advance Manufacturing Industry? Laney Employment Services is Hosting a Trade/Advance Manufacturing Job Fair. Questions? Email [eaglehirejobs@peralta.edu](mailto:eaglehirejobs@peralta.edu)

**LINKEDIN WORKSHOP**  
NOV. 28 / 11 AM - NOON

**Laney Tower, Room T-201**  
The Employment Services Center is hosting a LinkedIn Workshop. Want to find out what is LinkedIn and its purpose? Come to the fair to learn how to use the platform to help your future career. Questions? Email [eaglehirejobs@peralta.edu](mailto:eaglehirejobs@peralta.edu)

**POW-WOW**  
DEC. 1 / 10 AM - 10 PM

**Laney Gymnasium**  
Join the American Indian Child Resource Center and Master of Ceremonies Tom Phillips as they honor the legacies of Mary Ann Greycloud, Jacquelyne Arrowsmith and Michael Smith with Native American dancing, singing, arts, crafts, food, raffle prizes and a

**INTERNSHIP FAIR**  
DEC. 3 / 11 AM - 1 PM

**Laney Tower Lobby**  
Looking for an internship to help boost your resume? Want to gain experience in working in your field of interest? Come to the Laney Employment Services' Internship Fair. Questions? Email [eaglehirejobs@peralta.edu](mailto:eaglehirejobs@peralta.edu)

### The Tower seeks

- >Correspondents
- >Photographers
- >Ad sales (earn commission)

For details, contact Burt Dragin at [bdragin@peralta.edu](mailto:bdragin@peralta.edu) or phone 510.464.3459