

# LeapFrog Plumbing



**Got gas?** Many people think plumbers deal only with water and sewage. Not true! We install and repair all types of gas lines and fixtures too.

**Mo's sizzling summer specials...**

- Outdoor kitchens
- New gas lines for cooktops and dryers
- Fire pits & patio heaters
- Pool heaters & hot tubs
- Natural gas barbecues

We're polypipe certified (used by PG&E - better than iron)



**LeapFrog Loot \$25 off**  
Any plumbing job\*

**LeapFrog Loot \$100 off**  
Gas line installation over \$600\*

**LeapFrog Loot \$150 off**  
Tankless water heater installation\*

\*1 coupon per service, exp. 7/31/15

**We Hop To It!**

Family-owned and serving Lamorinda since 1993

green solutions!

(925) **377-6600**

www.LeapFrogPlumbing.com

CA Lic 929641



# Video Games and Neuroscience

Brain training health care in the digital age discussed at LLC

By Lou Fancher

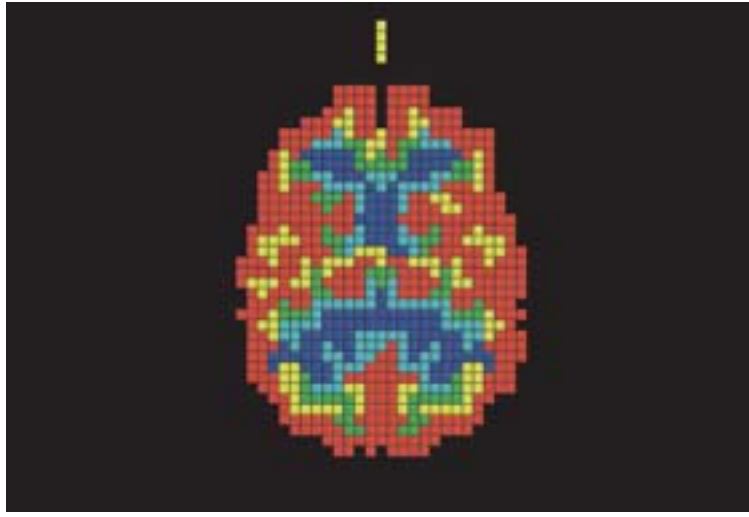


Illustration by Jennifer Daniel

In the not-too-distant future, a doctor's prescription might read like this: Take one-half the usual dose of pharmaceutical and apply 30 minutes of video gaming, daily.

Sound like a digital fantasy? It's not.

At a Commonwealth Club at the Lafayette Library and Learning Center on June 10, neurologist Adam Gazzaley presented an audience of approximately 100 people with a futuristic vision of brain training health care in the digital age.

The UCSF professor of neurology, physiology and psychiatry and director of the university's Neuroscience Imaging Center spends his

days developing video games – or traveling worldwide to show people the mind-bending work performed in his Gazzaley Lab.

Humans have long sought out high-level results in the physical fitness realm. There's endless equipment to build the body's endurance, flexibility, balance and power. Gazzaley says cognitive training equipment is "tragically lacking" and education is based on transferring information to the brain, not increasing the brain's power. Combating the effects of aging, disease and mental disabilities has been largely left to medication.

"We've been siloed into answering (mental health) needs with pharmaceuticals," Gazzaley said.

In his lab, scientists are working to prototype targeted, personalized, multimodal, closed-loop video games that harness the brain's neuroplasticity and boost desired outcomes for attention, focus and memory. The games are an ideal method for activating the brain selectively and providing feedback in the form of data. Able to adjust adaptively as EEG, heart rate, MRI imaging and other monitoring systems that evaluate a gamer's mental activity, video games can signal that a gamer's skill level is improving and boost the complexities for maximum results. Specific deficit areas in the brain can be targeted for therapeutic digital stimulation that a pill's blanket approach – impacting all regions of the brain instead of selectively – can't begin to imitate.

"We can use technology to literally fly through your brain and see how it's functioning while you're interacting with something," Gazzaley said.

Neuroracer – a game not commercially available but developed and used in his lab – enhances older adults' working memory and function. "Older adults (up to age 80) who trained on it had their multitasking mode improve even above that of 20-

year-olds," Gazzaley said, referring to ground-breaking results published in the journal Nature in 2013.

But to build a consumer product, a video game has to be scalable for mass distribution. Founding Akili, a consumer-focused spinoff for which he now is chief neurological advisor, Gazzaley says the company is trying to get their brain training video games approved to compete with medicines prescribed for attention deficit disorders.

The effort may some day lead to games targeting MS, Parkinson's, autism, PTSD, ADD, Alzheimer's and a host of other brain impairments impacting people of different ages. Gazzaley gave a peek into the possibilities, describing "Meditrain," a meditation/video cross blend; "Rhythmicity," a game tapping into the music therapy domain; "Virtual Attention," aimed at distributing attention more broadly; and "Body-Brain Trainer," a game using motion capture that challenges a gamer both physically and cognitively.

KQED journalist and moderator Christina Farr asked Gazzaley if he'd been a hard core gamer as a child and tried repeatedly to get him to make "best video games for brain training" recommendations.

Gazzaley wasn't having any of it, and said that scientists need to "slow down" the hype about brain games. "We need to figure out what really works. It's very exciting, but I'd hate to see the baby thrown out with the bath water. We need to move the excitement back to the science."

Big pharmaceutical and insurance companies, the gaming community and medical professionals are interested in supporting the research. Gazzaley said that when Akili started raising funds, the first over-one-million dollar checks came from two Big Pharma companies. Even Google and Apple are jumping into the digital medicine pool and developing health care products and divisions, Gazzaley said.

Asked about addiction, a primary consumer concern with video games, he said gaming is just one aspect of a healthy lifestyle. "Technology has opened potential for us, but it's the most vulnerable information stream. If you're in control of your environment, it's not unreasonable to set aside technology and learn how to engage with one thing at a time." And for gamers who just can't stop, Gazzaley's lab is working on that problem too; designing games that lock out at the exact moment a game becomes addictive.



"Nothing makes me happier than to see you smile!"

- Comfortable, Convenient Family and Cosmetic Dentistry
- Certified in Full Mouth Reconstruction
- Preferred Provider for Invisalign
- Always accepting new patients of any age

like us on

## Family & Cosmetic Dentistry

Providing Personalized Care through Quality Dentistry

**Scott D. Lothamer, DDS**  
Moraga  
925-376-4602  
1030 Country Club Drive  
moragadental.com

**\$40 off**

mention this ad to receive \$40 off any dental treatment  
Exp. 7-31-15

Member:  
ADA • CDA • CCDS • AACD



Moving? Cleaning? Getting Organized? 5A's here to help!

**5A has 15% OFF packing supplies + Summer storage prices**



We've Got A Special Deal... a 15% Discount On All Boxes & Packing Supplies!

15% off as many boxes & packing supplies as you need...including specialty boxes, dish packs and inserts, wardrobe boxes, tape & all box sizes in stock!

Check out our Summer storage prices & rent on-line...5Aspace.com



Use our van FREE to move in when you rent a unit!

Connect with 5A, we'd love to hear from you!



Special discounts on packing supplies and boxes ends August 30<sup>th</sup>, 2015



Ask for your Neighborhood Coupons when you come visit us!



455 MORAGA ROAD, SUITE F  
(925) 631-7000  
WWW.5ASPACE.COM

# Diablo Ballet's 'Dance on Film' Series Continues at Lafayette Library

By Diane Claytor

Four years ago, Diablo Ballet, headquartered in Walnut Creek, collaborated with the Lafayette Library to bring older, timeless movies featuring music and dance to local audiences during the summer months. The "Dance on Film" series proved to be popular and this month viewers will have the rare opportunity to see a true classic. According to Lauren Jonas, Artistic Director of Diablo Ballet, audiences seem to prefer movies from the 1930s and '40s, the movies that our parents often referred to as real entertainment.

Last month, attendees saw a very young and very dapper Gene Kelly alongside an even younger and very handsome Frank Sinatra in "Anchors Aweigh," a 1945 musical comedy. As a special treat to that audience, longtime Moraga resident and local actress, Kathy Ferber, revealed that her mother, Pamela Britton, had a feature role in the movie, playing the Girl from Brooklyn. Ferber brought photos and told stories from the filming that her mother had shared with her.

On July 14, you can return to the days of yore when viewing "Top Hat," starring the incomparable Fred Astaire and Ginger Rogers (watch carefully and you'll see Lucille Ball in a bit part as the flower shop clerk). Two of the songs written by Irving Berlin – "Top Hat, White Tie and Tails" and "Cheek to Cheek" – have become American classics, and Astaire's tap solo in "Top Hat, White Tie and Tails" is often considered his most celebrated.

"Top Hat" was made in 1935 and is, according to filmsite.org, "one of the great '30s dance musicals, and possibly the best, most characteristic ... Fred Astaire and Ginger Rogers musical ever, with wonderful, magical dance and song numbers." In 1990, Top Hat was selected for preservation in the United States National Film Registry by the Library of Congress as being "culturally, historically, or aesthetically significant." The film ranked number 15 on the 2006 American Film Institute's list of best musicals.

... continued on next page