Science News: Brain organoids grown from stem cells offer window into workings of the human mind

(Photo: Novitch Labs/Cell Reports)
How to build a human brain

Science News published an in-depth look at a new technique for growing three-dimensional brain organoids from stem cells. These organoids offer an unprecedented level of access into the inner workings of the human brain and have been used to identify drugs that could protect brain cells from damage linked to the Zika virus. The featured research is led by Bennett Novitch, the Ethel Scheibel Chair of Neuroscience and a professor of neurobiology in the David Geffen School of Medicine at UCLA; he is also a member of the Eli and Edythe Broad Center of Regenerative Medicine and Stem Cell Research at UCLA. Novitch was quoted.

It's time to get serious about a universal flu vaccine

In his most recent column for U.S. News & World Report, Dr. Jonathan Fielding, professor-in-residence at the UCLA Fielding School of Public Health, discusses the urgent need for
government funding to help develop a universal flu vaccine in light of a seasonal flu outbreak claiming thousands of lives nationwide.

**What’s the mind-gut connection and how did it evolve?**

*Psychiatric Times* featured Dr. Emeran Mayer, director of the G. Oppenheimer Center for Neurobiology of Stress and Resilience and co-director of the CURE: Digestive Diseases Research Center, in a podcast about the connection between the mind and the gut.

**Canine cupids deliver in Santa Monica**

*The Santa Monica Mirror* and Santa Monica Daily Press published front-page montages of patients in Santa Monica’s pediatric unit receiving handmade valentines delivered by therapy dogs and volunteers from the People-Animal-Connection.

**UCLA expert offers guidance in helping kids cope with traumatic events**

*KTLA-TV* featured Melissa Brymer, the director of terrorism and disaster programs at the UCLA-Duke National Center for Child-Traumatic Stress, in a segment about helping children move forward in the aftermath of a school shooting.

**New study aims to improve HPV vaccine rates among Latino teens**

*California Health Report* described a new study led by Roshan Bastani, professor of health policy and management at the UCLA Fielding School of Public Health, that will investigate methods to increase the number of Latino teenagers who get vaccinated against the human papillomavirus (HPV). Bastani was quoted.

**Newly discovered gene may protect against heart disease**

*Cardiovascular Business*, *IncRNABlog*, *IANS Wire*, *Drug Target Review* and *Christian Today* reported on the discovery of a gene that may play a protective role in preventing heart disease. The research revealed that the gene, called MeXis, helps remove excess cholesterol from blood vessels. Senior author Dr. Peter Tontonoz, the Frances and Albert Piansky Professor of Pathology and Laboratory Medicine, and lead author Dr. Tamer Sallam, an assistant professor in the department of medicine and co-director of the UCLA Center for Cholesterol Management, were quoted.

**Age matters behind the wheel – but not how you might expect**

*Phys.org* covered a UCLA study evaluating novice drivers’ skills. The authors found that male teens perform better behind the wheel than men learning to drive at an older age, suggesting that training be required for new drivers of all ages. Nancy Wayne, UCLA associate vice chancellor for research and a professor of physiology, led the research, which was published in PLOS One.

**Santa Monica Nurse featured in national story**

*Kaiser Health News* featured Lauren Bond, a traveling nurse in the pediatrics unit at UCLA Medical Center, Santa Monica, in an article exploring why nurses must pass licensing exams in each new state they work in. *USAToday.com* and *California Healthline* also published the story.

**Nurses have influential role in promoting heart health**

*Nurse.com* featured Jo-Ann Eastwood, an associate professor at the UCLA School of Nursing, in an interview about the important role that nurses play in cardiac health.

**Colorful research yields insights into heart development**
Cath Lab Digest reported on a UCLA study that used fluorescent-colored proteins to trace how cardiomyocytes — cells in heart muscle that enable it to pump blood — are produced in mouse embryos. The findings from this research, led by Dr. Reza Ardehali, an associate professor of medicine in UCLA’s division of cardiology and a member of the Eli and Edythe Broad Center of Regenerative Medicine and Stem Cell Research, could eventually lead to methods for regenerating heart tissue in human adults. Ardehali and first author Ngoc Nguyen were quoted.

**Brain scans and machine learning predict OCD therapy outcomes**
Health Care Business, PsychCentral and Brinkwire featured Dr. Jamie Feusner, a professor-in-residence in the department of psychiatry and biobehavioral sciences at UCLA’s Semel Institute, and Nicco Reggente, a UCLA doctoral student, in articles about research using brain scans and a form of artificial intelligence to predict which people with obsessive-compulsive disorder could benefit from cognitive-behavioral therapy.

**Continued media interest in Depression Grand Challenge**
WFMZ-TV, Philadelphia, Pennsylvania, covered the UCLA campus-wide initiative called the Depression Grand Challenge, an effort to transform how depression is treated, starting with voluntary screening of UCLA’s own students. Dr. Nelson Freimer, director of the Center for Neurobehavioral Genetics at UCLA’s Semel Institute for Neuroscience and Human Behavior, and Dr. Jonathan Flint, a professor of psychiatry and biobehavioral sciences at UCLA and a senior scientist at Semel’s Center for Neurobehavioral Genetics, commented.

**This week on “Ask the Doctors”**
UCLA Health internists Dr. Robert Ashley, Dr. Eve Glazier and Dr. Elizabeth Ko address health-related questions in the recurring “Ask the Doctors” column, syndicated by more than 50 outlets nationwide. A sampling of the stories from this past week’s column:
- On the perils of too much sitting, featured in the Virgin Islands Daily News
- On patient-doctor communication, featured in Hanford, California’s, The Sentinel
- On teething devices and portion control, in Park Hills, Missouri’s, Daily Journal Online
- On C. difficile and sugar substitutes, featured in Roseburg, Oregon’s, The News-Review
- On lymphedema, featuring in Kittanning, Pennsylvania’s, Leader Times
- On supplements for bone health, featured in Thailand’s Bangkok Post.

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**QUOTED**
“Traditionally, TB is a concern among the homeless due to crowded living conditions and comorbid conditions like diabetes, smoking and substance use. Rates of TB in homeless persons in Los Angeles, for example, are about 100 cases per 100,000 population, more than 30 times the national average.”

-Dr. Jeffrey Klausner in Healio: Infectious Disease News

Dr. Rena Callahan, hematologist/oncologist with UCLA Health practices in Santa Monica and Santa Clarita and an assistant clinical professor, commented in a Business Insider.com article and video about the evolution of human breasts.

Dr. Jeffrey Klausner, professor of medicine in the division of infectious diseases at the David Geffen School of Medicine at UCLA and of public health at the UCLA Fielding School of Public health, was quoted in Healio: Infectious Disease News about ways that infectious disease specialists are reaching out to homeless populations.

Dr. Michael Ong, an associate professor of medicine in residence at UCLA, commented in a Reuters Health article about a study that ties cigars and pipes to the same risks as cigarettes.

Dr. Carlos Portera-Cailliau, an associate professor of neurobiology and neurology, commented in Spectrum News about a new gene-editing tool that may speed the identification of gene function.

Dr. Gary Small, director of geriatric psychiatry at UCLA's Longevity Center and of the geriatric psychiatry division at the Semel Institute for Neuroscience and Human Behavior at UCLA, commented in Woman’s Day about simple tips that could help prevent Alzheimer’s disease.

Sean Young commented in a Voice of America article on the potential to predict and prevent mass killings by sifting through comments in social media. Young is founder and director of the UCLA Center for Digital Behavior and the UC Institute for Prediction Technology, and an associate professor of family medicine.
UCLA scientists use color-coded tags to discover how heart cells develop UCLA Newsroom

Physical and mental multitasking may boost memory, study suggests UCLA Newsroom

Cracking the connection between pediatric obesity and cancer UCLA Newsroom

Age matters behind the wheel – but not how you might expect UCLA Newsroom

David Geffen School of Medicine at UCLA presents award for excellence in basic science research UCLA Newsroom

A couple’s journey: Escaping World War II, seven decades of marriage – and life-saving heart procedures at age 90 UCLA Health Connect blog

This report features media placements from UCLA Health, which includes the David Geffen School of Medicine at UCLA, Ronald Reagan UCLA Medical Center, UCLA Medical Center, Santa Monica, UCLA Mattel Children’s Hospital, the Stewart and Lynda Resnick Neuropsychiatric Hospital at UCLA, the UCLA Health Clinics and the UCLA Faculty Practice Group.

It also includes placements from the UCLA Fielding School of Public Health, the UCLA School of Nursing, the UCLA School of Dentistry, the UCLA Jonsson Comprehensive Cancer Center and the UCLA Eli and Edythe Broad Center of Regenerative Medicine and Stem Cell Research.

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