

Visitors from far and near

More than 20,000 attend 'Explore JPL,' the Lab's new version of Open House

By Carl Marziali

Graying adults sacrificed dignity to lie on their tummies next to grade-school children, and feel a rover tread on their spines; parents and children competed to touch warmly fabricated parts at the machine shop; the waft of sunscreen scented the pleasant heat; and the line at the aptly-named Blasted Concessions burger stand stretched vexingly far.

"Explore JPL was a wonderful celebration of everything we stand for," said organizer Kim Lievense, manager of the Public Services Office. "I am truly grateful for all the team members in the JPL community who helped make this a success, both at the event and over nine months of planning."

The Lab was the center of the universe on the weekend of May 20-21, as more than 20,000 visitors from outskirts near and far demonstrated.

Solar System Ambassador Beate Czogalla traveled at her own expense from Milledgeville, Ga. to play both Captain Kirk and a black hole in a skit explaining the NuSTAR X-ray space telescope. A couple flew in from San Francisco for the day. A group driving up from San Diego had a minor accident on the freeway, and called in a panic because they would miss their ticketed time (they were assured of late entry).

Karla Lopez arrived at her assigned



Visitors check out a map of Vesta.

Bob Paz / JPL Photo Lab

time of noon on Saturday, May 20, gambling she could get back to Rancho Cucamonga by 3:30 p.m. for a quick change into formal dress. The occasion: a 4 p.m. wedding. She made it through Mission Control and the Earth Science area before jumping into an Uber at the west gate.

Angela Chen came with her sons Zachary and Thomas, 15 and 10, respectively. As they cooled down with ice cream in the shade, Thomas named the electricity demonstrations as his personal highlight. At one exhibit, he could put his hand near a giant ball and feel electricity pulse into his hand. Another demo showed how an arcing current can put a hole through a thin material.

It was encouragement he did not necessarily need, based on the experiments

going on at home.

"Me and my brother, we get steel wool, and a 9-volt battery, and we kind of set fire to the steel wool," he said, giggling.

"It's pretty spectacular," admitted his tolerant mom.

The afternoon heat discouraged some arrivals, but not a group in their early 20s. A young woman with a pierced lip said they did not want to miss their only opportunity this year to visit JPL.

"We turned down a Vegas trip for this," she noted. "And we're partiers, dude."

Visitor questions ranged the spectrum from insightful to somewhat less so. "Cassini," said one man to himself, reading the banner at the probe's display. "How do they come up with these names? Sounds

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FY '18 budget request stays the course

By Mark Whalen

The message of the proposed Fiscal Year 2018 budget for NASA is stability, JPL Director Michael Watkins told employees at an all-hands meeting May 24.

“As NASA acting Administrator Robert Lightfoot said, ‘Keep doing what you’re doing,’” said Watkins.

The director said the relatively stable budget for JPL projects and programs is indicative of the value that JPL brings to NASA.

“A number of federal agencies got significant cuts in the budget request, much more significant than ours,” said Watkins. “That’s a show of confidence not only for NASA but for JPL’s part as well.”

The exception is the proposed elimination of NASA’s Office of Education. Questions at the meeting centered on the potential impact to the Lab’s intern program, with longtime JPLers expressing concern about reduced opportunities for the young women and men who represent the next generation of scientists and engineers.

Watkins told the crowd in Pickering Au-

ditorium that he would do everything possible to protect the intern program, noting that many college internship programs will continue, along with mission-related formal and informal education programs.

The Science Mission Directorate, the NASA division providing the bulk of JPL’s work, would receive about \$5.58 billion, a small increase next fiscal year due to the inclusion of the Europa Clipper in the budget for the first time. That project would receive about \$400 million.

The proposed Earth Science budget is about 9 percent lower than last year, with JPL’s Orbiting Carbon Observatory 3 slated for termination.

“We have a lot of Earth science missions flying, and a lot in development over the next couple of years, so we still have a very robust Earth science program,” said Watkins.

Also terminated in the proposed budget is the Asteroid Redirect Mission, but the solar-electric propulsion work associated with it will continue at Glenn Research Center.

“From a technology perspective, we’re happy it’s continuing,” said Watkins. “We



JPL Director Michael Watkins

could be customers of solar-electric propulsion in the future.”

Watkins noted the strong public interest for the Cassini mission’s Grand Finale, begun in late April, in which the spacecraft is making a series of dramatic dives between Saturn and its icy rings before its final entry into the atmosphere.

For NASA’s Fiscal Year 2018 budget materials, visit <https://www.nasa.gov/budget>.

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like an Italian name.”

Czogalla, the ambassador, writes a biweekly column, “Our Space,” for her hometown newspaper, the Union-Recorder. She has been coming to the annual event to collect new material for more than 10 years.

“This is my only opportunity really every year to come in and help out and get to talk to the actual mission scientists who work on the project. This is my prime source,” she said on Sunday between taking turns playing a welcome video for visitors to Mission Control (she had volunteered at NuSTAR the previous day).

“There’s just nothing more exciting than saying I have been there, I have seen this, I have done this, I have talked to the guy who drives the Mars rover. To my people at home, that is exciting.”

Dressed in practical hiking boots for the day’s work, and wearing glasses that focused the excitement in her eyes, Czogalla called her 13 years of involvement with JPL and its public events “a dream come true.”

The weekend was close to a dream come true for Lievens and her hundreds of volunteers. Food lines were long, and alarmist news coverage about traffic scared off some visitors. But overall, the 22,000 visitors on the second year of the event’s ticketed format enjoyed a relaxed day with access to dozens of displays, movies and hands-on demonstrations.

The partiers who gave up the Vegas trip were an exception. They had a late start to their day, and rushed through the gate after learning the Mission Control tours would end in a half hour.

News Briefs

Former refugee Ellers receives Congressional honor

A native of Cambodia, JPLer Khanara Ellers has overcome numerous obstacles in her life. In recognition of her inspiring spirit, perseverance and drive for success, the systems engineer was recently chosen as a recipient of Congresswoman Judy Chu's Congressional Women of the Year Award to represent the city of San Gabriel.

The ceremony in San Marino recognized outstanding women who have contributed greatly to Rep. Chu's 27th Congressional District.

Ellers is a survivor of the Khmer Rouge's takeover of her homeland.

She lost her father in what has become to be known as the Cambodian Genocide. As a teenager, Khanara, her mother and her four siblings were forced into labor camps and were separated for four years.

Khanara's mother had sent her brothers to Thailand, where they would be safe. Afterward, Khanara, her mother, and two younger sisters followed and fled through mud and land fields west to Thailand. Their first attempt was unsuccessful, and they were sent back to Cambodia. They escaped on their second try, and were placed in a refugee camp. Through the sponsorship of the International Refugees Center, Khanara and her family were able to come to Los Angeles.

Ellers joined JPL in 1986, starting as a manufacturing engineer on the Shuttle Imaging Radar-C, which incidentally produced an image showing a previously undiscovered temple in Angkor Wat in her home country. She has contributed to numerous other JPL missions.

Recently, Ellers was recognized as one of the "Women at JPL." Please see the video at <https://www.jpl.nasa.gov/women/profile.html#ellers>.



Rep. Judy Chu, left, and JPL's Khanara Ellers.



Bethany Ehlmann

Ehlmann cited for early-career work

JPL research scientist Bethany Ehlmann has been named to receive the Harold C. Urey Prize for outstanding achievement in planetary research by an early-career scientist.

Ehlmann earned the honor for her work using spectroscopy to determine the mineralogy of Mars' surface and the extent of the Red Planet's previous habitability. The American Astronomical Society's Division for Planetary Sciences, which bestows the award, said, "Her inspiring work has motivated the development of Mars exploration strategies and methods, has been applied to other solar system bodies, and will continue to drive planetary science forward."

James is grand marshal for La Canada parade



JPL Deputy Director Larry James led La Canada's Fiesta Days Memorial Day parade May 29. Joined by his wife, Susan, James said it was an honor to give back to the community that supports JPL so well. "Working at JPL is absolutely amazing," James said. "It's the perfect place for me as we explore the unknowns of space, do things that have never been done, build amazing robotic systems and answer incredibly complex science questions. It doesn't get any better."

James is the third JPL official to lead the Fiesta Days parade. Richard Cook, now JPL's Associate Director for Flight Projects and Mission Success, served as grand marshal in 2004's "Spirit and Opportunity"-themed event, and former JPL Director Lew Allen was grand marshal in 1988 for "Fiesta of Flight."



Jill Seubert

Seubert honored by her alma mater

Jill Seubert, a navigation engineer in the Inner Planet Navigation Group, received the Recent Alumni Award from her alma mater, the University of Colorado Boulder.

The award is granted annually to alumni who have made exceptional contributions early in their careers and remained involved with CU Boulder within 10 years of graduation. Seubert earned a master's of science (2009) and a doctorate (2011) in aerospace engineering from the university.

She has contributed to several Mars missions and as deputy principal investigator for the Deep Space Atomic Clock mission. As a navigation and mission design engineer, Seubert is currently preparing for the 2018 InSight lander and 2020 Mars rover projects.

Also an assistant professor of planetary science at Caltech, Ehlmann is on the science teams for Mars Science Laboratory, Mars Reconnaissance Orbiter, Mars 2020 and Dawn, and was previously on the science team for Mars Exploration Rovers.

Award winners will receive their honors at the Division for Planetary Sciences' annual meeting in Provo, Utah in October.

Letters

Thank you, JPL colleagues, for kind support in many forms during my mother's declining health and recent death. Tupper Dooly Webster knew how glad I've been to be part of this grand team, and she started me on a path that led here.

Guy Webster

I am grateful to my colleagues and friends at JPL for all your kindness during my beloved Abigail's long struggle with cancer and her passing in November. I am especially thankful to those of you who loved and supported her in the hard times. It meant more to us than you can know.

Steven Jenkins

Passings

Retiree Donald Dahlquist, 84, died April 9.

Dahlquist joined JPL in 1962 and contributed to numerous missions. He retired in 1999 from the Device Research and Applications Section.

He is survived by his brother Jim as well as nieces and nephews.

Classifieds

Ads submitted May 27–June 3.

For Sale

LIZARDS, 2 friendly bearded dragon siblings, 1.5 years old, will include terrarium accessories/decoration/light bulbs, \$160/obo. send2ati@yahoo.com.

MISC.: Very lightly used Ethan Allen Tribeca sofa-sleeper + matching ottoman, exc. cond., comes from smoke-free + pet-free house, matching ottoman on wheels w/storage, \$600/obo; very clean & fully functional GE refrig., \$150; Nordic Ware microwave tender cooker, \$40; 27" Kitchen Aid microwave w/trim kit, can be used on kitchen counter or installed in cabinet (both for \$225, will consider selling separately). 818-369-6640.

Vehicles / Accessories

'07 HONDA Rebel motorcycle, red, new tires, low miles, asking \$1,800. Text 626-348-4295.

Wanted

USED CAR, small, prefer Japanese or Korean type. 818-393-3150, Rosa.

SPACE INFO/memorabilia from U.S. & other countries, past & present, for personal use (see <http://www.youtube.com/watch?v=S7PvjGp7mCU>). mrayman@alumni.princeton.edu, 818-790-8523, Marc Rayman.

For Rent

ALTADENA, 3 bedrms., 1 bath, 1,195 sq. ft., N. of Altadena Dr., E. of Lake; very quiet neighbor'd, mtn. setting, 3 separate trailheads within walking dist.; 2-year-old refrigerator, stove, microwave included in lease; single-car garage + outside parking; great mtn. view; plenty of built-in storage; laundry rm. w/washer-dryer hookups, good natural light; cat or small inside dog negotiable; natural setting w/ roses & mature oak trees, observe deer + an abundance of birds; \$2,600/

month; owner pays trash and sewer, tenant pays water, electric and gas. 626-390-7657.

ALTADENA: modern 1-bdrm. backyard studio, short-term rental (up to 2 months), ideal for JPL interns or visiting faculty, etc.; 5 min. to JPL by bike, close to Loma Alta Park & hiking trails; fully furnished, very quiet & tranquil; modern kitchenette, private bathroom, laundry on site; WiFi & utilities incl.; street parking (storage for bike/gear available); \$1,300/month. altadena.studio@gmail.com.

ALTADENA: room in 3-bdrm, 2-bath house in The Meadows neighborhood; share with couple and friendly dog, art and DIY-centered environment; shared kitchen, easy walk to hiking trails, easy downhill bike to JPL via street or trail; very laid-back neighbors including parrots and deer; \$950/month. 323-864-7067 or bambam6@earthlink.net

PASADENA, furn. room in a lovely 4-bd./2-bath house, big backyard, hardwood floor, big closet, shared bathroom, kitchen and laundry privileges; 2 miles to JPL, close to public transportation; short- or long-term lease available; must like dogs and be very clean; \$900 + \$900 deposit. 818-960-8654.

Vacation Rentals

MAMMOTH, Snowcreek, 2 bd., 2 ba. + loft, sleeps 6-8, fully equip'd kitchen incl. microwave, D/W, cable TV, VCR, phone, balcony w/mtn. vw., Jacz., sauna, streams, fishponds, close to Mammoth Creek, JPL discount, no pets. 626-798-9222, 626-840-3749 or valeriee@caltech.edu.

MAMMOTH, Snowcreek, beautiful updated condo, 2 bd., 2 ba. + loft (sleeps 6-8), great location by pond/meadow, new appliances, TVs, DVD players, free wireless Internet and washer/dryer, no pets. 818-952-2696 or BigMtnPrettySky@gmail.com.

MAMMOTH, remodeled 2 bed/2 bath + loft, short walk to Canyon Lodge; Courchevel 6 features full kitchen, cable/Internet TV, DVD, Blu-Ray, wireless hi-speed Internet, 2-car garage, Jacuzzis, grill, pool; no pets. <http://Courchevel6.com>.



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Universe

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