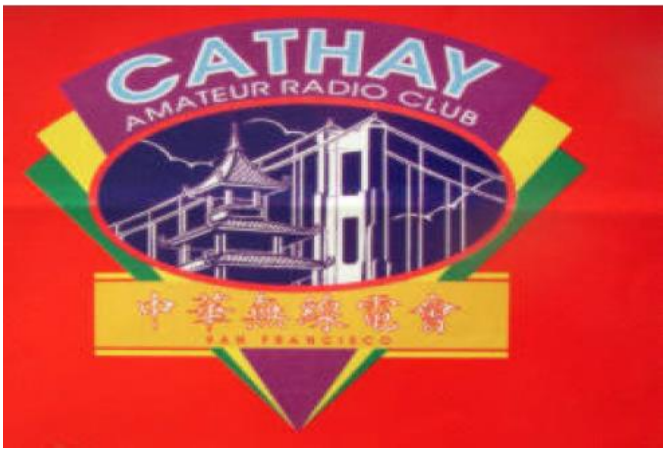

Cathay June 2015

www.cathayradio.org

President: George Chong, W6BUR **email:** *W6BUR@comcast.net*

Vice President North: Leonard Tom, *NX6E* **email:** nx6e@hotmail.com

Vice President South: Bill Fong, *W6BBA* - **email:** w6bba@arrl.net

Secretary/Membership: Rodney Yee, *KJ6DZI* - **email:** rodyee2000@yahoo.com

Editor: Rodney Yee, *KJ6DZI* - **email:** rodyee2000@yahoo.com

Treasurer: Vince Chinn aka Mingie, *W6EE* - **email:** vince@vincechinncpa.com

Web Master: Edison Fong – *WB6IQN* - **email:** edison_fong@hotmail.com

Mission: The Cathay Amateur Radio Club is basically an active social club of Ham Radio Operators and their spouses. We support local community requests for HAM emergency communications. Several of us are trained in CPR/ First Aid and are involved with community disaster preparedness.

Monday Night Net Time: 9 PM Local Time/PST, Frequencies: 146.67MHz -600KHz PL85.4 and 442.70 +5MHz PL 173.8. The repeaters are linked only during the CARC Monday night net.

Update: Link to repeater 442.70 is currently not active until further notice.

The CARC Monday night net is the best way to find out the latest club news.

All check-ins are welcome.

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Message from the President: George Chong, *W6BUR*

Hello CARC Members and Friends;

As many of you know ARRL/Ham Field Day is Saturday June 27, 2015 – Sunday June 28, 2015.

Normally I would be hosting the CARC Ham Field Day but I have other commitments that weekend.

Ed Fong has generously decided to help us out by holding a joint HAM Field Day with both the CARC Club and the Sunnyvale ARES Group and it will be conducted on Saturday June 27, 2015 at:

Fairbrae Swim and Racquet Club
696 Sheraton Dr.
Sunnyvale, CA 94087
(408) 739-3833

Additional details are in the Public Announcement Section of this newsletter.

As many of know by now on April 25, 2015 the country of Nepal suffered a devastating 7.8 magnitude earthquake and subsequent 7.3 magnitude aftershock. Many people lost their lives during the structural collapse of buildings.

On behalf of the CARC, Ed Fong donated $25 for Lois Tim, $25 to Judson Chew fund, and a Baofeng UV5 to the Nepal Earthquake Relief Fund. Ed happened to be on the email list of the Nepal Earthquake Relief Fund and they were looking for radios. Ed then inquired whether a Baofeng UV5 would help and they said that is exactly what they were looking for.

So please make whatever donations you can afford to the Nepal Earthquake Relief fund via disaster relief entities such as the American Red Cross, Salvation Army and other similar organizations.

Our Bay Area is also subject to earthquakes and we should take steps to prepare for it by checking out www.72hours.org. Your HAM radio skills and your FCC issued HAM license makes each one of you a potential disaster service volunteer and a community resource during an earthquake. So keep your HAM gear charged up and handy along with your disaster Go-Bag. Become proactive: become part of the solution and not a victim.

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Featured Tech Article Intro

Just about everyone has seen Star Trek where a patient is placed on a medical bed and the patient's vital life signs could be monitored.

Well this month's article shows that sometimes actual science can leap over the Science Fiction concepts and take it further along than expected.

Silent Key Memorial

After a prolong illness, long time CARC member Judson Chu, W6WTY passed away on February 1, 2015.

Many thanks to Ed Fong - *WB6IQN* for his very nice write up and tribute to long time CARC member: Judson Chu.

CARC Final Wrap-up News

Chat sub s'em to all you CARC members! - George W6BUR.

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Public Service Announcements

HAM CRAM / HAM Licensing

For upcoming HAM Licensing locations please refer to:
http://www.arrl.org/find-an-amateur-radio-license-exam-session

Auxiliary Communications Service (ACS)

The Auxiliary Communications Service (ACS) was organized by the San Francisco Office of Emergency Services (OES) following the 1989 Loma Prieta Earthquake to support the communications needs of the City and County of San Francisco when responding to emergencies and special events.

The Auxiliary Communications Service holds General Meetings on the third Tuesday of each month at the San Francisco Emergency Operations Center, 1011 Turk Street (between Gough Street and Laguna Street), from 1900 hours to 2100 hours local time. All interested persons are welcome to attend.

The ACS Net begins at 1930 hours (7:30 p.m.) local time each Thursday evening, on the WA6GG repeater at 442.050 MHz, positive offset, tone 127.3 Hz. The purpose of this net is to practice Net Control skills, practice checking in with deployment status in a formal net, and to share information regarding upcoming ACS events. Guests are welcome to check in. ACS Members should perform Net Control duty on a regular basis. On the second Thursday of each month, the net will be conducted on the output frequency of the WA6GG repeater, 442.050 MHz no offset, tone 127.3 Hz, simplex.

For more information, please attend an ACS meeting or check in on a net, or call 415-558-2717.

Upcoming meetings: Tuesday 7pm, June 16, 2015
Tuesday 7pm, July 21, 2015
Tuesday 7pm, Aug 18, 2015

Gilbert Gin (KJ6HKD)

Free Disaster Preparedness Classes In Oakland:
http://www.oaklandnet.com/fire/core/index2.html

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CORE is a free training program for individuals, neighborhood groups and community-based organizations in Oakland. The underlying premise is that a major disaster will overwhelm first responders, leaving many citizens on their own for the first 72 hours or longer after the emergency.

If you have questions about the recertification process, you may contact the CORE Coordinator at 510-238-6351 or core@oaklandnet.com.

Free Disaster Preparedness Classes In San Francisco – NERT Taught by San Francisco Fire Department

RSVP to sffdnert@sfgov.org or call 415-970-2024 to register.
Visit www.sfgov.org/sffdnert to learn more about the training, other locations, and register on line. Upcoming Special NERT Events.

May

30th: Disaster Mental Health (NEW! pilot training)

June

3rd: NERT Coordinators and Leaders Meeting, 6:30pm-8:30pm, SFFD DOT*

4th: NERT Communications 601: Social Media, 6:30pm-9:30pm, SFFD DOT*

Pre-requisites: NCT 201 (May 13), twitter account
If you are new to twitter, please review the following: Twitter Support 101 & tutorial video

10th: Ask an Elmer: informal session with ham radio mentors. 6:30pm-8:30pm, SFFD DOT*

13th: SFPD ALERT training

Early pre-registration and qualification required

16th: ICS Forms workshop. All NERT grads welcome. 6:30pm-8:30pm, SFFD DOT*

20th: Staging area drill, 8:30am-12:30pm, SFFD DOT*

Put your neighborhood command center ICS to practice.

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22nd: SFPUC Drinking Water. 6:30pm-8:30pm, SFFD DOT*

28th: march with the SFFD unit in the San Francisco Pride Parade

30th: Triage Drill

*** SFFD DOT is the Division of Training @ 19th Street/Folsom. (enter through yard on 19th and park along back wall) Division of Training classroom is in the 1-story building directly next to the Fire Station on the corner.**

San Francisco Police Department: Auxiliary Law Enforcement Response Team (ALERT)

The Auxiliary Law Enforcement Response Team (ALERT) is a citizen disaster preparedness program designed. The ALERT program is for volunteers 16 years of age or older, who live, work, or attend high school in San Francisco.

Graduates of the San Francisco Police Activities League (P.A.L) Law Enforcement Cadet Academy are also eligible to join.

ALERT volunteers will first complete the Fire Department's Neighborhood Emergency Response Team (NERT) (www.sfgov.org/sfnert) training and then graduate into an 8 hour Police Department course specifically designed for ALERT team members.

ALERT members will work closely with full-time and/or Reserve Police Officers in the event they are deployed after a disaster. The Basic ALERT volunteer will have no law enforcement powers other than those available to all citizens.

SFPD ALERT Training

The next ALERT training classes have been scheduled for Saturday, June 25, 2015. The classes will be held at the San Francisco Police Academy, in the parking lot bungalow, from 8am-5pm (one hour lunch break).

IMPORTANT- All participants must complete the background interview process in order to be eligible to attend the ALERT training class.

Eligible ALERT participants may register for a training class by contacting the ALERT Program Coordinator, Mark Hernandez, at sfpdalert@sfgov.org, or by telephone at 415-

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401-4615.

SFPD ALERT Training Drill

All active/trained ALERT members are asked to join us for our next training drill, scheduled for **TBD.** The drill will be held in the Police Academy (350 Amber Drive) parking lot from 9am-12pm. Details will be emailed to active ALERT members, prior to the date of the exercise. Participation is not required, but strongly encouraged.

For more information on the San Francisco Police Department ALERT Program, email us at sfpdalert@sfgov.org, or call Sergeant Mark Hernandez (SFPD, Ret.), SFPD ALERT Program Coordinator, at (415) 401-4615.

For additional information on the web please refer to:
http://sf-police.org/index.aspx?page=4019

HAM Volunteer Request From CARC Member Skip Weiss, KG6SCE

Event: Relay for Life / Daly City - A 24 Hour Cancer Society Relay Fund Raiser

Time: Starting at 10:00 am Sat June 6, 2015 and ending at 10:00 am Sun June 7, 2015

Location: Westmoor High School Sport Stadium
131 Westmoor Ave, Daly City, CA 94015
Entrance at corner of Del Prado Dr. & Mariposa Ave

Additional Information:
http://main.acsevents.org/site/TR?sid=128433&type=fr_informational&pg=informational&fr_id=56642

HAM volunteers are needed to help with directing cars, public safety and HAM radio communications support.

Please contact Skip Weiss, KG6SC via email for further details and assignments.
- Email address: "Skip Weiss" calgrizzly@earthlink.net
- Subject Line: Relay for Life/HELP

Skip (KG6SCE) and his VFW are supporting this worthwhile event. Map of Westmoor High School Location is shown below (entrance located at the intersection of Mariposa Avenue & Del Prado Drive):

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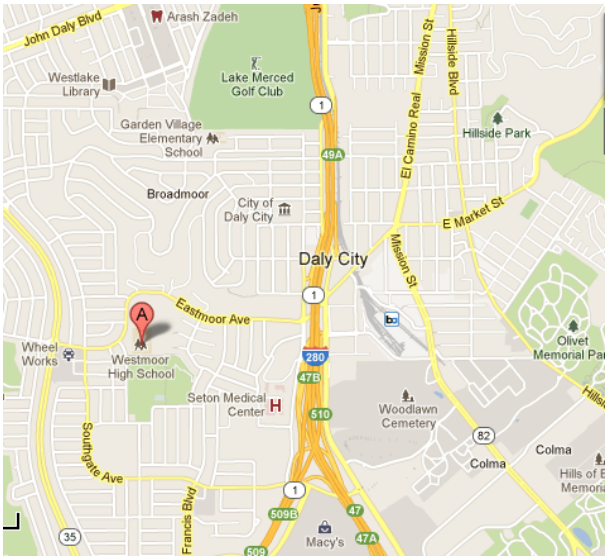

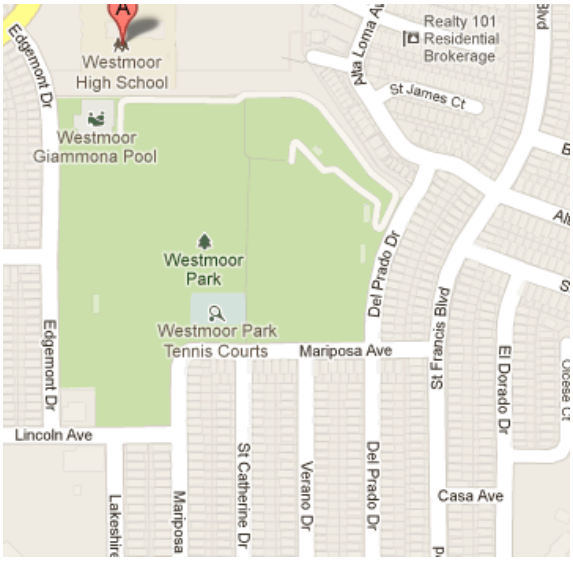

The Relay Event is:

- Organized, overnight community fundraising walk
- Teams of people camp out around a track
- Food, games and activities provide entertainment and build camaraderie
- Family friendly environment for the entire community

The scheduled activities are:

Opening Ceremony: 10:00 am Saturday, June 6, 2015

The Opening Ceremony brings everyone together for a high-energy event kickoff to celebrate the lives of those who have battled cancer, to inspire hope by sharing recent accomplishments and progress, and to remind everyone that while we are winning this battle, fighting cancer is a year-round priority.

Survivors & Caregivers Lap: 10:30am Saturday, June 6, 2015

During the Survivors & Caregivers Lap, upbeat music plays as all cancer survivors and caregivers at the event take the first lap around the track cheered on by the other participants who line the track, celebrating their victory over cancer and their fight to end cancer!

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Luminaria Ceremony: 9:00pm Saturday, June 6, 2015

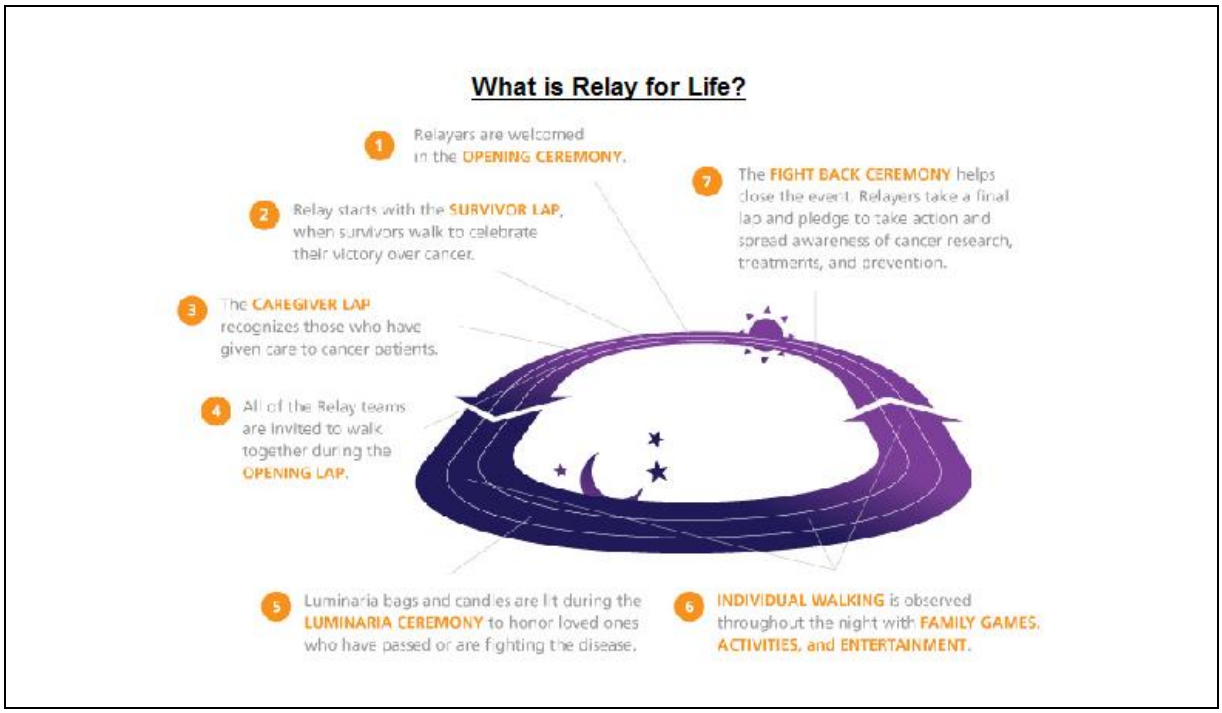
The Luminaria Ceremony is a time to remember people we have lost to cancer, to support people who currently have cancer, and to honor people who have fought cancer in the past. The power of this ceremony lies in providing an opportunity for people to work through grief and find hope.

Fight Back: 9:30am (Sunday, June 7, 2015)

The Fight Back Ceremony symbolizes the emotional commitment we each make to the fight against cancer. The action we take represents what we are willing to do for ourselves, for our loved ones, and for our community to fight cancer year-round and to commit to saving lives.

Closing Ceremony: 10:00am (Sunday, June 7, 2015)

The Closing Ceremony is a time to remember the lives of those lost and to Celebrate that each of us has committed, through our participation in a Relay event, to fight back against this disease over the next year.



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2015 CARC (Cathay Amateur Radio Club) ARRL Field Day Picnic – Fairbrae Swim & Racquet Club Saturday, June 27, 2015

Place: 696 Sheraton Dr. ,Sunnyvale 94087 Corner of Hollenbeck and Sheraton in Sunnyvale, 1 block from my house (Ed Fong – WB6IQN)

Time: 1pm Saturday June 27, 2015 - all day, but at 5pm dinner will be the main meal and raffle. Field day will continue through the night until Sunday morning June 28, 2015.

Costs: FREE – tell your friends - you need not be a licensed ham to attend. Please RSVP to *edison_fong@hotmail.com* on how many are coming so we can purchase enough food.

Menu - 1/3 lb premium Sirloin hamburger with all the trimmings and/or Hebrew National hotdogs. Salads, chips and drinks. Special Desert - Hot apple pie with vanilla ice cream.

Enjoy all day swimming, tennis, good conversation, even radio operating.

Raffle Tickets: $5 each for prizes below.

Windows 8.1 Laptop with 4GB RAM and 500 GB harddrive

GP5/SSB HF SSB portable radio

Beofeng UV5R VHF/UHF Hand Held transceiver

and more.

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4 GB Laptop 500GB of harddrive running Windows 8.1 Dual core with a LED back lit screen. High resolution camera for Skype , Wireless 802.11n. Time to upgrade that old Windows 95 machine.

Countycomm GP5/SSB - the latest and best portable hand held HF SSB receiver in the world. Fully software defined using the SiLabs chip. Has software defined product detector. 1000 memories.

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Baofeng UV-5R

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Silent Key Memorial

by Ed Fong 4/26/2015

Judson Chu - W6WTY, passed away on February 1, 2015 at the age of 91 of respiratory and heart failure. He was born in Chico, California. After graduating from high school, he attended vocational school to become a radio technician.

When World War II broke out, Judson was drafted, and served in the U.S. Army as a radio communications sergeant at the dangerous Pacific battlefront of Okinawa in the 421st Rocket Battalion, 10th Army Corps. Throughout his life, he was very proud of his service to his country.

After the war, he went back to his father's village in China, where he met and married May. They would be together for 66 years until her death in 2013. They raised four children, Dorothy, Judy, Dean and Jeffrey.

Judson worked hard to support his growing family, first at Lockheed for eight years in aircraft communications, and then Pacific Bell for 23 years.

His expertise in telecommunications equipment led him to become a supervisor.

In 1965, Judson and May moved the family to Santa Clara, where they lived for nearly five decades. He was very active in his community. He was a faithful member of the American Legion Santa Clara Post 419.

A lifelong ham radio enthusiast, he greatly enjoyed being a member of the Cathay Amateur Radio Club, where he participated in ham radio sessions every Monday night.
He actively volunteered at the YMCA, particularly in the outdoor youth camping program. He was president of the Chinese American Citizens League. For many years, Judson and his wife May volunteered to collect and distribute groceries to needy seniors.

Judy, Judson's daughter became the first Asian American Congresswoman representing the 49 District, Monterey Park. His son Dean, also served as the first Asian American Mayor for Sunnyvale. They attended several Cathay events throughout the years.

Judson was a familiar voice on our Monday night net. He checked in for the past 20+ years. I (Ed Fong) first met Judson in the early 1990's when we had our annual picnic at the National Semiconductor Park. He and I remained good friends throughout the years. He will be sadly missed.

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Featured Tech Article:

http://news.illinois.edu/news/11/0811skin_electronics_JohnRogers.html

LATEST NEWS »

Smart skin: Electronics that stick and stretch like a temporary tattoo

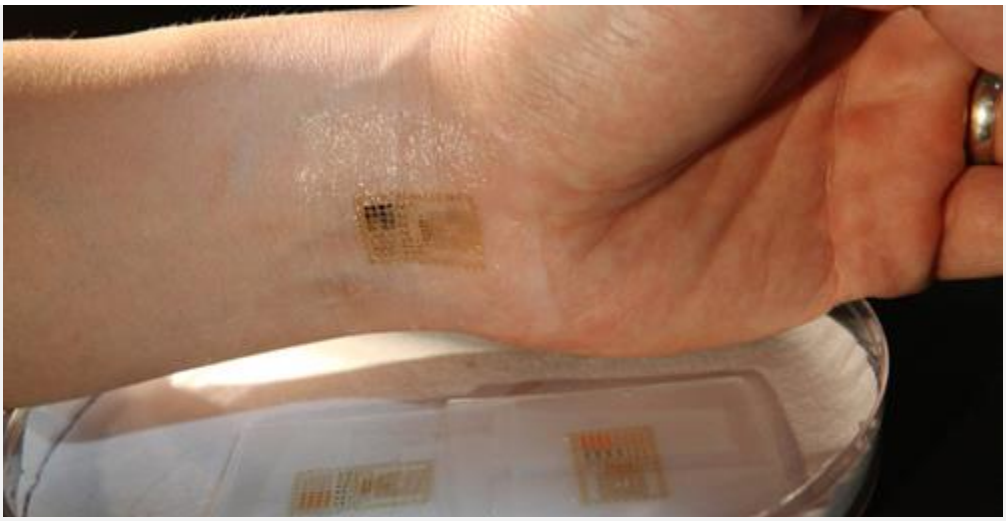

Photo courtesy
John Rogers

An ultrathin, electronic patch with the mechanics of skin, applied to the wrist for EMG and other measurements.

8/11/2011 | Liz Ahlberg, Physical Sciences Editor | 217-244-1073; eahlberg@illinois.edu

CHAMPAIGN, Ill. — Engineers have developed a device platform that combines electronic components for sensing, medical diagnostics, communications and human-machine interfaces, all on an ultrathin skin-like patch that mounts directly onto the skin with the ease, flexibility and comfort of a temporary tattoo.

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The circuits' filamentary serpentine shape allows them to bend, twist, scrunch and stretch while maintaining functionality. | Photo courtesy John Rogers

Led by John A. Rogers, the Lee J. Flory-Founder professor of engineering at the University of Illinois, the researchers described their novel skin-mounted electronics in the Aug. 12 issue of the journal Science.

The circuit bends, wrinkles and stretches with the mechanical properties of skin. The researchers demonstrated their concept through a diverse array of electronic components mounted on a thin, rubbery substrate, including sensors, LEDs, transistors, radio frequency capacitors, wireless antennas, and conductive coils and solar cells for power.

"We threw everything in our bag of tricks onto that platform, and then added a few other new ideas on top of those, to show that we could make it work," said Rogers, a professor of materials science and engineering, of chemistry, of mechanical science and engineering, of bioengineering and of electrical and computer engineering. He also is affiliated with the Beckman Institute for Advanced Science and Technology, and with the Frederick Seitz Materials Research Laboratory at U. of I.

The patches are initially mounted on a thin sheet of water-soluble plastic, then laminated to the skin with water – just like applying a temporary tattoo. Alternately, the electronic components can be applied directly to a temporary tattoo itself, providing concealment for the electronics.

"We think this could be an important conceptual advance in wearable electronics, to achieve something that is almost unnoticeable to the wearer," said U. of I. electrical and

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computer engineering professor Todd Coleman, who co-led the multi-disciplinary team. “The technology can connect you to the physical world and the cyberworld in a very natural way that feels very comfortable.”

Skin-mounted electronics have many biomedical applications, including EEG and EMG sensors to monitor nerve and muscle activity. One major advantage of skin-like circuits is that they don’t require conductive gel, tape, skin-penetrating pins or bulky wires, which can be uncomfortable for the user and limit coupling efficiency. They are much more comfortable and less cumbersome than traditional electrodes and give the wearers complete freedom of movement.

“If we want to understand brain function in a natural environment, that’s completely incompatible with EEG studies in a laboratory,” said Coleman, now a professor at the University of California at San Diego. “The best way to do this is to record neural signals in natural settings, with devices that are invisible to the user.”

Monitoring in a natural environment during normal activity is especially beneficial for continuous monitoring of health and wellness, cognitive state or behavioral patterns during sleep.

In addition to gathering data, skin-mounted electronics could provide the wearers with added capabilities. For example, patients with muscular or neurological disorders, such as ALS, could use them to communicate or to interface with computers. The researchers found that, when applied to the skin of the throat, the sensors could distinguish muscle movement for simple speech. The researchers have even used the electronic patches to control a video game, demonstrating the potential for human-computer interfacing.

Rogers’ group is well known for its innovative stretchable, flexible devices, but creating devices that could comfortably contort with the skin required a new fabrication paradigm.

“Our previous stretchable electronic devices are not well-matched to the

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mechanophysiology of the skin," Rogers said. "In particular, the skin is extremely soft, by comparison, and its surface can be rough, with significant microscopic texture. These features demanded different kinds of approaches and design principles."

Rogers collaborated with Northwestern University engineering professor Yonggang Huang and his group to tackle the difficult mechanics and materials questions. The team developed a device geometry they call filamentary serpentine, in which the circuits for the various devices are fabricated as tiny, squiggled wires. When mounted on thin, soft rubber sheets, the wavy, snakelike shape allows them to bend, twist, scrunch and stretch while maintaining functionality.

"The blurring of electronics and biology is really the key point here," Huang said. "All established forms of electronics are hard, rigid. Biology is soft, elastic. It's two different worlds. This is a way to truly integrate them."

The researchers used simple adaptations of techniques used in the semiconductor industry, so the patches are easily scalable and manufacturable. The device company mc10, which Rogers co-founded, already is working to commercialize certain versions of the technology.

Next, the researchers are working to integrate the various devices mounted on the platform so that they work together as a system, rather than individually functioning devices, and to add Wi-Fi capability.

"The vision is to exploit these concepts in systems that have self-contained, integrated functionality, perhaps ultimately working in a therapeutic fashion with closed feedback control based on integrated sensors, in a coordinated manner with the body itself," Rogers said.

The National Science Foundation and the Air Force Research Laboratory supported this work.

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