

## Cathay Nov 2020

[www.cathayradio.org](http://www.cathayradio.org)

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**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, Repeater: WB6TCS - RX 147.210, TX 147.810, Offset +0.6 MHz, CTCSS/Tone PL100 Hz

Please note: Repeater: N6MNV UHF 442.700 Mhz, Offset +5MHz, CTCSS/Tone PL 173.8 Hz in South San Francisco is cross linked every Monday Night Net at 9 p.m. to WB6TCS 2-meter repeater.

The CARC Monday night net is the best way to find out the latest club news. All check-ins are welcome.

**Message from the President:** George Chong, W6BUR

Hello CARC Members and Friends;

Many thanks to Mr. Denis L. Moore – WB6TCS for the use of his repeater for our CARC Monday Night Net.

I wish to thank our CARC members that set aside their valuable time to participate in our Monday night's nets.

Please make sure you vote in this November 2020 election.

## **News article forwarded by Walter Chang– AG6FK**

In the summer of 2020, HAM operator: Alden Summers Jones, KC1JWR was hiking with his family on the long trail in Vermont. He suffered a seizure from hypoglycemia (low blood sugar) and lost consciousness. Cell phone service was not available in such a remote area.

When his seizure ended, Alden regain consciousness and pulled out his trusty Baofeng HAM radio to call for help.

Further details can be found at:

<http://k0lwc.com/baofeng-saves-the-life-of-ham-radio-operator/>

## **Tech Article Introduction:**

The first women to jointly win the 2020 Nobel Prize in chemistry was announce on October 7, 2020. They are: Jennifer A. Doudna, an American biochemist and Emmanuelle Charpentier, a French microbiologist. Only 5 women preceded them is being awarded a Nobel Chemistry Prize.



The American biochemist Jennifer A. Doudna (left) and French microbiologist Emmanuelle Charpentier, pictured together in 2016.

Professor Jennifer A. Doudna, age 56 is a Li Ka Shing Chancellor Chair Professor in the Department of Chemistry and the Department of Molecular and Cell Biology at the University of California, Berkeley.

Professor Emmanuelle Charpentier, age 51 is a Director at the Max Planck Institute for Infection Biology in Berlin.

Now that I have peaked your interest, please read the full details in the Tech Article Section.

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

## 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: TBD

### **Gilbert Gin (KJ6HKD)**

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

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](mailto:core@oaklandnet.com).

### **Free Disaster Preparedness Classes In San Francisco – NERT Taught by San Francisco Fire Department (SFFD).**

<http://sf-fire.org/calendar-special-events>

Upcoming events TBD

\***SFFD DOT** is the Fire Department Division of Training. All participants walking, biking or driving **enter through the driveway gate on 19th St.** between Folsom and Shotwell. Parking is allowed along the back toward the cinderblock wall.

Visit [www.sfgov.org/sffdnert](http://www.sfgov.org/sffdnert) to learn more about the training, other locations, and register on line. Upcoming Special NERT Events.

### **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 no longer need to complete the Fire Department's Neighborhood Emergency Response Team (NERT) ([www.sfgov.org/sfnert](http://www.sfgov.org/sfnert)) training and then graduate into two 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 (New Members)**

The next SFPD ALERT training class has been scheduled for **TBD**. The class will be held at the San Francisco Police Academy, in the parking lot bungalow, from 8am-5pm (one hour lunch break) on Saturday.

\* Class date indicated are only for new members

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, Marina at [sfpdalert@sfgov.org](mailto:sfpdalert@sfgov.org), or by telephone at 415-401-4615.

### **SFPD ALERT Practice/Training Drill**

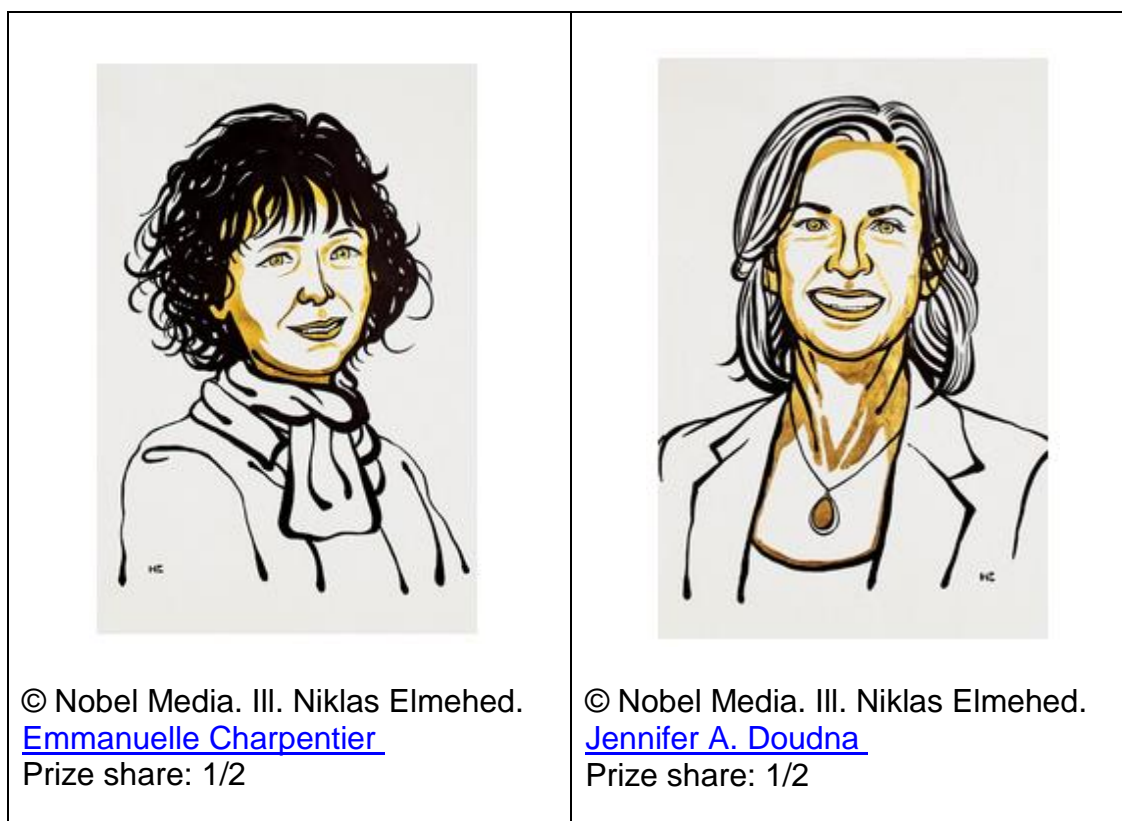
All active/trained ALERT members are asked to join us for our next training drill, scheduled for on **TBD** from 9 AM – 1pm. Details will be emailed to active ALERT members, prior to the date of the exercise. Participation is not required, but strongly encouraged.

For more information on the San Francisco Police Department ALERT Program, email us at [sfpdalert@sfgov.org](mailto:sfpdalert@sfgov.org), or call Lt. Marina Chacon (SFPD Ret.), SFPD ALERT Program Coordinator, at (415) 401-4615.

For additional information on the web please refer to:  
<https://sfgov.org/policecommission/alert>

## Tech Article

### The Nobel Prize in Chemistry 2020



### The Nobel Prize in Chemistry 2020



<https://www.nobelprize.org/prizes/chemistry/2020/press-release/>

7 October 2020

[The Royal Swedish Academy of Sciences](#) has decided to award the Nobel Prize in Chemistry 2020 to

**Emmanuelle Charpentier**

Max Planck Unit for the Science of Pathogens, Berlin, Germany

**Jennifer A. Doudna**

University of California, Berkeley, USA

*“for the development of a method for genome editing”*

Emmanuelle Charpentier and Jennifer A. Doudna have discovered one of gene technology's sharpest tools: the CRISPR/Cas9 genetic scissors. Using these, researchers can change the DNA of animals, plants and microorganisms with extremely high precision. This technology has had a revolutionary impact on the life sciences, is contributing to new cancer therapies and may make the dream of curing inherited diseases come true.

Researchers need to modify genes in cells if they are to find out about life's inner workings. This used to be time-consuming, difficult and sometimes impossible work. Using the CRISPR/Cas9 genetic scissors, it is now possible to change the code of life over the course of a few weeks.

“There is enormous power in this genetic tool, which affects us all. It has not only revolutionized basic science, but also resulted in innovative crops and will lead to ground-breaking new medical treatments,” says Claes Gustafsson, chair of the Nobel Committee for Chemistry.

As so often in science, the discovery of these genetic scissors was unexpected. During Emmanuelle Charpentier's studies of *Streptococcus pyogenes*, one of the bacteria that cause the most harm to humanity, she discovered a previously unknown molecule, tracrRNA. Her work showed that tracrRNA is part of bacteria's ancient immune system, CRISPR/Cas, that disarms viruses by cleaving their DNA.

Charpentier published her discovery in 2011. The same year, she initiated a collaboration with Jennifer Doudna, an experienced biochemist with vast knowledge of RNA. Together, they succeeded in recreating the bacteria's genetic scissors in a test tube and simplifying the scissors' molecular components so they were easier to use.

In an epoch-making experiment, they then reprogrammed the genetic scissors. In their natural form, the scissors recognise DNA from viruses, but Charpentier and Doudna proved that they could be controlled so that they can cut any DNA molecule at a predetermined site. Where the DNA is cut it is then easy to rewrite the code of life.

Since Charpentier and Doudna discovered the CRISPR/Cas9 genetic scissors in 2012 their use has exploded. This tool has contributed to many important discoveries in basic research, and plant researchers have been able to develop crops that withstand mould, pests and drought. In medicine, clinical trials of new cancer therapies are underway, and the dream of being able to cure inherited diseases is about to come true. These genetic scissors have taken the life sciences into a new epoch and, in many ways, are bringing the greatest benefit to humankind.



**Emmanuelle Charpentier**, born 1968 in Juvisy-sur-Orge, France. Ph.D. 1995 from Institut Pasteur, Paris, France. Director of the Max Planck Unit for the Science of Pathogens, Berlin, Germany

**Jennifer A. Doudna**, born 1964 in Washington, D.C, USA. Ph.D. 1989 from Harvard Medical School, Boston, USA. Professor at the University of California, Berkeley, USA and Investigator, Howard Hughes Medical Institute

Prize amount: 10 million Swedish kronor, to be shared equally between the Laureates.

**Further information:** [www.kva.se](http://www.kva.se) and [www.nobelprize.org](http://www.nobelprize.org)

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The Royal Swedish Academy of Sciences, founded in 1739, is an independent organisation whose overall objective is to promote the sciences and strengthen their influence in society. The Academy takes special responsibility for the natural sciences and mathematics, but endeavours to promote the exchange of ideas between various disciplines.