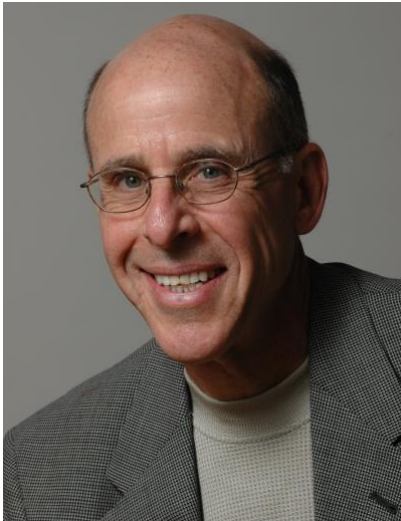




# EX-Ls Retiree Newsletter

Lawrence Berkeley National Laboratory – April 2020



**Join Us - The EX-Ls is proud to have  
SPEAKER: John Swartzberg, MD  
TITLE OF TALK: Update on the ongoing  
coronavirus pandemic**

**Date: Thursday, May 21, 2020**

**REMOTE: Zoom Meeting**

**Time: 12:00 to 1:00 pm to practice connecting,  
Speaker: 1:00 to 2:00 pm**

**Abstract: This talk will update the audience about SARS-CoV-2 and the disease it causes, COVID-19. John will cover properties of the virus, its pathogenesis, epidemiology, clinical manifestations, available diagnostics, treatment and prevention.**

**REGISTER USING THE EVENTBRITE LINK BELOW**

<https://ex-ls-may2020.eventbrite.com>

**Kathy Bjornstad, Activities Coordinator**, Call, text or email if you have questions or need help:  
(510) 220-1273    kathy.bjornstad73@gmail.com

John Swartzberg, MD, is a clinical professor emeritus at UC Berkeley’s School of Public Health, chairs the editorial board of the School of Public Health’s Health & Wellness Publications. He is a past director of the UC Berkeley–UCSF Joint Medical Program and continues to teach in that program. For two years he was President of UC Berkeley’s Emeriti Association.

Swartzberg is board certified in internal medicine and infectious diseases. Before joining UC Berkeley’s faculty part time since 1980 and full time since 2001, he spent 30 years in clinical practice. He is also the hospital epidemiologist and chair of the infection control committee at the Alta Bates Medical Center in Berkeley. He teaches an online course and a two-semester course on Principles of Infectious Diseases and a seminar on Healthcare Associated. He has collaborated with the late Sheldon Margen, a pioneer in nutritional sciences and co-founder of the Wellness Letter, on the highly successful Wellness Self-Care Handbook in 1998 and the Complete Home Wellness Handbook in 2001.

## **IN THIS ISSUE:**

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Join Berkeley Lab on **Thursday, May 7, from 6:30 to 7:30 p.m.** for a free, online event to learn how Lab researchers are helping address key challenges in responding to the COVID-19 pandemic.

Called "[COVID-19: Leveraging Science in Support of Solutions](#)," the program will feature presentations by Berkeley Lab Director Mike Witherell and three of our scientists who are leveraging the Lab's facilities to assist in the national COVID-19 response.

This event will be presented on Zoom. Go here to [register](#) (click "Join Meeting as an Attendee").

# President's Report – Bob Cahn



Robert (Bob) Cahn

This is a trying time for our community and our country. The pandemic that is threatening all of us is especially concerning for people like ourselves who are no longer young. Fears for ourselves are compounded by fears for our families, for our children and grandchildren. While we UC retirees do have the financial security provided by our defined benefit plan, financial insecurity could be a problem for our families. Concerns about health and financial well-being are serious sources of stress.

What can our organization do to help you, our membership at this time? There are some actions we can take directly. We have replaced the May 21 luncheon with an on-line presentation over Zoom. We will also record it and upload to the [LBNL page](#) on the UCBRC website. We also are looking to schedule another talk even before the May 21 event. When the details for these events are settled, we will provide all the information you will need to join them.

Many of us are finding that Zoom provides a convenient way to attend not just organized events but also informal gatherings of friends. Zoom is quite easy to use and you can learn about it easily on the web. While you do not have to sign up with Zoom to use it, you DO have to download it to the device you will use – either computer and/or smartphone. A very helpful presentation is available at

<https://support.zoom.us/hc/en-us/articles/201362193-Joining-a-Meeting>

I have found that getting together with family and friends on a regular basis is very helpful in combating the isolation we are feeling at this time.

The University of California Berkeley Retirement Center, UCBRC serves retirees from LBNL as well as those from the Berkeley campus and from the Office of the President. UCBRC is focused right now on providing support in response to the COVID-19 pandemic. You can learn about many events and services accessible through the web at

<https://retirement.berkeley.edu/keeping-connected-during-covid-19>

I urge you to check out the lectures, entertainment, and educational resources UCBRC has put together at this web site.

At this time, we all need to support each other as best we can. If you have suggestions for things the EX-Ls can do to help its members deal with the current challenge, please email me at [RNCahn@lbl.gov](mailto:RNCahn@lbl.gov).

Sincerely,

Robert Cahn  
EX-Ls President 2020

## Keeping Connected during COVID-19





# EX-Ls Luncheon Summary – February 20, 2020

The speaker at the February 20<sup>th</sup> luncheon was **Dr. Joel Parrott, President, CEO, and staff Veterinarian of the Oakland Zoo**. He spoke about the California wildlife on display, and on the conservation work and partnerships of the Oakland Zoo.

He focused on the animals that can now be found (or were previously found) in California (see The California Trail, below), and on how the East Bay Conservation Society became the Conservation Society of California (CSC), with programs across the world. The zoo has grown from 25 acres in 1984 to 100 acres in 2018 (the same size as the San Diego Zoo), with members from throughout California.

The Oakland Zoo’s mission is to educate students and the public about conservation, with 21,217 K-12 students participating in Zoo Education Programs last year. The current Zoo attendance places it number two in attendance with other museums and amusements. The CSC works in partnership with dozens of organizations in Africa, Asia, Latin America, and World Wide, as well as in North America, to preserve wildlife and its habitat.

## Attendance Comparison of Museums in the Bay Area

• 1. CAL Academy:	1.2 million (2017)
• 2. Oakland Zoo:	935k (2019)
• 3. Fine Arts Museum of San Francisco:	912k (2017)
• 4. Exploratorium:	801k (2018)
• 5. San Francisco Zoo:	800k (2017)
• 6. Warriors (41 home games):	803,436k (2018/2019)
• 7. Raiders: (7 home games):	367,848k (2018/2019)


CONSERVATION SOCIETY OF CALIFORNIA  
HONORING THE CALIFORNIA WILDLIFE
OAKLAND ZOO

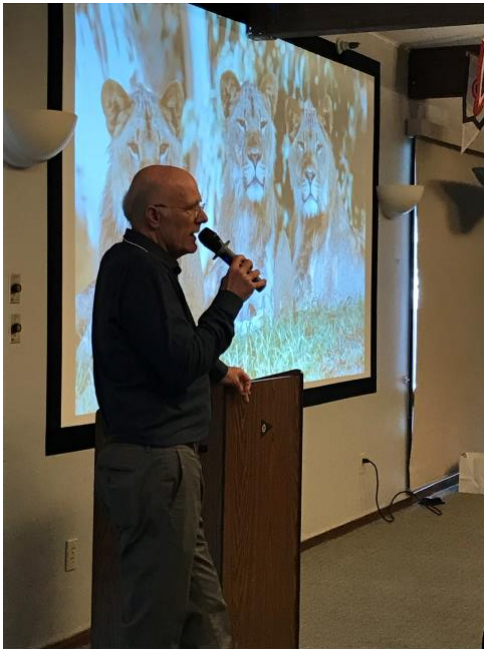


## February 20, 2020 Luncheon Attendees

Joel Parrott, Speaker  
Isabella Linares, Speaker guest  
Marie Alberti  
Ray Alberti  
Winnie Baker  
Michael Banda  
Jeffrey Beeman  
Gene Binnall  
Myrna Binnall  
Kathleen Bjornstad  
Igor Blake  
Kay Bristol  
Nancy Brown  
Jerome Bucher  
Robert Cahn  
Jianping Chen  
Jane Colman  
Alena Cowan  
Patrick Cullinane  
Janis Dairiki  
Ned Dairiki  
Diane D'Aoust  
Norman Edelstein  
David Edgar

Tanya Edgar  
Benedict Feinberg  
Mary Feinberg  
James Feit  
Angela Keres Frazier  
George Frazier  
Phyllis Gale  
Phil Gale  
Donald Grether  
Becky Grether  
Howard Hatayama  
Karla Holmberg  
Diana Hopper  
Mildred Hughes  
Vicky Jared  
Ferenc Kovac  
Ginny Lackner  
Heinz Lackner  
Jeanette Larsen  
Almon Larsh  
Jane Long  
Marit Marino  
Nance Matson  
Doug McWilliams

Cynthia Meadows  
Bill Myers  
Patricia Powers-Risius  
Mike Press  
Sharon Primbsch  
Traudel Prussin  
Donald A Riley  
Alan Robb  
Henry Rutkowski  
Linda Rutkowski  
Eva Sajan  
Esther Schroeder  
Lee Schroeder  
Carolyn Serrao  
Rich Sextro  
Joan Sextro  
Brenda Shank  
Frank Stephens  
Marie-Agnes Stephens  
Sande Sutter  
Deirdre Thorne  
Danica Truchkikova  
Kim Williams  
Caroline Yacoe



# 2020 EX-Ls OFFICERS, INFORMATION AND CALENDARS

## EX-Ls BOARD OF DIRECTORS

President: Bob Cahn  
1st Vice-President: Ben Feinberg  
2nd Vice-President: Howard Hatayama  
Secretary: Esther Schroeder  
Treasurer: Howard Matis  
Membership: Open  
Activities: Kathy Bjornstad  
LBNL Liaison: Margaret Dick  
CUCRA Representative: Nancy Brown/Bob Cahn  
UCBRC Advisory Board: Nancy Brown/Bob Cahn  
Editor EX-Ls Newsletter: Phyllis Housel Gale  
UCBRC Director and Liaison: Cary Sweeney

## EX-Ls Address at UCB Retirement Center

**Mailing Address:** LBNL EX-Ls; 101 University Hall, Berkeley CA 94720-1550

**Website:** <https://retirement.berkeley.edu/ex-ls>

**Webmaster:** Kris Thornton, UCBRC

## 2020 EX-Ls Board Meeting Calendar

Thursday, January 16, 2020, 3:00 p.m.

Thursday, April 9, 2020, 3:00 p.m.

Thursday, July 9, 2020, 3:00 p.m.

Thursday, October 8, 2020, 3:00 p.m.

## 2020 Luncheon and Event Dates

February 20, 2020 Luncheon at the Berkeley Yacht Club, 11:30 - 2:00, Dr. Joel Parrott

**May 21, 2020, Remote Zoom Meeting, Speaker 1:00 - 2:00, John Swartzberg, MD**

August 20, 2020 Luncheon at the Berkeley Yacht Club, 11:30 - 2:00

November 19, 2020 Luncheon at the Berkeley Yacht Club, 11:30 - 2:00

## PAST PRESIDENTS

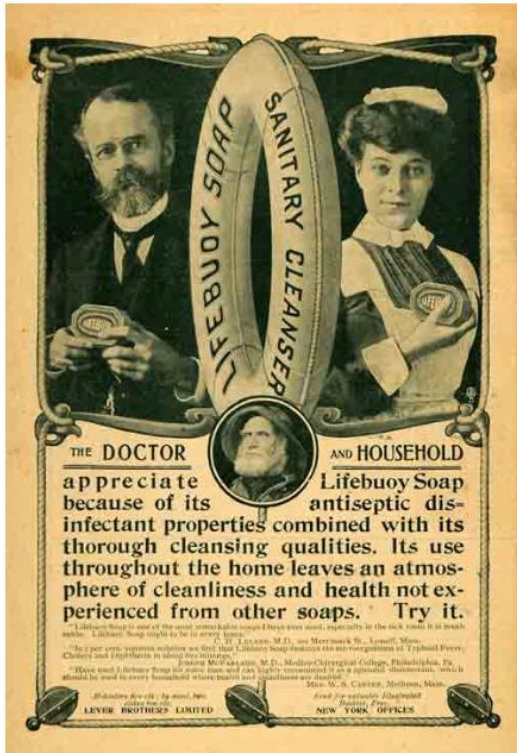
Nancy Brown – 2019  
Henry Rutkowski -2018  
Lee Schroeder – 2016-17  
Cheryl Fragiadakis – 2016\*  
Connie Grondona – 2015  
Trudy Forte – 2014  
Joe Jaklevic – 2012-13  
Rollie Otto – 2011  
Richard Sextro – 2010  
Don Grether – 2009  
Jose Alonso – 2008  
Janis Dairiki – 2007  
John Kadyk –2006  
Gene Binnall – 2005  
Sig Rogers – 2004  
Bob Fulton – 2003

Bob Birge – 2002  
Per Dahl – 2001  
Tom Beales – 2000  
Ken Mirk - `1999  
Paul Hernandez – 1998  
Clay Sealy - 1996-98  
Igor Blake - 1994-96  
Conway Peterson –1992-94  
Howard Browne – 1990-92  
Ethel Skyrdlinski – 1989  
Al Amon – 1988  
Ken Lou – 1987  
Virginia Cherniak – 1986  
Bill Bigelow – 1985  
Ted Bowers – 1981-84



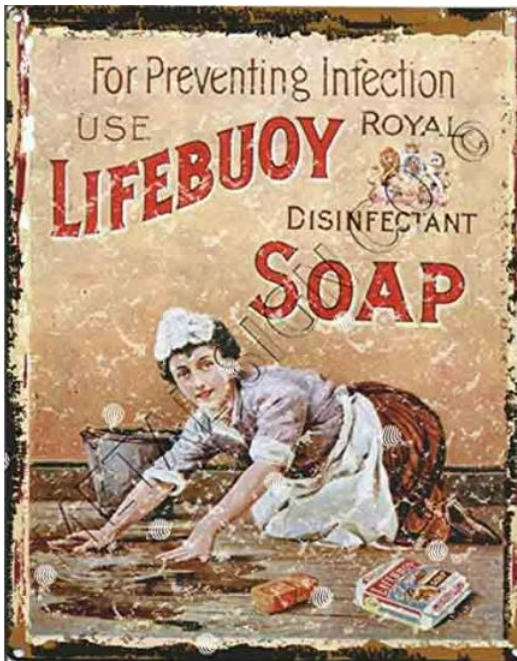
# Why We Wash Our Hands

By Margot Smith, DRPH



Recently I spent time with a relative in the Intensive Care Unit at my local hospital. In the ten days I kept vigil until his recovery, the hospital staff kept his room sterile. Every time the room was entered a new pair of gloves was put on. Blood pressure and other monitors were wiped down when staff entered and left the room enter. The floor and bed rails were cleaned often. For the short time he was considered contagious, we all put on paper aprons when entering, discarding them when leaving. There were four trash receptacles—one for needles and sharps, one for soiled linen, one for bio-contaminated equipment like tubes and wipes, and one for plain refuse. Staff efforts at keeping the room sterile were impressive.

Poor Dr. Semmelweis would have been very pleased. In 1847 he tried to convince doctors in his Viennese maternity ward to simply wash their hands. He was convinced doctors were inadvertently carrying infection into the ward where mothers were dying of puerperal fever. It is thought that Jane Seymour, the third wife of King Henry VIII was possibly the most famous victim of puerperal fever. In 1537, she died two weeks after giving birth to Henry's only surviving son, the future Edward VI of England. Mary Wollstonecraft Shelley (who wrote Frankenstein), also died of this disease shortly after giving birth.



Ignaz Semmelweis' idea of hand washing was considered bizarre for decades. Doctors then believed that infections were due to "miasmas" or "bad air," or to the imbalance of humors within a patient's body that could be relieved by bloodletting. Doctors who performed autopsies were revered because they were considered to be actively investigating the causes of sickness. Their colleagues believed that the dirtier the doctor, the better the doctor; doctors were proud to display their coats stiff with blood from the last autopsy or surgery they performed as they headed for the maternity ward. The idea that the doctor could be the agent of disease transmission was considered preposterous and wholly rejected.

But others besides Semmelweis advocated hand washing. British nurse Florence Nightingale at a military hospital in Turkey in 1854 was shocked to discover that nearly ten times as many soldiers fighting the Crimean War died from infections and diseases than in battle. Nightingale brought in soap, towels, fresh sheets, and she insisted on hand washing. "Every nurse ought to be careful to wash her hands very frequently during the day," she later wrote in her book *Notes on Nursing* (1859).

In the United States in 1855, Oliver Wendell Holmes also found that physicians with unwashed hands were responsible for transmitting puerperal fever from patient to patient. He was promptly attacked by the leading Philadelphia obstetrician, Charles D. Meigs, who declared that "Doctors are gentlemen, and gentlemen's hands are clean...any

## Why We Wash Our Hands – continued from page 6

practitioner who met with cases of puerperal fever was simply “unlucky...I prefer to attribute them to accident, or Providence.” Unfortunately, Semmelweis was dead for 20 years before his findings on hand washing gained acceptance.

### Hand washing: Not a New Idea

As early as 2800 BC ancient Babylonians used soap. Egyptians (1500 BC) bathed with soap-like substances made from plants combined with animal and vegetable oils. In ancient Greece, hands were cleaned using mud and ashes. In developing countries today where soap is not available, mud and ashes are still used. Among American Indians, yucca root was used for soap as it forms a lather. Many religions require hand and foot washing before entering religious sites and at certain rituals.

### The discovery of germs

From long before Biblical times, it was known that diseases were contagious. In the 1860s, Louis Pasteur and Robert Koch showed that [microbes](#) could cause diseases such as tuberculosis and [smallpox](#); their germ theory explained how diseases were transmitted and they developed vaccines that could prevent disease. Pasteur also connected his germ theory of disease with Semmelweis’ data and worked to make hand washing more popular. In 1865, Joseph Lister demonstrated that hand washing with antiseptic carbolic acid improved the outcome of surgeries.

As germ theory took hold, hand washing became a cause celebre. Homes had wash basins and ewers holding water in their bedrooms. Houses built in the 1890’s had basins with plumbing built into every bedroom with the water closet (toilet) down the hall. In one very old restaurant in Hawaii, there still is a wash basin at the front door for people to use before entering the dining room. Lifebuoy, a carbolic soap, was introduced by [Lever Brothers](#) in 1894 in Victorian England to combat cholera. They advertised their soap with a picture of a sailor rescued by a life buoy and the slogans “For Saving Life” and “Ending infections.” Nurses stationed in public schools taught children to wash their hands before meals. Fear of germ contamination generated laws that prevented food handlers from touching money which was known to be dirty. Even books in the public library were thought by some to be possibly contaminated because of use by many people.

Today it is known that diseases most often transmitted and prevented by hand washing are flu, colds and diarrhea. In developing countries, hand washing with soap also protects against pandemic flu, SARS, trachoma and parasitic worm infections. Hand washing keeps children in school and reduces infections that mothers and babies may contract during delivery and postnatal care. Hand washing by parents and midwives is found to prevent infant mortality.

Dr. Myriam Sidibe of Mali, Africa, founded **International Hand Washing Day**, Oct 15. She partners with organizations such as UNICEF, the World Bank, PSI, Oxfam, MCHIP and USAID to educate people about the importance of hand washing with soap. She recently gave a TED talk on how washing with soap, a simple public health measure, prevents childhood diseases. ([https://www.ted.com/talks/myriam\\_sidibe\\_the\\_simple\\_power\\_of\\_hand\\_washing](https://www.ted.com/talks/myriam_sidibe_the_simple_power_of_hand_washing))

Now, when entering many health facilities, supermarkets and restaurants, alcohol wipe dispensers are often available. Public lavatories provide soaps and hand drying. Portable toilets at events often include hand-washing basins.

The Center for Disease Control lists times that hands should be washed:

- Before, during, and after preparing food
- Before eating food
- After using the toilet
- After changing diapers or cleaning up a child who has used the toilet
- After blowing your nose, coughing, or sneezing



## Why We Wash Our Hands – continued from page 7

- Before and after caring for someone who is sick
- Before and after treating a cut or wound
- After touching an animal, animal feed, or animal waste
- After handling pet food or pet treats
- After touching garbage

Among the great public health achievements of the 20th Century are control of infectious diseases, improvements in maternal and child health, and improved food safety. Hand washing was important to these successes. Public health achievements that we enjoy every day are

- Vaccinations to reduce infectious diseases
- Control of infectious diseases
- Food Safety
- Improvements in maternal and child health
- Decline in death from cardiovascular disease
- Family planning
- Fluoridation of drinking water to reduce dental cavities
- Reductions in prevalence of tobacco use
- Improved motor vehicle safety
- Safer workplaces

These public health successes have increased our life expectancy from about age 40 in 1850 to age 78 in 2019. Infant mortality rates have declined from 181.3 deaths per 1,000 live births in 1900 to 5.8 in 2017.

Today, we expect people to wash their hands frequently. Laws regarding food handlers include hand washing before, after and during food preparation. By washing their hands properly with soap, people can prevent the spread of diseases and infections and live longer and healthier lives. Soap up, everyone!

*Reproduced by permission of the author*

## Life Before Vaccines: My Story

by Margot Smith, DRPH

Medical science has profoundly changed our lives. I am sure that I would not have survived to this old age without antibiotics and advances in epidemiology and surgery. I was a child in the 1930s. We lived in a flat across the street from my grammar school playground and I had friends in the neighborhood. It was a time when parents simply said “Go out and play” and we did. Our games were hopscotch, kick the can, jacks, tag, jump rope, handball, and hide and seek. We cruised on roller skates and bikes, and built club houses out of boxes in vacant lots. We were supposed to come home at twilight, before dark. The milkman, bakery truck, and iceman delivered to our doors. We felt safe in our neighborhoods.

But my parents were fearful of epidemics. At school in first through 8th grades, I had classmates who suffered from scarlet fever, mumps, [measles](#), German measles, chicken pox, and [whooping cough](#). I had rubella and had to stay in bed for several days in a darkened room; they thought light was bad for sick children’s eyes. Several of these diseases required the family to put a quarantine sign on their door; their children missed a lot of school.

## Life Before Vaccines: My Story – continued from page 8

As an adult, I knew survivors—men who could not father children because they had mumps as a child, a woman with a flail arm from polio, people with chicken pox scars, those deafened because of measles, a man who spent 3 years in a tuberculosis sanitarium and a woman whose child was mentally disabled because she had German measles during her pregnancy. I have friends who had polio then who now have post-polio syndrome—that is, muscle weakness, fatigue, and pain, for which there is no known cure. They experienced their illnesses before vaccines and antibiotics.

### Understanding disease

In the 1930s germ theory was less than 100 years old. Although people from Biblical times knew that diseases were contagious, no one knew exactly how they were spread. In 1854 there was the famous moment when [John Snow](#) stopped an epidemic of waterborne cholera in London by removing certain water pump handles. In the 1860s, [Louis Pasteur and Robert Koch](#) found that diseases were caused by germs—this led to both a new world of medical exploration and to new fears as to how epidemics originated. We were supposed to wash our hands after we handled money because it was contaminated with germs when touched by other people.

All had heard of Typhoid Mary, the infamous cook in 1900 New York who was a typhoid carrier and infected her employers. She was finally quarantined and incarcerated. The well-known author Helen Keller was blind and deaf because of fever as a child; she was taught to communicate through sign language and later speech by her teacher, Anne Sullivan. A movie, *The Miracle Worker*, was made in 1960 about her life.

The discovery of germs led to the birth of the Public Health movement and laws and practices designed to control the spread of disease. At that time, the main way epidemics were prevented was by quarantine, the isolation of the ill. When I was a child, patients and entire families could be quarantined. Quarantine was first used in Italy in the 14<sup>th</sup> century for ships crews coming from places with plague epidemics; later, in the 19<sup>th</sup> century, it was used to limit the spread of plague, cholera, yellow fever, and smallpox. Today, there are still laws for quarantining people and animals arriving on ships and planes.

These are guidelines for how long diseases are contagious and possibly how long quarantines were needed:

- Poliomyelitis: 40 days
- Diphtheria: Onset of sore throat for up to 4 weeks
- Measles: 4 days before rash until 4 days after rash appears
- Rubella (German measles): 7 days before rash until 5 days after rash appears
- Chicken pox: 2 days before rash until all sores have crusts (6–7 days)
- Scarlet fever: 21 days from the onset of the disease (in the absence of complications, 15 days)
- Mumps: 5 days before swelling until swelling gone (7 days)
- Whooping cough (pertussis): Onset of runny nose until 21 days after symptoms
- Typhus: 12 days after the fall of temperature

## **The first vaccine**

People long knew that exposure to certain diseases made them immune; one could get certain illnesses only once. This was known about [smallpox](#), which killed about 30 percent of those who caught it and often left facial scars on survivors.

In Asia, India, and Turkey, it was known that inoculation with smallpox scabs could lead to a mild disease that made one immune. Lady Mary Montagu, the wife of England’s ambassador to Turkey, was the first to bring the practice into Europe. In 1715, she was disfigured as a result of smallpox. After learning about inoculation in Turkey, she was determined to protect her six-year-old son from the disease through inoculation. “The smallpox, so fatal, and so general amongst us, is [in Turkey] entirely harmless by the invention of [inoculation],” Montagu wrote to a friend. “There is a set of old women who make it their business to perform the operation every autumn...The old woman comes with a nut-shell full of the matter of the best sort of smallpox, and asks what veins you please to have opened...”

In the 1790s, Edward Jenner, a country physician in England, noticed that the faces of milkmaids, the young women who milked cows, were rarely scarred with smallpox. He found that their exposure to cowpox, an infection of cows, protected them. This led to the development of cowpox vaccination as smallpox prevention—the word vaccine is derived from the Latin, Variolae vaccinae (smallpox of the cow). Immunization to smallpox was important in the Revolutionary War. George Washington in 1790 ordered mandatory inoculation for troops who hadn’t survived smallpox before. However, inoculation with this live virus was dangerous: It killed about 2 to 3 percent of those injected with even small amounts. Today, vaccines are developed from dead or weakened bacteria or virus.

My childhood vaccination for smallpox left a scar on my upper arm, a rarity now. In the "[History of Medicine in California](#)" mural at the University of California Medical School in San Francisco, artist Bernard Zakheim shows James Ohio Pattie in 1829 vaccinating the California Alcalde (governor) with cowpox during a smallpox epidemic; vaccination was a novelty at that time and place. Massachusetts was the first state in the U.S. to require smallpox vaccination in 1902.

Now that smallpox has been eradicated, smallpox vaccinations are no longer required. The last U.S. wild smallpox case occurred in 1949 and, after extensive vaccination campaigns, the last case of smallpox in the world occurred in 1977.

## **Vaccines for common childhood diseases**

**Polio:** For my parents, [polio](#) was a major fear. In summer, public swimming pools were closed because of polio, which thrived in summer months. The consequences of polio were serious: Children lost the ability to walk, to breathe, to use a limb. Hospitals had wards full of patients living out their lives in iron lungs. Our president, Franklin Roosevelt, was a victim of polio. He found relief from his symptoms with trips to Warm Springs, Georgia. Later, in the 1940s, polio patients were treated with exercise in warm pools, a method discovered by the Australian nurse Sister Kenney. She invented the concept, physical therapy. Many cities built warm pools where children and adults with polio could find exercise. In 1938, the March of Dimes was founded to fund the effort to find a vaccine. In 1960, 2,525 cases of paralysis due to polio were reported. In



## Life Before Vaccines: My Story – continued from page 10

1955, Jonas Salk developed the first polio vaccine, and it came into use that year. The oral polio vaccine was developed by Albert Sabin and came into commercial use in 1961.

In 1963, I gave my children an oral vaccine developed by Albert Sabin in a sugar cube and was grateful that I did not need to fear this dreadful disease. In 1965 there were only 61 cases in the U.S. By 1994, polio was declared eliminated from the Americas. In 2002, it was eliminated from Europe. Today, only Pakistan and Afghanistan continue to have polio cases.

**Diphtheria:** In my childhood, I was not aware of anyone having [diphtheria](#). However, my mother was from Eastern Europe (Chernowitz, Ukraine), born in 1893 and the youngest of 11 children. She knew only eight of her siblings as her parents lost three sons to diphtheria in one week, years before she was born. At that time, 40 percent of children who caught diphtheria died. The British royal family suffered from diphtheria epidemics during the late nineteenth century. Four members of the royal family died in the 1870s. Thanks to the discovery of germs as a cause of disease, diphtheria bacteria were observed by Theodor Klebs in 1883 and cultivated by Friedrich Löffler in 1884. The first successful vaccine for diphtheria was in 1923.

Vaccination for diphtheria became wildly popular in the U.S. after an outbreak in Alaska resulted in the famous [Great Race of Mercy](#) from the town of Nenana to Nome by dog sled. Balto, the lead sled dog on the final stretch into Nome, has a statue in New York City's Central Park. The relay took five and a half days and was successful in delivering the diphtheria vaccine that saved Nome and its surrounding communities from the epidemic. The race received coverage in newspapers around the country.

The Race of Mercy news generated a vaccination campaign in the U.S. that dramatically reduced the incidence of the disease. In the 1920s, there were 200,000 cases of diphtheria a year in the U.S. and 15,000 deaths; there were no deaths in the U.S. in 2015. We children did not experience diphtheria because we were vaccinated. However, today there are reports that Indonesia, Pakistan and other countries with refugees still have outbreaks and deaths.

**Measles:** Measles were another real danger for us children. In 1912, U.S. healthcare providers and laboratories were required to notify the health departments of measles cases. In the first ten years of reporting, there were about 6,000 measles-related deaths each year and 48,000 infected people were hospitalized. Complications from measles include difficulty breathing, ear infections and loss of hearing, seizures, hepatitis, and eye infections, as well as potentially fatal complications including neural and heart problems and pneumonia.

Before 1963, when a vaccine became available, nearly all children got measles by the time they were 15 years of age. I never caught measles and was glad to vaccinate my children. We feared measles, whooping cough, rubella, mumps, and scarlet fever—they might be fatal, or make us very ill and keep us out of school for weeks. Some parents arranged to expose their children to measles and chickenpox. These diseases were far more dangerous in adults.

## **A prevention timeline**

The success of small pox vaccination and the identification of specific germs led to a search for vaccines for other diseases. In my lifetime, these vaccines now protect my children and grandchildren from devastating diseases:

- 1923: diphtheria
- 1924: tetanus
- 1940: pertussis (whooping cough)
- 1961: poliomyelitis (polio)
- 1963: measles
- 1967: mumps
- 1969: rubella (German measles)
- 1994: hepatitis B
- 1995: varicella (chickenpox)

We no longer fear epidemics and deaths from these childhood dangers because vaccination prevents them and we have antibiotics to treat them. Because so many people are vaccinated, these diseases are no longer commonplace. Although not all children are vaccinated, these diseases are under control. Epidemiologists call this the "herd effect"—protection from infectious diseases that happens when most of a population is immune and thereby protects those who are not immune. I for one am grateful that these deadly illnesses are no longer prevalent.

[Vaccine-related articles on Berkeley Wellness](#)

Published April 23, 2018

## **Remembrances**

### *Ron Madras*

Ron worked at Berkeley Lab for 35 years, arriving in 1975 after earning his PhD at Harvard under Dick Wilson and spending three years as a postdoc at Laboratoire de l'Accélérateur Linéaire d'Orsay in France. Ron initially worked on a series of experiments at SLAC including Mark I, the Lead Glass Wall and the PEP-4 Time-Projection-Chamber (TPC) experiments. In 1986 he started working on the D-Zero experiment at Fermi National Accelerator Laboratory, leading the design, fabrication, assembly, test and commissioning of the uranium liquid-argon endcap electromagnetic calorimeters. This was a major project for LBNL at the time that occupied considerable space in building 77. (Two of the postdocs who worked under Ron on that project now serve as the LBNL Physics Division Director and Deputy). Ron was the LBNL D-Zero group leader from 1990 until 2007 and served in many significant roles in the D-Zero experiment, including service on the D-Zero Executive Committee, co-organizer of the Electroweak Physics Analysis group, and many Physics Analysis Review Boards. Ron later joined the ATLAS project and worked on the pixel detector.

In addition to his experimental particle physics activities, Ron served as the acting Physics Division Director from 1990-91, and was Deputy Division Director from 1991 – 1995. Ron was elected as a Fellow of the American Physical Society in 1997 “For his leadership in pioneering technical projects and in physics analysis with the Fermilab D-Zero detector, the PEP TPC, and the SPEAR Lead-Glass Wall.”

Ron enjoyed travel, scuba diving and, most of all, his family. Ron will always be remembered by those of us who were fortunate to be his colleagues over the years for how extremely diligent, thoughtful, and kind he was in everything he did.

*--Director of the Physics Division, Natalie Roe  
Submitted by Bob Cahn.*

## *Donald J. Rondeau – 1937-2020*



Don passed away peacefully on Thursday, January 30, 2020 after a valiant battle with cancer. He was surrounded by his immediate family. Patriarch of the family, servant of the community and handyman to all. A beloved husband/father/brother/mentor who will be missed by everyone he met.

Don was born August 8, 1937 in Rhode Island and joined the Marine Corp which brought him to California. He married his high school sweetheart from Connecticut and they raised their family in El Sobrante. Don began his electronics technical career at the Laboratory in January, 1960, where he built his career working at the Bevatron as swing shift group leader, Real Time Systems Group where he initiated the computer directed preventative maintenance program for those sections of the Bevatron under his jurisdiction, then Deputy Department Head of Electronics Engineering and finally Deputy Division Director of Engineering. He graduated from UC Berkeley with his Master in Electronics Engineering through a special Laboratory/U.S. Atomic Energy Commission scholarship. Don retired in 1998 and continued contributing to the Lab’s Engineering Division projects through an Affiliate appointment until 2019.

Don was preceded in death by his parents and granddaughter Brittany Sondrol. Don is survived by his loving wife Beverly (Lee), and devoted children Yvonne, Gary, Claudine & their spouses; grandchildren Jessica, Alicia, Joseph, Sean, Tara, Melissa & Zachary and their spouses; great-grandchildren Jayden, Estella, Joseph, Jennavae, Lorenzo, Andrew & Tucker. He is also survived by his brothers Robert, Gerald, David and their spouses and many more family members.

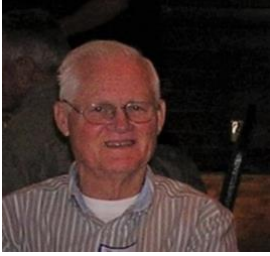
Don was an active member of St. Joseph Church of Pinole and the St. Vincent DePaul Society of Pinole. An avid racquetball player and traveling/camping enthusiast touring the country with his wife and family in their 5th wheel camper. He enjoyed the opportunity of solving other people's challenges and loved to tinker and fix anything broken.

A celebration of life was held on February 21st at St. Joseph's Church, Pinole, and a reception followed the service at St. Joseph's Cemetery, San Pablo. For those who wish to honor Don’s memory, the family has suggested a donation be made in Don’s name to either the Cancer Society, National Park Foundation or Semper Fi Fund.

*Submitted by Vicky Jared*



## Robert (Bob) Belshe, Sr. – 1934-2020



A resident of Moraga for 45 years, Bob died at his home on April 3, 2020 in Stockton of natural causes, surrounded by his family.

Bob was a native of California, born and raised in Long Beach and the San Joaquin valley, and moving to the Bay Area in 1954. After serving as an electronics engineer in the Navy during the [Korean War](#), he earned a BSEE degree from U.C. Berkeley.

He built a 40 year career at the Lawrence Berkeley Laboratory (LBL) as an electrical engineer and computer scientist where he worked on numerous projects including the Bevatron nuclear particle accelerator, SLAC National Accelerator Laboratory at Stanford University, and the LBL Gammasphere detector, the world's most powerful instrument for detecting gamma rays. A patient and dedicated engineer, Bob was the author of many technical papers and cutting edge technologies. He retired in 1994.

Bob was the consummate engineer, and he had a passion for electronics and computers. He was constantly tinkering, whether it was dismantling a vacuum cleaner as a child, restoring the engine in his car, building some of the first LED clocks, hacking the world's first keyless car, or building his own solar water heater. He was fascinated with all things electronic and mechanical.

Outside of engineering, Bob was an avid reader, skilled skier, and a lifelong pilot. He loved flying, doing aerobatics in his younger years, working on his experimental planes in his older years, and he once described flying as, "the most fun he ever had with his pants on." He was an active member of Chapter 393 of the Experimental Aircraft Association (EAA) in Concord and the Mount Diablo Pilot's Association.

He is survived by his children; Robert Belshe Jr. (Randi) of Rio Vista, Diana McDonald (Kerry) of Wheatland, Marie Cottman (Donald) of Stockton, and Michael Belshe (Jia) of Atherton. He has eleven grandchildren, and four great-grandchildren who will all miss him.

He is preceded in death by his wife, Sally, of 44 years. At his request, no services will be held. Memorial gifts may be made to the AOPA Air Safety Foundation or the American Heart Association.

*Submitted by Vicky Jared*

## Remembrance of Bojan T. Turko – 1931-2020



Dr. Bojan Turko passed away in Walnut Creek, California on February 18, 2020. He was born on November 26, 1931 in Strigova, Croatia, to Alfons and Barbara Turko. Both of his parents were school teachers. He is survived by his sister Dr. Vlasta Turko, along with many relatives and friends.

Bojan attended high school ("Gymnasium") in the town of Varazdin in Northern Croatia. In 1950 he enrolled into the Electrotechnical Faculty at the University of Zagreb and graduated with a Diploma in Engineering

Degree in 1956. Bojan was an excellent student, mastering such challenging subjects that he was selected as a teaching assistant by one of the most demanding professors. His principal subject was in high precision physics and electrical measurements, which Bojan pursued through his entire career.

In 1957, Bojan readily obtained a position at the prestigious research Rugjer Boskovic Institute, one of the three recently founded institutes for nuclear sciences in the former Yugoslavia. In 1962 he spent one year on a sabbatical in the Casaccia Research Center in Italy. Bojan obtained a Doctorate in Engineering Sciences Degree in 1966. In 1964, with three colleagues, he was granted the prestigious award “Nikola Tesla” for contributions to digital data processing in nuclear instruments.

In 1968 Bojan sought experience abroad, and joined EG&G (Edgerton, Germehausen and Grier) in Boston, which was at the time a leading developer of nuclear technology and of instruments for scientific research. Meanwhile, a group of scientists from the Oak Ridge National Laboratory (ORNL) in Knoxville, Tennessee, formed a company, ORTEC, dedicated to development of instruments for detection of nuclear radiation. ORTEC became a part of EG&G, inspiring Bojan to join them in Oak Ridge in 1972. In 1975 Bojan then moved to LBL, where he worked until his eventual retirement, 36 years later.

Bojan was an author or co-author on at least 70 technical publications in the top journals on scientific instruments and methods and he held three patents. His work has benefitted several diverse areas of science, helping to advance their state-of-the art. His interest in high speed/short-time scale phenomena resulted in the techniques he developed to help determine the time of occurrence of events ranging from nuclear reactions to medical physics on the scale of less than a billionth of a second. He also helped evaluate very fast imaging devices (cameras) operating at thousands of frames per second. A few projects, among many, illustrate the breadth of his contributions: one was a high speed detector for x-rays at the advanced source of synchrotron radiation at LBNL, a premier facility for research in materials science (2005); the second was for nuclear medicine, an intensity monitoring system for proton radiography at Los Alamos National Laboratory (2007); and the third was a monitoring system for the intensity (flux) of protons at the Large Hadron Collider (LHC) at CERN, the world’s largest facility for research in high energy physics (2009). Bojan’s work on imaging devices has also been invaluable to the field of astrophysics. He also made a contribution to tectonic monitoring crucial to earthquake prediction.

Bojan retired formally from LBNL in July 1999 as a Senior Electronics Engineer. This has been the highest job classification for Electronics Engineers at LBNL. After he retired, he was rehired many times as a “rehired retiree”. Characteristically for him, his first appointment as a rehired retiree started already on Nov. 11, 1999. He left LBNL for good in Nov. 29, 2011.

Bojan was an erudite person who had many interests, in particular history and literature. That was not apparent as he gave the appearance of being shy and very reserved. Nothing was further from the truth. He liked to be with people and often enjoyed long conversations, sometimes late into the night. His main character trait, deeply ingrained, and very likely his main motivation in life, was to help others. He had helped many individuals usually in a subtle way that was not visible to others. He was sensitive to the suffering of others and had deep compassion for those less fortunate. What came first to him was tolerance among people of different backgrounds.

*By friends of Bojan Turko, March 2020*

(Note: If you know of the recent death of a member of the EX-Ls retirement family, please send a note with an obituary of about 250 – 500 words in length to Phyllis Gale, Newsletter Editor at p2gale@gmail.com.

You have received this e-mail because the LBNL Retirees Association (EX-Ls) is inviting you to join us REMOTELY through ZOOM for our upcoming May quarterly speaker. You will continue to receive further information from EX-Ls regarding other lunches and events. If you would like to change your e-mail address please send an e-mail to: <http://retirement.berkeley.edu/ex-ls> with the words "Address Change" in the Subject line. Include your name and the old and new e-mail addresses in the body of the email.

**EX-Ls Retirement Association – News Online – Luncheon Announcement**

**Join Us ..... EX-Ls May 21, 2020 REMOTE Zoom Meeting: ZOOM Speaker**

Date: **Thursday, May 21, 2020**

Speaker: **John Swartzberg, MD**

**REMOTE: Zoom Meeting**

Time: **12:00 to 1:00 pm practice connecting, Speaker: 1:00 to 2:00 pm**

**Free Free Free Free**

REGISTER USING THE EVENTBRITE LINK BELOW

<https://ex-ls-may2020.eventbrite.com>

**Kathy Bjornstad, Activities Coordinator**

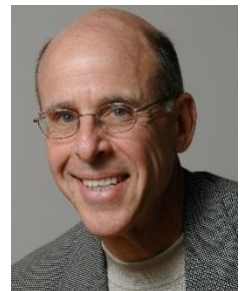
Call, text or email if you have questions or need help: (510) 220-1273 [kathy.bjornstad73@gmail.com](mailto:kathy.bjornstad73@gmail.com)

\* \* \*

**EX-Ls is proud to have SPEAKER: John Swartzberg, MD**

**TITLE OF TALK: Update on the ongoing coronavirus pandemic**

**ABSTRACT:** This talk will update the audience about SARS-CoV-2 and the disease it causes, COVID-19. John will cover properties of the virus, its pathogenesis, epidemiology, clinical manifestations, available diagnostics, treatment and prevention.



**BIOGRAPHY:** John Swartzberg, MD, is a clinical professor emeritus at UC Berkeley's School of Public Health, chairs the editorial board of the School of Public Health's Health & Wellness Publications. He is a past director of the UC Berkeley–UCSF Joint Medical Program and continues to teach in that program. For two years he was President of UC Berkeley's Emeriti Association.

Swartzberg is board certified in internal medicine and infectious diseases. Before joining UC Berkeley's faculty part time since 1980 and full time since 2001, he spent 30 years in clinical practice. He is also the hospital epidemiologist and chair of the infection control committee at the Alta Bates Medical Center in Berkeley.

He teaches an online course and a two-semester course on Principles of Infectious Diseases and a seminar on Healthcare Associated Infections. He has collaborated with the late Sheldon Margen, a pioneer in nutritional sciences and co-founder of the Wellness Letter, on the highly successful Wellness Self-Care Handbook in 1998 and the Complete Home Wellness Handbook in 2001.

We welcome new members to the LBNL Retirement Association the EX-Ls.

To be added to the LBNL EX-Ls Roster, please provide the following contact or updated information.

Address \_\_\_\_\_

Email \_\_\_\_\_ Phone \_\_\_\_\_ Cell \_\_\_\_\_