



Scholars Notebook

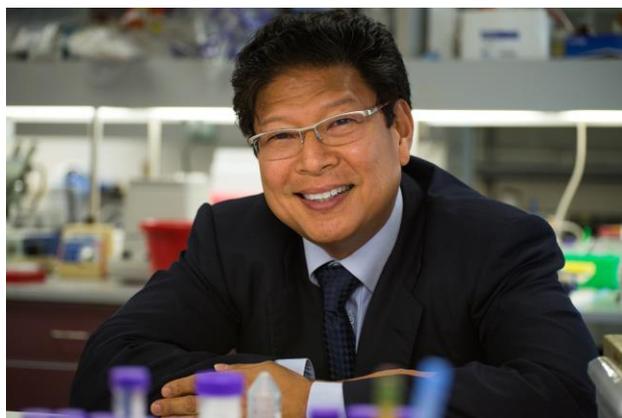
San Diego Independent Scholars (SDIS) February 2021

Saturday, February 20 at 1:30 p.m., by Zoom

Does DNA Editing by Brain Cells Cause Alzheimer's Disease?

Jerold Chun, MD, PhD

Abstract: One in 10 people over the age of 65 is living with Alzheimer's disease (AD)—and there is no cure. New research shows that certain edits of the brain's genetic blueprint may underlie the disease. Learn how existing FDA-approved medicines may offer near-term hope to treat this devastating type of dementia.



Jerold Chun, MD, PhD

Professor and Senior Vice President
Sanford Burnham Prebys
Medical Discovery Institute
La Jolla, Ca 92037

Short Biography: Jerold Chun, MD, PhD, is Professor and Senior Vice President Neuroscience Drug Discovery at Sanford Burnham Prebys Medical Discovery Institute (SBP). He has made important contributions to our understanding of the brain and its diseases, including the discovery of genomic mosaicism in the brain and its involvement in the most common forms of Alzheimer's disease with relevance to other brain diseases. In separate work, he identified the first lysophospholipid receptor, which is part of a growing class of lipid receptors underlying new neuroscience medicines (*e.g.*, fingolimod, siponimod and ozanimod for Multiple Sclerosis) and an understanding of other diseases, including hydrocephalus, schizophrenia, neuropathic pain, and fibrosis. As author of more than 300 scientific publications, he has been recognized in Thomson Reuters' World's Most Influential Scientific Minds citation list and is a member of numerous advisory, review, and editorial boards in both academia and industry.
(continued page 2)



Jerold Chun (continued from page 1)

Dr. Chun received his MD and PhD (Neuroscience) degrees through the Medical Scientist Training Program at Stanford University School of Medicine, moving east as a Helen Hay Whitney Postdoctoral Fellow at the Whitehead Institute for Biomedical Research – MIT.

He then joined the faculty at the UCSD School of Medicine, where he became Professor of Pharmacology and Neurosciences and directed the Neurosciences Graduate Program. He subsequently became Department Head of Molecular Neuroscience at Merck Research Laboratories, returning to academia as Professor at The Scripps Research Institute and adjunct Professor at UCSD, before his current position.

✓ **The San Diego Union-Tribune has printed an article on SDIS and our COVID-19 project.** (See page 5)

✓ **Recorded SDIS lectures are available on YouTube** (See page 5).

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Information: San Diego Independent Scholars

The Scholars Notebook is issued monthly during the academic year, except December, by the San Diego independent Scholars (SDIS), a nonprofit organization founded in 1982.

The mission of SDIS is to promote opportunities for active learning and scholarship, both for its membership and for the San Diego community.

Public service activities of SDIS include: (1) monthly public lectures presented during the academic year, (2) discussion groups held in public libraries or online, (3) small grants awarded on a competitive basis for research projects and (4) various cooperative educational and other projects with local organizations.

More information about SDIS and its activities is available at www.sdscholars.org. Questions: sandiegoindependentscholars@gmail.com

Members may submit a piece to the Scholars Notebook. Email it by the middle of each month to sandiegoindependentscholars@gmail.com

SDIS Board, 2020-21

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Welcome New Members !

Below are new friends who have joined SDIS since January 1 of 2020. We are so happy to have the chance to get to know these interesting people.

Name	City	Interests
Bacon, Glenn	Tucson, AZ 85718	AI impacts/Quantum Computing/Consciousness
Casey, Denise M.	La Jolla, CA 92037	Communication/Travel/Film
Eminhizer, Charles	San Diego, CA 92131	Physics/ Climate Change/ New Technology
Hunt, Timothy Ann	San Diego, CA 92122	Medicine/Wildlife/Computer Science
Kretzmann, David	Carlsbad, CA 92008	Cosmology (black holes)/ History of Religion/ Ethics
Nikora, Leo	Carlsbad, CA , 92008	Physics and Mathematics
Roland, Diane	San Diego, CA 92122	Many Topics
Swaim, Jill	Carlsbad, CA 92008	Travel/ Politics/ Improvization
Wengenroth, Colette	Carlsbad, CA 92009	Politics/Art/Film

Please help these new members to learn about our activities and welcome them to your groups, if you have not already done so. For their contact information, consult the SDIS directory, which has been recently mailed to all SDIS members.

Corrections to the 2021 SDIS Directory: For Inga Liden, the correct number of her apartment is #352. Contact information for Dr. Denise M. Casey is only in the PDF version of the directory, not the printed one, because she joined after printing of the directory.

Short Notices

- **An article about SDIS has been printed in the San Diego Union-Tribune.** A column concerning SDIS appeared in the San Diego Union-Tribune on January 22, 2021. For an online version, go to:
<https://www.sandiegouniontribune.com/opinion/commentary/story/2021-01-21/commentary-senior-scholars-journal-pandemic>

- **SDIS turns 40 next year.** Next year is the 40th Anniversary of the founding of SDIS. Is anyone interested in exploring the history of the first 40 years of our organization?

- **Try the YouTube link for recordings of monthly SDIS lectures.**
If a SDIS general meeting lecturer gives consent, that person's presentation is placed on the SDIS YouTube site. Jack Cumming has been kindly posting the material 2-3 days after each lecture. The link for the SDIS site is:
<https://www.youtube.com/channel/UC7zSUTp6Z6Gkb3NwZ-vAgwA>
There you will find recordings of: (a) the SDIS Christmas party on December 6, 2020, which featured readings from the COVID-19 project, (b) "The Future of Humankind," by Willard Wells and Ronald Peterson on November 21, 2020, (c) "Sexuality Across the Lifespan," by Erin Nissen Castelloe on November 21, 2020, (d) "How are Cellphones Shaping the Future of Photography," by Kim Signoret-Paar on April 18, 2020, and (e) Roman History in a Nutshell," by Michael Sage on September 15, 2018. The first four recordings are of Zoom presentations. The last was filmed during an in-person meeting in room 111A of the Chancellor's Complex at UCSD.

- **SDIS writing projects are posted on our website** The book describing our experiences and reactions during the COVID-19 pandemic has been published and is available for downloading or printing at:
<https://www.sdscholars.org/covid-19/>. First click "View," then click "Download" or "Print" if desired. Writings from the Frontier Project and the China Relations Project will appear soon, also in the Projects section of the SDIS website.

- **We would like your opinion on the role of Zoom in the future of SDIS.** At the end of the pandemic, do you prefer that your favorite SDIS activities (a) return to in-person meetings, (b) continue with Zoom only or (c) attempt hybrid formats that combine both Zoom and face-to-face options? Please give your opinion to Alvin Halpern.

Colloquy Cafe

now 2:30 p.m., 3rd Wednesday of month -- next is **February 17**

As of this writing, the January meeting has not yet occurred. Originally scheduled for Inauguration Day, members decided to postpone the discussion of “class” until Wednesday the 27th, also moving the time an hour later, 2:30 rather than the usual 1:30. Therefore, the report will be delayed until the next issue of the Newsletter.

Gerry Horwitz

Documentaries by Ken and Faye

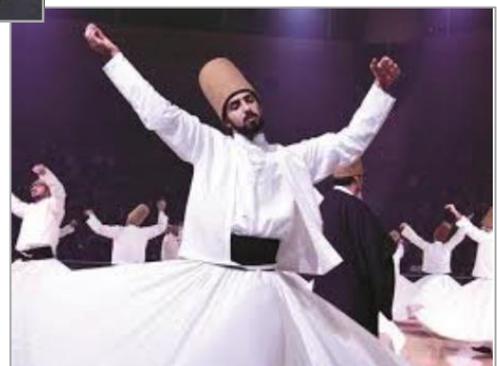
12:30 every Saturday - next is **February 6**



January 16:
Tiny Houses



January 23:
Elon Musk



January 30: A Trip to Turkey

To get on the Zoom mailing list,
contact KMW@ucsd.edu

FILM GROUP

10:00 a.m. 1st Wednesday of month -- next is February 3.

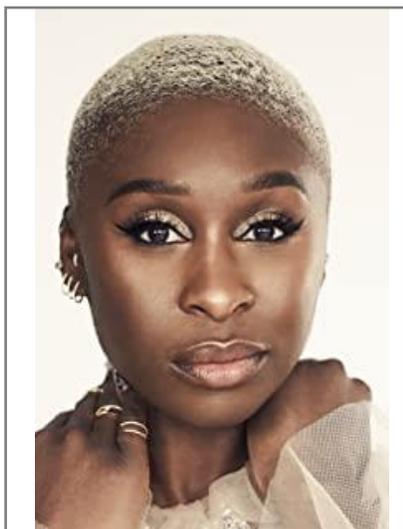
For the third in a series of films directed by women, The Film Group will meet Wednesday, February 3 at 10 a.m. to view *A New Leaf*.

A scatterbrain botanist is determined to find a previously unknown species of plant to be named after her. An unscrupulous, flat-out broke gigolo plans to arrange her death once he has married her. With a script based on a short story by Jack Ritchie, *A New Leaf* was a critical success that did poorly at the box office.



With Walter Matthau as the gigolo and character appearances

by Jack Weston, James Coco, Doris Roberts, Renee Taylor, and a host of familiar faces, this was Elaine May's first film as lead actress, screenwriter, and director. (One of my favorite lines: Introduced to someone at a fancy cocktail party whose last name is Hitler, Matthau asks, "Oh, are you one of the Long Island Hitlers?") The zany, black comedy and wonderfully sentimental ending make this a gem that audiences in 1971 just didn't get but it is something of a treasure.



Cynthia Erivo

Our January film, *Harriet*, moved several of us to tears. Director Kasi Lemons is a well-known actress and director whose directorial credits include *Eve's Bayou* and *Black Nativity*. She deliberately downplayed the cruelty of slavery, although it was clearly evident, in order to focus on the sterling character of Harriet. Cynthia Erivo's starring role as Harriet garnered an Oscar nomination as Best Actress, and she also earned a nomination for Best Original Song. She is a British actress who is perhaps better known as a singer and songwriter.

Barbara Heckler and Ken Krauss

Inside Politics

10:00 a.m., 1st Saturday of month: **next is January 2**

Our SDIS Inside Politics Zoom Study Group celebrated the New Year by meeting on Saturday January 2, 2021, our regular meeting on the first Saturday of each month. We were all optimistic about the new year, of course, and hoping for a much better year than what turned out to be a rather disastrous 2020. The Covid-19 pandemic has affected all of us in a negative way, even if we have managed to avoid becoming infected with the virus so far. So, we rolled up our sleeves and proceeded to do what we enjoy so much - discussing the hot button political issues of the day.

President Trump appeared to have lost the 2020 election but was still contesting the election in the courts, while Joe Biden was making plans to move into the White House on January 20. We discussed these topics, along with the delay in receiving the first dose of the Covid vaccines. The two Senate runoff elections were coming up in three days, leading to a lively discussion of those runoffs, along with whether Trump's continuous refusal to concede defeat would affect those upcoming elections.

What we could not and did not anticipate, of course, was the storming of the Capitol by Trump supporters on January 6, one of the most significant political events in our country's history. At our next meeting scheduled for Saturday February 6, we will discuss the political ramifications of that insurrection, along with the Impeachment voted against President Trump by the House of Representatives on January 13. The Senate will conduct the impeachment trial of President Trump beginning the week of February 8, so our February 6 class will discuss the issues expected to be raised during the trial. The television ratings for this trial should be quite high, as most of the political junkies around the country will be tuned in to watch what could result in the end of Donald Trump's political career. We can look for a lively exchange of ideas next month during our class, so be sure to read all about it in next month's SDIS Notebook.

To be placed on the Zoom mailing list, contact akorobk1@san.rr.com.

Al Korobkin

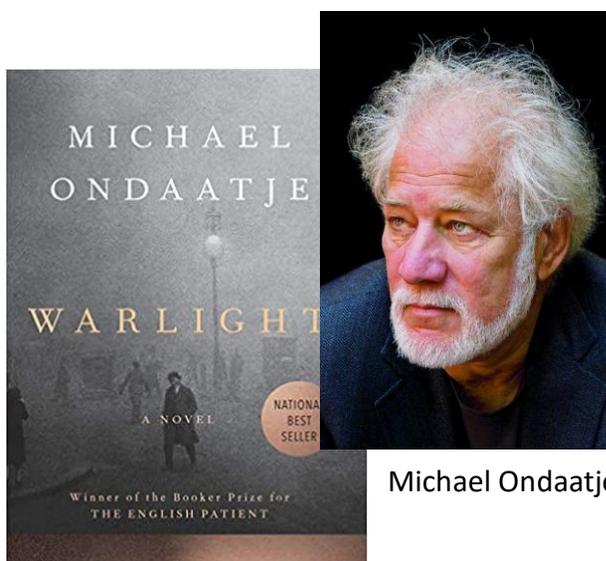
Reading Experience – a theme-based reading and study group

10:00 a.m. on 3rd Monday of each month -- **next is February 15**

Portrait of a Marriage by Nigel Nicolson, a son's "biography" of his parents and their marriage, was the January discussion topic on the theme **biography**. The long union of novelist Vita Sackville-West and Order of the British Empire recipient Harold Nicolson was unusual in that both were actively bisexual and confided in one another.

February's discussion will open a new series, "**deception**", beginning with the novel Warlight by Michael Ondaatje. That meeting will be on Monday the 15th at 10 a.m.

Gerry Horwitz



Michael Ondaatje

Science Group

1:00 p.m., 2nd Friday of month -- next is **February 12**

Our Science Study Group will meet via Zoom on Friday, February 12, at 1:00 p.m.. Currently we are focusing on **Genetics**. In February, we will consider the necessary background and then discuss issues pertinent to the SDIS lecture this month (see page 1). Focus will be on the role that genetic mosaicism within the brain may play in Alzheimer's disease and other neural disorders.

At our January meeting, we learned about some of the basics of genetics, including the use of RNA to create the current Covid-19 vaccines

Arlene Gilbert

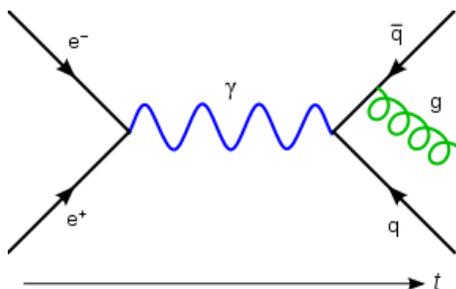
Physical Science Group

10:00 a.m. Thursday, biweekly -- **next is Thursday Feb. 4, 10:00 a.m.**

The Physical Sciences Group met on January 6 and January 19, at 10 a.m. via Zoom. At those meetings we completed Griffiths' Introduction to Elementary Particles, Ch. 2, which gives a brief description of the Feynman Diagrams for the Electromagnetic force (photon mediator) , Weak force (Z, W mediators) and Strong force (Gluon mediators).

The exchange of these mediators causes the particles that are sensitive to the particular force to "feel" the effects of that force. Thus, electrically charged particles feel the effect of the electromagnetic force by exchanging photons. The "color" charged particles, the quarks, feel the effect of the strong force by exchanging gluons, etc.

The Feynman Diagrams give one the ability to calculate, for example, the outcomes of an interaction of two colliding particles. The original particles can go off like billiard balls after the collision, but they could also change into other particles on the way out. Similarly, Feynman Diagrams can describe the "decay" of a particle into lighter particles via one or more of the forces, often via the weak force, but also via electromagnetic and strong forces.



In this Feynman diagram, an electron and positron destroy each other, producing a virtual photon which becomes a quark-antiquark pair. Then one radiates a gluon. A **Feynman diagram** is a diagram that shows what happens when elementary particles collide.

The group also went through several Ch.2 homework problems to see if we could figure out how to construct diagrams for various situations, as well as to see which forces were acting in different collision and decay scenarios, involving the many short-lived particles in nature. Such collisions are restricted by conservation laws which must be obeyed (e.g. , energy, electric charge, quark number, quark type ("flavor"), lepton number, etc.) and which differ somewhat for the different forces.

Our next meeting will be on Thursday, Feb. 4, at 10:00 a.m. This is a change in the regular day of the week for our meetings from Wednesday to Thursday.

Alvin Halpern

North County Events Open to SDIS Members:

Even before the pandemic, several SDIS members living in North County found it difficult to attend events in La Jolla because of traffic congestion, time constraints or other factors. To better meet their needs, SDIS has established a cooperative relationship with North County village (NCV), a non-profit grassroots organization that emphasizes interdependent, help-each-other living. The goal of NCV is to make aging at home easier.

NCV and SDIS have agreed to allow each other's members to visit their activities during a trial cooperative period. All NCV events currently are offered on Zoom.



North County Village (NCV)

North County Village Activities for February 2021

- 2/02 – Film Club 3:30 – RSVP jek123@msn.com
- 2/12 – Valentine's Day Happy Hour, 4:00 -- RSVP jek123@msn.com
- 2/17 – Memoir Writing – 2:00 RSVP rigdoncurrie@mac.com
- 2/24 – Book Club – 3:30 – RSVP jek123@msn.com
- 2/26 – Cooking Demo w/ Inga – RSVP rigdoncurrie@mac.com

Serengeti: Endless Plains

Nigella Hillgarth, PhD



Abstract: A glimpse into the fauna of fascinating ecosystems in Northern Tanzania and the vital role of Keystone species in this system. The talk will be illustrated by photographs of some of the species and landscape that makes up this remarkable area. A few examples of keystone species will be included from California and the North West as well.

Oceanids Sounding Board

Thursday, February 4, 2021 @ 12 p.m.

Dr. Nigella Hillgarth is a biologist, environmental advocate and photographer concerned with the impacts of climate change on ocean and coastal ecosystems. Nigella is a founding member of “Ocean Collectiv – solutions for a healthy ocean” and was the 2019 Climate Art Fellow at the Center for Climate Change Impact and Adaptation at Scripps Institution of Oceanography.

Previously, as President & Chief Executive Officer of the New England Aquarium, she raised the profile of the Aquarium’s global conservation and research work by founding the Anderson Cabot Center for Ocean Life in June 2016, as well as developing a vision for the future of the Aquarium and surrounding Boston waterfront.

Earlier Nigella Hillgarth was Executive Director of the Birch Aquarium at Scripps Institution of Oceanography, UC San Diego, where she produced the first major exhibit on climate change on the West Coast. Nigella was born in Ireland and received her Bachelor’s degree in Zoology from Oxford University in the UK as well as her Ph.D in Evolutionary Biology. She has conducted research on behavioral ecology and evolution in birds in many parts of the world including the United States, Britain, India, Thailand, the Arctic and South America.

→ → → Online via Zoom, please click this link to join:

<https://ucsd.zoom.us/j/2392094686?pwd=NUNnWndFNHlqS3NnbVk2TktXMEkzQT09>

February 2021

SUN	MON	TUE	WED	THUR	FRI	SAT
	1	2 SDIS Board 10 a.m.	3 Film 10 a.m.	4 Physical Science 10 a.m.	5	6 Inside Politics 10 a.m. <hr/> Ken & Faye 12:30
7	8	9	10	11	12 Science: Genetics 1:00 p.m.	13 Ken & Faye 12:30
14	15 Reading Experience 10 a.m.	16	17 Colloquy Cafe 2:30 p.m.	18	19	20 DNA Editing & Alzheimer's 1:30 p.m.
21	22	23	24	25	26	27 Ken & Faye 12:30

Upcoming Events

1:30 p.m., March 20: Some Amazing Discoveries in Modern Astronomy,
Monte Marshall, PhD Professor Emeritus, Department of Geology,
 San Diego State University

SDIS New Member Form and Optional Library Card Form

UCSD Library Cards:

- If you are 65 or over, affiliation with SDIS entitles you to a discounted UCSD Library card, Level 2 (graduate student) privileges, except for inter-library loans.
- Your SDIS library card is \$25 with this membership form. SDIS will match your \$25. That is, for cards acquired at this time, UCSD charges SDIS \$50.

Tax-Deductible Contributions to SDIS are encouraged and welcome . Your dues are also tax-deductible.

MEMBERSHIP: Dues paid in September through March apply to the current fiscal year (Sept-Sept). Those paid from April through August also apply to the subsequent year.

PLEASE provide ALL information for our Directory. Print, or write very clearly.

Date: _____

Name(s): _____

Address: _____

City: _____ State: _____ Zip: _____

Home Phone: _____ Work/Alt/Mobile Phone: _____

Email: _____

Field(s) of Interest, (maximum of three)

APPLICATION FOR OPTIONAL UCSD LIBRARY CARD
Effective for Academic Year Beginning October 1

I assume responsibility for lost, damaged, or overdue materials borrowed on my UCSD/SDIS library card:

Signature: _____ Print Name: _____

PAYMENTS

Make checks payable to SDIS. Please mail entire form with payment(s) to
David E. Parker, 8773 Caminito Abrazo, La Jolla, CA 92037

Tax Deductible SDIS Dues (\$40/single, \$55/couple)	\$ _____
UCSD Library Card (Optional - \$25)	\$ _____
<u>Tax Deductible Contributions</u> (Optional)	
Operations	\$ _____
Helen Hawkins Research Fund	\$ _____
Jane Ford Book Fund	\$ _____
TOTAL ENCLOSED	\$ _____