This talk will focus on how genomics is being used today and how it may be used in the future. We will share some of the reasons why genomics is, and will become, ever more important in a variety of areas of your life. We will discuss the basics of genetics, the fundamentals of sequencing and the latest advances in next generation sequencing. Finally, we will discuss the different applications of genomics, including applications to agriculture, cancer and health.

Allison Hahn is a Senior Field Applications Scientist at Illumina, Inc. She spends her days helping customers use Illumina sequencing technology to achieve their research goals through training, consulting, and troubleshooting. She earned a PhD in Molecular and Cellular Biology from University of Pennsylvania and completed a post doctoral fellowship at Rockefeller University in New York City. She lives in San Diego with her husband Michael, twin 10-year old sons and feisty 3-year old daughter.
On August 24, from 10:00-5:00 pm at Luce Court and Legacy Plaza of Liberty Station (map, page 7), the San Diego Union-Tribune will present its third annual Festival of Books. This year SDIS will join that festival by hosting a table in “Authors Alley,” where we will honor thirteen book authors who are also SDIS members:

- Joan T. Casale
- Donna Woolfolk Cross
- Arthur Curtis
- Wayne Fanebust
- Alvin Halpern
- Kenneth Krauss
- Paul L. Nunez
- Jean R. Renshaw
- Michael Sage
- Thomas T. Samaras
- Jerry N. Selness
- Linda Tway
- Willard Wells

Information concerning each person’s books is at sdscholars.org/our-authors, as well as on bookmarks available at the Festival of Books. All books cannot be listed here because together our authors have produced more than 50 books or plays. SDIS can indeed be proud of them!

Books by SDIS authors range from a best-selling novel (Cross) to scholarly books on diverse topics including physics (Halpern), consciousness (Nunez), sailing (Selness), tide pool ecology (Tway), diet cooking and nutrition (Casale), the effects of increasing human height (Samaras), changing depictions of male beauty in film and theatre (Krauss), the emerging role of women in Asian business environments (Renshaw) and the probability of human survival in an era having new means of mass destruction (Wells). Historical issues fascinate three authors: ancient Greece and Rome (Sage), the American West (Fanebust), and the role of fraternal organizations in the early years of the United States (Curtis). Since most of these persons are modest about their accomplishments, visit sdscholars.org/our-authors to learn more about your SDIS friends.

Participation in the Festival of Books represents a continuation of SDIS’s original goal -- to encourage writing and scholarship among its members. SDIS was founded by a group of highly-educated women who could not find employment to support their scholarly interests. Because of their efforts, SDIS is the founding chapter of the National Coalition of Independent Scholars, which administers a peer-reviewed interdisciplinary journal and holds periodic national meetings.

Although SDIS has now expanded to include nearly 50% men and many members who are not authors, it retains its commitment to writing and scholarship. Books published when an author is an SDIS member are placed in local libraries. Small grants are awarded on a competitive basis to members who wish to pursue scholarly research. SDIS study groups emphasize active learning. Our participation in the Festival of Books constitutes a new way to express those values.

The Acknowledgments page of Wayne Fanebust’s book Outlaw Dakota: The Murdorous Times and Criminal Trials of Frontier Judge Peter C. Shannon illustrates the relationship between SDIS and its authors. It says: “I have received valuable support from my California friends and colleagues of the San Diego Independents Scholars... I thank all of them, but especially Sam Gusman and Gerry Horwitz.”

In turn, I would like to thank the SDIS authors who are participating our Festival of Books table, earlier members who established our traditions, and current members who have volunteered their time and talent so willingly to help with the Book Festival and other SDIS activities.

Dorothy L. Parker, SDIS President
### Types of Memoir

**Oct. 21 - Vladimir Nabokov, SPEAK, MEMORY**  
Recollections of happy family life in St. Petersburg, flight from the Russian revolution when he was 18, and ensuing experiences in England, Paris and Berlin.

**Nov. 18 - Joan Didion, WHERE I WAS FROM**  
Stories about California and her family, she later found, were often inaccurate, misleading or exaggerated.

**Dec. 16 - Edmund de Waal, THE HARE WITH AMBER EYES**  
Describes the colorful lives of his ancestors in Paris, Vienna and Tokyo who collected and treasured 264 netsuke (intricate ornaments that attach a carrying pouch to a kimono) and passed them on to him, an accomplished ceramicist.

**10:00 am, 3rd Monday of each month**, starting October 21; Pacific Beach library  
4275 Cass Street between Thomas and Reed (1 block south of Grand) -- AMPLE PARKING!  
The San Diego Public Library System has multiple copies of each book listed above.  
First theme of a new group, “Reading Experience.”  
Organized by Gerry Horwitz.  
SDIS membership is encouraged but not required.

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### What is funny (or not) to you?

**Sept. 16 - “I was OK until the squirrel bit me!”**  
Bring your favorite humorous expressions or stories. The group will explore what is funny to different people and why. (Some online references concerning humor are in the Scholars Notebook for April 2019, at sdscholars.org.)

**Oct. 14 - Bring your own writing or participate in co-operative writing.**  
Those participants who wish to do so will write or otherwise create something funny. Other group members can provide positive feedback and suggestions. A co-operative writing or other project is also possible, depending on group interest.

**Nov. 18 (or Nov. 2) – Polish, distribute or post.** Participants are encouraged to bring their creations for distribution. Positive suggestions can be given.

**11:30 am, 2nd Monday of each month.** Bring a bag lunch if desired. Large parking lot.  
North University (UTC) branch library, 8820 Judicial Drive, San Diego, CA 92122  
Organized by John S. Alexander.  
SDIS membership is encouraged but not required.
Persons wishing to visit or join a study group are requested to contact SDIS via sdscholars.org or sandiegoindependentscholars@gmail.com

STUDY GROUPS

COLLOQUY CAFÉ: In-depth exploration of one concept each month. 1:30 pm, third Wednesday of each month.

“Celebrity”, which everyone thought was clear, was the subject of the group’s May meeting—but as usual attendees had to think again. One member, citing Wikipedia, defined the term as a recipient of fame and attention given by mass media, with that attention often being associated with some sort of action or behavior as in sports, movies, and/or the acquisition of wealth. That member added “We love them in the U.S.” and remarked ruefully that we don’t seem to value intellect. He was reminded, by another participant, of such intellectuals as playwright Arthur Miller.

Another asked what celebrities contribute to society. Several attendees cited several “celebrities” who seem to be famous just for being famous, naming Paris Hilton and the Kardashians.

Is a person still a “celebrity” after death? Consider such still well-known individuals as Einstein, Picasso, Marilyn Monroe. Both Princess Diana, famous not only for her position in England’s royal family but beloved as well for her good works, and John McCain, well-known for his actions as prisoner-of-war and US Senator, are worthy of being (or having been) a “celebrity”. Is there another, perhaps better, word to describe a defunct celebrity?

How does one become a celebrity? Are qualities such as charisma and self-promotion necessary? And what about individuals famous for misdeeds or crime? A new member of the group contributed the information that the word “celebrity” was first used in English in 1846, derived from the Latin, which then meant “celebration.” No baddies admitted at that time! Have such people achieved notoriety but not celebrity?

“Chilling”. The July discussion was unique in the history of Colloquy Cafe because the member who suggested that meeting’s topic, the adjective “chilling”, was inspired by encountering its use multiple times in a unique document: The Mueller Report!

As startling as this proved to be, direct quotes from part 2 of the report used the term multiple times; examples are a “chilling effect” and “chilling concern”. As used there, synonyms are alarming, depressing, discouraging, and/or hostile.

It turns out that the first known use of the noun “chill” was in the 14th century, meaning a sensation of cold accompanied by a shivering sensation. Henceforth it morphed into various parts of speech. A legal definition of the verb “chill” is to discourage, particularly through fear of penalty. That is definitely something to feel sorry about.

But, oddly, when coupled with “out” (a recent development), the verb “chill” means almost exactly the opposite: to relax or calm down. How did that happen? Does it reflect the diminution of a strong (hot) emotion?

Having digested all of this, is it a surprise that we chose “morality” as the subject of our next discussion?

Gerry Horwitz
**CULTURE GROUP:** Contemporary China  
2:00 pm, 2nd Thursday of each month.

During its last five sessions, Culture One has focused on references describing China since WWII. The organizing principal was a five-part series of exploratory articles in the New York Times called “China Rules”: (1) The Land that Failed to Fail, (2) What the West Got Wrong About China, (3) Money and Muscle Pave China’s Way to Global Power, (4) China became No. 2 by Defying No. 1 and (5) The Road to Confrontation. Although these articles emphasized China-U.S. relationships, we considered internal factors in each country also.

Group meetings this summer covered fascinating reports of how Chinese reforms fueled growth even as state control resurged within the contemporaneous past. We then moved on to discuss later events described by the Times as: “The U.S. adopts a hard line against China, and an era of engagement recedes into the past.” This topic brings us up to very current conditions, including the way in which various groups and people are shaping the views and actions of both nations.

Closure on “China Rules” creates the possibility of addressing related or newly engaging topics at future meetings. Stay tuned for further plans. Sue Rosner

**FILM GROUP:** Film viewing and discussion  
10:00 am, 1st Wednesday of each month.

The Film Group will meet September 4 to view 1939 masterpiece drama *The Rules of the Game*. Directed by France’s Jean Renoir, this social satire portrays a French upper class impervious to the impending destruction of WWII. The film evoked a strong negative response and fell into disfavor for many years. It was banned by the French government for its negative influence on youth. Today it is considered one of the best films of all time.

Summer film viewing included *The Umbrellas of Cherbourg*, 1964 French musical in which the dialogue is all sung as recitative, becoming a sort of cinematic opera. Catherine Deneuve began her ascent to years of stardom as the winsome lead.

August’s film was *The Mustang*, a 2019 drama about a convict rehab program to train wild mustangs for sale at auction to raise money for the prison work program. The film is based on an actual rehab program in Carson City, NV and was filmed at the Nevada State Prison. Begun as a project by writer/director Laure de Clermont-Tonnerre at Robert Redford’s Sundance Institute lab for emerging talent, the familiar redemption theme still appeals to a wide audience.

Barbara Heckler

**NEUROSCIENCE:** 2:00 pm, 3rd Tuesday of each month.  
*The Consciousness Instinct* by Michael Gazzaniga

In his latest book (*The Consciousness Instinct*), Gazzaniga seeks to unravel the brain/mind mystery and proposes that consciousness is an instinct, an inborn property that enhances survival or reproduction and thus has persisted during natural selection. In his usage, instincts can include complex, highly-evolved biological or mental processes.

Dr. Gazzaniga’s knowledge of biology and engineering contributes to his clear descriptions of the architectural structure of the physical system of the brain. This information has given the group a good background to understand ideas about consciousness in later chapters of the book.

This summer the group has considered evidence that many mental processes are performed by discrete units in the brain (modules), which Gazzaniga argues can increase mental efficiency and speed, properties likely favored by natural selection. We are next reading Chapter 8, “Non-living to Living and Neurons to Mind”, in which Gazzaniga builds on Howard Pattee’s idea that specific distinctions between living and non-living materials underlie those between brain and mind.

Additionally, newspaper reports of the development of Artificial Intelligence (AI) have provoked much comment in the group. Current developments were discussed with the knowledge that more developments are in the offing. Some members wonder if we will be able to connect Consciousness and AI in a meaningful way.

Bea Rose
GENERAL RELATIVITY:  *Gravity* by James Hartle  
   Day of month varies.

In May we completed our discussion of black holes in a Schwarzschild Geometry, the formation of black holes and Hawking Radiation, in which black holes "evaporate" mass over time, due to quantum effects at the horizon. While large black holes take the lifetime of the universe or more to completely evaporate, small ones can do so in a reasonable time frame and with an explosive end stage. Two of us independently calculated the mass of a black hole that would be predicted to explode in the current time frame. And reached the same conclusion, although no such explosive black hole endings have yet been observed.

In June and July, we briefly considered the general case of a rotating spherically symmetric mass, and the implications for black holes. We agreed to further review Chapter 15 of Hartle for the next meeting, to gain a better understanding of the energy emission mechanisms for this system. We also discussed gravitational plane waves (Ch. 16), and the two distinct polarizations of these transverse waves. We then began “The Universe Observed” (Ch. 17).

SUPPER WITH SCHOLARS:  Dinner discussion  
   6:00 pm,  Resuming Oct. 3

OPEN TO BOTH SDIS MEMBERS & NON-MEMBERS

At Humphreys Grill in La Jolla near UCSD  
   3299 Holiday Court, La Jolla, CA.  
   Meals from the menu are Dutch Treat.  
   (See [www.humphreyslajolla.com](http://www.humphreyslajolla.com))

Because restaurant reservations are needed, please RSVP 4 days in advance to [sdscholars.org](http://sdscholars.org) or [sandiegoindependentscholars@gmail.com](mailto:sandiegoindependentscholars@gmail.com)

Group discussion is based on suggested topics that have particularly interested the attendees in the last month. The subject is selected each meeting by vote of those present. We try to select a question that can be addressed from the differing viewpoints of the various areas of expertise of the participants, which are ordinarily quite diverse, ranging from the humanities to natural sciences to social sciences to various professions.

Dave Parker

Directions to Room 111A, UCSD Chancellor’s Complex  
*(This the location of SDIS monthly lectures at 1:30 on 3rd Saturday of each month.)*

Room 111A is the only room in a single-story building (also called 111A) on Lyman Lane between Meyers Drive and Library Walk.  
It is directly across the street from the back door to the UCSD Bookstore, which is in the Price Center (Student Union).

Parking currently is free at UCSD on Saturdays, except for sites marked as “Reserved 24/7.”  
A large parking structure at Gilman Drive and Villa La Jolla Drive is about 5 blocks from room 111A, although closer spots can be found if one is lucky.  
Another option is to park more peripherally and take a campus shuttle bus to Price Center.  
Lunch can be obtained from many vendors at the Price Center if the bus gets you there early.
Directions: SDIS Table at the Festival of Books
Saturday, August 24  10:00 am – 5:00 pm
2641 Truxtun Road in Liberty Station on Point Loma

(Note that North on the map is to the left.)

Go to “Authors Alley” in Legacy Plaza and Luce Court. (2641 Truxton Rd)
Block bounded by Truxtun, Dewey, Roosevelt and Historic Decatur Roads.


Closest parking lots:  2380-2578 Truxtun Rd.; 2670-2798 Cushing Rd.  2640 Historic Decatur Rd.
(The Union-Tribune has reserved spots for Festival attendees in these lots. Other spaces can
be used with validation from a Liberty Station business.)

Bus stop: Rosecrans and Roosevelt; (Rosecrans and Curtis; Rosecrans and Goldsmith)