

The Institute for Learning in Retirement is dedicated to the enjoyment and continued learning of its members. The courses in this Bulletin are the work of volunteer members who organize and facilitate the courses, discussion groups, special events, and field trips as well as social activities involving the ILR. The presenters are also volunteers from the University of Florida, Santa Fe College as well as the Gainesville community. Visit our website at www.ilratoakhammock.org or email Sara Lynn McCrea at smccrea@oakhammock.org for more information.

Winter Courses

Theater Series And the Winner is?

Mondays, January 9 through February 20
1:30 p.m.

Oak Hammock Commons Acorn Room

Cost: \$10.00

Presenter: Estelle Aden

Facilitator: Janet Jamieson

January 9 *Rashomon*: Fay & Michael Kanin
based on Japanese Stories by Ryunosuke Akutagawa

Three people tell conflicting accounts of a tragic incident. Who is telling the truth? What do they gain by telling a lie?

January 16 *The Little Foxes*: Lillian Hellman
Can Regina bring her small town business and the family to 'big time' in Chicago. Her ambition and shrewdness defies all obstacles. Is she the winner?

January 23 *The Hieress*: Ruth & Augustus Goetz
Based on Henry James novel *Washington Square*
Catherine Sloper has met the one man who promises to care for her. Her father rejects him as a suitable match for her. Is he right?

January 30 *The Price*: Arthur Miller
Two brothers respond to their elderly father in completely different ways. What is the price they paid? Who was vindicated?

February 6 *Good People*: David Lindsay-Abaire
How can some people reconcile themselves to the fact that someone they grew up with is

a success and they are struggling? Can these people ask for help to change their lives? Is there a responsibility that exists?

February 13 *Pygmalion*: George Bernard Shaw
Professor Higgins brings Liza out of the street where she is peddling flowers. He has no idea what she'll do after he has trained her to be a lady nor does he concern himself with that eventuality. Did he do her a favor?

February 20 *My Fair Lady*: Lerner & Lowe
Musical starring Audrey Hepburn & Rex Harrison based on Shaw's play, directed by George Cukor.

A Hollywood ending that pleased everyone but would not have pleased George Bernard Shaw.

Play scripts to be discussed are available from Drama Bookshop. (212) 944-0595



**Roundtable Discussion in the
Algonquin Genre**
**Thursdays, January 12 through
February 23**

10:00 a.m.

Oak Hammock Commons Multipurpose Room

Cost: \$10.00

Class Limit: 25

Moderators: Jim Sullivan, Dick Suttor

This is a forum for discussion of topics of mutual interest. Participants are encouraged to bring their interests, opinions, and expertise to the table and engage in spirited, though respectful debate. Topics will be determined jointly by participants.

Winter Courses



Science Matters

**Wednesdays, January 11 through
February 15
1:30 p.m.**

Oak Hammock Commons
Oak Room

Cost: \$10.00

Facilitators: John Axe and Henri Logan

January 11 Measuring the Structural Connectivity in the Human Brain
Presenter: Dr. Thomas Mareci, UF Biochemistry Department

The complex functions of the brain, like thought and perception, result from the way the brain is "wired," so that individual cells and groups of cells can communicate effectively. We are using magnetic resonance imaging to directly measure how the brain is connected to perform these complex functions.

January 18 LIGO, Gravitational Waves and Black Holes
Presenter: Dr. David B. Tanner, UF Physics Department

The Laser Interferometer Gravitational-wave Observatory (LIGO) collaboration completed two Advanced LIGO detectors in early 2015. Each LIGO detector is a Michelson-type interferometer with arm lengths of 4 km (2.8 miles), acting as a very sensitive laser rangefinder measuring the distance from a central vertex to mirrors 4 km away. One interferometer is at Hanford, WA and the other in Livingston, LA, near Baton Rouge.

The UF Physics Department built the input optics for both initial and Advanced LIGO and has been carrying out online and off-line data analysis for generic gravitational wave transients in the LIGO data stream. This, the detections, other results from the first observing run, the current status of LIGO, and the prospects for the future will be discussed.

January 25 Exploring the Dark Side of the Universe
Presenter: Dr. Anthony Gonzales, UF Astronomy Department

Dr. Gonzales will present an overview of the evidence for dark matter and dark energy, describe what we know about them so far, and discuss what their presence means for the future of the Universe. He will conclude by describing planned astronomical facilities during the next decade that have the potential to shed new light on the nature of dark energy.

February 1 Plant Domestication
Presenter: Dr. Paul Lyrene, Professor Emeritus, UF Horticultural Sciences Department

Before agriculture began (about 12,000 years ago), people lived by hunting and gathering. It is estimated that

hunting and gathering could support no more than 1 person per 10 square miles of land. In Florida, that would be about 8,000 people, far less than 1% of the state's current population. Farming wild plants with modern methods, with all the advantages of fertilizer, irrigation, and weed control, would produce only about 25% of the food needed to support the world's 7 billion people. How were high-yielding varieties developed starting with wild plants?

Despite our new understanding of DNA and molecular biology, the principal method still used to get better varieties of plants and animals is recurrent selection. In this talk Dr. Lyrene will tell how using recurrent selection to domesticate deerberries, a Florida native *Vaccinium* species that is kin to blueberries, cranberries, and lingonberries.

February 8 The Theory of Black Holes
Presenter: Dr. Charles Sommerfield, Professor Emeritus, Physics Department, Yale University

The recent discovery at the LIGO* and Virgo** observatories of gravitational waves attributed to the merger of two black holes has renewed general interest in these objects. In this talk Dr. Sommerfield will present our current understanding of the properties of black holes, mostly from the standpoint of their place in Einstein's general theory of relativity and also how they fit into quantum mechanics, thermodynamics and information theory

He will discuss features of the description of a given event that can be agreed upon by two different observers and what restrictions this can place on the relation between the coordinate systems they use. He will also will discuss the specific properties of black holes including how they seem to imply a loss of information, how they decay and how they fit into our understanding of thermodynamics and quantum mechanics.

*Laser Interferometer Gravitational-Wave Observatory
**Named for the Virgo Cluster of galaxies in the Virgo constellation.

February 15 The Birth of the Peaceful Use of Nuclear Power
Presenter: Willard G. Shafer, Civil Engineer Corps, USN, Ret.

The Atomic Energy Commission was established by Congress when President Harry S. Truman signed the McMahon/Atomic Energy Act on August 1, 1946. The Act shifted complete control of the personnel and assets used by the U.S. to develop and produce the WWII atomic bombs. The AEC was to oversee the peaceful development of atomic science and technology as well as weapons for national defense formerly within the wartime Manhattan Project.

This presentation will primarily trace our nation's early progress to develop peaceful uses of nuclear power leading to the commercialization of nuclear power. The period covered will be from the mid-1940s to the mid-1970s when the AEC was abolished and its functions were reorganized and reassigned. By this time the practical uses of nuclear power and accompanying safety challenges were fairly well in focus.

Winter Courses



The Sidney Ives Class on Understanding and Enjoying Opera Tuesdays, January 10 through February 28

1:00 p.m.

Oak Hammock Commons Acorn Room

Cost: \$10.00

Facilitators: Forrest Crawford, Jackie Davison,
Coni Gesualdi, Ray Jones

“In the 19th century German opera came of age. It owed its evolution to German folklore and the specific requirements of the German Language.” So begins Professor Robert Greenberg (who comes to us through The Great Courses DVD series) in his lectures on the important change from traditional German *singspiel* to a new German opera form. Join us as we learn the role of language and music not just in German opera, but opera in general. Greenberg discusses Mozart’s last major work *The Magic Flute/ Die Zauberflote* and its influence on the changes to follow, then he speaks about “the definitive work that established 19th century German opera,” *The Freeshooter/Der Freischutz* by Carl Maria von Weber. We will watch both operas. What discussion about German opera would be complete without examining the contributions of Richard Wagner? Greenberg introduces us to the man and his musical theories, including the concept of *leitmotif*. We will watch Wagner’s *Flying Dutchman/Der Fliegende Hollander* following the lecture. And to end this session we proceed to Late Romantic German Opera, specifically Richard Strauss’ richly orchestral *The Woman Without a Shadow/ Die Frau ohne Schatten*, described as “an ethical fairy-tale.”

January 10 & 17 A Greenberg lecture on *singspiel* will be followed by Mozart’s opera *Die Zauberflote*. We will watch two versions: one a 2006 Salzberg production featuring Diana Damrau and Rene Pape, and the other a 2003 Royal Opera House production, with Damrau and Simon Keenlyside. The facilitator is Coni Gesualdi.

January 24 & 31 We begin with Greenberg speaking about today’s opera, *Der Freischutz* by Carl Maria von Weber, followed by a 2015 production from the Staatskapelle in Dresden. Forrest Crawford will be the facilitator.

February 7 & 14 Greenberg outlines the life and musical contributions of Richard Wagner to begin this

class. This is followed by a 1985 Bayreuther Festspiel production of Wagner’s opera *The Flying Dutchman* which features Simon Estes. It is facilitated by Ray Jones.

February 21 & 28 We end this session on German opera with the complex and vocally demanding Richard Strauss opera *Die Frau ohne Schatten* in a 1992 Wiener Philharmoniker production starring Eva Marton and Bryn Terfel. This will be facilitated by Jackie Davison. We hope you will join us on this adventure into 19th Century German opera.



Seventh Annual ILR Student Research on Aging Exposition

February 22 and March 17

Oak Hammock Commons Oak Room
Free for ILR members; Register only for Wednesday,
February 22

Facilitator: Ron Bern

Wednesday, February 22 5:30-7:00 p.m.
Advance registration required

Wednesday evening the ILR Board will host a wine and cheese reception in the Oak Room for advance registered ILR members to meet students who have entered the ILR Levitt Award competition for research on aging. The students will each have a poster summarizing their research, and will engage informally with ILR members regarding their research and the results they have achieved.

Immediately following this reception judges will meet separately to select five students as finalists for the 2017 Levitt prize. These students will make oral presentations describing their work on Friday, March 17th

Friday, March 17
10:00 a.m. Oak Room
*Registration **NOT** required*

A member of the team of judges will first explain the guidelines for choosing the winning presentations. Then the five presenters will each have 10 minutes for a PowerPoint presentation describing their work (designed for clear understanding by a lay audience) followed by 5 minutes each of questions from the audience.

Following the presentations the judges, in a separate meeting, will decide the winners of the 2017 ILR Levitt Award prizes, which will be awarded at a private gathering later in the spring. Earlier, the winners will be announced on the ILR website.

Winter Courses



Explorations in Geology Mondays, January 9 through February 13 10:00 a.m.

Oak Hammock Commons
Oak Room

Cost: \$10.00

Series Organizer: Dr. Andrew Zimmer

Facilitator: John Axe

January 9 Evidence for Human-Caused Climate Change

Presenter: Dr. Andrew Zimmerman

Global climate change is one of the most important scientific and policy issues of our time. This talk will present the major lines of evidence that the Earth is currently experiencing unusual warming and that humans are the cause of it. We will also examine the existing uncertainties, range of effects (with a focus on Florida) and potential solutions to solving this most 'wicked problem' of our day.

January 16 Mid-ocean Ridges: Ocean Floor Mountain Ranges

Presenter: Dr. Michael Perfit

The largest and most continuous mountain ranges on Earth are the extensive systems of ridges, rifts, fault zones, and volcanic cones that make up globe-encircling mid-ocean ridge. The results of recent explorations and documentation of eruptions on Pacific ridges during the past two decades will be presented.

January 23 Understanding the Role of Ocean Circulation in Global Climate Change: Past and Future

Presenter: Dr. Ellen Martin

The oceans impact global climate through storage of CO₂ as well as storage and redistribution of heat. The Gulf Stream's warm current makes up the upper limb of a global conveyor system that links the surface and the deep ocean, as well as the Atlantic, Pacific and Indian Oceans. The global conveyor in part responds to changes in climate, but it can also drive changes in climate. The history of past variations in ocean circulation preserved in the geologic record provide a context to understand potential impacts and consequences associated with future global warming.

January 30 Deltas and Humans

Presenter: Dr. Thomas Bianchi

Humans have had a long relationship with the ebb and

flow of tides on river deltas around the world. The fertile soils of river deltas provided early human civilizations with a means of farming crops and obtaining seafood from the highly productive marshes and shallow coastal waters associated with them.

Because of the high population densities in these regions humans have developed elaborate hydrologic engineering schemes in an attempt to "tame" these deltas. With the current eustatic sea-level rise, coupled with delta subsidence (sinking of land) due to natural and human-linked reasons, the fate of modern deltas is in even greater jeopardy. Consequently, the future of numerous modern megacities built on deltas is now also in question.

February 6 How Old is Florida's Groundwater?

Presenter: Dr. Jonathon Martin

The "age" of groundwater is measured as the length of time from when it enters aquifers to when it discharges back to the surface, for example, from Florida's many springs. Groundwater age can be measured using various chemical compounds that dissolve from the atmosphere into the water before it goes underground. We have measured some of these compounds in water that is discharging from several of the Ichetucknee Springs. Combining those measurements with earlier measurements of age we found an increase in age of 10 to 15 years over the past 16 years. In other words, for the past 16 years most of the water discharging from Ichetucknee Springs recharged into the aquifer in a short period of time from around 1975 to 1980. We believe the reason the spring water is getting older is caused by reduced rainfall as global-scale climate patterns change. Consequently, the springs are tapping into deeper and therefore older sources. Although water withdrawal from irrigation may have a similar effect, it appears to be only a minor factor.

February 13 Solving Cold Cases with Geochemistry

Presenter: Dr. George Kamenov

About 1,000 new cases involving unidentified human remains occur each year in the USA, regardless of using traditional law enforcement forensic methods, such as DNA, dental records, fingerprints, facial reconstructions, and comparison to local missing person databases. This talk will present how we can use geochemistry to identify places of origin for cold case victims. As we are what we eat, drink and breathe, different geographical locations and diets imprint specific isotopic signature in our bones, teeth, and hair. He will discuss how we can use this isotope information to help police solve cold cases with unidentified human remains.

Winter Courses

A Dialogue on UF Research: What's Going On and Why We Should Bother Tuesdays, January 10 through February 14 10:00 a.m.

Oak Hammock Commons Oak Room
Cost: \$10.00
Presenters: Karyn Esser, Gordon Mitchell, H. Lee Sweeney, Mike Reid
Facilitator: Barbara Herbstman

Course Description: The University of Florida is home to a large community of biomedical scientists who study human movement and movement-related disorders. Telling the story of this work is a challenge, especially when speaking with non-specialists. In this course senior scientists from UF hope to improve their communication skills by learning from ILR participants. UF researchers will provide brief overviews of their work and then gather input from the attendees. The goals are to 1) inform participants about UF research in muscle biology, neural control of movement, regulation of breathing, circadian biology, and related fields, and 2) identify medical dilemmas, research discoveries, and ideas for the future that most interest the attendees. Classes will be informal and highly interactive. No textbook required.

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| January 10 | Introduction to UF Movement Research
Dr. Karyn Esser, Dr. Gordon Mitchell, Dr. H. Lee Sweeney, Dr. Mike Reid |
| January 17 | Weakness and Fatigue in Chronic Disease
Dr. Mike Reid |
| January 24 | Exercise and Your Circadian Clocks: Time of Day Matters
Dr. Karyn Esser |
| January 31 | Secrets from Sleep Apnea: Strategies to Restore Breathing & Walking
Dr. Gordon Mitchell |
| February 7 | Muscular Dystrophy and Other Rare Diseases
Dr. H. Lee Sweeney |
| February 14 | Take-Home Lessons: What Have We Learned?
Dr. Karyn Esser, Dr. Gordon Mitchell, Dr. H Lee Sweeney, Dr. Mike Reid |



Spanish Conversation and Culture Mondays, January 9 through April 10 1:30 p.m.

Oak Hammock Commons Multipurpose Room
Cost: \$10.00
Instructor: Cathryn Gregory
Facilitator: Roanne Coplin

This course is a continuing course in Spanish. It is targeted toward those who have a basic knowledge of the Spanish language. Conversation, culture, short stories, literary analysis, advanced grammar, and vocabulary expansion will be included. Student input is encouraged.

Cathryn Gregory has 41 years of experience in teaching high school Spanish. She has a master's degree in Foreign Language Education from Ohio State University.

The Jews of Africa and the Complexity of Origins

Thursday, February 2 7:00 p.m.
Oak Hammock Commons Oak Room

Free to ILR Members

Presenters: Professor Tudor Parfitt, Florida International University and Remy Ilona, Igbo Tribe, Nigeria, also of FIU

Facilitators: Karen Miller; Fr. Rebecca Jefferson, Head Price Library of UF Judaica Library, Virginia Brissette, Executive Director Jewish Council North Central Florida

We invite you to hear a fascinating talk by Professor Tudor Parfitt (SOAS, FIU), the leading expert on the history of Jews in Africa, and Remy Ilona, his student and a member of the community of Igbo Jews. The talk will offer two different perspectives on the origins of Igbo Jewish ancestry and it will shed light on the complexity of African Jewish history. Igbo Jews, like Ilona, regard themselves as descendants of the ancient tribes of Israel and can offer up evidence of ancient practices. Yet, in his recent book, *Black Jews in Africa and the Americas*, Parfitt shows how Africans were often labelled as Israelites by colonialists, travelers, and missionaries in an attempt to explain and understand the strange people they encountered on the colonial frontier. This identity was then adopted by Africans who offered up common traditional practices as proof of a racial relationship to the Jews.

Professor Parfitt has been featured on PBS and frequently is referred to as "the British Indiana Jones." If you would like to learn more about Professor Parfitt and Mr. Ilona before the program, please read the following:

- <http://www.pbs.org/wgbh/nova/ancient/tudor-parfitts-remarkable-quest.html>
- <http://www.miamiherald.com/living/article1951282.html>
- <http://forward.com/news/331188/meet-the-igbo-nigerias-lost-jewish-tribe/>
- <http://religion.fiu.edu/faculty/full-time-faculty/tudor-parfitt/>

Winter Courses



The Pacific Century

Wednesdays, January 11 through
February 15
10:00 a.m.

Oak Hammock Commons
Oak Room

Cost: \$10.00

Presenter: Jerry Kirkpatrick

Facilitator: Dick Martin

The Asia-Pacific region is the largest and fastest-growing region in the world. By estimates of the National Intelligence Council, the International Monetary Fund and the World Bank, by 2020 Asia will overtake Europe and the United States combined in global power based on GDP, population, investment in technology and infrastructure, and investment in human capital. This has profound implications for world peace and security and for the future of the United States as, currently, the world's largest economy and sole superpower. This course will examine these issues strategically and by country. Questions and comments by course attendees are encouraged.

January 11 China as a Rising Economic Power. China's economy is the world's second largest and growing fast (6.5% vs. U.S. 2%), yet there are serious dysfunctions in the Chinese economy due largely to China's autocratic one-party political system. We will examine China's economy and its effects on China domestically, the region and the world, particularly economic competition with Japan, South Korea, Western Europe and the United States, what it is now and what it is likely to be in the coming decade.

January 18 China as a Rising Military Power. China is a country with a population of 1.4 Billion people and a land mass 2% larger than the United States. Like the U.S., China does not have immediate neighbors that pose a direct military threat to its security. It does, however, have vital national interests in the waters that border its territory, particularly the East China Sea and the South China Sea. The problem for China is that it does not control these waterways. The U.S. does and has done so since the end of World War II. This is causing escalating tensions between China and the U.S., as well as between China and some of its maritime neighbors. We will examine the implications for U.S. – China relations and peace and security in the region.

January 25 Japan – A Strong but Aging Ally in a Changing World. Japan has the world's third-largest economy behind the United States and China, but its economy has largely been stagnant during the last decade (0.5% growth so far in 2016). The country's population is aging rapidly, more so than in any other developed country. (A quarter of its population is over age 65).

A problem for Japan is that it is essentially a closed society. Non-Japanese are welcome as visitors and, in some cases workers, but not as citizens. Since the end of World War II, the United States has been Japan's protector. However, the government is concerned about rising U.S – Chinese tensions and the country's place in a new emerging order for the region. We will examine the role and policy choices for Japan as it confronts these new realities.

February 1 The Koreans – A Study in Contrast and A Possible Flashpoint for War. With Japan's defeat, the Korean Peninsula was divided at the end of World War II, with the Soviet Union taking the northern portion and the United States taking the southern portion. The North became the Democratic Peoples Republic of Korea and the South became the Republic of Korea – both recognized internationally as independent sovereign nations. North Korea is a closed, impoverished and paranoid state, while South Korea is an economically and socially vibrant nation, a leader in world trade and fully engaged in domestic development. We will examine these contrasts and current relations between the two Koreas, as well as their respective places in determining the state of peace and security in the region and, perhaps, the entire world.

February 8 Southeast Asia – The Underbelly of the Asia-Pacific Region. Thailand, Vietnam, Cambodia, Laos, Myanmar, Philippines – each has a different story to tell and each is important to the economic development and security of the Asia-Pacific Region. We will examine the major issues in each of these countries, as well as the importance of ASEAN, the Association of Southeast Asian Nations.

February 15 Indonesia, Malaysia and Singapore – The Anchor of the Asia-Pacific Region. Indonesia, Malaysia and Singapore - each borders the Strait of Malacca, the most strategic waterway in the world, through which one-third of the world's trade, including oil, passes each day. Each of these countries plays an important role in the region's economy and security. However, Singapore is truly exceptional. *The Economist* describes it as “the world's only fully functioning city-state, a truly global hub of commerce, finance, industry, shipping and travel.” We will examine the Singapore “miracle” and the rising economic and political influence of Indonesia and Malaysia (two of the world's largest Muslim-majority countries) in the region and in the world at large as they seek balance in ties with their longtime maritime protector, the United States, and an increasingly assertive and somewhat intimidating China.

**The Institute
for Learning
in Retirement**
Oak Hammock at the
University of Florida
5100 SW 25th Blvd
Gainesville, FL 32608

Oak Hammock Chamber Players
Thursdays, January 12 through June 22
1:30 p.m.

Oak Hammock Commons Acorn Room
Cost: \$10.00
Director: Gary Langford
Facilitator: Michael Plaut

The Oak Hammock Chamber Players are a group of instrumental musicians who enjoy playing music with others. We welcome people who play or who have once played orchestral instruments. There are no auditions, and some of our members had not played in over 50 years before joining the group. If you do not have an instrument, we can recommend local places where you might rent an instrument. You will also need to have your own music stand.

Most of our selections are from the classical repertoire but we also play traditional pieces, show tunes and seasonal music. Not only do we learn about our music, but also about musical technique and both the discipline and fun of making music as a group.

We are very fortunate in having retired UF music professor, band director and jazz music expert Gary Langford as our music director. The Oak Hammock Chamber Players are members of the New Horizons International Mu-

sic Association, which is a support network for adult musicians. For more information, go to www.newhorizonsmusic.org. If you register for this course, please contact Mike Plaut at 352-371-1301 or smplaut@gmail.com to discuss your musical experience.

Beginning German

Tuesdays, January 12 through March 1
11:00 a.m.

Intermediate German

Tuesdays, January 12 through March 1
1:30 p.m.

Oak Hammock Commons Fireplace Lounge
Cost: \$10.00
Instructor: Barbara Johnston

Both German courses use the Total Physical Storytelling (TPRS) methodology. Hand gestures are implemented as an aide in learning new vocabulary, and stories created by the instructor, the students, or both together, are used to quickly start using the language. All students interested in learning German are invited to attend.

Visit our website: ilratoakhammock.org