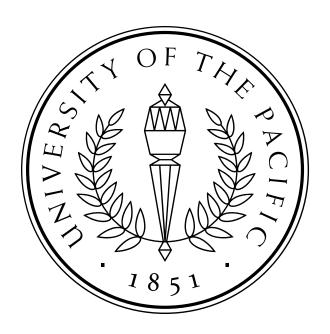
PACIFIC

Honors Seminars 2019–20





Honors Seminars 2019 – 2020



Biology Building, Room 101 Thursdays at 6 PM

Honors Seminars

Liberal arts colleges expose students to a wide range of academic disciplines, including the sciences, as well as the traditional humanities subjects. These typically small colleges ensure that more individual attention is given to each student on a daily basis. Large research universities, on the other hand, have the world's leading researchers and scholars amongst their faculty, with vibrant, well-funded research programs that undergraduate students can also participate in.

University of the Pacific aspires to offer the best of both worlds. We are committed to a personal, student-centered approach and our faculty is dedicated to excellence in teaching. At the same time, with our high-quality graduate and professional programs, Pacific's professors are some of the nation's foremost scholars and researchers. The university prides itself on providing opportunities for students to conduct research at the undergraduate level, working closely with our distinguished faculty.

The Honors Seminars are designed to show this aspect of our University by introducing some of our best students to the research and scholarship of our faculty. Once a month, the Honors Program hosts a distinguished faculty member from Pacific, who presents a lecture on the latest and hottest research or scholarship accomplishments. The topics of the talks span every field from science and engineering to humanities, arts to law.

Seminar Program

Fall, 2019

September 12 **Carla Strickland-Hughes**

Department of Psychology Human Memory, Self-Regulation, and Aging

October 3 Joan and Geoff Lin-Cereghino

Department of Biological Sciences
The Power of Pichia

October 24 Scott Larwood

School of Engineering and Computer Science The Future's So Breezy, I Gotta Wear a Wind Breaker

November 21 **Cindy Ostberg**

Department of Political Science
Leadership and Strategic Change on the
Supreme Court of Canada

Seminar Program

Spring, 2020

January 23 **Preeti Deshpande Oza**

Thomas J. Long School of Pharmacy and Health Sciences
Functional Mobility and Community Participation for
Individuals with Neuromuscular Disorders

February 20

Cosana Eram

Department of Modern Languages and Literature The Avant-Garde Logic of Dispute

March 19

Cecilia Ruvalcaba

Eberhardt School of Business Investigating Consumer Behavior using Qualitative Research Methodologies

April 16

Robert Halliwell

Thomas J. Long School of Pharmacy and Health Sciences How to Maintain a Healthy Brain Without Really Trying

Human Memory, Self-Regulation, and Aging

What have you done today that did not use your memory? Memory is not just a recollection of our life stories or answering trivia questions (or taking multiple-choice exams): Memory is learning someone's name (and perhaps their phone number), reciting a poem or song, retelling a story from the newspaper (or your textbook), and remembering to do tasks we want to do, whether we did them already, and how to do them. Memory is essential and highly valued by adults of all ages. Yet, age-related declines in memory processes are welldocumented, leading to anxiety among older adults. However, these declines are not the same for all people or all types of memory. The declines also vary dramatically depending on broader social and motivational contexts. This seminar will focus on broader contexts of memory, specifically self-regulatory factors, or non-ability influences on performance. Successful self-regulation involves maximizing one's performance by responsively adapting task effort to feedback, to performance self-appraisal, and to careful evaluation of task demands. The over-arching goal of this research is to understand and improve everyday memory in midlife and beyond.

Carla M. Strickland-Hughes, Ph.D.

Globally we are living longer than ever; in 2030, 1 in 5 U.S. residents will be retirement age. Dr. Strickland-Hughes's professional passion is asking how can we live longer, better? She is a developmental psychologist trained in experimental and intervention research methodologies. She completed her B.S. in Finance at North Carolina State University



(2011) and her M.S. (2014) and Ph.D. (2017) in Psychology, with a certificate in Gerontology, at the University of Florida. After graduation, she joined the University of the Pacific community as an Assistant Professor in the Department of Psychology and Director of the Aging and Cognitive Training Laboratory. Her research, conducted with assistance from Pacific undergraduate students, has been presented at international conferences and published in flagship journals including *The Journals of Gerontology: Psychological Sciences* and *Psychology of Aging*.

The Power of *Pichia*

Heterologous protein expression consists of engineering an organism to express a protein which it does not produce in nature, such as human insulin made by a microbe. The methylotrophic yeast Pichia pastoris has been a popular host for heterologous protein expression in order to produce thousands of recombinant protein products for research, clinical, and industrial purposes. Because this yeast secretes very few of its own proteins, the exported recombinant protein is the major polypeptide in the extracellular medium, making purification relatively easy. Unfortunately, a disadvantage to programmed export is that some recombinant proteins intended for secretion are retained within in the cell and may be subsequently degraded. A mutant strain isolated in our lab, containing a disruption of the BGS13 gene, has displayed elevated levels of secretion for a variety of reported proteins. Therefore, we are trying to understand how mutation of this BGS13 gene leads to an abnormal Bgs13 protein which in turn results in improved secretion of many different recombinant proteins. Our long term goal is to apply this understanding of the BGS13 gene to create new versions of Pichia pastoris expression strains that will be able to secrete larger amounts of valuable recombinant proteins.

Joan and Geoff Lin-Cereghino, Ph.D.'s

Both Joan and Geoff Lin-Cereghino earned their Ph.D. in biology from the University of California, San Diego after doing undergraduate degrees in molecular biology at Princeton and biochemistry at University of California, Davis, respectively. Both taught at Haverford



College as visiting professors in the biology department for a year and then moved to Oregon. At the Oregon Graduate Institute (now part of the Oregon Health and Sciences University) both Joan and Geoff ended up doing postdoctoral research on the methylotrophic yeast *Pichia pastoris* under the direction of Dr. Jim Cregg. Joan and Geoff came to Pacific twenty years ago in a joint position as ³/₄ of a professor each. They still share an office, a lab, two kids (Ted '19 and Grace), and a chicken named Gloria.

The Future's So Breezy, I Gotta Wear a Wind Breaker*

Wind energy has become the fastest growing renewable energy source in response to global climate change and energy security. Wind energy was seriously considered during the energy crises of the 1970s, started growing from favorable legislation, and has finally matured with large corporations entering the field. Prominent research projects initiated in the late 70s and early 80s were replaced by robust, smaller-scale machines of the California wind boom. Slow, steady progress towards higher efficiency and lower cost has fueled incredible growth in number and size of machines. Continued growth will require further cost reductions in the technology, expansion of the electric grid, and effective energy storage. The presenter will highlight points in his career in wind energy along with research work conducted at Pacific.

*See: Timbuk. 3.

Scott Larwood, Ph.D.

Scott Larwood is an Associate Professor of mechanical engineering. His first wind energy experience was working on the Boeing MOD-2 for PG&E in 1986. He later worked for Kenetech Windpower in the Altamont and abroad. He then moved on to work for the National Renewable Energy Laboratory in Colorado. He later went back



to industry to work for the ill-fated Enron Wind Energy, which was absorbed by General Electric. Frustrated with the corporate environment, he returned to school to obtain his doctorate from UC Davis. Later he followed his wife to Stockton (where she works in agriculture) and started teaching part-time at UOP. That job later grew into a tenure-track position, with research work in wind energy.

Leadership and Strategic Change on the Supreme Court of Canada

In the age of polarized political discourse in the United States, American citizens and judicial elites could learn from examining the leadership style of Chief Justice McLachlin, who led the Canadian Supreme Court from 2000-2017. This lecture will begin by discussing some basic facts about Canada and the Canadian Supreme Court and then use theories of strategic behavior and leadership change to examine patterns of majority voting, opinion authorship, ideological voting, and panel size across the three modern chief justices (1973-2014). While Chief Justice Lamer and Dickson displayed clear patterns of task leadership, Chief Justice McLachlin exhibited both task and social leadership patterns, which is highly uncommon. As the first female to lead a common-law high court, these findings are worthy of scholarly attention. She was able to foster a far more collegial and unified court than her predecessors, and her efforts were indicative of a leader who understood the importance of collegiality despite increasing panel sizes and the growing political role of the Court in Canadian society in recent years.

Cindy Ostberg, Ph.D.

Cindy Ostberg is a Professor in the Political Science Department and the Pre-law advisor at Pacific. She earned her B.A. from UC Berkeley in Anthropology and her Ph.D. from Northern Illinois University in Political Science. She came to Pacific in 1994 and subsequently helped develop the Pacific Legal Scholars Program, which she has directed since it was created in 2007. She teaches classes in Criminal



Law, Constitutional Law, and Courts and Judicial Behavior. Over the last 20 years, she has done extensive research systematically exploring judicial behavior on the Canadian Supreme Court, and has published numerous articles and books addressing such topics as strategic decision-making, freshman effects, attitudinal conflict on the Canadian Court, gender effects, and leadership styles. Her most recent publication includes a book she co-authored with Matthew E. Wetstein titled, *Value Change in the Supreme Court of Canada*. She is currently working on a book analysing the impact of Chief Justice McLachlin on the Canadian Supreme Court from both a quantitative and qualitative perspective.

Functional Mobility and Community Participation for Individuals with Neuromuscular Disorders

Individuals with neuromuscular disorders such as Stroke, Brain injury, Parkinson's disease have decreased mobility resulting in diminished daily functioning and dependency. There is strong evidence that physical activity and community engagement contributes to good health. Fear of falling and social stigma related to challenging behaviors serve as barriers for individuals with neuromuscular disorders leading to sedentary lifestyle away from socializing. Community exercise programs for functional task training may provide the support system to improve social participation and health outcomes. Dr. Oza will present her work related to Parkinson's wellness exercise program and therapeutic volunteering program for stroke survivors, which was developed by collaborating with local community organizations and groups.

Preeti Deshpande Oza, P.T., Ph.D., N.C.S.

Preeti D. Oza, Associate Professor of Physical Therapy received B.Sc. and M.Sc. in Physiotherapy from University of Mumbai, India and PhD in Rehabilitation Sciences from University of Iowa, USA. Dr. Oza is a board certified specialist in Neurologic Physical Therapy and mentors physical therapy residents in Kaiser Permanente. She



continues to work with clients with neurologic conditions in outpatient setting. At University of the Pacific, Dr. Oza teaches Neuromuscular Physical Therapy, Motor Control, Psychosocial issues of Illnesses and Research Writing courses in the Department of Physical Therapy. Her research work is in three different areas: teaching and learning in graduate school, physiology of muscle control and community exercise programs for individuals with neurologic disorders.

The Avant-Garde Logic of Dispute

The Avant-Garde Logic of Dispute primarily explores the ideologies that avant-garde artists both shared and disputed. My goal is to produce an organic discourse about how the avant-garde used scandal as a tool to shred the mainstream bourgeois social fabric and cultural assumptions. I include examples from the period around and after World War One, when Dadaists and Surrealists shook the cultural ground in Paris, as well from mid-20th century, when experimental movements, such as Situationist International and Lettrism asserted their artistic role. In my theoretical endeavor, I frame the notion of "scandal" as a loosely and contingently aggregated set of practices that revolve around the contested definitions of literary canon, cultural value, politics, and history. In my talk, I will give an introduction to the main content of my book starting from two main issues: violence in language and controversies among artists.

Cosana Eram, Ph.D.

Cosana Eram's academic background includes a Ph.D. in French and Humanities at Stanford (2010), a Fulbright at NYU, as well as undergraduate and graduate studies in Romania, where she holds a Doctorate Magna Cum Laude in Philology (2003). Her current research interests and publications encompass transatlantic avant-garde, mod-



ern and contemporary French literature, ethics of technology and the human, and digital humanities. She has published a book in Romanian on literary hierarchies and their pedagogy (Canon. Canonic, 2007). Dr. Eram teaches all the classes in the French section at Pacific, from beginner French language to upper division literature and culture courses, such as Women in French Literature, Why Do They Talk about Paris?, The Francophonie, French literature surveys, etc. She has initiated the French Club at Pacific, distributes a French Studies Newsletter to the interested community on campus, and loves to talk about everything French with students.

Investigating Consumer Behavior using Qualitative Research Methodologies

The use of qualitative research methodologies is a growing field in marketing research. Qualitative methods allow us to investigate marketing phenomena through a subjective lens. We are able to capture information about consumer behavior that cannot be gathered through quantitative methods such as meaning, experience, and relationships. Ethnographic research in particular sees people's behavior on their terms, and in their context, in order to obtain an inside look at cultural trends, attitudes, and lifestyle factors that influence consumer decisions about everything from donating to a charity to purchasing a car. In this talk, Dr. Ruvalcaba will introduce you to the field of Consumer Culture Theory and highlight the use of qualitative methodologies in marketing research, including that in her own work on cultural markets, highlighting her most recent work on the Chicano culture in Japan.

Cecilia Ruvalcaba, Ph.D.

Dr. Ruvalcaba is an Assistant Professor of Marketing at the Eberhardt School of Business. She received her Ph.D. in Marketing from the University of California Irvine. She has an M.B.A. with emphasis in Marketing Management and International Business from Loyola Marymount University, and a B.S. in Business Administration



with emphasis in Business Information Systems from DeVry University. Born in Southern California, a first generation Mexican American and first generation college graduate, Dr. Ruvalcaba has a passion for investigating marketing issues around culture and legitimacy specifically revolving around Hispanic culture and the Hispanic market.

How to Maintain a Healthy Brain Without Really Trying

We are now living longer than ever before but that also means we face the challenge of a longer phase of life when time and tide begin to take their toll on our bodies and our brains. This presentation will consider recent evidence that *lifestyle*, *diet*, *education* and *community* engagements can slow down the brain aging process, reduce the risk of disease and enhance a healthy old age and retirement. As a neuroscientist, I will also review the reasons why these diverse activities are thought to positively affect brain function.

Robert F. Halliwell, Ph.D.

Robert F. Halliwell is Professor of Neuroscience & Clinical Pharmacology in the Schools of Pharmacy (Stockton) and Dentistry (San Francisco), University of the Pacific; he previously held a lectureship in Neuroscience and Pharmacology at the University of Durham, England and a Research Fellowship at the University of California, Irvine. Dr Halliwell undertook



graduate training in neurological science at University College London (University of London) and in pharmacology at Ninewells Hospital & Medical School, University of Dundee (Scotland). His lab is investigating nerve cells derived from human stem cells for drug discovery and safety evaluation; he has also published work in the history of medicine.



University of the Pacific Freshman Honors Program

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