Honors Seminars 2018–19
Honors Seminars
2018 – 2019

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 offers 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, 2018

September 6
Bálint Sztáray
Department of Chemistry
What a Coincidence!

October 11
Alan Lenzi
Department of Religious Studies
The Uses of a Babylonian Story of Suffering

November 1
Hector Escalante
Gladys L. Benerd School of Education
Civility in Higher Education

November 29
Jonathan Latta
Conservatory of Music
Seminar Program

Spring, 2019

January 24
Kris Alexanderson
Department of History
What History Teaches Us About Corporate and Political Intrigue

February 21
Cindy Lyon
Arthur A. Dugoni School of Dentistry
Humanism and How it Shapes the Learning Environment

March 21
Daniel Jontof-Hutter
Department of Physics
Why are Exoplanetary Systems unlike the Solar System?

April 18
Michael Mireles
McGeorge School of Law
Universities and Patents
Photoelectron photoion coincidence (PEPICO) spectroscopy is a combination of photoelectron spectroscopy (PES) and mass spectrometry (MS). A high-energy photon kicks out an electron from a molecule in the gas phase and both the resulting electron and the positive ion are captured, in delayed coincidence. With this technique, we can put a well-defined amount of energy into the ion and measure how it is falling apart, learning about the strength of its chemical bonds and measure highly accurate energetics for a wide variety of key species or reactions, including the proton affinity of the water molecule.

This technique can also be used to study the chemical reactions of very reactive, elusive intermediates. Recently, we have shown that PEPICO spectroscopy offers a much more detailed molecular fingerprint than mass spectrometry, making it suitable for analyzing gaseous mixtures of many components. With our prototype experiment in Switzerland and with a new Sandia National Lab apparatus for the Advanced Light Source synchrotron in Berkeley, reactions of unstable intermediate species, relevant in combustion, atmospheric, or interstellar environments are studied.

Bálint Sztáray, Ph.D.

Professor Sztáray received his undergraduate and graduate degrees in Chemistry at Eötvös Loránd University, the leading research university in Hungary. After a post-doctoral scholarship at UNC Chapel Hill, he was appointed Assistant Professor at his alma mater. In 2008, he joined Pacific as Associate Professor in Chemistry and was promoted to Full Professor in 2016. Since 2014, he has been serving as the founding Director of the Freshman Honors Program and he is the current Faculty Athletic Representative. Prof. Sztáray has published more than 40 peer-reviewed articles since coming to Pacific and his research area is in gas-phase physical chemistry/chemical physics; using photoionization methods to study the energetics and dissociation mechanisms of small molecules and reactive intermediates.
The Uses of a Babylonian Story of Suffering

*Ludlul bēl nēmeqi*, a Babylonian poem written during the late second millennium BCE, presents a first person, retrospective account of the suffering and deliverance of a man named Shubshi-meshre-Shakkan. Marduk, the Babylonian high god, becomes angry with this man and subjects him to tremendous suffering in the form of social alienation and physical affliction. The man laments his condition extensively and doubts the justice of the gods. Eventually, after a series of dreams, Marduk has mercy on him and restores his physical well-being and social standing. Despite his suffering, the protagonist never repudiates Marduk. Rather, he praises the deity throughout and presents himself as an example of pious patience. See https://tinyurl.com/y9hnocou for my translation. In this talk, I argue that several later Babylonian texts used this story as a model to describe and interpret the unfortunate circumstances of others. One text is a letter from a scholar to his king. Another is a royal inscription written by a scribe for the Babylonian king Nabonidus. The final text is a personal lament from the last great Assyrian king, Ashurbanipal. This literary history exemplifies a broad theme in the use of narrative. Just as we cry out when physical pain unmakes our bodies, we are also driven to cry out in emotional distress and intellectual confusion as that pain unmakes our view of the world. To those in the midst of suffering, a culturally significant or authoritative narrative (such as *Ludlul* in Babylonia or the biblical book of Job in Christian communities) provides a model for interpreting such experiences and a hope of overcoming them.

Alan Lenzi, Ph.D.

Alan Lenzi, professor of Religious Studies, earned a Ph.D. in Ancient Near Eastern Studies at Brandeis University in 2006. He works on the religious traditions of Babylon, Assyria, and Israel. He is the author or editor of five books, including a text edition of *Ludlul*, and nearly thirty articles. Currently, he is writing *Suffering in Babylon: Reading the Babylonian “Job”* and preparing a volume of Babylonian prayers in translation. His *Survey of Akkadian Literature* is under review at a major university press. Professor Lenzi has taught at Pacific since 2006.
Civility in Higher Education

Current research indicates that abrasive conduct or incivility is on the rise in higher education and Ombuds are in a unique position to address this behavior. By applying transcendental phenomenological methodology to examine Ombuds experience when handling these types of cases and how the complex structures of higher education impact what they do, this study provides insights into how other institutions and organizations can address the rise in abrasive conduct amongst university faculty, staff and students.

Hector Escalante, Ed.D.

Dr. Hector Escalante serves as the University of the Pacific multi-campus Ombuds. Hector recently earned his Ed.D. from The Bernerd School of Education at Pacific where he researched incivility in higher education and the Ombud's role. Dr. Escalante also holds a Master's of Fine Arts from National University and is a University of Notre Dame certified mediator. His diverse background in higher education includes serving as a faculty member, dean of students, and director of academic affairs. He taught as an adjunct professor for what is now University College for several years before becoming the Pacific Learning and Development Project Manager. He then transitioned into the inaugural Ombuds position in 2014.

Percussion was one of the last instruments to enter into the symphonic orchestra. At one time, it was thought that the percussionist needed only to learn timpani to take part in the orchestra; now a full battery of percussion instruments add to the orchestral landscape. The percussionist is looked upon to master a variety of sounds and techniques to achieve the wishes of the composer. Though impossible for this presentation to capture all the instruments in the percussion section, a discussion of some of the unpitched percussion instruments that are commonly found in the section will occur. Many instruments that are found in the percussion section, such as snare drum, have performance aspects that extend beyond the symphony hall. It is helpful for an audience member to understand a broader spectrum of sound that be found from a single instrument. Therefore, musical performances and demonstrations of the instruments selected will be shared to give context to both the experience that occurs for the performer and for the listener. Some history of instruments will add further context to understand how we got to where we are today and what the journey for the percussionist is now and into the future.

Jonathan Latta, D.M.A.

Professor Latta currently performs throughout the Northern California region and Colorado. Prior to moving to California in 2014, he was Director of Percussion Studies for six years at Fort Lewis College. He taught percussion at Pacific from 2017-2018 while also serving as Assistant Dean. He holds a Bachelor’s of Music in Performance and Music Education from the University of the Pacific and a Master’s of Music in Performance from East Carolina University. In 2009, Jonathan finished his Doctor of Musical Arts degree from the University of Arizona. Prior to returning school for his doctorate, Jonathan was a member of the United States Air Force Band of the Golden West. Dr. Latta’s other performing experiences include the Music in the Mountains Festival Orchestra, Stockton Symphony, San Juan Symphony, North State Symphony, Long Bay Symphony, Tar River Symphony, the Texas Music Festival Orchestra, the Durango Chamber Music Festival, the Animas Music Festival, and the Percussive Arts Society International Conference.
What History Teaches Us About Corporate and Political Intrigue

During the two decades after World War I, Dutch imperialism in Southeast Asia was challenged not only in the terrestrial realm of colonial Indonesia, but also across transoceanic spaces connecting metropole and colony. A variety of passengers, maritime workers, religious pilgrims, and other migrants utilized the world’s oceans as a space to contest colonial hegemony and spread anti-colonial ideas such as pan-Islamism, Communism, and pan-Asianism between distant port cities. Dutch shipping companies and the colonial government collaborated in global policing and surveillance projects in an attempt to control their transoceanic empire and maintain imperial hegemony beyond the colony’s terrestrial borders. This lecture reveals how shipping businesses were vital not only to the economic and logistic prosperity of Dutch empire, but also for protecting it against both foreign and indigenous socio-cultural threats to Dutch authority. Interwar Dutch shipping companies have largely escaped critical analysis over the ways colonial culture influenced their business decisions, but this presentation shows how they felt the same fears and paranoia as the colonial governments during the 1920s and 30s.

Kris Alexanderson, Ph.D.

Dr. Alexanderson is an Assistant Professor in the History Department, where she teaches courses in world history, maritime history, film history, and the history of science and technology. She received her Ph.D. from Rutgers University with an emphasis on European and global/comparative history. Prior to joining Pacific in 2013, she was an Assistant Teaching Professor at Drexel University and was a Fulbright IIE scholar to the Netherlands. Her first book, Subversive Seas: Anti-Colonial Politics Across the Twentieth Century Dutch Empire, will be published by Cambridge University Press in 2019. Her work has been published in the Journal of Social History, Journal of Early Modern History, Journal of Pacific History, Journal of Military History, and a forthcoming edited collection titled Colonialism, China and the Chinese: Amidst Empires, under contract with Routledge.
Humanism and How it Shapes the Learning Environment

“Culture eats strategy for breakfast.” This quote, attributed to management guru Peter Drucker, applies to health care and education as much as it does to any other industry. The culture of the learning environment may affect learner engagement, success and satisfaction in many ways. Humanism in modern education traces its roots to the 1960 teachings of psychologist Carl Rogers, among other notable psychologists of the era, who believed that “for a person to grow, they need an environment that provides them with genuineness (openness and self-disclosure), acceptance (being seen with unconditional positive regard), and empathy (being listened to and understood).” Arthur Combs notes that a humanistic culture acknowledges that “unique dignity lies in [the student's] critical reason, moral sensitivity, creative imagination, autonomous will, and unique personality.” It prioritizes these dignities and supports the freedom to explore and take risks without fear of intellectual oppression or intimidation. At Pacific’s Dugoni School, a commitment to humanism has informed the learning environment since the mid-1970s. Students, staff, faculty and patients cite this culture as greatly important to their learning work and patient care.


Dr. Lyon is the James R. Pride DDS and Carolyn L. Pride Endowed Chair for Practice Management at Pacific’s Dugoni School of Dentistry, where she serves as Associate Dean for Oral Health Education. She received her B.S. in Dental Hygiene from USC, her D.D.S. from the Dugoni School and her doctoral degree in Professional Education and Leadership from Pacific’s Benerd School of Education. Dr. Lyon’s primary research interest is in how learners move through the novice to expert continuum; and how the culture of the learning community can support engagement, enthusiasm, life-long learning and growth. In the case of dentistry, this includes how we shape the environment in which we teach, learn, serve, and provide care.
Why are Exoplanetary Systems unlike the Solar System?

For about 400 years, scientists have known that all the stars we see in the night sky are similar to the Sun, but a lot further away. It was unknown what fraction of stars had planetary systems like our own until this decade when NASA’s Kepler mission discovered thousands of planets around other stars, allowing us to study types of worlds that had not been imagined and learn what typical planetary systems look like. This is a golden age in exoplanet science in large part because nature provided us with systems which proved that our understanding of the origin of planetary systems was wrong. In this talk, Dr Jontof-Hutter will highlight some of the amazing discoveries in exoplanets of recent years – from evaporating planets to puff-balls of light gases to potentially habitable worlds. He will also highlight what we have learned about planetary systems in general, how planets form, and why the solar system appears atypical. This will include discussion about the implications of exoplanet discoveries for the search for life elsewhere in the universe, and the expected discoveries in the near future; of exoplanets at the nearest neighboring systems with NASA’s TESS mission, and the search for water in exoplanetary atmospheres with the James Webb Space Telescope.

Daniel Jontof-Hutter, Ph.D.

Dr. Jontof-Hutter has been an Assistant Professor in the Department of Physics since 2016. He is an astronomer, who studies planetary systems around other stars. As a NASA postdoctoral fellow, he worked on the Kepler mission, a space telescope designed to measure the fraction of stars with Earth-like planets. His research has focused on measuring the masses and compositions of exoplanets, including the first characterized exoplanet smaller than Earth, and comparing other planetary systems to the solar system, with a view to understanding how planets form and why our solar system does not appear to be the norm. Dr. Jontof-Hutter majored in astrophysics at Monash University, Australia, before completing a Ph.D. (2012) at the University of Maryland.
Universities and Patents

Universities play a critical role in the creation and dissemination of knowledge. In particular, university technology transfer offices and patents have received considerable attention since the passage of the federal Bayh-Dole Act in 1980, which allows universities and other nonprofits to take title to government funded inventions. Grant recipients are allowed to take title because of a concern with the tragedy of “underuse” of government funded inventions. Many government funded inventions were not commercialized prior to the passage of the Act. Since then, university involvement in patenting and licensing has increased substantially and continues to rise. Numerous questions concerning the unintended consequences of the Act have been raised, such as: the development of an anticommons; shifting researchers from basic to applied research projects; and enforcement efforts by universities that resemble the behavior of so-called patent trolls. In examining numerous sources, this talk will present and discuss data concerning patent enforcement of U.S. patents by universities, the reasons why universities may continue to enforce their patents, and how universities can avoid the negative "patent troll" label.

Michael Mireles, J.D., LL.M.

Mike Mireles is a Professor of Law at and graduate of McGeorge School of Law. He recently presented on related topics at the Stanford University Law School Patent Litigation Symposium; University of Kentucky Law School; Wake Forest University Law School; China University of Political Science and Law in Beijing, China; the Shanghai Jiao Tung University, KoGuan School of Law; Beijing International Studies University; VIT University Law School in Chennai, India; and the East China University of Political Science and Law in Shanghai, China. He was invited to and participated in workshops on related subjects at the European Commission in Brussels, Belgium, and has published numerous papers on universities, patents, and trademarks in leading journals. Before joining academia, he practiced law at the Downey Brand law firm and clerked for Judge S. Jay Plager, U.S. Court of Appeals for the Federal Circuit.
University of the Pacific
Freshman Honors Program

Bálint Sztáray, Director
Professor of Chemistry
☎ 209-946-2856
✉ bsztaray@pacific.edu

Dinelle Davis
Program Services Assistant
☎ 209-946-2283
✉ davis@pacific.edu