Welcome to this second issue of Together! This time we focus on our college’s distinguished and diverse scholarship, as exemplified by the extraordinary teachers and students who conduct research here.

I am pleased to introduce you to these wonderful people, all of whom embody the tradition of which we are so proud. Four of those featured; Mary Pickering (History), Kevin Jordan (Psychology), Will Russell (Environmental Studies), and Matt Spangler (Communication Studies) are current faculty members in our college. One, Tom Layton (Anthropology), is an emeritus professor, and Mychilo Cline, Adriana Manago and Will Russell are all alumni. Together, they illustrate the exceptional quality and productivity of our College of Social Sciences scholars.

I never tire of listening to Mary Pickering discuss her ground breaking biog-
When you ask for Mary Pickering’s take on Auguste Comte, the 19th-century French thinker whom she has studied intensively for 30 years, she pauses to choose her words carefully.

“He was a very difficult individual,” she says, finally. “He struggled with everyone he knew.”

Comte (1798-1857), credited as the founder of sociology and positivism, inspired people around the world and corresponded with some of the brightest lights of his day, then petulantly broke with them. “He coined the word ‘altruism,’” says Pickering, who in 2009 completed a well-received three-volume biography of Comte, “but he himself was the center of attention.”

Last fall, Pickering, a professor of history in the College of Social Sciences, was named San José State University’s Presidential Scholar in acknowledgement of her work, an award that came with some money and recognition. “It was a nice honor,” she says. “I was happy about that.”

Pickering, who has taught European history at San José State since 1997, happened upon some of Comte’s original manuscripts in an archive while studying in Paris in the late 1970s. “It was kind of a historian’s dream,” she says. “I spent 3½ years there doing all this research. I had massive amounts of material.”

Pickering started a family (she has three children) before completing her dissertation at Harvard in 1988. She taught at Pace University in New York City before heading west, all the while researching Comte and his contemporaries.

Blessed with a supportive husband and the ability to survive on five or six hours of sleep, Pickering deployed disciplined time-management skills in balancing parenting, teaching, research and writing. “I developed an ability to focus on intellectual conundrums for very short periods of time,” she says, a trick she picked up in the noisy dorms of her all-girls Catholic boarding school.

Comte had a penchant for organization as well. “He was a system maker,” she says. “He wanted to put people into categories,” a trait that contributed to his positivist theory of knowledge.

After spending so much time re-imagining Comte’s world, Pickering has come to believe he probably suffered from manic depression. He had highly energized and productive periods, but “The next moment he would be super depressed and lie in bed for days,” she says. Still, “People really did think highly of him at the time. They said he was the great priest of humanity by the end of his life, and he believed he was.”

Pickering plans to publish a Comte anthology, but after that she’ll turn to a completely different subject: how food has been used as a weapon of war.

“I think I’ve been successful because I have been extraordinarily happy as a mother, wife, professor and writer,” she says. “I’d urge all women students to pursue a career, because it makes them deeply fulfilled and gives their children a good role model.”

A difficult genius

SJSU Presidential Scholar documents the life and times of Auguste Comte
Mychilo Stephenson Cline has been pondering the human implications of technology ever since he graduated from a small liberal arts college and got his first job as a temp at a software company in the 1990s. “I became very interested in how the technology we were developing was influencing social interaction,” he says.

That led the Southern California native to look around for a university willing to let him craft an interdisciplinary graduate program that would accommodate his varied interests and to publish his first book, *Power, Madness and Immortality: The Future of Virtual Reality.* “San José State was not the first place I looked, but I was very impressed with everyone I met,” he says.

Cline found kindred spirits in psychology professor Robert Cooper and anthropologist Jan English-Lueck (now associate dean), along with humanities professor Marianina Olcott, as he pursued his master’s degree in technology and society. “Jan is so knowledgeable,” Cline marvels. “In my interaction with Bob, I’m not sure I ever asked a question that he didn’t have a 10-minute answer for.”

Cline’s coursework was primarily in Social Sciences—developmental psychology, human factors and anthropology being key interests. “I don’t think there’s anywhere in the world that I could have gotten a comparable education,” he says. “I don’t think it exists.”

After graduating in 2004, Cline spent a year looking for a job without finding many opportunities. He eventually decided to follow his twin brother’s example by teaching abroad in English-language schools. He currently works for 3,200-student Shanghai American School which serves the city’s expatriate business community. Through the years he has taught mathematics and philosophy, along with a class called “Computer, Ethics and Society.” “I became really interested in the future and how new technologies were impacting the future,” he says. “People tend to look at history in the rear-view mirror. I think we need to use the lessons of history to make decisions about the future.”

That interest is reflected in his latest book, *The Virtual State and The Fall of Empires: Digital Rights Management, Virtual Rights and the Decline of the Nation-State System,* which assumes that before long paradigm-altering technologies like cinematic virtual reality and artificial wombs will be commonplace. When that happens, Cline argues, human relationships will be fundamentally mediated by technology, shifting the foundation on which the guarantee of human rights has traditionally rested.

“The Internet challenges the basic institution of a nation-state,” Cline says. “It challenges its ability to regulate its boundaries and its borders—every area of social interaction is challenged.”

This underscores the need to extend the state into virtual space, which Cline calls “a dangerous experiment in democracy, but a necessary one.” He views websites like Facebook and eBay as precursors of what he calls a “nationware platform.” “As the virtual world becomes more and more intertwined with real world activities,” Cline predicts, “the social structure will enforce standards of behavior.”
At West Virginia University, Adriana Manago was a scholarship gymnast and undergraduate journalism major. After a stint reporting at a television cable news network, the Salem, N.H., native worked as an assistant gymnastics coach at San José State while studying feminism and gender socialization.

As she explored the intersection of anthropology and psychology, Manago found support from Jan English-Lueck, a psychological anthropologist who helped her win an internship with the Institute for the Future, a Silicon Valley research group with which she is affiliated.

Psychologists Arlene Asuncion and Elena Klaw also became mentors, with Manago helping Klaw organize healthy relationships workshops to educate students on the cycle of intimate partner violence.

For her master’s thesis, she asked undergraduates to assess imaginary vice presidents of either a non-profit or a corporate business after supplying them with male or female names and mention of their leadership style—communal (nurturing) or agentic (dominating).

“Agentic leaders were perceived as more competent overall,” she says. “Male leaders were always perceived as competent, but female leaders were only perceived as competent when they were described as agentic.”

“The study suggested that the association between female and ‘nice’ is incongruent with notions of competency, so women must surpass expectations of ‘nice’ to prove that they’re competent.”

Manago’s Ph.D. research at UCLA focused on an intensively studied Maya community in Chiapas, Mexico, where subsistence farming has gradually given way to a more integrated market economy over the past 50 years. High school was only recently introduced to the community—for the first time teens are socializing with unrelated members of the opposite sex.

“This was a major shift in cultural practices,” Manago says. “I was looking at how their notions of gender roles and expectations are shifting across the generations.” She asked people from different generations to respond to a scenario in which a woman takes a job outside the home to support her family. Older people valued traditional, gender-specific roles, she says, while younger people were more supportive of women working outside the home.

Manago recently started a post-doctoral fellowship at the University of Michigan to study media socialization of gender and sexuality, and has just accepted a tenure-track position at Western Washington University. “It’s going to be a very good fit for me,” she says.

Growing up in Riverside, Calif., Will Russell spent summers on a 120-acre parcel of land his grandparents owned in Mendocino County. Half of it was old-growth coastal redwood forest and the rest was recovering from having been logged.

“From a very young age I got to see this second growth grow up,” Russell says. “For almost 50 years I’ve been watching this forest changing.” Now an assistant professor of environmental studies at San José State, Russell draws on his lifelong interest as he regularly leads his graduate students into the field to research redwood forest ecology.

The redwood belt starts south of Big Sur and runs to just north of the Oregon border. Because the trees depend on an infusion of moisture from marine fog, they tend to grow in a strip of land between the coast and the coastal mountain ranges, he says.

Commercial logging began in the mid 19th century, soon after the Gold Rush, but gained momentum in the early 20th century, Russell says. But the greatest wave of cutting came after World War II, with the arrival of chainsaws and Caterpillar tractors.

“A lot of areas were clear-cut then,” he says. By the 1990s, the last big areas of private old growth redwood forest had been clear cut, and today, just 2 percent of the old growth remains.

Russell, who studied plant biology as an undergraduate at University of California, Santa Cruz, came to San José State as a graduate student in environmental studies in the early 1990s. With help from then-professor Les Rowntree, he got a research job with the U.S. Forest Service while working on his master’s thesis. That led to his Ph.D. dissertation at University of California, Berkeley, studying the effect of timber harvesting on areas adjacent to old-growth timber stands.

After a stint studying coastal ecology for a government agency, he realized he missed academia. In 2004 he returned to campus as a part-time lecturer and has been teaching ever since.

When it comes to restoring a clear-cut redwood forest, “the best thing you can do is you leave it alone,” Russell says. “Recovery, if they’re left alone after the first harvest, is really phenomenal. They start to develop old-growth characteristics after 60 years and after 100 years they are very close to old growth.”

But for full recovery to occur it’s still important to preserve uncut areas, Russell says.

“Trying to draw those lines between what is a preserve and what is a working forest is one of the most important things we’re working on” he says. ☀
Growing up in Hawaii, Matthew Spangler was a *haole*—a Caucasian in a distinct minority—and he didn’t fit in much better after his family moved to Wyoming, where he discovered his fondness for Irish literature, as well as an inconvenient allergy to horses.

“I felt like I was the only kid in Wyoming who was interested in James Joyce,” Spangler says. “Growing up in those two places kind of convinced me to go into the arts, because I was an outsider in both places.”

Now an associate professor in communication studies in the College of Social Sciences, Spangler also teaches theater arts in the College of Humanities and the Arts. He identifies with the outsider’s perspective in the immigrant experience, a viewpoint reflected in his adaptations of well-known works of fiction for the stage.

In 2007 he workshoped his adaptation of San José resident Khaled Hosseini’s best-selling 2003 novel *The Kite Runner* with his theater students. The story, set amid the tumultuous upheavals convulsing Afghanistan from the 1970s onward, involves themes of dislocation and betrayal. “It’s kind of a beautiful, heartbreaking book,” he says.

Spangler’s two-act adaptation premiered at the San José Repertory Theatre in 2009. It won in five categories of the San Francisco Bay Area Theatre Critics Awards, including best new script and best production. The play since has been performed in Arizona, Louisville and Cleveland, he says. Hosseini was supportive as Span-
gler wrestled with the adaptation. “Most of his comments were along the lines of changes he would have made in the book if he was rewriting it today,” Spangler says.

Spangler recently premiered an adaptation of The Tortilla Curtain, novel T.C. Boyle’s tale about two undocumented Mexicans immigrants and their encounters with the residents of a gated community in Los Angeles. Although the story explores themes of racism and xenophobia, “They’re rendered in kind of a comic, theatrical way,” Spangler says.

The play, which won an Edgerton Award last year, will premiere this spring at the San Diego Repertory Theatre. Spangler, who wrote parts for seven actors in 33 scenes, says Boyle had final script approval. “He’s been great to work with,” Spangler says. “I hope he’ll be tickled pink.”

Spangler’s interests span a wide swath of modern English literature. Over the past 15 years he has also adapted work by Joyce, Samuel Beckett, John Cheever, Ernest Hemingway and Thomas Wolfe.

Spangler appreciates the support he has received from the university in the form of course releases that gave him time to write the scripts for The Kite Runner and The Tortilla Curtain. “I feel this university is a great incubator for new plays,” he says. When an all-student cast first performed The Kite Runner on campus, Spangler was still working out the kinks in the script. “They essentially spend a year with it,” Spangler says. “They see it go from a first draft in August to performance in the spring.”

Spangler, who is hard at work on a piece about the Negro baseball leagues of the 1920s through 1950s, sees more theatrical opportunities in the future for campus thespians. “The number of projects I want to do on this campus with this student population is immense,” he says.

Here are some other literary works Spangler has adapted:

Shady Hills: The Short Stories of John Cheever (2002 Chapel Hill)

Hot Nights at the Go Go Lounge, from the short story by Irish novelist, Patrick McCabe (2001 Chapel Hill)

Thomas Wolfe’s The Lost Boy (2000 Chapel Hill)


Men and Women, by Ernest Hemingway (1999 Chapel Hill; 2000 Birmingham, AL)
Funding the hunt for the human factor

Psychology Professor Kevin Jordan wins $73 Million NASA Research Grant

Last fall, when Kevin Jordan, a professor of psychology in the College of Social Sciences, landed the largest grant in San José State University’s history—$73.3 million to fund the cutting-edge human systems integration projects he directs at NASA’s Ames Research Center in Mountain View—even he was impressed.
“It’s mind-boggling,” says Jordan, who has led the NASA-San José State collaboration since 1985. “I’ve heard that the largest award in the history of the university previous to this was $14.1 million. It’s actually caught even some NASA management off-guard.”

The grant, parcelled out over five years, will support work in a variety of critical areas, including the development of human automation integration technology and interactive flight deck systems, studying flight crew performance and helping to develop crew vehicles for planetary exploration.

“When we are getting these funds at San José State, they are intended to support us to come out to NASA Ames and collaborate with NASA scientists on NASA missions,” he says. Nevertheless, much of the research will be conducted by 80 or so San José State graduate, post-doctoral and post-masters students working at Ames, which is about 12 miles from the SJSU campus.

Jordan, 59, once gave thought to retiring when he turned 60, but he says the need to oversee the grant will keep him on the job until it expires on Nov. 30, 2016. “I don’t want to work beyond that,” he says. “I’ve been working two difficult jobs for a very long time. They’re fun, but staying on top of this is a challenge.”

Sheila Bienenfeld, dean of the College of Social Sciences, says Jordan’s research has yielded immeasurable benefits.

“It’s been an honor for me to have been a colleague of Kevin’s for nearly 30 years,” she says. “His work has touched the lives of millions of air travelers and makes an important contribution to the human-machine interactions that are part and parcel of our everyday lives.”

Jordan spent part of his childhood in New Jersey before his family moved to the Chicago suburbs. He eventually earned his master’s degree and Ph.D. in psychology at Kansas State University, with a focus on visual perception. He taught at Quincy College in Illinois before arriving in San José in 1984. He applied for the job without knowing of San José State’s plan to collaborate with NASA Ames, where research into “human factors”—the study of how peoples’ capabilities (and limitations) affect their ability to function under demanding conditions—is a primary mission.

Although he continued his visual perception research, “I became a human factors person basically as I developed the grant over the years,” Jordan says. In 1986 he helped launch a graduate seminar in human factors and ergonomic, which by 1997 had blossomed into a full-fledged degree program.

As the university’s research partnership with Ames expanded in the 1980s, Jordan found success in getting some of his graduates jobs with NASA or its aerospace contractors. “They came up with strong statistical and methodological skills,” he says of his students. “They knew data and analysis. The NASA scientists looked around and said, ‘Hey, I want one of them,’ so we sent more.”

Eventually, he says, “We started looking around and thinking, ‘we train these kids as grad students for two or three years and then we give them away. Why don’t we keep some of them?’” That led to more post-doc students working as grant-funded employees, he says.

The study of human factors is inherently interdisciplinary, drawing on expertise from disciplines as varied as in psychology, engineering, computer science and industrial design, Jordan explains.

“Our goal is to take into account the human factor in the design, definition and deployment of any system, whether it’s a phone, an airplane or a nuclear power plant,” Jordan says.

“We can actually design an airplane to fly without humans, but imagine stepping aboard and not seeing anyone in the cockpit,” he says. “I don’t think we’re ready for that. We want a Captain Sullenberger who can step in when systems fail—and he did that very successfully.”

Unmanned drones, some flown by onboard computers or others controlled remotely by humans on the ground, have a higher accident rate than general aviation aircraft, Jordan says. “When you don’t have any skin the game, or you’re sitting on the ground, maybe you’re less vigilant,” he says. NASA has been studying the issue because of the growing number of drones sharing the airspace, he says.

Jordan also has conducted ongoing research connected with Federal Aviation Administration plans to use new technology to allow more commercial aircraft to share the same routes.

One study used flight simulators to examine how pilots respond to differing instructions about how quickly to proceed along taxiways. Those told to arrive at a designated spot at a particular time and those instructed to travel at a specific speed tended to keep their eyes glued to the instrument panel, he says.

You don’t want to overcome human factor problems by training.
Ultimately, you want to overcome human factor problems by design.

—Kevin Jordan
Pilots who were given an approximate speed and provided with an audible signal that told when they were going a little too fast or too slow performed the best, Jordan says. “We were able to show that not only were they able to make their clearances, they were looking out the window more, and that’s critical for situational awareness.”

In an earlier study conducted at NASA, eight aircraft crews simulated flying into Los Angeles International Airport with their flight instrument readings projected directly onto the windscreen in front of them.

In one trial, they were suddenly confronted with an aircraft sitting on the runway, a situation that calls for a go-around. Only two pilots noticed the plane and flew the go-around, while six would have collided with the plane. “They’re tunneling their attention at the head-up display at the expense of looking out the window,” Jordan says. “These are pretty significant issues.”

One solution is to train pilots to continue to scan from the head-up display to the out-the-window view, but Jordan finds that unsatisfactory. “You don’t want to overcome human factor problems by training,” he says. “Ultimately, you want to overcome human factor problems by design.”

Jordan says word of the new research grant “drew a lot of attention—some of it negative.” Critics openly wondered how San José State, as a regional university, could have won a competition for such a significant grant.

“It is out of our league, but tough,” Jordan says defiantly. “Maybe we can redefine our league.” NASA’s call for proposals, issued last March, sparked a nationwide competition, he points out. “This wasn’t an earmark or a good-old-boy thing. We submitted and were selected, and I’m very, very proud of that.”

Although Jordan once carried a busy teaching load, he now spends most of his time at Ames and hasn’t taught in three years (he still chairs theses and advises graduate students). “I don’t want to lose that identity as a professor,” he says. “In fact, I hope to return to teaching next year, now that we’ve won this award and are secure for the next five years.”

Jordan, who stills surfs (a hobby he picked up at the Jersey shore), golfs and runs marathons, clearly has post-retirement plans in mind, but in the meantime he is intent on grooming people to fill his role after he is gone.

“I am absolutely committed to the university keeping this,” he says. “We have some smart people here. “They would carry a wealth of knowledge forward to whoever succeeds me.”

MIND MEETS MACHINE

Graduate students from the College of Social Sciences at San José State University conduct pathbreaking human factor aerospace studies at the NASA Ames Research Center in Mountain View.
Archaeologist Tom Layton has been collecting old things pretty much his whole life—Model A Fords, vintage Martin guitars and thousands of early photos and daguerreotypes of the Santa Clara Valley.

Perhaps that was why, in 1984, he was especially intrigued to learn Native Americans had collected fragments of blue and white Chinese porcelain at a long-vanished settlement in Mendocino County.

“My career took a left-hand turn there,” says Layton, an emeritus professor in the anthropology department of the College of Social Sciences who has spent nearly 30 years working out the details of how those ceramics came to California.

Layton, who had been studying the Pomo people who lived around Point Cabrillo, about 10 miles north of Mendocino, quickly figured out the porcelain had been salvaged from the wreck of a Baltimore clipper ship called the Frolic, which ran aground just offshore in July 1850.

In a series of books and articles, Layton has shown that the Frolic, built in 1844, was an important link in the lucrative opium trade, carrying a cargo of opium from Bombay to China, then bringing manufactured goods from China to San Francisco at the dawn of the Gold Rush.

“These were the true greyhounds—small and fast,” Layton says of the clipper ships. “The Frolic was built for speed, with small cargoes that had to be worth a hell of a lot.”

Layton discovered the ship’s owner, a Boston-based opium merchant, had left a portion of his sizable estate to the Eurasian son he had fathered in China. His latest book is an imaginative reconstruction of this family’s history over the course of two centuries. Although it includes reconstructed dialogue and character development, he considers it a work of nonfiction. “At the end of each chapter I have endnotes that describe where every fact came from, and where I had to interpolate between facts,” Layton says.

Layton’s interest in archaeology dates to his undergraduate days at University of California, Davis, in the early 1960s, when his anthropology major roommate invited him to come along for a field course. “There were guitars and banjos there,” he recalls. Layton, already an avid bluegrass musician, was smitten.

For his doctoral dissertation at Harvard University he focused on Native American archaeology in the northwestern Great Basin, the triangle where Nevada, Oregon and California come together. In historical times the area was home to the Northern Paiute, but as he excavated dry caves in the desert, Layton found twined basketry, dart shafts and throwing sticks called atlatls dating back close to 10,000 years.


Since his retirement in 2003, Layton has found more time for writing, while also helping to build the world’s second-largest collection of photos of the Santa Clara Valley for the university’s Sourisseau Academy for State and Local History. He prowls eBay, visits auction houses and bids in online auctions to add to the academy’s collection.

“I’m as busy now as I ever was,” he says. “It’s such a joy now to use one’s fresh hours to see progress and see the completions—it’s a happy opportunity that we retirees have.” ©
We’re in this together...

As a graduate of the College of Social Sciences you are part of a lifelong learning community. Your generosity helps make it possible for a tradition of scholarship to continue. Please consider making a donation today.

http://campaign.sjsu.edu/give-now.html