Putting Heads Together at ‘Brains R Us’
March 3 Science and Education Town Hall to be Broadcast Online Later This Month

Inga Kiderra | March 10, 2008

On any given weekday, about a quarter of the U.S. population is occupied with the critical business of education — including 50 million students in K-12 public schools, six million more in private schools, 18 million in college, plus all of their teachers. Education is a big business, but a struggling one.

As the nation grapples with issues facing its troubled educational system, can the science of learning provide insights and solutions? Can dialogue and collaboration between scientists and educators point a way forward? Researchers at the Temporal Dynamics of Learning Center at UC San Diego believe so. On March 3, the center, along with The Science Network, held a public town hall to discuss the possibilities. “Brains R Us” brought together more than 300 researchers, educators, policymakers and parents for an interactive daylong discussion at the Salk Institute.


Each invited participant was, in the words of Science Network director Roger Bingham, asked to bring to the meeting “a thought bomb and lob it out into the room for discussion.” Many of the participating scientists underlined the importance of neuroplasticity and neurogenesis — the ability of the brain, respectively, to form new connections and change over time and to produce new brain cells.

Newborn cells, emphasized Fred “Rusty” Gage, adjunct professor of neuroscience at UC San Diego.
UCSD and the Adler Professor at the Laboratory of Genetics at the Salk Institute, are inhibited by both acute and chronic stress. Environmental enrichment and physical activity, on the other hand, Gage said, play a salutary role. (Possible translation: Don’t cut physical education classes. Pause when eliminating art and cultural studies, too.)

Kurt Fischer, president of the Society for Mind, Brian and Education at Harvard University, stressed that learning does not progress on a continual upward slope. Skills are built up, he said, sustained for a little while, then they collapse and are rebuilt all over again. We “need to build, then rebuild and rebuild again,” he said. “Learning takes a long time.”

Hal Pashler, UCSD psychology professor, spoke about the importance of spacing review sessions for maximum retention of information. Forgetting may be inevitable, but it can be delayed with optimally timed study and testing. Pashler’s lab has, with good results, applied some of its “spacing effect” findings in a history class at The Preuss School at UCSD.

Teachers and education policymakers, including representatives from the Council of Chief State School Officers, welcomed collaboration with researchers and urged scientists to speak in a language that laypeople can understand. Some called for a “clearinghouse” of information or brokers that would connect the often lamentably distant worlds of knowledge with practice and with policy.

Paul Houston, executive director of the American Association of School Administrators, addressed the importance of motivation. School reform, he said, should begin with “making schools that children want to go to.”

Nobel Laureate Lederman worried about the ongoing failure to implement what we know and called for a national strategy —“national not federal.” He expressed hope that global climate change might today serve as a creative spur — much like the satellite Sputnik and the Cold War space race it helped launched once had.

Kathleen Leos, former assistant deputy secretary in the U.S. Department of Education and now president and CEO of the nonprofit International Institute for Language and Literacy Development, said that, with the upcoming change in national administration and reauthorization of No Child Left Behind, the political moment might now be right for effecting significant change.

Many echoed Paula Tallal of Rutgers University — co-director of the Temporal Dynamic of Learning Center’s Education and Outreach Center — who lamented the current focus on content in education. “We need more on building a better brain,” she said. How we learn is at least as, if not more, important than what we learn, she said, using the analogy of Internet access: You pay for broadband so you can access any content. We don’t want some of our children to get stuck with dial-up.
Virtually all of the participants said, like David Lightfoot, assistant director of the National Science Foundation, that conversations like the ones sparked by “Brains R Us” are a vital first step.

The town-hall format is one that The Science Network has used successfully several times to address such highly relevant topics at the “intersection of science and public policy” as science and religion (the “Beyond Belief” series), sleep and stem cell research.

“We’re interested in the synergy of different groups coming together,” said Bingham, who is also a scientist at the Salk Institute and UCSD. “We aim to create an environment in which disparate people can talk to and learn from one another. So the emphasis is on conversation rather than presentation.”

Based at UC San Diego, the multidisciplinary and multi-institutional Temporal Dynamics of Learning Center (TDLC) is one of six Science of Learning Centers funded by the National Science Foundation. The TDLC focuses on time and timing as critical to understanding how the brain learns and applies this understanding to improve educational practice.

“With ‘Brains R Us,’ we want take a long look at where we stand. We’re not successfully teaching the fundamentals, the three R’s, in our schools,” said Terry Sejnowski, co-director of the learning center and co-director of the center’s Education and Outreach Center, and also head of the Computational Neurobiology Lab at the Salk Institute and a professor of biology at UCSD. “The goal of the town hall, and TDLC more broadly, is to do what we call ‘in-reach.’ We realize that we, as scientists, don’t really understand all the problems and the practical challenges. So we need help from the experts out in the trenches to tell us which questions our research should ask.”

The meeting was organized by Bingham, Sejnowski and Tallal. The TDLC is a collaborative consortium of UCSD, Rutgers University and Vanderbilt University. Gary Cottrell, professor of computer science and engineering at UCSD, is principal investigator of the TDLC and co-directs the center with Sejnowski and Andrea Chiba, associate professor of cognitive science at UCSD.
“Brains R Us” was co-sponsored by the UCSD Office of Research Affairs, the UCSD Kavli Institute for Brain and Mind, Calit2 at UCSD, the Scientific Learning Corp. and the Crick-Jacobs Center at the Salk Institute.

The Science Network webcast the event live and also taped it for later distribution online. Videos from “Brains R Us” are expected to be ready for viewing later in March; to check back for their availability, bookmark http://thesciencenetwork.org.

For more about the Temporal Dynamics of Learning Center, see http://tdlc.ucsd.edu.
Alumni Brothers Spice Up Chocolate World
Move From High-Tech to Chocolate Spells Success for Chuao Chocolatier Founders

Eating Chuao Chocolatier’s “firecracker” bonbon is a multi-sensory experience. Popping candy rings in your ears and crunches in your mouth. Meanwhile, a dash of chipotle chili pepper ignites under your tongue, while fudgy caramel smooths your palate. The overall effect is fun, disconcerting and yummy. These are precisely some of the feelings that Chuao’s co-founders, who also are UCSD alumni, said they wanted to bring about with their chocolate concoctions.

Michael and Richard Antonorsi opened their first chocolate store, in a small mall off Highway 101 in Encinitas, in 2002, after facing what Richard calls a mid-life crisis and Michael a “mid-life revision.”

Men Take CCAA Basketball Championship Title for First Time in Team’s History
Women Also Heading Off to NCAA Division II Tournament

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Campus Pulls Out Stops to Celebrate Birthday of Beloved ‘Dr. Seuss’

The smell of chocolate cake filled the air. A giant inflatable Cat in the Hat stood in front of the Geisel Library. Preschoolers donned hats with red and white stripes and sipped fruit punch. The UCSD campus celebrated the birthday of Theodor Seuss Geisel, also known as Dr. Seuss, in style Monday. Chancellor Marye Anne Fox, Audrey Geisel, widow of the famed author, and University Librarian Brian E.C. Schottlaender cut birthday cakes and handed out pieces to members of the UCSD community who gathered on Library Walk.

UCSD Political Scientist Talks About Where the Presidential Election is Headed

On March 4, New York Sen. Hillary Clinton won two critical primaries in Texas and Ohio, ending a 12-primary winning streak for Illinois Sen. Barack Obama. That same day, Arizona Sen. John McCain secured the Republican nomination. This Week@UCSD asked UCSD political scientist Gary Jacobson where the presidential election is now headed after last week’s contests.

UC San Diego and Salk Institute Establish Center to Study the Origin of Humans

Perhaps the oldest question in the world is “where do I come from?” To help answer this question from a scientific perspective, a multidisciplinary group of researchers at UC San Diego, along with colleagues at the Salk Institute for Biological Studies in La Jolla, have established a center to formally explore the origins of humanity and the many facets of what makes us human.

What’s Happening?

A Live Webcast Will Be Available
March 11, 2008
1 p.m.
Faculty Club

The Stem Cell Challenge:
Opportunities
for California
and the Wider World
March 10, 2008
5 p.m.
Leichtag Biomedical Research Building

Climate Change Lecture:
Gateway to the Arctic
March 10, 2008
6:30 p.m.
Birch Aquarium

Women of the Silent Screen
March 13, 2008
8 p.m.
Porter’s Pub
Putting Heads Together at ‘Brains R Us’
March 3 Science and Education
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People

UCSD Artist, Designer, Author to be Honored at National Women’s History Month Festivities
A sculptor, architect and designer of buildings at UC San Diego, an author and professor of theatre, and an emerita professor in visual arts will be honored in festivities during March — National Women’s History Month. In its seventh year, the San Diego County Women’s Hall of Fame is sponsored by the Women’s History Museum and Educational Center, the department of women’s studies at San Diego State University, the San Diego County Commission on the Status of Women, and the Women’s Center at UCSD. More ▶

National Geographic Society and City of Florence Team Up on Project with UCSD-Based Culture Heritage Center
CISA3 Director Maurizio Seracini Named National Geographic Fellow
The UCSD-based center that is leading the scientific search for a long-lost Leonardo da Vinci masterpiece has a new partner in the effort: the venerable National Geographic Society. The City of Florence has announced a five-year agreement with the society to explore the history and culture of Florence in the pages of National Geographic magazine and books, and the National Geographic Channel on TV. More ▶

Press Clips

An EGGS-travagant Experience at Birch Aquarium
March 15 to 21, 2008
Birch Aquarium

More Events

By the Numbers
= 16: number of schools working with UCSD's Early Academic Outreach Program
= 2,000: number of students in these schools served by UCSD's EAOP
= 80: percent of seniors served by UCSD's EAOP that will go on to college

Faculty Authors

Sync or Swarm: Improvising Music in a Complex Age
By David Borgo

“Sync or Swarm” won the Alan P. Merriam Prize in 2006 from the Society for Ethnomusicology as the most distinguished English-language book published during the previous
Vaccine Against 'Strep Throat' May be Coming
MSNBC
March 6, 2008

Estrogen Levels in Blood
Predict Breast Cancer's Return
U.S. News & World Report
March 6, 2008

'Magic Mirror' Reveals Effects of Bad Habits
ABC7, Los Angeles, Calif.
March 9, 2008

Protecting our Seas
San Diego Union-Tribune, Opinion
March 9, 2008

Happy Birthday, Dr. Seuss
NBC San Diego
March 3, 2008

More Press Clips

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Alumni Brothers Spice Up Chocolate World

Move From High-Tech to Chocolate Spells Success for Chuao Chocolatier Founders

Ioana Patringenaru | March 10, 2008

Eating Chuao Chocolatier’s “firecracker” bonbon is a multi-sensory experience. Popping candy rings in your ears and crunches in your mouth. Meanwhile, a dash of chipotle chili pepper ignites under your tongue, while fudgy caramel smooths your palate. The overall effect is fun, disconcerting and yummy.

These are precisely some of the feelings that Chuao’s co-founders, who also are UCSD alumni, said they wanted to bring about with their chocolate concoctions. Michael and Richard Antonorsi opened their first chocolate store, in a small mall off Highway 101 in Encinitas, in 2002, after facing what Richard calls a mid-life crisis and Michael a “mid-life revision.”

“We try to make multi-layered, avant-garde offerings,” Michael Antonorsi said. “But it still has to be delicious.”

Cinco de Mayo: Lemon tequila dark chocolate ganache topped with preserved lemon chip.
The brothers had worked for high-tech ventures in Venezuela for years. Then, they decided to team up and start a chocolate-making enterprise. Richard would handle the business side, while Michael would create the company’s products. They named their company Chuao (pronounced chew-WOW), after a famous cacao-growing region in Venezuela. Today, Chuao brings in about $2.4 million in sales, said Richard Antonorsi. The company has about 30 full-time employees, as well as a host of part-timers working its six cafes.

The brothers’ business acumen allowed them to strive where many others fail, said Darren Solomon, a regional director for Pacific Community Ventures, a nonprofit organization that worked with the Antonorsis in the past. Chuao also is doing well because it delivers a unique, high-quality product, he added.

“They bring a lot of their culture and flair to the business,” Solomon said. “It’s a fun place to work and also a fun product.”

Creating chocolate

Asked how he gets ideas for his bonbons, Michael Antonorsi, Chuao’s master chocolatier, replied that he pretty much always thinks about food. Every time he tastes something new, he immediately thinks about how he could use it in his creations, he said. And he gets his ideas from all around the globe.

On a trip to India last April, he sampled a snack of fried lentils. “It was really crunchy and full of proteins,” he recalled. Back in San Diego, he mixed the fried lentils with roasted fennel seeds and coriander seeds in a bonbon that felt like a healthy and tasty granola bar, he said. He called it “300 yoga,” in honor of his driver in India. Uncle Surit, as Michael called him, would often say he knew “300 yoga,” then demonstrate some yoga positions.

Other Chuao creations were designed around a mood rather than a flavor. It took Michael Antonorsi two years to perfect his “firecracker” bonbon, which was released for this New Year’s celebrations. The chocolate maker wanted to evoke the holiday’s festive mood by using popping candy. But he could only find flavored candy, which wouldn’t work for the bonbon he had in mind. It took him two years to secure a manufacturer that would provide the unflavored variety.

“All your senses are engaged,” Michael said. “That’s entertainment.”

In addition to bonbons, Chuao also sells chocolate bars, hot chocolate, snacks and other goodies. Its cafés serve up beverages and cakes. “Chocolate makes you happy,” Michael Antonorsi points out, when asked why he gave up his career in high-tech. Of course, there is more to the story.
Richard Antonorsi lends his business savvy to the family enterprise.

Richard and Michael Antonorsi graduated from UCSD a year from one another in the mid-1980s, in computer science and bioengineering, respectively. Then the two brothers went back to their native Venezuela to pursue business ventures. After many years, they decided they needed a change. So Richard headed for Miami, where he ran an Internet bank, and Michael for Paris, where he enrolled in cooking school.

Then came the dot-com bust, which derailed Richard’s business. At the same time, Michael realized that life in the kitchen of a five-star restaurant, with its 16-hour days, was not for him. But he liked to make pastries and chocolates, a business that required a more reasonable time investment.

Around the same time, the brothers also decided to move back to the United States, as a crime wave gripped Venezuela. “We all have children and families, so we wanted them to be safer,” Richard explained. The Antonorsis decided to come back to San Diego. Richard’s wife, also a UCSD alumna, is originally from San Diego and still has family here. In fact, Richard and his wife were married on campus, on the Sun God lawn, in 1990, surrounded by about 50 of their friends.

Once in the United States, the Antonoris found financial backers and opened their first store in 2002. They saw it as an R&D shop, where they could test their bonbons and fine-tune their flavors. They wanted to make a statement that their brand would offer sweets that were different, unusual, but delicious, Michael said.

Family ties

Cacao runs in the Antonorsi family. The brothers’ family used to grow the plant in Rio Caribe, one of Venezuela’s cacao-growing regions, known for its strong-flavored criollo beans. But the plantation, called Aguasanta (“Holy water” in Spanish) was neglected, like many others, once oil replaced cacao as Venezuela’s most-coveted resource.
The Antonorsis are trying to make up for that neglect by buying a cacao plantation in their native country. This would allow them to better control the quality of the cacao that goes into their products, Richard Antonorsi said. For now, Chuao has been buying chocolate from Venezuela and transforming it into various confections in a factory in Carlsbad.

Meanwhile, Aguasanta lives on as the name of the brothers’ sustainability initiative, which they are funding through proceeds from their chocolate sales. The Antonorsis are working with non-governmental organizations in Venezuela to provide training in cacao-growing techniques and medical services for isolated communities. Back in San Diego, Chuao also is providing jobs for low-income communities in its Carlsbad factory, said Solomon, the non-profit regional director.

**Chuao today**

Today, most Chuao stores are located in San Diego County, from Encinitas to University Towne Center. But the company also has a lone outpost in Irvine and another even farther away, in Florida. The company also has forged a partnership with the Coupa Café chain, with locations in Beverly Hills and Palo Alto. Its products also are showing up on shelves at Whole Foods, Ralphs and Safeway, among other retailers.

Chuao’s goal now is to launch a chain of stores statewide, targeting major metropolitan areas, said Richard Antonorsi. The goal is to help customers understand what Chuao is about – a story that’s much easier to tell in a full-blown café than on a few inches of shelf space, he said.

The brothers’ business has been so successful that a professor at the Rady School of Management, who also is a family friend, has asked the Antonorsis to mentor a group of students who wanted to start a gelato company. Richard Antonorsi said he would love to get a class going at Rady and talk to a younger generation about what it takes to create a successful business.

“In the end, street smarts prevail,” he said.
Chuao Timeline:

1984-85: Richard and Michael Antonorsi graduate from UCSD.

2002: The brothers open their first store in Encinitas.

2003: A second café opens in UTC.

2005: Chuao extends its reach beyond San Diego County, with a café in Irvine.

2007: The company opens its newest café in Coral Gables, Fla.

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Men Take CCAA Basketball Championship Title for First Time in Team’s History
Women Also Heading Off to NCAA Division II Tournament

Ken Grosse | Month 10, 2008

Darryl Lawlor in the midst of the action.

This weekend’s CCAA Basketball Tournament became a coming-out party for UCSD’s men’s basketball team, which won its first championship title and earned a spot in the NCAA Division II Tournament for the first time in the team’s history.

The Tritons knocked off Cal Poly Pomona, 64 to 56, and will be traveling to Anchorage, Alaska, for the eight-team NCAA West Regional starting Thursday. The Tritons will play Friday night against the University of Alaska Anchorage, the regional host.

"We’re thrilled to be going to the NCAA Tournament," said Head Coach Chris Carlson. "It’s just a fantastic feeling to be head coach at such a prestigious institution with such a great group of guys—it’s extremely special."

Meanwhile, UCSD’s women’s basketball team couldn’t hold off Chico State in their championship game. But Coach Charity Elliott’s squad will still take part in the NCAA Division II Tournament taking place March 14 to 17 in Seattle. The women’s team is the No. 4 seed and will face fifth-seeded Cal State San Bernardino at 5:30 p.m. Friday. In 2007, the Tritons post-season run took them all the way to the Final Four.
Michelle Osier goes on a run.

“We’re really excited obviously about making the tournament,” Triton junior Michelle Osier said. “We think we match up pretty well against San Bernardino because of our strong post defense.”

During the CCAA tournament, the men’s basketball team, which finished the regular season on a five-game losing streak, went overtime to upend second seed Cal State San Bernardino in the first round, won for the first time in three tries against San Francisco State in the semifinal and got 17 points from tournament MVP Henry Patterson in the title game. UCSD, which split its two previous contests with Cal Poly Pomona, led for all but the first minute and a half in the championship contest. In addition to Patterson, senior Clint Allard and sophomore Jordan Lawley were all-tourney selections.

During the championship game, four UCSD players scored in double figures, including junior Darryl Lawlor’s 11 points. Lawlor also grabbed 10 rebounds to record his second double-double of the tournament. Cal Poly hit the game’s first shot, a three-pointer from Rich Collins, but the Tritons rallied back for a 13-0 run stretching to the 14:07 mark. The scoring spree featured four successful free throws from Patterson and three shots knocked down from beyond the arc by Lawley, Allard and Lawlor.

Photos of coaches Chris Carlson and Charity Elliott

Men’s basketball coach Chris Carlson and women’s basketball coach Charity Elliott.

"The key was really understanding what we had to do defensively," Coach Carlson said. "It all started on the defensive end. We got some stops early and that led to our ability to
control the tempo. Offensively, we got some good looks early and were able to knock them down."

In their championship game, the UCSD women’s team were on top most of the way but just missed out on a second consecutive conference crown, 69 to 63. Their opponent, Chico State, finally secured their first second half advantage with 3:01 remaining on the clock. The Tritons grabbed the lead back with 1:31 to go but Chico State scored on the next possession and pulled away. Senior Meaghan Noud paced UCSD with 21 points and junior Osier added 14. Both were all-tournament choices.

For more information, check the Triton website at http://ucsdtritons.com
Campus Pulls Out Stops to Celebrate Birthday of Beloved ‘Dr. Seuss’

Ioana Patringenaru | March 10, 2008

Click here for slideshow.

The smell of chocolate cake filled the air. A giant inflatable Cat in the Hat stood in front of the Geisel Library. Preschoolers donned hats with red and white stripes and sipped fruit punch.

The UCSD campus celebrated the birthday of Theodor, Seuss Geisel, also known as Dr. Seuss, in style Monday. Chancellor Marye Anne Fox, Audrey Geisel, widow of the famed author, and University Librarian Brian E.C. Schottlaender cut birthday cakes and handed out pieces to members of the UCSD community who gathered on Library Walk.

Then they gave interviews to several local TV crews who had come to campus for the occasion. That morning, Fox also went to Alcott Elementary School in the Clairemont area to read “The Cat in the Hat” and talk about college with pupils.

In all, about 2,000 members of the UCSD and San Diego communities took part in the birthday celebration on campus. They could pick from an extensive selection of cakes, including chocolate and white cake, with strawberry, raspberry, lemon and chocolate filling. Then, they could pick up a glass of fruit punch and enjoy their snacks and drinks under the shade of the giant cat and a giant inflatable cake.
Children from the International Cooperative Nursery School also took part in the celebration.

“It’s so exciting,” said Ashley Lowe, a sophomore who also works at the Geisel Library.

The event really helps raise awareness about all the contributions that Geisel made to UCSD and San Diego, she also said. “I am loving the decorations,” added Lowe, whose favorite Dr. Seuss book is “Green Eggs and Ham.” “It reminds me of growing up.”

A few feet away, some members of the UCSD community who are still growing up were enjoying their slices of cake too. Like every year, children who attend the International Cooperative Nursery School on campus had come to take part in the celebration. This year, they wore Cat-in-the-Hat headgear. Little ones also got to play with noise makers handed out by members of the Teeny Tiny Pit Orchestra. Musicians performed songs from “The Cat in the Hat Songbook” on various instruments, including a harp and a toy piano.

Earlier in the day, Fox read and talked to children enrolled in second- and fifth-grade at Alcott Elementary School, in San Diego’s Clairemont area. She read the “The Cat in the Hat” to the younger students and talked about life on a college campus to the older ones. She encouraged all students to pursue higher education.

UCSD’s Mandeville Special Collections Library is the main repository in the nation for the original works of Dr. Seuss. The approximately 8500 items in the Dr. Seuss collection, which includes original drawings, manuscript drafts, books, notebooks, photographs and memorabilia, document the full range of Theodor Seuss Geisel’s creative achievements, beginning in 1919 with his high school activities and ending with his death in 1991.