

BRAIN RULES

Scientist brings brain myth-busters to Cabrillo

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APTOS — John Medina averages about five and a half hours of sleep a night.

A renowned developmental molecular biologist, Medina bristles at what he calls the “myth” that he may require an average of eight hours of sleep a night to “recharge his batteries.”

The author of the New York Times best-selling book, “Brain Rules: 12 Principles for Surviving and Thriving at Work, Home and School,” Medina brought his myth-busting presentation on how the brain really works to the Cabrillo College Crocker Theater on Thursday night.

Gateway School, Cabrillo College and the Santa Cruz County Office of Education teamed up to bring Medina to Santa Cruz County. The event was free and filled up well in advance with more than 300 people on a waiting list.

Percy Abram, the head of Gateway School, first learned about Medina and his teachings while attending a conference in San Francisco in February 2010 called “Learning and the Brain.”

The school decided last spring to invite Medina to the area, with donations from families of current students and alumni of Gateway School paying for Medina’s appearance.

“I’m hopeful that the educators and the parents in the area will rethink how children learn best after hearing Dr. Medina speak,” Abram said. “I hope we learn innovative ways helpful in instructing students, based on the ways we know the brain works.”

Cabrillo College President Brian King said he welcomed the opportunity to partner with the two organizations to bring Medina to town.

“It’s so essential to collaborate with other colleagues in our community with the same commitment to finding the best way to meet the needs of our



SHMUEL THALER/SENTINEL

Developmental molecular biologist and best-selling author John Medina, right, talks with Cabrillo College President Brian King, Gateway School head Percy Abram and Santa Cruz County Office of Education Associate Superintendent Theresa Rouse before his speaking engagement at Cabrillo’s Crocker Theater on Thursday.

students,” King said. “This is a great opportunity. Dr. Medina’s ability to teach comes across both in his books and his presentations.”

Medina’s 90-minute presentation was geared toward the effects of exercise and stress on the brain. Today, his visit to Santa Cruz continues as he will lead a free workshop for local educators from 9 a.m. to noon at the county Office of Education, which set aside funding for classroom substitutes to allow any of the county’s public school teachers to attend the professional development course.

A private consultant to both the biotech and pharmaceutical industries with a specialty in genetics of psychiatric disorders, Medina said he uses the “royal we” in his presentations to refer to beliefs about brain science shared by developmental molecular biologists, strict cellular biologists and behaviorists.

“We don’t know the basics,” said Medina, a Seattle resident. “We know precious little about how the brain works. But we’re not entirely clueless either.”

“We know 12 things, and one of them is sleep,” Medina said. “It wasn’t until five years ago that we learned why we need to sleep. It’s not to recharge your batteries; it’s not energy-restorative. Your brain is actually very active at night.”

Medina also said that he and his colleagues don’t know how many hours a night people need to sleep, but they agree that sleep is essential.

“At night, when you go to sleep, part of your brain turns on that begins reviewing everything you learned during the day that you thought was important,” Medina said. “You repeat it thousands of times in your sleep. The reason why you need to sleep is so you can shut out all of the external world and pay attention to your psychiatric interiors.”