

COVER STORY

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IMPACT 10 WOMEN CHANGING OUR LIVES

As the role of women in business and society grows ever greater, our annual list of 10 outstanding Orange County women gets harder to compile. Not because there are too few candidates, but because there are so many extraordinary women who belong on the list that it is hard to narrow it down. A recent poll conducted by the Siena College Research Institute and sponsored by Hearst Newspapers found that more than 6 in 10 Americans think the U.S. is ready for a female president. The same number say they expect the Democratic Party to nominate a woman in 2008. While we wait for the historic day when a woman takes the presidential oath of office for the first time, here are profiles of the 10 OC women we chose, after much debate, for this year's list.

including | [sue bryant](#) | [stacy motenko](#) | [elena rojas](#) | [jerri rosen](#)
| [sue parks](#) | [eileen padberg](#) | [michelle jordan](#) |
| [lorena maae](#) | [anh do](#) | [jane glenn haas](#)

also | [Where Are They Now?](#) |



1. Stem Cell PIONEER Susan Bryant

Sue Bryant has been getting a lot of ink lately because of her appointment to the California Independent Citizens Oversight Committee, the high-powered group charged with handing out \$3 billion in stem cell research funds over the next 10 years. Proposition 71, approved by 59% of California voters, set the money aside so that researchers can pursue cures for diabetes, Alzheimer's, heart disease, spinal cord injuries and a host of other conditions.

The prestigious appointment is only the latest of many feathers in her cap. British born and educated, Bryant, 61, has taught at UC Irvine since 1969, and was one of the first women to teach biology at an American university. She gained international scientific acclaim for her work in the field of limb regeneration studies which stem cell therapy will likely bring to fruition. Since January 2000, she has been dean of the school of biological sciences at UCI. She also is a leading advocate for women's advancement in academia.

Under her leadership, UCI won a \$3.45 million grant from the National Science Foundation to promote gender equity on campus. Three years into the grant program, 44% of tenure-track faculty recruited at UCI were women, up from 22% before Bryant and her team swung into action.

Bryant, who will continue as dean, says that her new position on the Citizens Oversight Committee is "a big job. I was already busy and this is a lot of extra work. The only thing that makes it doable is that it's so exciting. It is so great to be a part of this that I don't mind the extra hours."

Born in Yorkshire, England, daughter of a factory foreman and department store clerk, Bryant's interest in biology was sparked when she was "11 or 12. I had a teacher who took us out to collect local flowers and plants and draw pictures of them . . . I came to biology by way of botany and art."

She locked onto her lifelong study of limb regeneration while still an undergraduate at Kings College, University of London. She was studying with Lewis Wolpert, a renowned scientist who became her mentor. "I had a one-on-one tutorial with him and he let me pick a topic and then go and research it and write an essay," Bryant says. "I came back and told him everything that was known about limb regeneration. He said, 'Well, if that's the way it is, how come we don't know how to regenerate?' I have been working on it ever since.

"We still don't know how to regenerate human limbs, but we are a little further ahead."

Bryant and her husband David Gardiner study salamanders, which do regenerate lost limbs, trying to figure out the cellular and molecular mechanisms that allow the creatures to re-grow lost tissue. Human stem cells, particularly embryonic stem cells, which can be triggered to grow into any type of tissue, are critical to the eventual goal of people re-growing lost limbs.

It turns out that evolution distilled such extraordinary intelligence in the genetic material of individual cells that they can communicate with each other and coordinate the growth of a structure as complex as an arm or organ. The communication takes place by means of “messages” carried by molecules from cell to cell. Along with other researchers around the world, Bryant and Gardiner are gradually figuring out what the signals are and how to trigger them.

Bryant believes that stem cell therapies for some diseases will be available within the next 10 years. “The spinal cord area will be ready for some clinical trials in a couple of years,” she says.

In this application, stem cells will be stimulated to create nerve tissue compatible with an injured individual, someone paralyzed from the waist down, for instance. The growing nerve tissue will then be grafted to the healthy part of the spinal cord. There, the cells will link up with living cells on either side of the injury and bridge the gap, allowing the individual to walk again.

“ Proposition 71 is a very big deal,” Bryant says. Research that was stifled by President Bush in 2001, causing America to fall behind other countries in this critical area of science, can now flourish here in California.

Thanks to California voters and inspired scientists such as Sue Bryant, it is likely that the lame will indeed walk and the blind see sometime in the not too distant future.

— By Steve Thomas

SNAPSHOT

Her mission

To get stem cell therapy out of the laboratory and into hospitals

Residence

Newport Beach

Family

Married to fellow UCI scientist David Gardiner; two children in college and a stepson who is a lawyer in San Diego

What man influenced you most?

Her husband, David Gardiner, and British scientist Lewis Wolpert who was her mentor in graduate school

Sandbox lesson you learned early that became a life lesson?

“ You have to work hard and be organized to be successful.”