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The Tacoma News Tribune
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March 26, 2006

Birds do it. Reptiles do it. Amphibians do it. Fish do it. So why can't humans do it, too?

That's the question that preoccupies a team of scientists laboring in cramped offices and labs at the University of Washington.

If they can find the answer, maybe one day doctors will have a cure for deafness.

The secret of hearing regeneration is the Holy Grail for researchers at the Virginia Merrill Bloedel Hearing Research Center at the UW School of Medicine.

Part of their quest is the search for knowledge. Another part, just as critical and also somewhat sad, is the search for dollars to keep their research going.

Last week I joined a group of Tacoma and Lakewood Rotary Club members on a tour of the Bloedel center's labs. The visit was arranged by Gene Pankey and Dave Sclair, Lakewood Rotarians who head a local "action group" called Rotarians for Hearing Regeneration.

As anyone who has hung out with Rotarians knows, many are middle-age or older fellows who, like most Americans of their generation, are discovering that age often brings failing hearing. In fact, 30 percent of Americans over 60 have significant hearing loss.

I can sympathize, because I've had severe hearing loss since birth and depend on lip-reading and hearing aids to get by.

Pankey, a retired auto dealer and still-active civic leader, has no hearing in his left ear and is losing hearing in his right where he wears a hearing aid. Sclair's hearing is fine, but his good friend Pankey's difficulties inspired him to join the action group.

I've always called my disability "nerve deafness," but I learned during the Bloedel tour that "nerve deafness" is an outmoded term.

Researcher Elizabeth Oesterle, standing near a machine where a white-coated lab technician was working with hearing organs taken from baby chicks, set me straight.

What I used to think of as the nerves of the ear, she explained, are the inner-ear hair cells; these fragile cells, necessary for normal hearing, transform sound energy into nerve impulses.

When hair cells are genetically defective or destroyed by loud noises, medications, environmental toxins – or just plain aging – loss of hearing results. In humans, lost hair cells never recover.

In 1988, however, UW researchers led by Ed Rubel made a startling discovery. Birds spontaneously regrow hair cells and recover hearing. When Seattle timber baron Prentice Bloedel learned of the finding, he gave the university a large bequest to fund the research center that now bears his wife's name. Virginia Bloedel had become profoundly deaf late in life.

Today, the Bloedel center is one of the largest hearing research centers in the world. Sixty-five scientists from more than a dozen disciplines pursue many lines of research related to hearing and communication disorders. Some of the work involves

using cutting-edge techniques of molecular biology to study hair-cell regeneration at the level of single cells.

Through gene manipulation methods, Bloedel scientists are trying to understand how hair cells regenerate in birds (and some fish, reptiles and amphibians) – and why it doesn't happen in mammals.

Bloedel scientists have been able to induce the beginning stages of hair cell regeneration in inner ears of mice and guinea pigs, demonstrating that achieving the same feat in humans – curing deafness - may well be within reach.

How far off is that great day? Ten to 20 years, perhaps, but it will take something like the Hearing Regeneration Initiative to pull it off.

The initiative would be a 10-year, $25 million research effort allowing several labs around the country to coordinate their work in a sustained, systematic way – without having to constantly hustle for short-term grants.

That's what struck me most about our visit to the Bloedel labs: the constant struggle for research funding typical of so much scientific work.

The university of Washington is a multibillion-dollar research powerhouse, but still many of its scientists have to scrap for every dollar they can get to sustain their work.

Finding a cure for deafness isn't one of this nation's top scientific priorities – even though hearing loss is the most common chronic human disability.

The Bloedel scientists' immediate target is raising $500,000 this year and the same amount next year to qualify for promised matching funds. My Rotarian friends are determined to help.

On the drive home with Pankey and Sclair, I couldn't help thinking about the $8 billion a month we're spending on the war in Iraq. What a shame.