Computer whiz helps disabled cousin communicate

PHILOMATH (AP) — A near-fatal accident in Southern California 12 years ago left a Philomath teen-ager's only cousin trapped inside his body, unable to speak or move.

But Jim Richardson, 17, is determined to set his beloved cousin free. He is building a computer hardware and software system that will give the young man the ability to communicate for the first time in 12 years.

"It motivates me tremendously," Jim said.

Jim's cousin, 22-year-old Matthew Stern of Palos Verdes Estates, was the victim of a brain injury that destroyed his motor functions. He can think, hear and understand what the outside world says to him. But in reply, he only can move his eyes and head.

Jim's family still lived in Southern California when the accident occurred. He and his younger brother were at his aunt and uncle's when Matthew went to borrow some butter from a neighbor.

Matthew, then 10, pressed the automatic garage-door button and began to duck beneath the descending door. But a spring caught on the hood of his jacket. The door didn't stop, and its choking grasp left Matthew without oxygen for more than 10 minutes.

Matthew's father, Larry, prayed in the ambulance for his son's heart to beat again. It did.

After six months in a coma, Matthew awoke with a laugh. He had heard his father telling a joke to a nurse.

But laughing and making noises are all the only way Matthew can communicate.

"He's this real intelligent child inside of this job that can't talk," said his mother, Linda.

When Jim talks mechanical engineering, his eyes light up. His knowledge bubbles out of him excitedly. He knows computers. He knows how to build them, run them, tinker with them. He knows video capturing and digitizing. He knows electronics. He knows robotics.

His laboratory is a corner desk in the bedroom of his family's spacious home just south of Philomath. A card table is covered with a maze of wires, batteries and tools. A white plaster mold of Jim's head sits on top.

He used the mold to build from fiberglass a black head harness with two rectangular boxes in front.

One box contains a tiny infrared camera that is aimed directly at the wearer's pupil.

Jim puts on the headset and turns on his computer. A live picture of his eyeball, delayed just a few seconds, floats on the screen.

Eventually Jim's cousin will wear the headset. He will see a picture of the computer screen. Instead of using a hand-controlled mouse, Matthew will blink his eyes on different parts of the screen. The camera will sense the movement and will transmit the command to the computer's cursor.

For example, the wearer will blink on a file, open his eyes, go to another screen section and blink again, "dragging" a file to another spot.

"It's just like you have a mouse," Jim said. "But instead, your eye is doing it."

The speed of the blinking system can be set so the headset camera won't pick up normal eye blinks.

Jim is setting up an alphabet and common word file, so Matthew can begin writing and expressing himself. A human voice system installed in the computer will allow Matthew to "speak" what he writes.

Eventually, Jim would like to link the computer to household appliances so Matthew can turn on a television. Or, it could be linked to an electric wheelchair, allowing Matthew to move around.

Jim's mother, Carole, a substitute teacher, has no idea where Jim got his engineering talents.

"The first thing he wanted was a tool belt," she said.

Jim's love of creativity advanced quickly from an award-winning 4-H pig to a two-person hovercraft he built at age 14.

After seeing the hovercraft, which can carry two people a foot over water at 35 mph, Carole and her husband, Neil, learned not to doubt Jim's ideas.

"We quit saying, 'It's impossible,'" she said.

Linda described Matthew as a happy person with a good spirit who loves anything new.

He works with teachers who show him printed questions and ask him to look at the correct answer. He can do it easily.

"That will work right into this computer," Linda said. "He'll be so enthused about it. It will be kind of a thrill. He loves anything adventurous."

NOMINATION DEADLINE: APRIL 15, 1994

Faculty Awards For Distinguished Teaching

Nominations are being accepted for awards which will be presented at Spring Commencement to University of Oregon faculty members for distinguished teaching. Graduate teaching fellows, who have their own competition, are ineligible for these awards. This year there will be up to three awards, each accompanied by a monetary prize. Nominations may be made by students, faculty, staff and alumni. If you wish to make a nomination, you may use the form below or another sheet of paper and send it to the following address:

Lorraine G. Davis, Vice Provost for Academic Personnel
103 Johnson Hall, University of Oregon

Please send your nominations no later than April 15, 1994

Eligibility for Awards

Ersted Award for Distinguished Teaching

The late Mr. A. J. Ersted established the Ersted Award for Distinguished Teaching so the University of Oregon could annually honor faculty members "who have taught comparatively short periods and have demonstrated exceptional abilities to induce students to reason and not merely memorize." The Ersted Award can go only to faculty who are early in their teaching careers. This teaching may occur at the undergraduate or graduate level.

Faculty Achievement Award for Distinguished Teaching

The University of Oregon wishes to continue the tradition of the Burlington Northern Foundation Faculty Achievement Award For Distinguished Teaching by instituting an award which will honor senior faculty members who have achieved outstanding records as teachers. The Faculty Achievement Award for Distinguished Teaching can go only to faculty members who have held academic rank at the University of Oregon for at least seven years, and who have demonstrated excellence in teaching at the undergraduate or graduate level.

I nominate _____ **for the**
❑ **Ersted**
❑ **Faculty Achievement Award for Distinguished Teaching.**
(Check one)
The reasons for this nomination are as follows:
(Please feel free to attach an additional sheet, if necessary.)

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Signature of nominator _____
Address _____
Telephone _____
Please indicate your status: ❑ Student ❑ Faculty ❑ Alum ❑ Staff

Man arrested in motel undercover operation

SEASIDE (AP) — A Washington murderer who was paroled after six years in prison has been charged with arranging to have sex with children.

Steven Howard Vorce, 37, of Bingen, Wash., was arraigned Monday on 16 counts.

He was arrested at a motel Friday in a sting operation involving an undercover San Diego County sheriff's detective. The California detective promised to arrange for Vorce to have sex with two girls, ages 7 and 12, and a 9-year-old boy, all fictitious, authorities said.

"If she hadn't been a San Diego detective, three children would have been horribly sexually abused in terrible ways that this guy had planned," said Marcus Lawson, a U.S. Customs Service special agent who participated in the operation.

Clatsop County District Attorney Josh Marquis said Vorce's arrest concluded an investigation by federal, state and local authorities that spanned several months.

In 1984, Vorce admitted that he and another man had been hired to kill Clifford "Sonny" Heard, a suspected drug dealer in Hermiston. The two men kicked in Heard's door and shot him. A woman with a baby and two other children were in the house at the time.

Vorce, who originally was charged with aggravated murder, turned state's witness against two co-defendants and got a light sentence in exchange for his testimony.

He served six years in the Oregon State Correctional Institution for felony murder and was released on parole in November 1991. He was discharged from parole Feb. 4.

Parole Board member Marva Sabien said Vorce had been eligible for release from parole after two years. She said records show he had no new arrests or convictions, and parole office records do not show he was under investigation.

Conspiracy charges against Vorce include trying to commit sodomy and rape. He also is accused of trying to use children in a sexually explicit display and paying to view sexual conduct involving a child.

Woman who killed spouse may claim self-defense

GRANTS PASS (AP) — Authorities say a Grants Pass woman used an assault rifle to kill her husband in their home last week, and her attorney says she's likely to claim self-defense.

Margaret W. Biggs had a black eye when she went into Josephine County District Court on Monday for arraignment on a murder charge. She was denied bail.

Noting her injury, defense attorney Thomas C. Howser of Ashland said Mrs. Biggs would plead innocent and claim self-defense, or some other justification for the slaying.

Howser refused to say whether Mrs. Biggs would argue she was battered.

Court records show Mrs. Biggs had been denied a restraining order the day before the shooting, claiming her husband was harassing her.

Deputy State Medical Examiner James Olson said Thomas W. Biggs, 69, died of multiple gunshots to the head from an AK-47. Olson didn't say how many times Biggs was hit, but did say 15 shots were fired in the house.