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THREE MEMBERS OF THE HAWKINS FAMILY—Since this is National Secretary Week, INTERCOM felt that hard-working medical center secretaries should occupy a prominent position in the attention of Duke employees in this issue. We persuaded Jeannie Hawkins, secretary to John D. Shytle, assistant vice president for business and finance, to serve as our model. With Ms. Hawkins are her son David and one of her oldest friends, Sheba, an 11-year-old palomino mare which she has raised from a six-month-old filly. The young mother said she and Sheba have been together so long, they know what each other is thinking. She also said that life is "like a butterfly — brief, bright, but with a few dark spots." Before her husband James and son David came along, Sheba helped her hurdle the "dark spots" successfully. (Photo by David Williamson)

Immune System Clock Marks Death's Approach

For more than a decade, researchers have said that a genetic clock built into our cells may determine how long we live.

Now a Duke specialist on aging reports that the immune system may signal when that clock is running down.

Dr. C.E. Buckley III, an associate professor of medicine, brought up this possibility last week at a symposium in Miami. He said he and Dr. Jeffrey M. Roseman found a link between immune system strength and survival in a study of 39 aged men and women.

Laboratory tests performed in 1967 showed how well the subjects' immune systems were working. The study participants were 73 to 91 years old at the time.

The Duke doctors noted a direct relation between how strong a subject's immune system was and how many years he lived after 1967. Those with strong systems lived as long as eight more years, Buckley said. Those with weaker systems died much sooner, being more vulnerable to life-threatening diseases.

The doctors also found that data on blood pressure, age, race and sex — traditional risk indicators — were useless in trying to predict how much longer a subject would live.

This suggests, Buckley said, that the immune system may influence which elderly people live on and which die. The study results could point to a genetic clock at work, he said, because "immune capacity is genetically controlled."

A person over 72 whose immune system remains vigorous may have inherited a life-span clock that takes longer to run down, he said.

"People who have long life-spans arise from parents who have long life-spans," he pointed out.

The study has important implications for physicians who treat the elderly, Buckley said.

"It indicates that measures of immunity in extremely old persons provide a way of identifying those

individuals who need maximum health care," he said.

The measures of immunity the Duke doctors looked at were levels of three immunoglobulins — protein substances the body makes to fight disease.

Length of survival was tied to two of the three, called IgG and IgM, Buckley and Roseman discovered.

"Those individuals who died early had relatively low levels of IgG and high levels of IgM," Buckley explained.

IgG is the "janitor" of the body, he said. It "cleans up" viruses, bacteria and fungi throughout the body. IgM, on the other hand, is more like a street cleaner. It "zips around" fighting disease in the blood vessels, he said.

A high level of IgM means an older person's immune system is relying primarily on that substance, the professor said.

"At this point, death is not far off," he said. "This change suggests that the biological clock is winding down."

Trash Search Reveals Lower Waste Levels

Following up on an earlier investigation made in January, Frank Braden, assistant administrator for patient services, and several undergraduates searched all hospital trash delivered to the compactor near the old hyperbaric chamber during a single day.

The second search, which took place in March, was made to determine if the \$1,100 worth of unused hospital supplies found during the first search was unusually high or average for the 15-hour period.

"We're not throwing away nearly as much as we thought," Braden said. "Our findings were a whole lot better."

The total value of items recovered was \$180.

Like the first search, the trash was checked starting with the initial run at 8 a.m. and continuing until the final run at 10:45 p.m. All trash bags were labeled so that they could be identified by work areas.

Again, the largest percentage of valuable items were recovered from the trash early in the morning before 9:30 a.m., indicating that these supplies had been discarded during the night shift.

Included on the list of unused, reusable or repairable supplies were bottles of Acetest reagent tablets, bars of soap, towels, syringes, pillow cases, pencils, bandages, sponges, dinnerware, toilet paper rolls, catheters and surgical gloves.

Braden said a third search of hospital trash will be made to determine if the March results were unusually low.

"There was such a difference in our findings, we want to try again so that we'll get a true picture of the amount of materials being wasted," he said.

New Williams Ward Visiting Hours Established To Safeguard Infants

In an effort to prevent newborn babies from acquiring infections in the hospital, a committee of pediatricians, nurses and administrators have established a new visiting policy for Williams Ward.

"Everyone wants to see the mother and her new baby," said Dr. Roberta Smith, unit physician for the Full Term Nursery and one of the committee members. "It's exciting, and it's only natural."

"But the newborns are more susceptible to infection than older children and adults, and so we're asking for everyone's cooperation in observing the new regulations."

At some time in the past, everyone connected with the mothers has been guilty of ignoring the visiting regulations including hospital personnel—senior staff physicians, residents, medical students, nurses, environmental service workers, etc., she said.

"That's simply got to stop," the physician added.

The new regulations provide that the father of an infant and one other person designated by the mother may visit on Williams between 11 a.m. and 8 p.m., Dr. Smith explained. Grandparents may visit between 2:30 and 4:30 p.m. while the infant remains in the nursery.

If the grandparents wish, they may view the baby through the nursery windows during that time.

Friends and families of women who are on the ward prior to giving birth may also visit between 2:30 and 4:30 p.m., provided that only two people enter the mother's room at a time.

Babies will be shown after admission from Carter Suite (the delivery area) to those family members who are at the hospital at the time of delivery. This will be a brief show at the nursery windows unless the infant's condition dictates otherwise.

Exceptions to the visiting policy will (Continued on page 4)