



Clues to a Missing Chemical

Inside the Leg Muscle of a Toad

To see him in his laboratory one would never guess that Dr. Frans F. Jobsis is running a race against time.

His movements are not swift, but they are forward.

For more than 10 years the Duke University research scientist has continued to push forward in his search for a "lost" body chemical that may some day prevent muscular dystrophy.

He believes that the absence of this elusive chemical in the body brings about an imbalance that leads to muscular dystrophy.

The Duke physiologist expects to find clues to the "missing" chemical's identity buried somewhere inside the leg muscle of a toad.

He looks forward to the day when thousands of children each year will be spared the horrors of a crippling disease that causes muscles to waste away and can sometimes mean death.

Though still as far away as a polio vaccine was 20 years ago, Dr. Jobsis visualized that muscular dystrophy will be halted with injections of the now unknown missing body chemical.

In the race to rescue dystrophied children, the public becomes impatient. And doctors eager.

But physiologists and bio-

chemists know the pace of science is painfully slow. Surrounded by electron microscopes, spectrophotometric analyzers and digital computers, they methodically turn hope into action . . . bit by bit.

Dr. Jobsis has examined leg muscles from more than 1,500 giant tropical toads in an attempt to learn more about the basic mechanics of muscle activity. He chose the toad because its leg muscles are big and easy to work with.

The basic study by Dr. Jobsis aims at discovering the reactions producing the mechanical power output of the muscles, lack of which is one of the primary symptoms of the disease.

A physiologist in his search for scientific evidence sees a lot of dead ends, Dr. Jobsis says, but they must be explored and crossed off.

Supporting Dr. Jobsis and other scientists across the United States like him is the Muscular Dystrophy Associations of America. Recently he received a 10th year renewal grant for \$12,000, the second he has received at Duke Medical Center. Earlier, grants were made while Dr. Jobsis was at the E. R. Johnson Foundation for Medical Physics, University of Pennsylvania School of Medicine, Philadelphia.

'Life in These United States'

'Ambassadors' Find Many Differences

"Our headpieces have been met with wide eyes and open mouths . . . and everyone asks where we're from," says Margaret Thomas, Exchange Nurse from Sydney, Australia, who is working on Hanes Ward.

Margaret is one of three nurses who arrived at Duke in September as participants in the American Nurses' Association Exchange Visitor Nurse Program. Also participating in the Exchange Program are Berilie Swan from Sydney, Australia (now working on Howland Ward) and Hanora Bygrave from Cork City, Ireland and Birmingham, England (now working in the Operating Room).

The purpose of the ANA Exchange Program is to provide nurses opportunities to improve their nursing skills and to promote better understanding of the United States—and, in this case, an introduction to Duke University Medical Center, Durham and the State of North Carolina. The nurses will be working here at Duke for at least six months; however, their visas allow them to remain in America for a maximum of two years.

It would seem that the Exchange Program's desire to "promote better understanding of the United States" would be an easy, natural achievement. However this has proven to be somewhat difficult, for the three vivacious nurses quickly dis-

covered that we in the United States speak a language quite our own.

Southern Dialect

Hanora: "The Southern dialect is really like a different language—and our words are so different. In England to line up means to 'queue'. And, oh, you know those carts that you wheel about here in the hospital? Well, in England we call those 'trolleys'. No one could understand me at first."

Berilie: "You know, I'm a nurse on Howland; and I had the same problem. I kept asking for 'napkins' when I came here, and they didn't have any idea what I wanted. Finally I learned that what we call 'napkins' in Australia you call 'diapers' here in America. What you call napkins here in America—the paper napkins that you use in the cafeteria—we call 'serviettes' in Australia."

Hanora: "And you say seven thirty, where we say half past seven or half the hour."

Margaret: "It took me a bit to learn that when you refer to 'braces' you mean the same thing that we mean in Australia when we say 'calipers'. And the way you pronounce certain drugs here in America—I have to have several spelled out for me; for I can't understand the different pronunciations!"

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A warm, warm welcome to Duke Medical Center is extended to the three ANA Exchange Nurses pictured above (left to right): Miss Berilie Swan, of Sydney, Australia, Miss Hanora Bygrave of Cork City, Ireland and Birmingham, England, and Miss Margaret Thomas, also of Sydney Australia.