



“... to suffer less and lead fulfilled lives.”

Dr. D. Holmes Morton II, a 1979 graduate of Trinity's

Individualized Degree Program, has brought new hope to Amish and Mennonite children with genetic disorders.

BY CHRISTINE PALM

Anyone reading D. Holmes Morton's biography could be forgiven for believing him a character dreamed up by Mark Twain: roots in the coal mining country of rural West Virginia. A brief, unhappy stint at a military academy, followed by a brief, uninspired stint at a religious school. Then, a jaunt around the world reading and writing which landed him in the Merchant Marine and the U.S. Navy, where he worked as a boilerman. Along the way he learned to play the cello.

Eventually, Morton ended up at Trinity College, enrolled in the Individualized Degree Program (IDP), where he built upon a lifelong fascination with neurobiology and early childhood development. He graduated, with honors, with a degree in developmental psychology and biology and went on to earn an M.D. from Harvard Medical School. He then completed a three-year residency in pediatric medicine at Children's Hospital of Boston and a three-year fellowship at both the Children's Hospital of Philadelphia and the Kennedy Krieger Institute at Johns Hopkins.

And here's where maple syrup urine disease comes in: Morton is one of the world's pre-eminent researchers into this and several other rare, inherited childhood diseases. Morton's astonishing career began somewhat unexpectedly in 1988 when he made an old-fashioned house call.

On that day, Morton visited the home of an Amish boy in Lancaster County, Pennsylvania, who suffered from an inherited disease called glutaric aciduria type I. Morton learned from the boy's parents that among the Amish community were many other children who, like their son, appeared

normal at birth but who, within a few months, were stricken with a sort of paralysis. Morton had a hunch that these were the same children commonly mistaken by most physicians for cerebral palsy patients.

Morton soon discovered that several other rare diseases appeared common among members of the Old Order Amish and Old Order Mennonite communities, including metabolic disorders such as Crigler-Najjar syndrome, which causes jaundice and organ malfunction, and "maple syrup disease," so named because children affected by the disease are unable to process certain amino acids, which gives their urine a distinct smell similar to burned caramel. While the disease affects an estimated one in 185,000 infants worldwide, as many as one in 358 newborns within the Old Order Mennonite population is affected.

The Clinic for Special Children

Morton knew he was onto something but realized, too, "the success of any treatment ultimately depends upon finding, and caring for, asymptomatic newborns." To this end, he spent a year researching the phenomenon at Johns Hopkins. Ultimately, however, Morton learned his research support would not continue through any official channels, so he took the bold step of founding, with his wife, Caroline, his own clinic. Today, the Clinic for Special Children, a non-profit medical and diagnostic service in Lancaster County, is supported through a combination of fees for services, benefit auction proceeds, and private contributions.

"At our clinic we care for children with more than 80 different genetic disorders," Morton says. "Our

mission is to advance methods of newborn screening, to improve follow-up services, to develop better diagnostic methods, and to further clinical research so we can improve treatment and outcomes for children who suffer from rare inherited disorders.”

As much as Morton helps children with special needs, he draws inspiration from them. Upon accepting the Schweitzer Award, he said, “The prize gives me the opportunity to reflect upon an aspect of my work that is at times overshadowed by scientific efforts, here and elsewhere, to describe and prevent genetic disorders. In my work caring for children with complex, sometimes lethal, inherited disorders, I am impressed by the hopes and worth of these children. They hope to suffer less and lead fulfilled lives. Within their families and communities, they are not merely the object of compassion and love but the very source. The Plain People call them God’s Special Children. They shape the Amish and Mennonite cultures and inspire work such as mine in an important and forceful way that would have been of interest to Dr. Schweitzer as a humanist and physician.”

The writer in the doctor

Throughout all his years of research and treating children, and the honors his work has bestowed, Morton has not lost his love of writing. He has published a collection of essays, one of which, *Through My Window*, is often included in the syllabi at medical schools. Morton credits a number of Trinity faculty members as having influenced him, but singles out Professor of Psychology William Mace as having had a profound effect, especially on his writing.

“Bill Mace was my thesis adviser. I worked for him as a teaching assistant too. He was the best writing teacher I’ve had—he was masterful at using pointed questions and short, concise essays to teach writing and find out what his students understood, or didn’t understand. His thinking about experi-

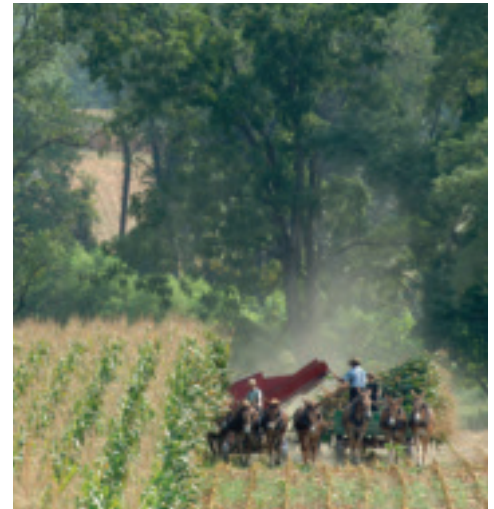
mental Gibsonian psychology emphasized history, philosophy, and careful thinking about the manner in which the questions that a researcher asks, and the design of experiments, fundamentally influence, and potentially bias, what can be learned. Dr. Mace’s critical thinking about all areas of science has had a lasting influence on my work as a physician and biologist who studies the genetic basis of disease.

“In lectures to students about my work, I tell them that I am a biologist, with a special interest in neurobiology and genetics, who has found an unusual way to make a living as a general pediatrician for children who have difficult problems,” he says. “And, I’m a person with many interests in the sciences and humanities, who set out at age 18 to be a writer, and who, unexpectedly, has found in the work of a doctor remarkable opportunities to learn and to write.”

The writer in the doctor is never hard to discern. Here, Morton sounds more like Sherwood Anderson than an eminent researcher:

“I was from a town of two-thousand people named Fayetteville, in the coal region of southern West Virginia. The town had two stoplights and two pool halls, each just before and after the Court House, at the start and end of Main Street, and the town had one of just about everything else required to make a town, including one policeman, (and) an ex-heavy weight boxer whose career ended in a coma, after a professional fight with a quick, black boxer from Kentucky named Cassius Clay...”

These days, Fayetteville can make a bolder claim on our attention, as the place where a young man who wanted to be a writer became instead a scientist and humanitarian whose work has given new hope and new life to thousands of families.



Morton named MacArthur Fellow

It was announced in mid-September that Dr. Holmes Morton has been named one of 25 MacArthur Fellows for 2006. Recipients are selected for their creativity, originality, and potential to make important contributions in the future, and each receives \$500,000 in “no strings attached” support over the next five years.

According to Morton’s former Trinity thesis adviser, Professor of Psychology William Mace, the fellowship comes as no surprise. “As a student, Holmes was a faculty member’s dream because he was so genuinely interested.” Mace continues, “Like Socrates and Columbo, he is quick to be puzzled and slow to be fooled, and he is far more impressed by what he does not know than by what he knows.” Mace notes that after he visited Holmes several years ago, he returned and told a colleague that Holmes’s work had elevated to Nobel Prize levels. “But whether hyperbole or not,” Mace adds, “the MacArthur suggests that others have seen similar achievement and promise.”