

FRIENDS OF HISTORIC VINELAND

Spring Issue



Memories Of The Past In Medicine



The Newcomb Lab

By: Frank De Maio, M.D.

In the good old days when men were men and women were housewives, having your blood drawn was a great and wonderful experience. Early syringes were naturally made of glass, but they were so crude that to make them capable of creating a suction, the plunger was wrapped with string. You can imagine the size of the "small" needles that went along with such a syringe. Now I am not that old, but I do remember that when I was drawing blood as a medical student, the needles were pretty big compared to the ones we use today, and they were not thrown away after each use. You reused them!! Naturally, they became dull, so

when you had to push extra hard to get them through the skin, you just took out your little old sharpening stone and sharpened them, and took off the burrs!!

Once the blood was drawn, it was sent to the "laboratory" which was a real laboratory in those days. Blood tests were nothing to sneeze at. It was hard work analyzing blood. For example, when you wanted to get a blood sugar result you first had to spin down the blood and separate the red cells from the serum, then you had to suck up the serum through a pipette to draw the right amount. That was dropped into a test tube containing the right solutions for that particular test. Then you put a bunch of these tubes in a pot of boiling water so that a chemical reaction took place. Then you dropped in a reagent which made the devil's brew you were cooking turn color. That was then placed

in a photospectrometer and the intensity of the color was measured. The reading was then placed on a curve which had been drawn based on known sugar solutions using your machine. With the help of a slide rule, you figured out the sugar value.

What do you do now? Well, you stick your little finger, get a drop of blood, put it on a small "stick" that has been placed in a glucometer, wait 20 seconds, complaining all the time about how slow these damn machines are, and then get a reading.

Now, if you think that doing a blood sugar was hard, let me tell you, getting a serum calcium level took an act of Congress.

In the "old days" a doctor did not order a test unless there was a clinical indication for the test. First, there was no insurance to pay for the test, the patient paid, and they did not suffer fools lightly.

This Month's Articles

The Newcomb Lab on page 1.

The story of Dr. Mary J. Dunlap by Carol V. Paterson on page 2

Carol Paterson and her role as Mary Dunlap on page 2

A history of laboratory medicine by the founder of the American Red Cross, our own Clara (Rosanne Hughes) Barton on page 3

. Second, the tests were difficult to do and very costly. Third, those needles were big and they hurt. So, the doctor had to be a real diagnostician and order the test where there was a good reason to do so. For example, if there were a lot of flies circling around your urine, the doctor might order a blood sugar because he suspected diabetes. If your breath had a "mousy odor," or your face had uremic frost on it, he was allowed to order a BUN. If he examined your chest, and got percussion dullness, he might order a chest x-ray (but don't count on it).

Today, things are different. We do what is called "screening tests" which are done for no particular reason except "to make sure everything is OK" and which is always done when the insurance will pay for it. And, sometimes, we actually do pick up a disease as for example when we make a diagnosis of one case of hyperparathyroidism out of every 50,000 serum calcium studies.

Many doctors start rounds in the hospital

around 8:00 in the morning and look for the lab sheet for the results of the blood work that was done THAT DAY! If it is not on the chart, the ever alert physician will immediately begin to complain about how things are going to the dogs every since that "Bridgeton crew" took over Newcomb. (Actually, the "Bridgeton crew" has placed computer terminals on every Nursing Station, and if the doctor can remember his password, he can access the computer where the results are displaced immediately upon completion of the tests as the analyzer is virtually linked to the computer.)

Yes, in the good old days, things were different. The blood was drawn in the morning and if everything went right, the result was placed on the chart by 4:00 PM of that same day!! Because the doctor ordered perhaps one test a day, that result was not hard to find. The next day, when he made rounds, if everything worked out, wonder of wonders, the result from yesterday was on the chart and he could confidently treat today's blood sugar based on

yesterday's result. But, the system was so complex, that it often did not work, and he found himself making call after call to the lab as he went from patient to patient trying to find out the results of yesterday's lab results.

For many years, the lab at Newcomb was under the direction of our Pathologist, Dr. Solomon. The lab technicians were under the direction of Mrs. Ranagen. Now, Julie, as she was known, was tough and she was good. There was little of lab work she did not know, and she also was quite involved in teaching the young people of the area how to become lab technicians.

When they were finished the course, they could look at a blood smear under a microscope and tell a lymphocyte from a monocyte. The good ones could even tell a stem cell!!

Alas, no more!! Machines, machines, machines, and now computers!!! The good old days are gone!



Training School at Vineland

Dr. Mary J Dunlap The First Female Superintendent of The Vineland Developmental Center & The First President of The Woman's Club of Vineland—A Brief Biography by Carol V. Paterson, The Woman's Club of Vineland

On March; 8, 1888, New Jersey Governor Robert S. Green signed into law an act empowering the State to send indigent retarded females above fifteen years of age "to some suitable and convenient home." The home was to be "entirely separate from the other sex, " and its residents were to receive "such industrial and other training as they may be capable of, and also that

moral and physical care which they needed." The act authorized an annual appropriation of \$230 for the resident's training and maintenance.

Public interest for establishing a home for the "care and training of feeble-minded women" was at a high peak during this time. The Governor ap-

pointed a board of managers to appropriate a site for such an institution. The estate of Professor Marcius Wilson and over eleven acres of farm land on Landis Avenue in Vineland were purchased for ten thousand dollars. On May 1, 1888, the Vineland Developmental Center was opened under the direction of Reverend Garrison as superintendent .

Because of several internal problems with the school, Reverend Garrison resigned in November of 1888. His position was filled by a young physician from Philadelphia, Dr. Mary J. Dunlap, who would reside over the growing facility for the next twenty years.

A leader in many fields, Dr. Dunlap was chosen as President of the National Association of Medical Officers for the Study of the Feeble-minded (AAMR), Director of the New Jersey Legal Aid Association for Women, Charter President of The Woman's Club of Vineland, President of The Cumberland County Medical Society, and life member of The Vineland Historical and Antiquarian Society. While the official object of the institution was "to relieve the State from perpetuating a race of feeble-minded paupers," Dr. Dunlap's aim was to promote physical development through "close supervision and moral persuasion. " She believed that "in making others self-helpful, useful and happy, we find our own lives so bright and so busy that we envy not those who look on coldly."

In 1891 legislation was passed to allow placement of girls as young as twelve years of age. Steady development and recognition of programs and expansion at the facility continued

under Dr. Dunlap's supervision into the new century. With the academic progress at an outstanding level as the school continued with instruction in reading, writing, spelling, history, geography, physiology, drawing and composition, the residents made their own clothing, wove baskets and carpets, and made mattresses, soap, and butter .

In 1909, after twenty years of remarkably distinguished leadership, Dr. Dunlap retired from her position as the first female superintendent of the Vineland Developmental Center.

When Dr. Mary J. Dunlap moved to Vineland in 1888 she became an active and important citizen of her new community. Local women were interested in forming a club for mutual improvement to provide an intellectually and organized influence to promote the welfare of the commu-

nity. On October 28, 1899, twenty five concerned women organized *The Woman's Club of Vineland* and elected Dr. Mary J. Dunlap as their first president, a position which she successfully held for two years. At their first meeting, the members decided their first order of business would be to establish a local public library. Although books were somewhat of a scarce commodity in those days, these women worked together to gather 1,275 books to establish the library, which is now The Vineland Public Library .

In November of 1899 The Woman's Club of Vineland joined The New Jersey State Federation of Women's Clubs and later the General Federation of Woman's Clubs, the largest women's organization in the United States.

Dr. Mary J. Dunlap continues to be a

source of inspiration to both women and men because of her dedication to making a difference for the good of humanity and her outstanding accomplishments. Her portrait is displayed at the top of the staircase of the Vineland Historical and Antiquarian Society



During Founder's Day, a number of individuals, through the miracle of history, bring back famous characters of Vineland. These characters are a source of pride to Vineland and should serve as an inspiration to the youth of Vineland as they grow to maturity. Such a special person is Carol V. Paterson who portrays Dr. Mary J. Dunlap, the first female superintendent of the Vineland State School and the first president of the Woman's Club of Vineland.

Carol V. Paterson was the president of the Woman's Club of Vineland from 1997 to 1999 when the club celebrated its Centennial Anniversary. During her presidency the club held a formal Centennial Ball, a Victorian Tea with members dressed in Victorian Attire, a Vintage Dinner Fashion Show featuring fashions worn throughout the century as well as the latest fashions, and a Victorian Christmas Dinner held at the Woman's Clubhouse.

Mrs. Paterson served as Communications Chairman for the club for five years, winning several blue ribbons for the best press book at the New Jersey State Federation of Women's Clubs Annual Conventions.

Mrs. Paterson has compiled a book about the reception she chaired at the Vineland Public Library in February 2002 to celebrate the Centennial of the founding of the library by the Woman's Club.

The book will be kept behind the information desk at the library and entered into the CLUES database on the worldwide web with Paterson listed as the author .

Mrs. Paterson is the wife of Dr. James W. Paterson, Professor Emeritus of Rutgers State University. They have three grown children and four grandchildren.

Another View of Lab Medicine, by Rosanne Hughes (Otherwise known as Clara Barton, the founder of the American Red Cross)

As first mentioned in the writings of Hippocrates, knowledge of diseases such as TB & malaria was known. But there was no way of proving or testing for the presence of such diseases. The ancients believed that body fluids or "humours" were maintained in an internal balance and that sickness was caused by a disturbance in this internal balance. Blood was the most important of all of those body fluids but no tests could determine a disturbance.

Of course, doctors did attempt to use signs & symptoms to diagnose diseases. For example, if urine tasted sweet or attracted ants, diabetes was diagnosed.

(It took a strong stomach to be a lab technician in those days!!)

The first clinical lab in the US was started at Johns Hopkins Hospital in 1896. But progress was slow. It was not until World War 11 and modern technology that laboratory medicine became of great value. Initially, around the 1950's, almost all laboratory tests were done by complicated and manual techniques. Pipetting was done by the lab tech's mouth, sometimes resulting in a mouthful of blood, acid or urine. It was not until the 1960's that clinical labs began to handle the many tests

available with automated instruments. More recently, computers were used to compile the results.

Won't it be great when they finally come out with a painless needle-free way to get the blood sample!! (Don't laugh, it's not that far away!)

Between now and the next issue of our Newsletter, we will have Founder's Day. We need your help!! Join the "Friends" and be a part of our efforts to bring History Alive in Vineland.

Founder's Day will be on Saturday, May 10—as always on the weekend of Mother's Day. The event starts at 10:00 AM and will finish at 4:00 PM

This year our greatest efforts will be to make history alive and ***fun for the kids***. Bring them to the event. There will be a lot of activities, all free, designed for them to have fun and to learn about history and Vineland.

DO YOU WANT TO JOIN??

TO BE A MEMBER

BENEFACTOR.....	\$100
SPONSOR.....	\$50
FAMILY.....	\$35
INDIVIDUAL.....	\$25
STUDENT.....	\$5

MAKE CHECK PAYABLE TO THE:
"FRIENDS OF HISTORIC VINELAND"

The Friends have no connections with the Vineland
Historical Society or any other society!

Name: _____

ADDRESS: _____

CITY : _____ STATE: _____

ZIP: _____ PHONE: _____

Mail to: Friends of Historic Vineland
C/O Frank De Maio, M.D.
1047 Almond St.
Vineland, NJ 08360