

Liwanag - Tanglaw

International

The Discovery of Insulin

Diseases that were previously deadly—smallpox, measles, tuberculosis, and others—can now be cured. Advances in science and medicine have virtually eliminated them from the planet. For those diseases that still have no cure, progress has been made such that their effects can be minimized and controlled.

Diabetes is one such disease. For much of history people with diabetes had only one prognosis—death. Once diagnosed, the afflicted—many children—had only months to live, much in suffering.

Diabetes has been known to exist since at least 1500 BCE. In India, it was called “honey urine” because the diabetic’s urine tasted sweet and attracted ants. The Chinese and Japanese called it “sugar urine disease”.

In the 1800s, doctors began searching for the cause of diabetes. Animals were used in the lab. When a dog’s pancreas was surgically removed, the dog began showing the symptoms of diabetes. The pancreas, it turned out—or the lack of it—caused diabetes. No one knew at the time what the pancreas did but doctors now had a solid lead.

In 1908, while waiting for a cure to be discovered, a New Jersey doctor implemented a temporary but radical solution—starvation. Diabetic children in his institute were starved and fed the bare minimum to keep them alive. Diet consisted of chicken broth, vegetables boiled three times to purge them of carbohydrates, and “no desserts or bread ever”. Hungry, skeleton-thin, and semi-conscious most of the time, the children nevertheless lived months past their prognoses. Although the doctor’s cure was worse than the disease, it kept them alive. Some died eventually but the doctor was hopeful that in the time he kept the children alive a cure would be found.



“Phalaenopsis in Bloom”. Kitchen window of Sis. Madel and Bro. Bill Matias-Abb’s home in Chapell Hill, North Carolina

In the 1920s, a cure was found. Insulin—a hormone produced by the pancreas—allows our body to process glucose commonly known as “sugar”. Glucose extracted from food we eat penetrates our body’s cells with the help of insulin. Glucose in our cells then becomes our body’s key source of energy. It is what keeps us alive, active, and alert. Without glucose we would feel drained, weak, and thirsty and be susceptible to infections.

When the pancreas does not function correctly as in the case of a diabetic’s, it does not produce insulin in sufficient amounts if at all. Without insulin, glucose cannot penetrate the body’s cells and remains in the bloodstream where it becomes toxic waste. After some years, high sugar levels in the blood lead to complications like blindness, kidney disease that require dialysis or transplantation, and nerve disease that lead to amputations. Eating sugar alone does not necessarily cause diabetes. Rather, diabetes is the condition where the body cannot metabolize the sugar we eat. Normal

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Message on

The Resurrection

By Bro. Virgelio V. Carpio

Some say that without the story of the Resurrection, there would be no Christianity. Because soon after Jesus’ death, his followers used the story of his resurrection to spread his teachings. The following grew and three centuries later, the Roman Emperor converted and made Christianity—a cult at the time—the Roman Empire’s official religion. Christianity became a major world religion today all because a man named Jesus rose from the dead.

Today, perhaps the greatest challenge facing the Christian is the question of the Resurrection. With science achieving technological marvels never before seen in the history of humankind, some turn away from Christianity because of the Resurrection’s physical impossibility.

But the story of the Resurrection need not be hard to grasp. From perspectives we already know and a little faith that the physical realm is

not all there is we may come to understand the story of the Resurrection.

Following are two such perspectives: (1) current thinking by the scientific community about death and reversing it and (2) the spirituality of life as well as of death.

For many years, declaring someone dead was easy. If a person isn’t breathing and the heart stops

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**East Coast
Next Sesyon:**

June 15 – Saturday

Pag-gunita at pag-laala sa pag-alis sa laman ng KGG na Gran Superma, Dr. Rosa Pena Tongko. Gaganapin ito sa tahanan ng mga kapatid na Bro. Art at Sis. Fiely Novilla sa:

302 Shadowood Lane
Greenwood, SC 29649
Tel. (917) 775-3776

West Coast:

Maaring tumawag kina:

- Bro. Louie & family:
(619) 264-4251
- Sis. Fia Zabat Swartz:
(619) 656-3138
- Sis. Amor & Bro. Salvador Pia:
(619) *82-656-0325,
or Fax (619) 421-5240.

Matthew 19:19-24

Through the Eye of the Needle

by Sis. Fiel C. Zabat

It is a wise man to realize that dispossessing himself only of material things is not enough to enter the Kingdom of Heaven. It is the baggage both mental and physical that make it impossible to achieve the enlightenment that engenders Nirvana.

Foremost of this baggage is our preoccupation with things material, things tangible, things we can acquire, possess, and enjoy. Priorities change when enticed by measurable attractions. Our lives are bombarded by the inescapable ever-present media. Anywhere we turn, we are surrounded every second with all the superfluous enrichments and pleasures that create the need for them. There is always something new every minute, something exciting, something we must have. Our society has created things for us to enjoy, to cherish, but also distracts us from the real, from the important. The imperceptible hold that fads, current trends and new inventions have on us, add to our visual opulence but nothing to the real you, the inner being which needs nothing to embellish it. We must use our better self to wean us from the ruffraff, to separate the chafe from the grain, the mundane from the essential. Simplicity is key to the pursuit of perfection.

Ego and Pride are next, giving so much weight on the spirit, since it is more difficult to diagnose. Self-pride is not so apparent to a person and becomes like second skin so he can not discern having it himself. This leads to the perception that he is always right and above all else. Great leaders have this trait that gives them the motivation to succeed and triumph. The downside is they will never heed a different idea. That always leads to their decline. We have to realize the simple truth that we are never always right and people around us have ideas more effective or sensible than ours. It is the mark of an enlightened mind to accept being correct is not a monopoly.

Vanity is an obvious trait that is perennially present in any age, in any photo, in any mirror. Every single person, facing the image in the mirror, will think how gorgeous that image is. No one on earth will even consider oneself less than perfect. This vanity has exploded into a trillion dollar industry with cosmetics, fashion and surgery, to which we can see no end.

The bonds we form with our family and loved ones are the unshakeable ties that, most of the time, present almost insurmountable pressures. We know that families spawn millions of conflicts enough to inspire mountains of books and movies. This baggage we call Relationships.

Our lives are blessed or cursed by the way our loved ones interact with us. We have no key on why our loved ones behave one way or another. This becomes a heavy burden on our journey

to enlightenment. There are relationships that pose more harm than good and affections that are more taxing than enriching. When this is realized, then it is time to let go for the benefit of everyone. Friendships and relationships are mostly perennial but when it is time to move on for growth, then fade out.

Great Expectations or unfulfilled wishes add up to unhappiness and despair. We consciously or unconsciously expect our children or other loved ones to act according to our perceptions and standards. We are hurt when things we wished to happen, don't. We are hurt when our loved ones do not give us our expected love or attention. We are pained to see them behaving in ways we did not expect them to do. We have to learn to accept that our children have their own paths to travel, goals to pursue, lives to live.

Envy or the proverbial seeing the grass greener on the other side, is quite a thief in the night as we do not know when it hits us. Sometimes, we feel we should be what we think we should be. Sometimes we feel that we should have what the next person has, or more. Envy is the Green Evil that we should be advised to bury in the deep recesses of our souls. Envy spawns insecurities that ruin friendships and relationships and clouds our outlook towards life in general. It will also engender self-pity which destroys the spirit.

Last, Lack of Faith is a product of minimal belief that everything in this world is all spontaneous and unplanned. In this world that we are in, living life from day to day, minute to minute with no goals give a hedonistic lifestyle that often leads to excessive boredom and emptiness. A goalless existence leaves a vacuous spirit, thirsty and hungry for purpose. We have to give ourselves motivation to live, by going outside of ourselves and looking into the needs of others, thus creating meaning into what could be an empty life.

It will take a gargantuan effort for a human being in this complex world we are blessed to be in, to excise or shave off any or all of these dead weights that keep us from our pursuit of the Kingdom of God through the eye of the proverbial needle. It was not designed to be easy but when we strengthen our faith and reach out to the needs of those beyond ourselves, we can be sure we are on our journey.



Submissions are welcome! Please send them to:

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A Moment of Silence

Sis. Domgelia Monzon

I pinanganak ang aming magulang na si Sis. Domgelia Monzon sa Bayan ng Imus, Cavite noong Hunyo 3, 1945. Panaglawla siya sa pitong magkakapatid na mga anak nina Sis. Deadelia Param at Bro. Jose Bautista. Sila ay sina Sis. Marnia Miranda, Sis. Vida Evangelista, Sis. Video Bautista, Sis. Virgelie Acosta, Sis. Magnifia Pablo, at Sis. Meadina Figueras.

Kilala sa tawag na “Mommy Hel”, nakarating siya sa Canada noong Pebrero 23, 2012. Halos sang taon siyang namalagi sa aming tahanan sa Toronto. Mula sa Amerika ay dumalaw ang kanyang mga kapatid na sina Tita Dina at Tita Annie. Masaya silang nagkita at nagkasama.

Sa kanyang paninirahan sa Toronto, nakita niya ang Niagara Falls, Parliament sa Ottawa, at Montreal. Bagama't marami pa siyang ibang narating, isa lamang ang kanyang ninai na makita—ang puno ng mansanas. Kaya naman tuwang-tuwa siya nang makakita at makapitas siya ng bungang mansanas noong kapanahunan ng tinatawag na “apple picking”. Nadama ko ang kanyang kaligayahan sa pagkatupad ng kanyang mithiin.

Laki sa ating katuruan, pinanatili niya sa amin na kanyang mga anak ang pananampalataya sa Dios, pagmamahal sa kapuwa nang walang kundisyon, at ang pagkamulat sa Katotohanan.

Umalis sa laman ang aming “Nanay” noong Pebrero 27, 2013 sa edad na 67. Sa piling ng ating mga tagapag-akay, nananampalataya kami na masaya siya sa kanyang kinaroroonan at puspos ng kaligayahang espiritual. -Ni Bro. Donnie Monzon

Congratulations...

...to High School graduates:

- Bro. Leogelio L. Sagenes, son of Mehel and Doris Lacson-Sagenes.
- Sis. Kristine Ann S. Tagle, daughter of Sis. Merdy Sagenes-Tagle.

...to College graduates:

- Sis. Rose Aguilar, B.S. Radiologic Technologies, daughter of Sis. Nita Aguilar.
- Sis. Janine Crisostomo, Hotel and Restaurant Management, daughter of Bro. Fernando and Sis. Grace Crisostomo.
- Bro. Daryl Marc Moreno, B.S. Nursing, Boise, Cum Laude, son of Sis. Marilyn and Bro. Marcial Aguilar-Moreno.
- Bro. Justin Roman, B.S. Accounting, Rutgers, Cum Laude, son of Bro. Luzmiño and Sis. Dena Roman.
- Bro. Sedifio L. Sagenes, B.S. Information Technology, son of Bro. Mehel and Sis. Dorris Lacson-Sagenes.

Coming Sesyons

Agosto 24 – Sabado

Gaganapin ito sa tahanan nina Bro. Billy at Sis. Vi Carpio sa:
5 Fortune Rd. E.
Middletown, NY 10941
Tel. (845) 692-4561

Oktobre 12 – Sabado

Gaganapin ito sa tahanan nina Bro. Angel at Sis. Grace Santos sa:
390 Chestwick Dr.
Martinsburg, WV 25403
Tel. (304) 267-7248

This issue is also available at:

<http://www.billycarpio.com/LTI>

Overheard...

My First U.S. Visit

By Bro. Jim T. Nibungco

In the early 1960s, when I was staff member of our campus newspaper at Far Eastern University, our editor-in-chief whispered to me that I may be going to the U.S. in a couple of weeks. I was one of two students in the university—four in the country—awarded travel grants for being “student leaders” by the United States of America.

I did not immediately tell anyone even as I went about applying for a passport, obtaining police and NBI clearances, and getting briefed at the Cultural Office of the U.S. Embassy in Manila, until the news came out on our campus newspaper.

My parents were thrilled. My closest friend at Templo Sol, the late Bro. Gely Pantig, said it was a silver lining among dark clouds. His “dark clouds” pertained to my agonizing over quitting medical school the year before.

My parents, friends, relatives, and Lola Itang all wanted me to become a medical doctor. I dropped out because I was the eldest of six children and, thinking that ten years of studies will drain my parents’ finances, I did not want to be in the way of my siblings’ finishing college.

When Lola Itang learned of my good fortune, however, she invited me for lunch. I braved my way to her dining table because I felt I was a disappointment—I will not become the doctor she wanted and, unlike her, Dr. Zabat, and Dr. Matias, I will not become the valuable addition to helping humankind. So I was surprised when she congratulated me instead and gave me her blessings.

On April 23, 1962, I was on a direct flight to New York.

The flight took nearly twenty-four hours. Since the earth rotated, it was all day and no night during the long flight. Food and drinks were constantly served and there were plenty of toilets inside the airplane. To a neophyte traveler like me, it was all very mindboggling.

Reaching New York’s Idlewild Airport (renamed “JFK” in 1963) we, the four Filipino students, were welcomed by our State Department escort, a man named Orozco. He delighted us by saying he worked in the Philippines for the US State Department in the past. He did not speak Tagalog but we felt at ease being with someone “from Manila”. When asked what we wanted to do, I asked if we could see the Broadway play, “My Fair Lady”. He seemed very understanding, and since he knew each of us had already received our permit, he took us to Broadway to

see the play. He reminded us, however, that we should be careful with our money and save as much as possible.

We spent the next five days touring New York City—the Empire State Building, Rockefeller Plaza, St. Patrick’s, Radio City, the Statue of Liberty, and the crowded Fifth Avenue—and experienced firsthand the famous hustle and bustle that is New York City.

A few days before the end of our first week, I asked Mr. Orozco if we could see another Broadway show. I couldn’t let go of another chance to see Bette Davis in “A Night of the Iguana” by the famous playwright Tennessee Williams. Orozco gave his nod without question, perhaps knowing that I was writing an arts-and-culture column for my university’s newspaper. It turned out Bette Davis wasn’t performing that night but it wasn’t much of a disappointment because the famous Shelley Winters took her place.

Such was my first week in America. The grant was an “experimental Educational & Cultural Exchange Program” sponsored by the State Department. It consisted of an all-expenses-paid trip, being cared for by foster parents, and a cross-country trip from the East to the West Coast so that we may observe student government, student-faculty relations, student activities, and, generally, American student life. On our second week we were scheduled to fly to Detroit so we were excited to see yet another American city.

It was a dream just to come to America. To arrive and be given the treats we had on our first week—an all-expenses paid tour of New York City—was beyond imagining.

Before the trip, when I was told by our editor-in-chief that I was going to the U.S., my impulse was not to tell anyone. I didn’t want to believe until I had plane tickets in my hands.

Having lunch with Lola, however, made me come around. Lola always spoke of the truth. So when she gave me her blessing, even though my planned trip was months away, I began to feel the weight of its reality. Lola’s blessing was to me as good as having plane tickets in my hands.



Photo by Bro. Chavez Marfelia

The Discovery of Insulin

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food to a diabetic, in other words, is poison.

Diabetes is classified into two types: Type 1, usually diagnosed in children, is the body’s inability to produce insulin. Type 2, the more common form of diabetes, is the body’s inability to produce enough insulin or the body’s resistance to insulin’s actions.

Insulin’s discovery as a cure for diabetes was made when in the 1920s a doctor experimented on a dog. When the dog’s pancreas was removed, it became diabetic. The doctor then took a second, healthy dog, extracted insulin from its pancreas, and injected it into the first, diabetic dog. The depancreatized dog was expected to live only a day or two, but through regular injections of insulin, it survived for 80 days.

Although not all cross-species transplants worked, experiments revealed that insulin from calves and pigs worked on humans. This was great news to the children at the New Jersey institute. The children need no longer starve or die. With regular injections of insulin from pork and beef pancreas—animal body parts routinely discarded at large meatpacking companies like Swift and Armour—the children began to eat regular food and gain weight. Life expectancies jumped from just a few months to ripe old age. Hailed as a miracle cure, insulin gave the diabetic the gift of living normally like the rest of us.

Today, advances in genetics ended reliance on calves and pigs for insulin extracts. “Bio-synthesis”—so-called because of the requirement of organic hosts like yeast or *e. coli* for culturing—allowed for the large-scale production of insulin in the lab. What’s

more, methods of delivery have also improved. Today’s diabetics administer their own medication through disposable syringes, pumps, or pens. Other methods like oral, inhaled, and pancreatic transplants are being studied.

It is still not known what causes Type 1 diabetes today. However, years of excessive intake of carbohydrates and sugars and a “sedentary” (also known as “couch potato”) lifestyle which leads to obesity are widely-known culprits for the onset of Type 2 diabetes. A healthy diet and keeping trim and fit through exercise reduce the risk of getting diabetes. For people unable to exercise, simply staying active like walking for 10 to 30 minutes daily can help burn those extra calories which can delay or even prevent the onset of this disease.

The discovery of insulin enabled diabetics to grow and function normally. It also gives promise that miracle cures do happen and the next one could be just around the corner.

Knowing a cure’s history does not rid one of the disease. But learning about the sacrifices made by patients past and the continuing research by the medical community could develop an appreciation for the cures we enjoy today—or endure—and foster a positive mindset that could prove beneficial to our overall health and general well-being.

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The Resurrection

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beating, that person is dead. It was that simple.

Today, with the development of CPR, pronouncement of death becomes complicated. The science of resuscitation, as it is called, makes possible the restoration of consciousness to those already dead.

Every organ in the body—the brain, the heart, the kidney, the lungs, etc.—needs oxygen. From the air we inhale oxygen is absorbed by blood cells. The blood cells travel inside the body to deliver oxygen to the organs. Blood circulation is maintained by the beating heart even when we are asleep. At the same time that oxygen is delivered to the organs, waste in the form of carbon dioxide is picked up and released into the air whenever we exhale.

During cardiac arrest, the heart fails. Blood circulation is lost. Oxygen delivery stops. Deprived of oxygen, the organs self-destruct. At this stage the victim dies—he is not near death—but the organs are still viable. But as time increases so does organ damage. If air and blood circulation are not restored quickly, an organ might become damaged enough that a resuscitated person would become crippled for life.

Before CPR, people only knew the obvious—we need to breathe and our hearts to beat for us to stay alive. Based on this knowledge, doctors in the 1900s massaged the stopped heart. In 1949, mouth to mouth was introduced. In the 1960s, the two were combined in resuscitating cardiac arrest victims. Electrically shocking the heart was added in 1963. All three—chest compressions, mouth to mouth, and electrical shock—became known as CPR or cardiopulmonary resuscitation.

Recently, another discovery was made. When the body is cooled with ice packs, the body's metabolic processes slow down. Because less oxygen is needed by organs, organ self-destruction slows down, too. Cooling the body—or hypothermia—buys rescuers time.

Minutes, hours, and in rare cases nearly 24 hours after the heart stopped beating, hypothermia, chest compressions, and mouth to mouth or ventilator tubes coupled with the use of a defibrillator—those pads placed on a victim's chest to electrically jolt the heart into restarting—can deliver oxygen to the brain to restore consciousness. When

a patient would not awaken, however, an ethical question arises—when do we give up and declare someone permanently dead?

And even when death is declared, organs can still be transplanted to a healthy body. Organs are not yet dead but there is little reason in restoring consciousness back into a mostly dead body.

In the 50 years of administering CPR, an unintentional consequence emerged. More and more people are telling stories of tunnels of light, relatives long gone, and beings of love appearing when they were supposed to be dead. They find themselves floating in the ceiling observing the medical staff administering CPR on their bodies below and some can even describe the scene accurately. In all of these recollections, there was also a loving presence. When told by this loving presence to return to their bodies they reluctantly do so. The wealth of near-death experiences as they are called has been mounting in the past 50 years that science today can no longer deny its existence. Consciousness—or what some would call the soul—has an existence apart from physical reality. Through the science of resuscitation, we are essentially recalling the soul back into our physical world. We live in a day and age where science can say it can resurrect the dead.

It is said that Jesus raised three people from the dead. It is conceivable that he performed CPR or a highly advanced version of it on some or all of them. Jesus himself said one girl was not dead but merely sleeping. Being ahead of his time in his teachings about love and humility, it is probable that he, too, was ahead of his time in science, maybe even two thousand years ahead.

Jesus also made the crippled walk, made the blind see, and healed just about every disease and sickness. Being highly evolved and pure in spirit, he would have had extensive knowledge of the workings of Mother Nature. Because nowhere is it written that a Master must bend Mother Nature's laws in order to effect his miracles. Indeed, a Master might be expected to respect and abide by the laws of Mother Nature—the same laws that science is trying to unravel today—when within her domain.

Regarding Jesus' own resurrection, several books today attempt to explain how he might have survived the crucifixion.

One book supposes that a switch was made while Jesus was carrying the

cross to Calvary. When the Roman guards allowed a man to help him carry the cross, the Roman guards lost track which one was Jesus and crucified the wrong man. Jesus simply disappeared in the crowd.

Another book proposes that Jesus planned it all—his death and his resurrection—to fulfill the ancient prophecies. Jesus knew what herbs to take that will render him temporarily dead. When Joseph of Arimathea took custody of the body, he gave Jesus the antidote and roused him back to life.

Yet another book suggests that Jesus never resurrected at all. His body was stolen and the burial cloth—today known as the Shroud of Turin—was left behind. When Mary Magdalene and the apostles saw the imprint of Jesus on the burial cloth, they reacted the same way someone would today who sees Jesus' face on toasted bread, on a smear of dirt on the wall, or up in the clouds. Seeing Jesus' image materialize before their eyes the longer they stared at the burial cloth, Mary and the apostles became convinced that Jesus had resurrected.

These books and many others explain the Resurrection in one term only—the physical. Missing from them is the spiritual.

We are told we are spirits living in the physical world to learn. It follows then, that any explanation of our births and deaths—our transitioning between the physical and spiritual realms—need include not just the physical but the spiritual aspect as well.

For example, we may consider Jesus' birth. People at the time knew there was something odd about the way he was conceived. It was unnatural. They were unaware that preparations were underway for the coming of a Master no longer deserving of the trappings and sufferings of the human flesh. So they explained Jesus' conception the only way they can—a virgin birth. Little did they know that much more was going on in the spiritual realm. A body not fully physical but partly spiritual was being prepared.

As with his birth, something, too, was odd about Jesus' death. His body vanished. The disappearance could have been the result of the same body conceived in Mary's womb as being partly physical and partly spiritual. Mary Magdalene's inability to recognize Jesus outside the tomb may have been caused by Jesus' apparition as he had already shed his physical body. The same would be true of the apostles'

encounter with the risen Jesus. The apostles were in a locked room. They feared the Romans might find them so they had the windows shut. With no way in, Jesus managed to be among them. Only an apparition can walk through walls.

The story of the Resurrection mystifies even the ardent believer. Hopefully, the perspectives presented here make the story more palatable to the rational mind.

Jesus spoke of a life elsewhere, a heaven he called it, of which today's so-called near-death experiencers might have glimpsed. Jesus came back soon after his death not only to prove that such a place exists but also to uphold the ancient gospels. The Greeks before him believed that some men for their lack of intellect were destined to become slaves while some men were born to engage in the arts, sciences, and philosophies. The Christian worldview changed that. Because man was made in the image of God, it follows then that all men are created equal. For all the world's ills, it is a much better place today compared to two thousand years ago—all because a man named Jesus rose from the dead.

When we meditate, perhaps in a quiet corner of our room, we may try picturing Jesus in our minds. We may picture the same calm image of Jesus at Templo Verdad where he shepherds a flock of sheep. We may imagine him sitting in front of us, a smile from within contouring on his face. His love extends and envelops us as he assures us there is nothing to fear—not even death—for there is only life everlasting. In the company of such great being, a Master who looks after us and is so humble and gentle that he will allow pain and suffering into his life so that we, his flock of sheep, may be spared, we might begin to feel a deep sense of joy. When that happens, when we feel compelled to act kindly and think sincere thoughts because Jesus is alive and well in our hearts, then we may have come to know the meaning of the story of the Resurrection.



Bro. Ding and Sis. Noy Carpio's garden in Antipolo, Rizal.