Who Will Lead WHO?

Aileen Marshall

Most of us here at The Rockefeller University, and the Tri-Institutions, do basic research: figuring out the molecular mechanisms of various life forms. Many of us also do translational research: taking that basic research and applying it towards a product. However, we all do our work for the betterment of the human race, to paraphrase Rockefeller’s motto. We are all concerned in some way, of different aspects of human health. Most of us have probably dealt with some data from the World Health Organization (WHO) at some point in our careers. How many of you know that WHO is currently in the process of electing a new head, the title of Director-General? How much of an impact this will have on our work remains to be seen, but WHO’s work effects many people around the world in some way.

In 1945, Chinese United Nations (UN) delegate, Dr. Sze, proposed the creation of an international health agency under the UN to focus on public health. WHO was finally ratified on April 7, 1948. It was the first specialized UN agency to which every member pledged. In its early years, WHO ran programs to give mass vaccinations for tuberculosis and started a malaria and small pox eradication programs. They started an epidemiological information service that has become a standard today. In 1977, they released their first list of essential medicines: a list of drugs that WHO believes all countries around the world should have on hand. This can be very helpful to healthcare workers and advocates around the world in order to petition their governments for funding for these medications. In 1979, WHO reported that small pox had been eradicated, and with that, it became the first disease to be eliminated by human intervention. In 1986, WHO started its global program on the prevention and treatment of HIV/AIDS around the world. WHO is currently focused on many areas, primarily communicable diseases such as AIDS, Ebola, malaria, and tuberculosis. It also has programs promoting reproductive and occupational health, nutrition, healthy aging, and substance abuse prevention. WHO encourages countries to develop reporting methods, promotes cooperation between scientific and medical groups, and help governments develop research agendas. Today, it is known as the organization that puts health statistics from around the world in a unified system.

Besides these accomplishments, WHO has also endured controversy and criticism. It reproached the Vatican’s ban on condoms as being dangerous considering the AIDS pandemic, and it has been criticized for its classification of red meat and cell phone signals as possible carcinogens. In recent years, they have had negative media attention for a slow response to the Ebola crisis. Some say their focus is too wide and that the organization encourages too much bureaucratic red tape and internal politics. There have been calls for more accountability and transparency within WHO. There has also been a lack of funding for many of their efforts.

Located in Geneva, Switzerland, today WHO has 194 member states, and offices in Congo, Egypt, Denmark, India, the Philippines, and the United States. It is financed by contributions from member states, the largest contributor being the United States. WHO’s policy making branch is the World Health Assembly, which member states appoint delegates to.

CONTINUED TO P.2
The delegates meet annually, usually in May, to vote on matters of policy and budget, and they elect a new Director-General every five years. The next election will have taken place by the time of this publication (at the end of May). The current Director-General is Margaret Chan, a physician from Hong Kong. Currently there are three candidates for the new head: Tedros Adhanom Ghebreyesus, from Ethiopia, Sania Nishtar from Pakistan, and David Nabarro of the United Kingdom. Whomever is elected will take office on July 1, 2017.

Tedros Ghebreyesus, 52, was born in Eritrea, and received a Bachelor’s in Biology from the University of Asmara in Ethiopia. He has a Master’s of Science in Immunology of Infectious Diseases from the London School of Hygiene and Tropical Medicine and a Ph.D. in Community Health from the University of Nottingham. He is the only non-medical doctor of the three candidates. Ghebreyesus’ first job out of college was as a junior public health expert for the Ministry of Health of Ethiopia where he worked on methods of malaria prevention. Then Ghebreyesus worked as the head of a Regional Health Bureau. He is recognized for a 20% reduction in AIDS and 70% reduction in malaria cases in that region during his tenure. In 2005, he was appointed Minister of Health. As Minister, he hired over 30,000 health extension workers throughout the country, increased hospital staffing and connected hospitals to the internet. He initiated a program that distributed 20 million insecticide-treated nets throughout Ethiopia. During his time as Minister of Health, deaths from malaria decreased by 50%, new AIDS infections by about 90%, and infant mortality by almost 30%. In 2012, he was appointed Minister of Foreign Affairs where he encouraged Ethiopia to adhere to WHO guidelines during the Ebola epidemic. He is known for having published many papers on malaria. As a candidate for Director-General, Ghebreyesus has stated that he supports strengthening health care systems and universal health care coverage.

Sania Nishtar, 54, was born in Peshawar, and received her medical degree in cardiology from Khyber Medical College in Pakistan. She earned a Ph.D. in Medicine from King’s College London. After medical school, she worked as a cardiologist at the Pakistan Institute of Medical Sciences. In 1999, she founded Heartfile, a health policy think tank based in Islamabad, focused on ways to improve Pakistan’s health care system. She has served as an advisor to WHO on many occasions, most prominently co-chairing the WHO Commission on Ending Childhood Obesity. Nishtar wrote Choked Pipes: Reforming Pakistan’s Mixed Health Systems, a book that was published in 2010. In 2013, she was a Federal Minister in the Government of Pakistan, overseeing the Ministries of Science and Technology, Education and Training, and Information Technology and Telecom. In this role she helped establish a Ministry of Health. Nishtar is a member of the Lancet and Rockefeller Foundation Commission on Planetary Health and the Working Group on Private Sector Health Systems established by Results for Development and the Rockefeller Foundation, among many other boards.

David Nabarro, 68, is from the United Kingdom and obtained his medical degree from the University of Oxford. In his early years, he was a Medical Officer for Save the Children in Iraq and a District Child Health Officer in Nepal. Later, he became South Asia Regional Manager for Save the Children. Nabarro joined WHO in 1999, first as a project manager for Roll Back Malaria, a partnership among countries to coordinate efforts against malaria. Next, he helped start their Global Fund to Fight AIDS, Tuberculosis, and Malaria. In 2003, he moved to WHO's Sustainable Development and Healthy Environments division. He was the UN Special Envoy on Ebola in 2014. In 2015, he was Chair of an advisory group on WHO’s responses to outbreaks and emergencies. Now he is special advisor to the UN Secretary-General on sustainable development and climate change, and leading the UN’s response to the Cholera outbreak in Haiti. Nabarro has said that if he is elected WHO Director-General, his four goals would be: sustainable development goals, responses to outbreaks and emergencies, building relations with member states, and people-centered health policies.

By the time this issue comes out, it may be publicly known which of these candidates will be the next Director-General of WHO. Whichever one of the three candidates is elected Director-General, let’s hope WHO keeps up their high standards of statistic reporting and encouraging collaboration between scientific groups.
The Giro D'Italia
Francesca Cavallo

The Giro d'Italia, or Tour of Italy, is one of the world's most famous bicycle races. Twenty-two international teams compete for three weeks in a contest of racing tactics, willpower, and raw athleticism. The 2017 Giro is extra special: it's the 100th race!

Even if you're not a cycling enthusiast, you have probably heard about this multiple-stage bicycle race held in Italy every May, which, along with the Tour de France and Vuelta a España (collectively known as Grand Tours), represents the world's most prestigious road bicycle race. Also, known as Corsa Rosa (Pink Race, because the race leader wears a pink shirt), Giro d'Italia was established in 1909, an idea of Tullio Morgagni, a journalist with the Gazzetta dello Sport newspaper. At the time, cycling was already a popular sport, with the first races having taken place in 1869.

The first Giro d'Italia left from Piazza Loreto in Milan on May 13, 1909. Overall, the first Giro consisted of eight stages, held three times a week, between May 13 and May 30, covering a total of 2,448 km. Since then, except for interruptions during World Wars I and II, the Giro d'Italia has taken place every year in May over the course of three weeks. Although the starting point varies every year, the arrival is always in Milan, the headquarters of Gazzetta dello Sport. In 1931, it was decided that the race leader needed to display a symbol that would make him instantly recognizable amid the dense pack of racers; thus, the iconic maglia rosa, pink jersey, was introduced.

The golden age of the Giro was between 1931 and 1950, when such cycling greats as five-time winner Fausto Coppi (il Campionissimo) champion of champions and his historic rival three-time winner Gino Bartali (nicknamed Ginettaccio) competed and inflamed fans, dividing Italy into supporters of one or the other. Between 1956 and 1978, the race lead was taken by foreigners, especially the Belgian Eddy Merckx, who won the Giro five times in seven years and earned the nickname “The Cannibal” because, it was said that he wouldn't let anyone else win.

The 1990s saw the emergence of Marco Pantani, who became a real sports idol in Italy, winning the Giro d'Italia in 1998 (the same year, he won the Tour de France, the last cyclist, and one of only seven, to win the Giro and the Tour in the same year). Nicknamed “il pirata” (the pirate) because of his shaved head and the bandana and earrings he always wore. Pantani is considered one of the best climbers of his era. In 1999, while leading the race, he was expelled due to irregular hematocrit values. He was accused of Erythropoietin, or EPO, use, which is thought to have led him into a depression from which he never fully recovered. He died of acute cocaine poisoning in 2004.

The latest years of the race have been dominated by the Spaniard Alberto Contador (one of only six riders to have won all three Grand Tours of road cycling), and Italian Vincenzo Nibali (like Contador, he has won all three Grand Tours). Since the beginning, Nibali has been nicknamed Lo Squalo (the shark) for his technique, which consists of always rushing to the attack, and for his Sicilian origins. Nibali is the current Giro d'Italia title holder, having won the 2016 race (he previously won the 2013 edition).

2017 marks a special year for the Giro d'Italia as it celebrates its 100th edition. Giro d'Italia 2017 will run from Friday, May 5th to Sunday, May 28th, from the island of Sardinia, to the heel of Italy’s boot, to the Alps. After leaving Sardinia, where the first three stages will take place, it will move to another island, Sicily. The Sicilian leg’s highlight will be the climb up the Etna volcano. The next day, the race will end in Nibali’s hometown of Messina. Giro d'Italia 2017 will continue through the heel, traversing Puglia’s Valle d’Itria, then proceeding north through Umbria’s Sagrantino wine country. Two stage starts will be Tuscany’s Ponte a Ema and Piedmont’s Castellania, birthplaces of Italian cycling greats Bartali and Coppi, respectively. The Apennines traverse will be followed by the climb of the famous Stelvio Pass. Then it’s the majestic Dolomites, which will involve some brutal climbs (stage 18 features five ascents!). Like every year, Giro d'Italia 2017 will conclude in Milan.

If you are inspired by Giro d’Italia and you are an active person I suggest that you bike across Italy. You will pedal to extraordinary art cities such as Venice, Florence, Lucca and Pisa. If you have enough time, add to this the rural landscapes of Veneto, Emilia-Romagna, Chianti and Maremma areas of Tuscany and you will have the best of Italy. One of the most popular bike tours in Italy is coast-to-coast cycling from the Adriatic coast in the east to the Tuscan coast line in the west. This bike route takes you form Marche through the Umbrian hills and onto the Tuscan mountains before descending to the Tuscany coastline. Along the way you can have a wine tasting at a family winery, observe the medieval art, and learn culinary secrets behind the incredible regional cooking.

Last but not least is the biking tour in Sardinia. The captivating island is famous for its beautiful beaches and the beautiful turquoise waters of the Tyrrenian Sea. Sardinia’s best kept secret is its amazing network of immaculately scenic and quiet roads that are perfect for cycling. The island’s rugged and remote mountainous interior boasts rivers, lakes, archaeological sites and an amazing variety of wildlife such as flamingos, falcons, and wild boar.
Rebooting the traditional food production model to improve climate and environment is driving innovative entrepreneurs to pursue a vegan path. The resulting alt-foods are, unlike alt-facts, solidly grounded in science, as the personnel list at these companies—data scientists, bioinformaticians, chemists, biologists, nutritionists and chefs—attests. While we already have soy-based meat alternatives, such as tofurky and veggie duck, the challenge lies in faithfully replicating, and even exceeding, the appearance and taste of animal-derived food products using solely plant-derived substitutes.

The most prominent/poster child of these is the Impossible Burger created by Impossible Foods—a one hundred percent vegan burger made with potatoes, beets, coconut oil, and most importantly, a plant version of heme protein—a distinctive component of animal muscles, which gives meat its distinctive taste. The founder of Impossible Foods is aware of the high threshold he has to overcome to win over die-hard meat-lovers. But undaunted, that is his goal—to not simply improve food options for vegans and vegetarians but to convert red in tooth and claw carnivores. So far, the feedback is encouraging with comparisons to turkey burgers.

The Impossible Burger isn’t alone—Beyond Meat’s approaches are to be appreciated when compared with the efforts of Modern Meadow, a Brooklyn-based biotech company that aims to grow meat and leather in the lab using cultured cells from livestock. While noteworthy and arguably a more difficult undertaking to grow meat from scratch, the trouble with cultured mammalian cells is the requisite fetal bovine serum—a vital elixir for their sustained growth & nourishment—derived from unborn calves’ blood which doesn’t exactly circumvent the environmentally wasteful and greenhouse gas-emitting livestock industry.

Evidently, eggs from cage-free and pastured chickens weren’t sufficiently humane for the founders of Hampton Creek—they decided to get rid of eggs altogether, substituting them with a yellow pea protein as the emulsifier in their vegan Just Mayo. The company has other vegan offerings (salad dressing, cookie dough) and a mission to mine the cornucopia of thousands of plants to create cheaper, healthier and more stable foods than those that are animal-derived.

Living in NY, we are quite spoiled for dietary choice. Even so, one can imagine there can be moments when nothing appeals to the taste buds and yet life must be sustained. At such times, one can reach for Soylent—a completely animal-free food that provides a nutritionally complete meal from soy, algae and other plant-derived components in several easy to consume formats: bottled drink, powder, bar, and best of all, coffiest—breakfast + coffee in one drink. It seems like it was designed with busy New Yorkers in mind—no cutlery or flapping containers to deal with, just chug or chomp and go! For those of us who are neither culinarily gifted nor inclined, Soylent can replace hours of schlepping groceries, prepping ingredients and slaving over a stove before finally indulging in a meal. To some ardent foodies however, Soylent seems abhorrent (not least owing to the sci-fi reference) and only to be resorted to in a food desert.

Our industrial food system provides bountiful affordable nutrition and so the pressure to embrace these innovations is not yet urgent. Do we have this luxury? The human population is set to climb from 7 billion to just under 10 billion by 2050. The climate change debate is raging but the disappearing summer Arctic ice signifies a stark reality. However, a noble impetus to save the earth cannot force adoption of the healthier and sustainable foods 2.0. Ultimately, their success will be determined by the most important factor—taste.
Martin Scorsese, who I consider America’s greatest living film director, is a creative talent with the ability to continuously surprise his audiences in terms of what he chooses for his huge enterprises. Yet, the quality of the final story on the screen may vary. With that said, I find some of his movies absolutely brilliant, from their rich palettes of cinematography, to the impassioned and inspired performances of the actors and actresses, and the stimulating ideas that always aren’t black and white in these tales of extreme moral and ethical quandaries. My personal favorites from the Scorsese oeuvre include Raging Bull, The Departed, Good Fellas, and The Aviator.

From his early days of films such as Mean Streets and later (more blatantly) in The Last Temptation of Christ, it became apparent that the Italian-American Scorsese was struggling to come to terms with his Catholic upbringing and the meaning behind the story and lessons from the life of Jesus Christ. In the final scene of Raging Bull starring Robert DeNiro in a beautifully nuanced performance as troubled boxer Jake LaMotta, the screen displays these words from the New Testament (John IX. 24-26): “So, for the second time, [the Pharisees] summoned the man who had been blind and said: ‘Speak the truth before God. We know this fellow is a sinner.’ ‘Whether or not he is a sinner, I do not know,’ the man replied. ‘All I know is this: once I was blind and now I can see.’” The idea of being clothed in the darkness of ignorance and having the light shine in on life, courtesy of a Savior, is powerful.

Scorsese’s 2016 film Silence is right up there as one of his very best. It is a movie about not just Catholicism because it also examines the boundaries, trials and tribulations, and other tumultuous ethical situations surrounding the ideal of staying true to one’s own morality and choices, not only in God’s eyes. It is a long movie and didn’t fare well at the box office, but I was absolutely riveted from start to finish and overwhelmed by the force of the ideas on display.

Silence stars Andrew Garfield as Sebastião Rodrigues and Adam Driver as Francisco Garupe as a pair of young 17th century Jesuit priests traveling from Portugal to Japan to locate their former teacher (played by Liam Neeson), who had gone to Japan to teach and convert the populace to the ways of Catholicism and goes missing after supposedly renouncing his faith.

When Fathers Sebastião and Garupe reach Japan, they are taken in and hidden by the terrified villagers who are converts to Christianity at a time where the religion is being violently suppressed and must be practiced in secret. While watching Silence, I was awed by the beautiful, lush scenery of the mountains and foliage depicted. The stunning scenery becomes the backdrop of the violence that reigns down from the minions of a horrific inquisitor on these people. The inquisitor is masterfully played by Japanese actor and comedian, Issey Ogata, who the New York Times noted as stealing ever scene he is in.

As one watches the struggles of Sebastião unfold, dozens of questions and ideas run through the mind of the viewer on issues that center around the crux and core of faith in God, but also Western ideas forced onto Eastern cultures, and on the difficult notion of whether one should betray one’s greatest beliefs for the greater good. The focus centers on the dilemma facing Sebastião when he is given the choice of renouncing Catholicism or seeing villagers tortured to death. All of the intellectual banter of the inquisitor and his interpreter, the latter beautifully portrayed by Tadanobu Asano, devolves into their extreme meeting out of violence on the bodies and minds of the poor villagers, who they deride as worthless peasants. By breaking Sebastião, they can publicly break a man who has devoted his heart, life and soul to what they believe is the affliction invading Japan.

Before Sebastião does his act of apostasy, the inquisitor brings in the man Sebastião has come to find, Father Cristóvão Ferreira, played by Neeson. He arrives late in the movie like Marlon Brando’s Kurtz does in the film Apocalypse Now. As he begs his former pupil to renounce his religion in the hope of saving lives, he makes one extremely powerful argument: that these poor, uneducated Japanese men and women, the derided so-called peasants, aren’t truly practicing Christianity because of their prior beliefs and ingrained culture and simple notions of spirits. He’s basically saying, “It’s all for nothing.”

Silence is a reminder that barbarity, such as that practiced by ISIS today, the torturing and murder in the name of God and religion goes back to the dawn of man’s conceptualization and organization into religious sects. The inquisitor, a witty, well-read man of knowledge, can banter with Sebastião on ideals and ethics one moment, while ordering the decapitation of a prisoner in a courtyard for all to see the next. Scorsese has a long history of using extraordinary violence in the hopes of finding some inkling of why God has put us on earth in the first place, and to seek an idea of how to live one’s life in the face of brutality and terrible suffering. But he never openly actually says, “Jesus is the answer.”

From the interviews I’ve read with Scorsese about Silence and from what I’ve learned from reading about him in the past, he is more a man who is opening up ideas about searching for rather than explaining the meaning of life. He often sounds quietly and admittedly lost, but very glad to have the opportunity to make art and films about his state of confusion.

It has become my opinion that because most people are taught about faith and religion in childhood, it is incredibly hard to shed any of the major faiths later in life. It’s akin to an indoctrination. As I’ve grown older, I’ve read many of the books from the past by religious luminaries, such as Rashi’s commentaries or Jerome’s letters and books by Augustine and Philo; the texts of ancient Buddhists or the ideas behind the spirit religions of Japan; the fascinating words of the “Upanishads” and the “Bhagavad Gita” and the creation stories as presented in Assyrian myths or related by Hesiod to the Greeks, and many other illuminating treatise. I believe at some point one must start anew with a clean slate and admit that the spiritual notion behind the concept of God is as complex as advanced physics and that a child’s idea of what lies behind the abstraction, hinted at in the Old Testament, that a casual once-a-week (at most) rote Sabbath notion has as much truth and merit as an adult belief in say, Santa Claus. Imagine that the power and
forces of life or what is popularly called “the divine” is encased inside of a statue of a golden calf and that all of the major faiths and religions are blind and given only one part to feel with their hands and gather its meaning. Each religion falsely and confidently believes they know the full statue and its secrets, while in truth, the one with the dominant voice in society may very well have its hands on the rump. None of the followers of any religion knows or realizes that the power lies hidden inside the idol and that the statue has very little to do with the immense power of this vaguely traceable treasure. Why settle for one set of rules and rituals when there is such a rich tapestry available for study, which weaves together everything from philosophy to astronomy and on and on, endlessly woven, ripe for discovery and continued revelation? (Unified Field Theory indeed). What is really so terrible that we end up like Martin Scorsese in some way: in awe of the unanswerable, and finding ways to express our intuitions and discoveries in art, music, books, and science? Because in the end, whether it is Judaism, Christianity, Islam or the religions of the East, the zealots of each faith make them all superstitious faiths borne of unspeakable and unjustifiable violence while serving as Band-Aids to the open wound of awareness of one’s own mortality.

CONTINUED FROM P.5

New York State of Mind

This month Natural Selections interviews Jens Matthes, Information Security Architect

Interview by Guadalupe Astorga

How long have you been living in the New York area?
18 years, since March 1999. I remember I was terrified, I wanted to go back home after a week.

Where do you currently live? Which is your favorite neighborhood?
I live in the Upper West side near the Central Park and that’s probably one of my favorite neighborhoods. I also like the Lower East side, it’s fun down there.

What do you think is the most overrated thing in the city? And underrated?
Overrated all the touristic places like Time[s] Square and the Statue of the Liberty. underrated, the public transportation, it’s actually great here, even if people always complain about it. They don’t realize how much value it adds. I also like the ease of the access, everything is close, pharmacies and stores in every block. People don’t realize how convenient and easy it is to have it.

What do you miss most when you are out of town?
The fact of not having to drive. Every time I go somewhere and I have to drive everywhere, it really gets on my nerves pretty quick, to sit in the car for everything. I also miss the food, all the fantastic options, whatever you like for however much you want to pay. Also, the public transportation, most places, especially in the U.S., don’t have it. I remember I went to L.A. like 10 years ago and I hated it after three days.

Has anything (negative or positive) changed about you since you became one of us “New Yorkers”? I come from a really small city in Germany, so things look homeless and crazy people in the street would have affected me much more, because it wasn’t common and not a big issue. Here, I got a bit jaded about these things. When I see crazy people in the subway all I think is “I hope he doesn’t throw me down the tunnel.” I don’t think “how did this happen, or how could one help him?” This has definitely changed. Also, the stress of the city, when I get visitors they say “why do you have to run like that?” It’s something you don’t realize, you just become part of it. It’s negative, but after so many problems you see, you cannot get involved all the time, it’s just too much.

If you could change one thing about NYC, what would that be?
One thing is the noise, it really stinks. It’s always noisy, also where I live, even the Central Park.

What do you think is the most memorable experience you have had in NYC?
We used to go with some friends to the World Trade Center, in the twin towers, tower number two, 110th floor. “The Windows of the World”: on Wednesdays they had a cool DJ with good music, it was very impressive to have a beer there, see through the windows, especially after 9/11, I always remember that time.

Bike, MTA or WALK IT???
It’s too far to walk home. I had to do it for the “Blackout” [of 2003] and it took me two and a half hours. I use the Citybike quite a bit if it’s available, it’s a great way to get around, saves me some time. MTA, of course, in the winter, subway and bus.

If you could live anywhere else, where might that be?
I could live in Florida, I have some family there, it’s cheap. California, of course too. I could also move back to Germany; I may even have to think about it with the current political situation, which really sucks.

Do you think of yourself as a New Yorker?
I have always been told that it takes about 20 years, so I’m not quite there. But, I guess I feel pretty much like a New Yorker, people from out of town come and complain I talk too much, I walk too fast, I talk too fast. So, they definitely think I’m a New Yorker. I still feel connected to my roots and my culture, I have a lot of friends and family in Germany. In that sense, maybe a New Yorker with roots, I think that’s very common in NYC.
Beaune is one of the wine capitals of my country, and is known for its Hospices and its famous roof made of glazed tiles (which you can glimpse in the 50-year old comedy, La Grande Vadrouille). However, I have a clear preference for the Hospices’ courtyard itself, which hasn't changed in years.

See more pictures taken in Beaune on my photoblog.