



## ROTARY CLUB OF NORTH BETHESDA

Currently meeting via Zoom  
 Fridays @ 7:30 AM  
 7:15 AM to 7:30 AM Mix and Mingle  
 Contact us at [nbrotary.org](http://nbrotary.org)  
**March 2021**



### UPCOMING MEETINGS AND EVENTS

Date	Speaker	Topic
March 5	Daniel Moore	3-Minute Speaker
	Bruce Fowler, Ph.D.	Ongoing Flint Michigan Lead in Drinking Water Crisis & Effects of Lead in Children
March 12	Kent Mason	3-Minute Speaker
	Abdel-Razak Kadry, Ph.D. Professor, University of Maryland	A Journey Through the Historical Monuments of Egypt
March 19	Lasse Syversen	3-Minute Speaker
	Dr. Bob Sonawane	The Global Problem of E-Waste Pollution and Human Health Impact
March 26	Steven Vaccarezza	3-Minute Speaker
	Ms. Elizabeth Linske Georgetown University	The Global Threat of Plastic Pollution to Oceans

### MILESTONES

	Event	Date
Vigdis Syversen (Lasse)	Birthday	March 1
Bob Sonawane	Birthday	March 5
Wanda Fangmeyer (Bob)	Birthday	March 27

### SPEAKER – March 5, 2021

#### Ongoing Flint Michigan Lead in Drinking Water Crisis & Effects of Lead in Children Bruce A. Fowler, Ph.D, Fellow ATS

The public health problem of lead in drinking water systems has been appreciated for several thousand years. The Roman engineer Vitruvius (81 BC - 15 BC), who was involved in constructing the water system in ancient Rome was well aware of the dangers of using lead pipes (fistulas) for carrying water from the terra cotta main lines into homes. (A quote which is relevant today on this matter is something to the effect that “We know that lead is bad but on the other hand it is cheap and easy to work with so we will use it anyway.”) Lead may also

be leached from lead or copper lines with lead solder acidic (soft) water from chemicals added to inhibit bacteria. The result is increased lead levels water consumed by humans. In more recent times, elevated lead levels have been found in a number of municipal water systems, most notably including Washington, DC (2003-2004) and Flint Michigan (2014-2019).

In other words, the problem of lead in water systems is not new and still with us. Solution range from replacing all lead-containing municipal water systems to using chemicals to reduce lead solubility into water. Major questions include:

- What is a “safe level” for lead in drinking water? For some people, it’s zero.
- What are the effects of low dose lead exposure?: Loss of cognitive ability, irritability, kidney effects and others. How long does lead stay in the body? Decades, due to skeletal deposition but this may vary due to processes affecting the skeleton such as pregnancy, osteoporosis etc.
- Who is at risk? All age groups, both genders and genetic inheritance.



Bruce A. Fowler, a Past President of our club, has a B.S. degree in Fisheries (Marine Biology) from the University of Washington in 1968 and a Ph.D. in Pathology from the University of Oregon Medical School in 1972. He began his scientific career at the National Institute of Environmental Health Sciences prior to becoming Director of the University of Maryland System-wide Program in Toxicology and Professor at the University of Maryland School of Medicine. He then served as Associate Director for Science in the Division of Toxicology and Environmental Medicine at CDC / ATSDR. He is currently a private consultant and Adjunct Professor, Emory School of Public Health and Presidents Professor of Biomedical Science at the University of Alaska-Fairbanks.

Dr. Fowler has been honored as a Fellow of the Japanese Society for the Promotion of Science, a Fulbright Scholar and Swedish Medical Research Council Visiting Professor at the Karolinska Institute, Stockholm, Sweden and elected as a Fellow of the Academy of Toxicological Sciences (ATS). He has served on the Council of the SOT and the Board of Directors of the ATS. He is currently a member of the Board of Directors of the Fulbright Association and past chair of the Advocacy Committee. Dr. Fowler is the author of over 260 research papers and book chapters; he has authored or edited/co-edited 10 books or monographs on metal toxicology, molecular biomarkers, computational toxicology and mechanisms of chemical-induced cell injury.

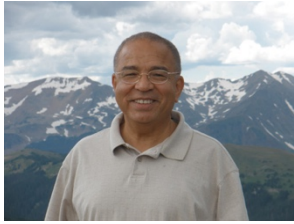
## **SPEAKER – March 12, 2021**

### **A Journey through the Historical Monuments of Egypt**

**Abdel-Razak Kadry, DVM, PhD, DABT**

Ancient Egypt is one of the world’s great civilizations. The ability of ancient Egyptians to adapt to the conditions of the Nile River valley for agriculture played a critical role in the success of ancient Egyptian civilization. The ancient Egyptians were very advanced in the quarrying, surveying and construction techniques that supported the building of monumental pyramids, temples, and obelisks. They developed a system of mathematics, a practical and effective system of medicine, irrigation systems and agricultural production techniques. The Egyptian civilization interacted with several other civilizations along its long journey. These interactions resulted in rich advancements in several fields.

The presentation will describe the most famous monuments of Egypt and how these monuments describe the diversity and the vision of ancient Egyptians.



Dr. Kadry is an adjunct Professor at the University of Maryland, School of Public Health, College Park, MD. Abdel is a former senior science advisor at the Center for Computational Toxicology and Exposure (CCTE) in the Office of Research and Development (ORD) of the United States Environmental Protection Agency (EPA).

Dr. Kadry's experience in toxicology and risk assessment spans over thirty-five years and includes academic research, drug safety and efficacy, food safety and environmental risk assessment. He served for seven years as a senior advisor for Scientific Organizational Development and International Activities at the EPA's National Center for Environmental Assessment (NCEA). For Five years he led EPA's risk assessment development activities as the Director of the EPA's Integrated Risk Information System (IRIS). Before joining EPA in 2006, he was Chief of the Technical Analysis and Evaluation Branch, Risk Assessment Division, Office of Public Health Sciences, Food Safety and Inspection Service, at the U.S. Department of Agriculture (USDA). In addition, Dr. Kadry spent 12 years on the faculty of the University of Medicine and Dentistry of New Jersey.

Dr Kadry published a large number of peer reviewed journal articles and book chapters. He trained large numbers of graduate students, postdoctoral fellows and other professionals in the United States and several countries on the principles and applications of toxicological research and risk assessments. Dr Kadry collaborated with two Egyptian professors and together established an international global graduate course on the application of risk assessment to ensure food safety and security. This course is web based and very popular in both the University of Maryland and Cairo University.

Abdel's roots are in Egypt where he was born and grew up. He is very interested in Egyptian ancient history, culture, and the effect of ancient Egypt culture on the current Egyptian society. Abdel is very active in community service, offering mediation as a lead mediator in Shared Neutral of the Federal Mediation and Conciliation Service.

## **SPEAKER – March 19, 2021**

### **The Global Problem of E-Waste Pollution and Human Health Impact Bob Sonawane, PhD, Adjunct Professor, Georgetown University & TRACS, LLC.**

In his talk, Bob will discuss electronic waste (E-waste), which includes various forms of waste electric and electronic equipment (WEEE) that have ceased to function properly to their owners. Technological advances are generating considerable volume of E-waste at an alarming rate as the demand of electronic products is on the rise at global level. Most of the households in developed and developing countries are rapidly acquiring multiple electronic products and home appliances. Consumers around the world are connecting at rapid rate to the information and communication technology devices such as computers, smartphones, and tablets. In addition, more people using equipment's and gadgets and are now adapting to the smart economy. These products include but are not limited to electric toothbrushes, smart watches, smart water bottles, smart mugs, electrical and electronic tools, toys, leisure and sports equipment, medical devices, monitoring and control instruments, and automatic dispensers.

E-waste is also one of the emerging and fastest growing pollution problems in the world, with an estimated over 53 million metric tons produced globally in 2019 and the value of raw materials to be worth of approximately \$57 billion. E-waste is mostly exported from the Western countries to low-income Asian and African countries. Developing countries face a serious problem in managing E-waste. In majority of these countries, the collected E-waste includes both domestically generated and imported from developed countries.

Electronic waste is recycled to recover raw materials and resalable parts that can be sold to create income. In addition to valuable materials such as gold, silver, platinum, palladium and rare earth elements, E-waste contains

many types of hazardous chemicals that are released during the recycling process and are known to be harmful to human health and ecological habitats. Both, domestically generated E-waste, and the imported from developed countries is processed using crude and unsafe recycling practices such as open burning, coal-fired grill heating, and leaching using acid baths to extract high-value elements and materials.

Bob will briefly discuss the scope of the problem, current global E-waste generation, its movement and distribution, recycling practices, exposure scenarios, and major human health and environmental effects, special populations at risk, including risk assessment challenges.



Dr. Sonawane, currently our club's Membership Director, received his Ph.D. degree in Entomology with specialization in Toxicology from the University of Missouri. He was a NIH postdoctoral Fellow and served as a faculty member in the Departments of Pediatrics at the Children's Hospital of Philadelphia, the School of Medicine, and at the School of Veterinary Medicine of the University of Pennsylvania, Philadelphia, PA. Dr. Sonawane worked as a Toxicologist with the U.S. Food and Drug Administration in Rockville, MD. He served as a toxicologist and manager at the National Center for Environmental Assessment (NCEA), Office of Research and Development of the U. S. Environmental Protection Agency. Dr. Sonawane has over 35 plus years research and management experience in toxicology and pharmacology and cancer/non-cancer health risk assessment of environmental pollutants. He is an author and/or co-author of over 120 publications and several book chapters in toxicology and pharmacology, children's environmental health and risk assessment of environmental chemicals. Dr. Sonawane was involved in providing leadership in coordinating and managing several health risk assessments of chemicals. He is retired from the US EPA in 2016 and started consulting company along with Dr. Bruce Fowler in the areas of toxicology and health risk assessment, environmental chemicals and pharmaceuticals. Since 2017, he is an Adjunct Professor at the Georgetown University in Washington DC.

## **SPEAKER – March 26, 2021**

### **The Global Threat of Plastic Pollution to Oceans Ms. Elizabeth Linske, Georgetown University**

#### **"A Global Threat of Plastic Pollution to Oceans"**

Every minute, two garbage trucks' worth of plastic enter our oceans. It is now estimated that over 15 million metric tons of plastic enter the ocean every year. Plastic can be found in the deepest depths of our seas and the highest mountain peaks of our lands. Plastic can be found in the air, in the rain, and in our drinking water. Plastic pollution impacts us all and continues to worsen every year.

This presentation will focus on the impacts of plastic in our oceans and the varying types of plastic polluting our seas. Elizabeth will share firsthand experiences of seeing plastic adversely affect marine animals. The lecture will also emphasize where plastic is coming from and common myths surrounding the top plastic polluters on our planet.



Elizabeth Linske is an Environmental Metrology and Policy graduate student at Georgetown University, studying environmental chemistry and the connection between science and Federal policy. Before returning to graduate school, she spent six years working as a marine scientist specializing in marine animal conservation. During this time, Elizabeth helped to save over 1,500 sea turtles as well as hundreds of seals, dolphins, and whales. This work enabled her to visualize the connection between animals, the ecosystem, and how anthropogenic impacts are affecting both. She witnessed population shifts, habitat fragmentation, overexploitation, entanglements, and plastic ingestion. This allowed Elizabeth to recognize that she wanted her actions to



protect marine life to be on a larger scale, spurring her decision to return to graduate school to further her knowledge on how science informs Federal policymaking. Over the past year, Elizabeth worked at Oceana on the Plastic Campaign team where she co-authored a national report title, Choked, Strangled, Drowned: The Plastic Crisis Unfolding in Our Oceans. Elizabeth is always looking to educate as many people as possible on how to reduce their plastic use and help make the planet healthier.

# 2021 DISTRICT CONFERENCE

APRIL 23-24, 2021

This year's District Conference will be virtual! After months of planning and hoping that we could have the conference in person in Annapolis as planned, due to the continued risks associated with COVID-19, District 7620 leaders have shifted to a virtual format. But our awesome programming will continue!

Registration for the April 23-24 event is now open. Learn more about our pre-conference events, keynote speakers, breakout sessions, and more at [rotary7620.org](https://rotary7620.org).

Get ready for a weekend filled with Rotary stories, notable community partners of our clubs, and celebrations!

[REGISTER NOW](#)

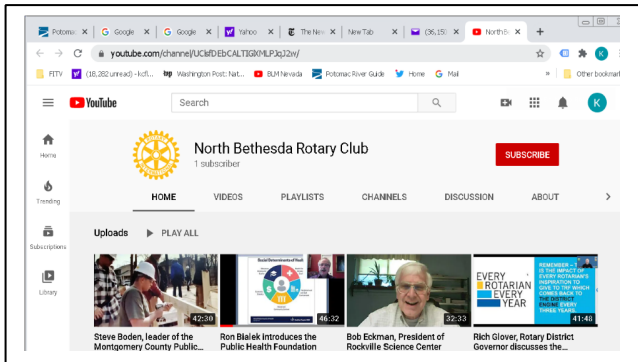
## NBRC CONTINUES TO HELP NOURISH BETHESDA



North Bethesda Rotarians are continuing to participate in the "Nourishing Bethesda" family food distribution effort organized by the St. John's Norwood Episcopal Church in Bethesda. The program feeds about 300 families per week, providing bags and boxes of food designed to feed four people for 5 days. In late January, our team helped move the food bags from St. John's Church to the distribution site at the B-CC Rescue Squad station on Old Georgetown Road. Pictured are team leader Dan Moore (red hat), Kevin Flynn (stylish fedora), and Rob Follit (Rotary ball cap) on a very cold Friday morning. Plans are to join the effort with a transportation team once a month.

**The next Nourishing Bethesda event for North Bethesda Rotarians is scheduled for Friday, March 5 To join the effort, contact Dan Moore at [danielmoore128@gmail.com](mailto:danielmoore128@gmail.com).**

## CHECK OUT OUR PRESENTATIONS ON YOUTUBE!



Thanks to the efforts of club member Paul Arveson, our weekly Zoom presentations are now being recorded and posted on YouTube! The videos currently posted include presentations by Bob Eckman, President of the Rockville Science Center, Ron Bialek, Executive Director of the Public Health Foundation, Rick Glover of the Rotary District 7620 on the Rotary Foundation, and Steve Boden of the Montgomery County Public Schools Foundation. Paul set up a YouTube channel for NBRC at [this web link](https://www.nbrota.org). The presentations will also be posted on our club website, <https://www.nbrota.org>.

## NOTES FROM THE 2020-2021 BOARD

Time to get involved in a Club Committee! Contact the Committee Chair to volunteer.

COMMITTEE	COMMITTEE RESPONSIBILITIES:	CHAIR
Club Member Outreach	Outreach to Club members	Linda Berg-Cross
Club Service	Plan and implement community services activities.	Dan Moore
Membership	Develop and implement the Club's Membership Plan	Bob Sonawane
Public Relations	Develop and implement the Club's Public Relations Plan	John Waterston

## DISTRICT NEWS



## District 7620 Environmental Focus

This coming July, Rotary will be adding a new Environmental Area of Focus. Rotary will be supporting “activities that strengthen the conservation and protection of natural resources, advance environmental sustainability, and foster harmony between people and the environment.”

To learn more about this new focus, more than 80 Rotarians from District 7620 participated in a workshop in late January on Rotary International's new focus area on the environment. NRBC members Kevin Flynn and Barry Thompson were among the participants. Barry was one of the leaders in a breakout session on “Well Being and Resilience.” Other topic areas included:

- Planetary Health—Pollution cleanups, invasive species, and climate change
- Biodiversity—Species loss, overharvesting, food production and hunger
- Clean Energy—Energy production, clean energy, and efficiency
- The “Circular Economy”—Smart design, integration, transit, and recycling

Beyond the lofty goals, there were some interesting local projects that were suggested, including a regional cleanup effort, tree planting projects, and oyster restoration in Chesapeake Bay. Rotary International and the District will be funding global grants in this area in the coming years. Stay tuned for more information!

Did you miss the 7620 Workshop on Rotary's latest area of focus – the Environment – that was held on January 16, 2021? Not a problem. Recordings are available for your viewing leisure.

[Video – Part I: Welcome, Objectives & Goals, What is in “The Environment”](#)

[Video – Part II: Breakout Sessions Reports](#)

## PROGRAM SCHEDULING LIST

**Goal:** To have programs scheduled and publicized at least one month prior to meeting date. Once you schedule the speaker go to NBRC Friday Programs Google Form, [https://docs.google.com/forms/d/e/1FAIpQLSd8Dzwousg7IEmZxIEV88c7bSPTN\\_fQ3meVrR0KN854sqcuH/viewform?vc=0&c=0&w=1](https://docs.google.com/forms/d/e/1FAIpQLSd8Dzwousg7IEmZxIEV88c7bSPTN_fQ3meVrR0KN854sqcuH/viewform?vc=0&c=0&w=1), enter the information regarding the Speaker/Program and complete the NBRC Friday Program form.

Rotary Month	Date	Person Responsible
Water and Sanitation	Friday, March 5, 2021	Bob Sonawane
	Friday, March 12, 2021	
	Friday, March 19, 2021	
	Friday, March 26, 2021	
Water and Sanitation	Friday, April 2, 2021	Linda Berg-Cross
	Friday, April 9, 2021	
	Friday, April 16, 2021	
	Friday, April 23, 2021	
	Friday, April 30, 2021	
Maternal and Child Health	Friday, May 7, 2021	TBD
	Friday, May 14, 2021	
	Friday, May 21, 2021	
	Friday, May 28, 2021	
Youth Service	Friday, June 4, 2021	TBD
	Friday, June 11, 2021	
	Friday, June 18, 2021	
	Friday, June 25, 2021	Installation of Officers

### ROTARY CLUB OF NORTH BETHESDA 2020-2021 OFFICERS

- |   |   |
|---|---|
| • <b>President:</b> Carmela Carr        | • <b>Club Administration Director:</b> Carmela Carr (Interim) |
| • <b>President Elect:</b> Nick Martinez | • <b>Club Service Director:</b> Dan Moore                     |
| • <b>Vice President:</b> Nick Martinez  | • <b>Public Relations Director:</b> John Waterston            |
| • <b>Secretary:</b> Linda Berg-Cross    | • <b>Membership Director:</b> Bob Sonawane                    |
| • <b>Treasurer:</b> Steve Vaccarezza    |   |