

Roundabout: June 30, 2020

NEXT MEETING: CHANGING OF THE GUARD

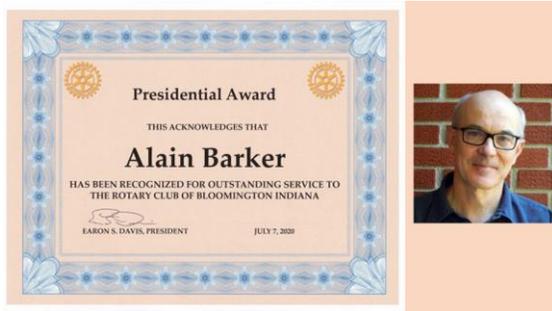
Our July 7 Celebration of Service on Zoom will continue our socializing experiment. If you arrive before noon (between 11:45 and 11:58), you will be assigned to a breakout room for a period of social conversation, comparable to first arriving at one of our standard meetings in the Frangipani Room. At noon we will all assemble (electronically) for our Celebration of Service.



Next week will be our leadership changeover meeting – probably our club’s first virtual leadership changeover in 102 years. The primary changes are that **Earon Davis** will become our immediate Past President and **Ashley Sullivan** will assume the Presidency, with **Sally Gaskill** becoming President-Elect. The other officers and the Board will remain mostly the same. Earon will provide some reflections on his year as President and will present the Service Above Self Award. After taking the helm, Ashley will discuss her plans and goals for the next year, when the theme is Rotary Opens Opportunities.

THIS WEEK’S NEWS

Dual Honors for Alain Barker



Past President **Mike Baker** introduced **Alain Barker** as our club’s newest *Paul Harris Fellow*. Alain is Senior Lecturer in Music Entrepreneurship and Director, Music Entrepreneurship and Career Development, at the Jacobs School of Music at IU. Alain has earned this honor through his financial contributions to the Rotary Foundation and his extensive service to our club. Mike indicated that Alain was instrumental in organizing and carrying out our club’s 100th anniversary two years ago, and that he is largely responsible for the successful movement of our club’s meetings to Zoom during the present pandemic.

President **Earon Davis** then announced that Alain is this year's recipient of the *President's Award*. Alain has contributed his Zoom account and expertise to co-produce our virtual Celebrations of Service for nearly four months. He also handles our Rotary Café social hours. In Earon's words, he has been the "conductor" of our Zoom meetings during the pandemic. As communications committee co-chair with Katie Beck, Alain has been planning and implementing our social media and Web site activities. He also delivered a remarkable video reflection on April 28, 2020.

Rotarians in the News

Congratulations to **Jeff Baldwin**, **Ashley Sullivan**, and **Jessika Hane** for their innovative and very successful virtual SMART Girls/STRONG Women fundraising event for the Boys and Girls Clubs of Bloomington.

Rotary Action Updates

On Thursday, join us on the next **Rotary Zoom Café** to socialize from 7 to 8 p.m. If you need the URL for the Rotary Zoom Café, send your request by email to earondavis1@gmail.com.

At least 13 members of our club attended **Jessika Hane's** (Bloomington Sunrise) Zoom induction Saturday, June 27, as *District Governor*, including Jim Bright, Ashley Sullivan, Charlotte Zietlow, Phil Eskew, Raj Haddawi, Joy Harter, Michael Shermis, Sara Laughlin, Lance Eberle, Owen Johnson, Amy Osajima, Martha Foster, and Earon Davis. IU Rotaractors Maren McClelland and Megan Gearhart also attended.

JUNE 30 PROGRAM: DR. CHANDAN SEN, INDIANA UNIVERSITY SCHOOL OF MEDICINE



Fred Cate, Indiana University Vice President for Research, introduced our speaker, Dr. **Chandan Sen**, Distinguished Professor, Stanley Battersby Chair and Professor of Surgery, Director of the Indiana Center for Regenerative Medicine and Engineering, and Associate Dean for Entrepreneurial Research at the Indiana University School of Medicine. He also serves as Associate Vice President of Research for Indiana University and as the Executive Director of the

Indiana University Health Comprehensive Wound Center. Fred indicated that he begged for the opportunity to introduce Dr. Sen because he thinks so highly of him. Fred works with many outstanding researchers, but none of them are more committed to their research, none are more engaging, and none are more positive than Dr. Sen. Dr. Sen received his Ph.D. in Physiology from the University of Eastern Finland, and then trained as a postdoctoral fellow at the University of California at Berkeley's Molecular and Cell Biology department. His first faculty appointment was in the Lawrence Berkeley National Laboratory, and then he moved to Ohio State University in 2000 before joining the School of Medicine at IU in 2018.

The title of Dr. Sen's presentation is "Electroceutical Management of Pathogens." He began by considering a number of instances where animals employ electricity. As early as 2750 B.C., electric eels ("Thunderers of the Nile") were used to treat certain health conditions. Some animals use electricity to numb their prey. A gecko uses electrostatic forces to hold onto a wall. After observing the legs of recently killed frogs reacting to lightning at a wet market by twitching and jumping, Luigi Galvani was able to recreate this twitching during a lightning storm by experimentally attaching zinc and copper electrodes to the frog's nerves. This led to neuromuscular research, where electricity is required to fire nerves. Thus, there is a deep connection between electricity and biology and medicine.

Now let's consider the treatment of wounds. Treatment becomes very difficult if the bacteria are able to form a biofilm over the wound. Bacteria attach themselves to the surface, proliferating and maturing to form a biofilm, which is difficult to overcome by antibiotics and the body's immune system. Research has shown that bacteria have their own communication system (their "Facebook"), which is electrical in nature. If researchers can find a way to disrupt the communication among bacteria by applying external electrical voltage, they can prevent the bacteria from forming a biofilm and make the infection easier to control.

Electric-field-based dressings have now been created to accomplish this disruption and prevent the formation of biofilms. Commercially available dressings (or fabrics) now exist, with low levels of electrical voltage, which work when the dressings become wet. Dr. Sen has a shirt made of such material that doesn't stink after exercising. Dr. Sen and his team have developed a new electric-field-based dressing that has a "tunable" electrical source, where the voltage can be turned up and down via a cell phone to electrocute the microbes. Dr. Sen has just received a \$1 million per year grant for two years to commercialize this newer form of electric-field-based dressings. This work is evidence of the fact that medicines can be other than drugs (or pharmaceuticals) – in this case electroceuticals.

When the COVID-19 shelter in place order occurred in March, Dr. Sen and his team immediately began to wonder if their work on electric-field-based dressings could be applicable to fight COVID-19. They asked Vice President Cate for permission to return to their lab, and that permission was granted. In studying the structure of the coronavirus, they noticed that a single-strand (stringlike) RNA existed in the virus structure, and that it had a measurable electrokinetic property. The RNA structure contained nucleocapsids, and they wondered if they could "knock" the capsids off the RNA by the use of electroceutical fabric. And they did! They found that exposure of COVID-19 to a fabric with an electric field changed the particle size of the virus, changed its electrokinetic potential, and caused a loss of infectivity. Once the virus touches the

electroceutical material for one minute, it cannot cause an infection. This observation encourages the consideration of electroceutical approaches to limit the spread of infections.

While this work appears to be immediately applicable to the masks worn to ward off the coronavirus, Dr. Sen is optimistic about the use of electroceutical methods in more diverse applications, such as cleaning the air, cleaning a room, and cleaning furnishings.

To view the entirety of Dr. Sen's presentation, go to the club's YouTube channel at <https://www.youtube.com/channel/UC9apIEQDUbx7V4oPH-FWEkg>. Be sure to click Subscribe if you have not already done so.

To provide helpful feedback on our speaker, go to <https://tinyurl.com/BtownRotarySpkrFdbck>

In honor of Dr. Sen's presentation, the Bloomington Rotary Club will give a donation to Centerstone, a United Way agency. Dr. Sen graciously volunteered to match that donation to Centerstone.

JUNE 30 CELEBRATION OF SERVICE

President **Earon Davis** presided. Greeters were **Jim Bright**, **Michael Shermis**, **Ashley Sullivan**, and **Katie Back**. **Alain Barker** and **Michael Shermis** were production supervisors.

Jim Bright gave the reflection, beginning with "Today is the last day of the 2019-20 Rotary year, and I have never been prouder to be a member of Bloomington Rotary. What a wonderful group of people ... what an impressive year of accomplishments ... and what an incredible year of change. Whether we meet over lunch at the IMU, or from home in a breakout group before a Zoom meeting, we are making and nurturing friendships for life." Jim noted that at the June 12 District Zoom meeting, DG **Santhana Naidu** recognized President **Earon Davis** and our club for an outstanding Rotary year with the *District Governor Citation*. Earon will share more about our club's many accomplishments next week before he turns the bell and gavel over to **Ashley Sullivan**.

Jim provided a few of the questions that our club must address next year:

- How will we meet, and when and where?
- How will we become more diverse and more inclusive?
- How will we serve more young people through our sponsorships of Rotaract and Interact?
- How will we continue to have a positive impact on our community through Teachers Warehouse and other service projects?
- With the Bloomington Rotary Toast just four months away, how will we raise money to support our service projects when it is no longer possible to stage an elegant in-person dinner as we have done so successfully (with Rotarians from Sunrise and North) for the past five years?

Jim assured us that we already have teams stepping up to address these questions.

Jim stated that he knows one thing for sure: We must continue to embrace *service above self* and our core values of service, fellowship, integrity, diversity and leadership. We must empower more young professionals and women, and we must increase our membership numbers through diversity.

Our Rotary district recently installed **Jessika Hane**, a young mother of four children ages two to seven and the human resource manager at Oliver Winery, as our new District Governor. Jessika's 2020-21 leadership team includes three members from our club: **Lance Eberle** as District Governor Nominee, **Sara Laughlin** as Assistant District Governor, and **Loren Snyder** as Rotary Youth Leadership Awards chair. At the installation ceremony, new DG Jessika also thanked **Joy Harter** for her years of service as RYLA co-chair.

In closing, Jim said that "With **Ashley Sullivan** as our club president, with **Sally Gaskill** as our president-elect, with so many fellow Bloomington Rotarians on our board and on our committees, with **Jessika Hane** as our district governor, and with all of you, I can promise you this: Bloomington Rotary will be even stronger at this time next year."

Jim Bright, Owen Johnson, Trent Deckard, and Sandy Keller introduced our guests:

- Beverly Teach, Brown County Rotary President
- Len Tieman, Bloomington Sunrise
- Carolyn Frey, Bloomington Sunrise
- Randy Wheeler, Evansville Rotary Club and District Treasurer
- Julia Johnson, Bedford Rotary
- Megan Gearhart, President, IU-Bloomington Rotaract
- Kristina Hunter Mullis, IU School of Public Health Ph.D. student, former Rotaract of Southern California district governor, and twin sister of Bloomington Sunrise Rotary President Melissa Stone
- Sherrie Shuler, United Way of Monroe County
- Marcus Debro, Assistant Principal, Bloomington High School North (guest of Raj Haddawi)
- Lisa Fukuda, Indiana University Office of the Vice President for Research and wife of Global Grant Scholar Kaz Fukuda (Jim Bright)
- Mary Morgan, Greater Bloomington Chamber of Commerce (Jim Bright)
- Alicia Perez, Spain (Owen Johnson)
- Regina Moore, former City Clerk, Bloomington (Trent Deckard)
- Jennifer Crossley, Monroe County Democratic Party Chair (Trent Deckard)
- Justin Crossley, Producer/Director, WTIU (Trent Deckard)
- Ashley Reid, Express Employment (Trent Deckard)
- Laura Chaiken, Bloomington Salt Cave (Sandy Keller)
- Fred Cate, Indiana University Vice President for Research
- Connie Shakalis, wife of Gus Shakals

Birthdays this week:

Keith Klein, Past President, July 4

Joyce Poling, July 4

Membership anniversaries this week:

Craig Spence, 18 years

John Bender, 1980-1981 Past President, currently Honorary member; this is his 50th anniversary in Rotary

Happy Dollars were given to celebrate the successful kidney transplant for Earon's brother; to congratulate Alain for the well-deserved President's Award; to thank Earon for a great year as our president; to celebrate Sara Laughlin's last day as President of Teachers Warehouse (she promises to keep volunteering at TW); to celebrate significant rainfall; and to thank our guests for attending. President Earon reminds us to send in the happy dollars we have accumulated during our months of virtual meetings to Teachers Warehouse.

President Earon's thought for the week is a quote from **Margaret Mead**: "Always remember that you are unique ... just like everyone else."

Reporter:

Bill Perkins

Photographer:

Martha Foster