Ari Novy, PhD

President and CEO, San Diego Botanic Garden, California

Ari Novy is President and CEO of the San Diego Botanic Garden in Encinitas, CA, a 37- acre facility with extensive collections of Mediterranean climate plants as well as award winning children's gardens. Dr. Novy is a plant biologist with a wide range of expertise in plant science and education. He has worked as an estate gardener in Italy, researched sustainable agriculture in the Philippines, and served as an environmental consultant on infrastructure projects in the northeastern United States. In his graduate work at Rutgers University he conducted research on plant population genetics, invasive species, plant conservation, horticultural improvement, agronomic risk assessment, beekeeping management, plant evolution and agricultural economics and policy. He also taught undergraduate and graduate courses on various plant science and horticultural topics, winning awards for research, teaching and outreach excellence. He was Executive Director of the United States Botanic Garden in Washington, D.C., and sat on the Executive Leadership Team of the U.S. Architect of the Capitol, the federal agency responsible for the management and upkeep of the U.S. Capitol Campus, including the U.S. Botanic Garden, U.S. Capitol, Library of Congress and Supreme Court. He remains an active researcher, holding an appointment as Research Collaborator at the Smithsonian Institution, National Museum of Natural History and Visiting Scholar at University of California-San Diego, and has authored numerous peer-reviewed scientific papers. He is the founding co-chair of the Food and Agriculture Professional Section of the American Public Gardens Association, and has served on task forces and advisory panels for diverse groups including the White House Council on Environmental Quality, the Cornell Alliance for Science, Botanic Garden Conservation International, Rock Creek National Park, the Garden Club of America, the European and Mediterranean Plant Protection Organization, and many others. Dr. Novy is chair of the international advisory committee of the Afghan Fellowship Legacy Projects' BGNet. He currently lives in Encinitas, California with his wife and two sons.

Please tell us a bit about yourself and your history, how did your interest in plants and aspiration for a career in the field come about? What advice for our readers especially younger students thinking about future careers, on path(s) you followed, that led you to become president of San Diego Botanic Garden today?

Plants hold a special place in my heart because I come from a long line of florists. My great grandfather was a taxi cab driver in New York City. He wanted to marry my great grandmother, but she said she would only marry a business owner. The only business my great grandfather could afford was a small flower shop in Newark, New Jersey, USA. And so, my family became florists. I have fond memories growing up around flowers and working in my grandfather's flower shop. I never really thought of plants as a career until much later. I love science and I love plants, so I finally combined the two and decided to study plant biology. I graduated with my PhD into a difficult economy and just wanted a job. After applying for more than 30 jobs in one month, the first job I was offered was at a botanic garden. I took it and my career began. So, the best advice I can give is… keep an open mind. Life presents options that can lead to the most unexpected and wonderful outcomes. As the baseball player Yogi Berra said, "When you come to a fork in the road, take it."

What was your experience working in Washington D.C. as head of the US National Botanic Garden — and what lessons did it bring you for your current work at the SDBG? You often say that botanic gardens can transcend partisanship, politics and wars — please tell us why. Do you have any anecdotes to share in this regard?

It was such an honor to lead the U.S. Botanic Garden in Washington, DC. My favorite activity there was giving tours to all sorts of people, including members of the U.S. Congress, foreign dignitaries, military, people from all over the world, Supreme Court justices and even the First Lady. I learned that no matter someone's background or politics, they always had some connection to plants. Whether someone gave them the gift of flowers to sooth heartbreak, or they have fond memories of walking in the woods with loved ones, plants are a critical element of everyone's life. Most importantly, plants are invaluable resources for everyone. We all eat and we all breath. Neither activity is possible without plants. Plants are a great unifier. We need them and they heal us.

You have become one of the pillars of the Afghan Fellowship Legacy Project's Botanical Gardens Network (BGNet) and chair of its international committee. What made you accept this difficult and pro bono assignment, despite your extremely busy schedule?

I think absolutely everyone should have a botanic garden in their community. I am so deeply inspired by the Afghan leaders who

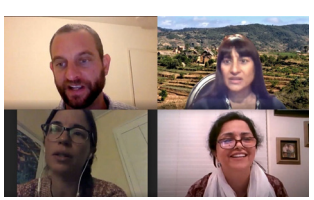
want to make sure their community has botanic gardens. It is one of the great honors of my life to play a small role toward this most worthy goal. I was committed to the project as soon as I heard about it.

You have visited Japan (but not yet Hiroshima!). Tell us about your first encounters with Japan?

I was invited to visit Japan in the summer of 2010 to speak at the Osaka Museum of Natural History about one of my favorite trees, the dawn redwood (*Metasequoia glyptostroboides*). Dawn redwood has an amazing story. The tree was first described by the great Japanese botanist Shiguru Miki in 1939 based on his discovery of fossils of that species in Japan. But the tree was thought to be extinct. In the 1940s, Chinese foresters found living dawn redwoods in central China and realized it was the same species Dr. Miki had described. We now think of it as a living fossil, a plant that miraculously survived from the distant past. It has also become a well-used horticultural tree all over the world because it is beautiful and well suited to urban environments. In 2010, I was researching the horticulture of this species, which had interested the organizers of the 3rd International Metasequoia Symposium that was being planned at the Osaka Museum of Natural History, where Dr. Miki deposited his fossil discoveries. I was so thrilled to experience Japan. On my trip, my wife and I visited Osaka, Kyoto, Lake Biwa and Gifu. We fell in love with Japan and the Japanese people. I've never felt so welcomed and well-treated as I was in Japan. I have such gratitude and affection for all of my Japanese hosts. I dream of returning as soon as I can. I would love to visit Hiroshima, especially to see the Survivor Trees.

When and how did you learn about GLH, and what do survivor trees of Hiroshima and Nagasaki mean to you personally, and to the San Diego Botanic Garden collectively? Also SDBG is now, alongside CAFRE in Northern Ireland, one of only two regional hubs established by GLH — this is a marvelous development for our team, please share with us your vision for this special partnership.

I first learned of GLH from the wonderful and inspiring Nassrine Azimi, who has since become a treasured colleague and friend. The first survivor tree seedling I saw with my own eyes was at the Japanese Friendship Garden in San Diego. I was deeply moved. The idea that trees could survive the horror of the Hiroshima atomic bombing brings such hope. These extraordinary plants have the magical ability to harvest hope from the dark. Their magic is needed all over the world. At San Diego Botanic Garden, we



Dr. Novy (top left) at a BGNet workshop, November 2020.

Dr. Novy and son Isaac welcome GLH coordinator Dr. Azimi to the San Diego Botanic Garden.

hope to be an integral part of sharing survivor tree seedlings to all those who want to advance the cause of hope and peace. I can think of no better way to accomplish this most critical task than serving as a regional hub for GLH.

How do you see botanical gardens evolving in the future — and with all the challenges of climate change and loss of biological diversity, impacting especially poor countries — what worries you, and what gives you hope?

Botanical gardens have the most amazing superpowers…we continually evolve to address the challenges of the time. Climate change and biodiversity loss are two of the world's great current challenges that botanical gardens are particularly well positioned to help solve. I am an incurable optimist. I believe that humans are resourceful and overall kind. I believe we will look to nature both for inspiration to solve our crises and to continuously deepen our value of the natural world. Plants, and biodiversity in general, are the building blocks of life on our planet. We must cherish our natural diversity and celebrate human diversity. If we can do both, we will thrive together.

In addition to plant conservation, restoration and botanical garden management, you have expertise in science education. How important is it in current society?

Education may be the single greatest human invention. Science education is simply our modern way of observing the natural world and teaching how it works. As so many of our challenges involve the management of our natural world, science education is critical. Our future success as a species will rest on our ability to wisely manage the natural world and our place in it. The better we learn about nature, the better we'll protect and harness it in service to one another.

Your favorite tree?

My favorite tree is cacao (Theobroma cacao). This is the tree we make chocolate from. I love it so much because it makes people want to learn about plants and nature. We all love chocolate, but most of us have never seen the plant that makes chocolate. We have one in our conservatory at San Diego Botanic Garden. My favorite thing in the world is to show children and adults the chocolate tree, watch their eyes light up and learn about nature together.

Feature edited by Saeeda Razick