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GGI-Gardens Newsletter



The Global Genome Initiative for Gardens is an international partnership dedicated to collecting and preserving genome quality tissues for all species of plants on Earth





rth Highlight: BGCI/GGI-Gardens Award Program

The teams at GGI-Gardens and Botanic Gardens Conservation International (BGCI) have been hard at work to unveil a newly expanded awards program for GGI-Gardens! The BGCI / GGI-Gardens Awards Program aims to promote partnership activities to preserve and understand Earth's genomic biodiversity of plants. To this aim, we seek to support collection and preservation activities at botanic gardens around the world. This program, funded by GGI-Gardens and <u>United States Botanic Garden</u>, and administered through BGCI's Global Botanic Garden Fund, will provide **up to 15 awards of up to \$4,500** to support sampling activities from living collections with unique families and genera of vascular plants not yet represented in GGBN biorepositories.

The call for applications to the BGCI/GGI-Gardens Awards Program now **open**, **but the deadline is coming soon – application review will begin on November 15th**, 2020.

Eligible applicants include any BGCI member that is either a current or prospective member of GGI-Gardens. Institutions with successful proposals who have not yet joined GGI-Gardens must – as a minimum – become a GGI-Gardens partner by signing the GGI-Gardens Memorandum of Cooperation (MoC) prior to the awarding of funds. Eligible institutions will need to identify a recognised herbarium where they will deposit collected plant vouchers as well as a <u>GGBN-partnered biorepository</u> for the storage of preserved genomic tissues.

For more information about the award and to apply, visit the BGCI website.

Contact GGI-Gardens: Email: <u>mgostel@brit.org</u>, jlinsky@brit.org / Facebook: <u>@ggismithsonian</u> / Online: <u>GGI-Gardens Website</u>/ Twitter: <u>#GGIGardens</u>

"The BGCI/GGI-Gardens Award program will provide up to 15 awards of up to \$4500"

Successes in collection management at U.S. Botanic Garden during Coronavirus Pandemic

By: Devin Dotson, U.S. Botanic Garden

The U.S. Botanic Garden, a founding GGI-Gardens Partner, has implemented a number of garden strategies for safe management of our Garden during the coronavirus pandemic this year. The Garden has two working locations – the main campus downtown and the Production Facility a 15-minute drive away. The Garden created two Horticulture teams with a plan to keep them working in separate locations without overlap. If an employee was possibly exposed to the virus, there would be a safety plan for resiliency in the overall Horticulture team.

Prior to the pandemic, most Horticulture employees worked at both locations, so in the new plan, each employee was assigned a specific, singular work location caring for crops they may not have cultivated prior to the new work plan. An example of this is maintenance of the Garden's cacti and succulents collection. There is a gardener that takes care of this collection over both locations, but now that employee is stationed solely at the Conservatory. Other Collections team gardeners are assigned to care for the cacti and succulents at the Production Facility, and the main gardener keeps in touch with his new counterparts via video calls and photos, guiding the care and maintenance of the collection.



A U.S. Botanic Garden Horticulture employee cares for orchids in the Garden's Conservatory. Credit: U.S. Botanic Garden

"The strategy has worked better than expected," said Jim Adams, Horticulture Manager. "When the pandemic first started, we went through each house and looked very carefully at what we are caring for during this challenging time, focusing in on keeping collections plants with known provenance and importance and reducing duplicates of unknown provenance.

"There have been challenges. At first, gardeners were stressed about not caring directly for their collections. But we've used technology to help us, and it's working. We've used the closure to the public for some good, too -- digging into our displays to make plant changes to diversify and update the collections on display in ways that are quicker than typical because we can make a bit more of a mess for a few days instead of working just a few hours each day outside of public hours."





Resources

The **'Kew Tree of Life Explorer'** interactive website will be launched in November. Kew is building a comprehensive evolutionary tree of life for flowering plants and will be sharing results and data on the website as they are released. <u>Check out the</u> <u>website</u> once it's launched.

The <u>State of the World's Plants and Fungi Virtual Symposium</u> (October 13th-15th) held a session entitled 'Genomics – how do we embrace novel approaches to **studying plant and fungal biodiversity**?'. The session featured many great talks about genomics including one by Dr. Ilia J. Leitch titled 'Embracing novel genomic approaches to study plant biodiversity: Insights from across the genomic scale – from genes to the whole genome level' which provided excellent examples for how programs like GGI-Gardens are greatly needed for genomic research.

BRIT assumes management of the Fort Worth Botanic Garden

The Botanic Research Institute of Texas (BRIT), home of GGI-Gardens, assumed non-profit management of the <u>Fort</u> <u>Worth Botanic Garden</u> on October 1st. This transition follows 'extensive review, assessment and public involvement, including a community task force that determined transformational change was needed for the Garden's long-term sustainability.' To learn more read the <u>BRIT press release here</u>.



Photo: BRIT and the Fort Worth Botanic Garden



The new transitional logo of the Fort Worth BG and BRIT

Community Resources

As you are aware, GGI-Gardens and our partners are focused on collecting and preserving genome-quality tissue samples from across the plant Tree of Life and the data for these collections is made available through the Global Genome Biodiversity Network (GGBN). GGBN (<u>www.ggbn.org</u>) is an international network of institutions that share an interest in making non-human genomic collections discoverable for research. GGBN is redesigning and upgrading the search functionality and display of the GGBN Data Portal, which was designed to serve as a single-stop search platform for researchers to locate genomic samples from biodiversity biobanks around the world.

GGBN is asking for input from those that conduct non-human molecular research, to ensure that the redesign meets your needs. Please fill out and share this survey by December 1: <u>https://www.surveymonkey.com/r/J9G5ZXF</u>

Events & Opportunities

Past:

The American Public Gardens Association's Virtual 2020 Conference took place June 25th-July 9th. GGI-Gardens presented a poster '<u>Gap Analysis and Prioritization for the Global Genome Initiative for Gardens</u> <u>Partnership</u>'

The **Botany 2020-Virtual Conference** took place online from July 27th-31st. GGI-Gardens presented a poster entitled '<u>How does your garden grow? Analyzing living collections for conservation and research priorities</u> <u>using integrated gap analysis tools</u>'.

The **2020 Texas Plant Conservation Conference** was held on August 13th & 14th. GGI-Gardens presented a poster entitled '<u>Assessing Conservation Priorities for Texas at the Interface of Botanic Gardens, Conservation, and Genomics</u>'

Recent:

The <u>Biodiversity Genomics 2020</u> meeting took place online from October 5th-9th. GGI-Gardens director, Morgan Gostel, presented a talk entitled 'Crowdsourcing the genomic revolution for plants: a partnership at the interface of biorepositories and botanic gardens' – the presentation will soon be available on Youtube!

The <u>Center for Plant Conservation</u> - National Meeting 2020 was held October $8^{th} - 9^{th}$. GGI-Gardens presented a poster entitled '<u>Conservation priorities at the interface of botanic gardens and biodiversity genomics</u>'.

Upcoming:

Global Genome Biodiversity Network Conference has been postponed until March 2021.

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