June GROWing Together™ Newsletter

School's out! What better time to take advantage of our many GROW education classes – both for kids and adults. The Fort Worth Botanic Garden and Botanical Research Institute of Texas (BRIT) offer something for everyone and remember, GROW members receive discounts on select classes. Read on!

Table of Contents

News
Monet Soiree in the Garden - A Night of Art, Music and Wine

Education
A Night With Richard Louv: How Natural Environments Improve the Ability to Learn and be Creative
Dive into Summer GROW Community Ed Classes
GROW Offers Environmental Learning Opportunities

Research
BRIT Scientist's Flowering Plant Research Featured in Nature Plants
GGI-Garden Crew Begins Collecting from Botanic Garden

The Fort Worth Botanic Garden invites you to take part in a night of art, music, and wine at “Monet Soirée” June 27, 7:30 p.m. – 10 p.m.

Stroll through the Monet-inspired Fuller Garden and watch artists paint the beautiful botanical surroundings while music fills the air.

This event is inspired by the Kimbell Art Museum’s “Monet: The Late Years”
GROW MEMBERS -- Pick up Your Guest Passes

Fort Worth Botanic Garden general admissions begin next month. If you’re a GROW Supporter level member or above, make sure to pick up your guest passes at BRIT during our regular business hours.

Pick-up dates at the Fort Worth Botanic Garden coming soon.

BRIT Scientist's Research Featured in *Nature Plants*

A recent study on the origin and large-scale relationships of the flowering plant, co-authored by BRIT Vice President of Research Peter Fritsch, was published in *Nature Plants*, a peer-reviewed scientific journal.

This study is the most comprehensive of its kind, containing data from whole chloroplast genomes from nearly 3000 species representing all 64 orders of the angiosperms. The work was conducted by a team of scientists from the U.S., China, UK, South Africa, and Australia. The study resolves areas of the angiosperm phylogenetic tree that were previously uncertain. It also corroborates the presence of a major discrepancy in the time of origin of the flowering plants based on molecular versus fossil estimates.

The earliest fossils are from the Lower Cretaceous ca. 125–130 million years ago, but the estimate from this study based on the rate of molecular evolution (the so-called "molecular clock") puts the origin at ca. 209 million years ago, or the Upper Triassic.

The authors have termed this difference the "Jurassic gap" because it roughly spans the entire duration of the Jurassic Period. Possible explanations for this gap range from analytical artifacts such as molecular dating bias or lack of nuclear DNA sampling, to more evolutionary explanations such as the possibly low prevalence of early angiosperms and consequent rarity of fossils, or their occurrence on land areas that are now submerged under oceans. Gathering more genomic data may provide the answer.

View the original article [here](http://example.com).
Dive into Summer GROW Community Ed Classes

Looking for ways to while away the long hot days of summer? Join BRIT and the Fort Worth Botanic Garden for some great adult education classes and learn something new this summer.

Get in touch with your inner botanical artist and join us on June 29 and 30 for Botanical Painting in Oils with instructor Devon Nowlin. Nowlin, whose work can regularly be seen at Artspace 111 and the Fort Worth Community Art Center; and who has taught at TCU, The Modern, and the Rachofsky Warehouse. Nowlin will guide you through the basics of oil painting, with an emphasis on color mixing and working safely and cleanly with oils at home. You'll take inspiration from specimens from the BRIT herbarium and complete one or two paintings in this immersive workshop.

Painting not your thing? Then join us for Fall Vegetable Gardening on July 6 and learn how to take advantage of the best time of year for gardening in North Central Texas. Instructors Kim Martin and Laurie Bostic of Barking Cat Farm will cover a variety of topics including site and plant selection, irrigation, soil biology, and specialty gardens such as herb, salad and salsa gardens. This five-hour workshop will set you up for gardening success well into the next year.

If you’re not an artist nor a gardener, we’ve still got you covered! Culinary dietitian Dixya Bhattarai of Food, Pleasure, and Health will be joining us on July 20 to teach us all about Super Summer Salads. You’ll learn how to whip up a tasty, well-composed, nutritious salad complete with a homemade dressing.

For more information about these classes or to see our other great summer time educational offerings please visit our [website](#).

GROW Offers Environmental Learning Opportunities

Got kids? Consider Camp BRIT and Summer Field Study Trips for fun summer learning.
Camp BRIT is a day camp offering a variety of experiences for children in preschool through fifth grade. Each week-long camp session encourages children to connect with the wonders of nature and their local environment through science explorations, artistic activities, and special opportunities available only at BRIT and the Fort Worth Botanic Garden campuses. Camp BRIT is offered June 10 – July 11. Follow this link to learn more!

Field Study Trips spark curiosity and a love for learning through experiential activities in nature at the BRIT and Fort Worth Botanic Garden campuses. Students enjoy nature-based investigations and explore plants through the lens of a scientist. Whether it’s an in-depth study of flowers or a guided hike through the garden, the GROW education team has a lot of fun in store this summer. Field trips take place June 1 – August 3, from 10 a.m. to noon.

For more information, contact Rachel Lincoln at rlincoln@brit.org or visit our website.

GGI-Gardens Crew Begins Collecting from Botanic Garden

Last year, BRIT became the new headquarters for the Global Genome Initiative for Gardens (GGI-Gardens) – an international partnership of botanical gardens dedicated to collecting and preserving Earth’s plant genomic biodiversity.

Worldwide, botanic gardens are home to over half of the genera of plants on Earth and more than one third of the world’s species of plants. These living collections are invaluable for research and conservation, but underutilized. Through GGI-Gardens, botanic gardens are working to preserve plant genomes, facilitate collaboration, and increase the visibility and impact of gardens for research.

This past month, GGI-Gardens director and BRIT Research Botanist Morgan Gostel, and a team of interns began collecting herbarium vouchers and genetic tissue samples from the Fort Worth Botanic Garden. You might see them in the garden with a red wagon, liquid
nitrogen tank, and plant press. As the program grows, we will collect and preserve plant genomes from across Texas in our Global Genome Biodiversity Network-partnered biorepository at BRIT, emphasizing the amazing botanic gardens we have in our state, while continuing to build partnerships nationally and internationally.

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**Calendar of Events**

_June 3 through July 1_

Through June 20 – **Art in Bloom**

June 1, 8, 15, 22, & 29 – **Family Exploration Saturday**

June 4 – **Bella's Book & Nature Club**

June 10 – July 11 – **Camp BRIT**

June 12 – **Seedlings**

June 18 – **Little Sprouts**

June 15 – **Propagation of Ferns**

Jun 29, 30 – **Botanical Painting in Oils**