

For Immediate Release

CONTACT: Jan Giamanco, Executive Administrator
Accredited Gemologists Association (AGA)
844-288-4367 or Email: jan@accreditedgemologists.org

E. Billie Hughes, research gemologist at Lotus Gemology in Bangkok, Thailand is Awarded AGA's 2019 Gemological Research Grant

The Accredited Gemologists Association is pleased to announce that research gemologist, author and award-winning photographer E. Billie Hughes, of Lotus Gemology, has been awarded a \$10,000 research grant to help fund a comprehensive research study focusing on ruby and sapphire's chief value determinants—whether or not the stone has been treated and its origin. “The importance of this study cannot be overstated,” said AGA president Stuart Robertson. “Billie’s has designed an experiment-intensive project that clearly has the potential to vastly expand the industry’s understanding of treatments and origin determinations, especially for corundum from recently discovered sources.”

There are serious gaps in our understanding of the extent of alteration possible in corundum through heating. This is especially true of low temperature heat treatments which have only recently even been acknowledged by the labs, but still often go unreported. This is one of the specific areas of heating that Hughes intends to conduct numerous experiments for this project.

Writing in support of Billie’s grant, renowned physicist and Bonanno Award recipient Dr. John Emmett stated, “This is an area of research that has received little formal study even though it has been used to great effect at least from the time of al Beruni (ca. 1040 AD.)” Dr. Emmett further notes that “Conventional heat treatment is usually identified by the impact on inclusions contained within the gem...If we cannot easily determine inclusion disruption as an indication of heat treatment, it is imperative that we develop other observational techniques to do so.”

The AGA’s Education Scholarship and Research Grant Committee recognized the significance of this study for its potential to ultimately increase the accuracy of testing as well as harmonization between different laboratories, which remains an issue for gemology, if consumer confidence is to increase.

Billie’s research will include numerous ruby and sapphire samples of known origin which will be carefully examined, cut into sections to for testing and control groups, with careful analysis of properties recorded at each treatment stage.

We are happy to be contributing to its funding. AGA Committee Chair, Heidi Harders, noted, “Ruby and sapphire are among the most valuable gemstones in the market. This treatment study clearly holds important implications for the international gemological community.”

Stuart Robertson and Heidi Harders are especially delighted to be presenting this grant to Billie Hughes on behalf of the membership of the AGA. “Billie’s contributions to gemological research have already earned her respect among her peers. And if her past work is any indication; this study will provide breakthroughs that will be taught for years to come.”

About the Grant

The AGA was founded by Antonio C. Bonanno to foster an environment for continuing, practical education in gemology. In more recent years, the association has broadened this mission to include active intellectual and financial support of gemological education and research. The AGA Research Grant provides funding of up to \$10,000, per year for approved research and is authorized by the governors of the AGA. Only one Grant is awarded per year as approved by the board. The application process is open to anyone who is aiming to conduct a scientific gemological research project with an appropriate background defined in the application form. Funding for the AGA Research Grant is made possible by the generous support of AGA members and benefactors.