San Diego Opera Announces “Opera Hack”

Two-day ideation summit to explore how technological innovations can enhance the production, presentation, and consumption of opera

Supported by OPERA America Innovation Grant and the Ann and Gordon Getty Foundation

Sponsored by Microsoft

San Diego, CA – San Diego Opera is excited to announce “Opera Hack” a two-day interdisciplinary event for music/theater and technology experts to explore how technology can be applied to the production, presentation, and consumption of opera. Inspired by “hacks” in the technological sector which often brings together experts in disparate fields to work together to solve a presented problem, usually in a limited amount of time, San Diego Opera’s Opera Hack will partner participants with local universities and tech companies to come up with creative solutions to scenarios presented by San Diego Opera. Scenarios might include: how can mixed reality be used to create an interactive experience for an opera production? How can projection design be used for a costume change? Can virtual reality be used to preview a production before committing resources to build it? How can augmented reality improve supertitles and our understanding of the opera? Participants from creative and technology disciplines such as composition, stage direction, lighting design, costume design, scenic design, sound design, video design, 3D printing, projection mapping, augmented reality, and virtual reality will gather for two days July 27 and July 28, 2019 at the Microsoft Corporation Headquarters in San Diego. After the two-day hack, participants will present their concepts to an advisory panel who will then select a number of concepts to be developed.
over the next year for presentation at a public performance the following summer in 2020.

San Diego Opera is currently looking for local participants for the Opera Hack in July of 2019. Candidates should have expertise in areas such as technical direction, lighting design, composition, costume design, performance, theater project management, stage direction, scenic design, 3D printing, virtual, augmented, and mixed reality, creative coding, A.I. and machine learning, computer Vision and haptics, and interactive theater and performance art. Interested parties can apply online at [www.sdopera.org/operahack](http://www.sdopera.org/operahack) no later than Friday, April 5, 2019.

Participants will be joined by an Advisory Panel that includes [Vita Tzykun](http://www.sdopera.org/operahack), award-winning set and costume designer of opera, theatre, and film and a founding member of the GLMMR art collective; [Anne E. McMills](http://www.sdopera.org/operahack), Head of Lighting Design at San Diego State University and author of *3D Printing Basics for Entertainment Design*; [Matt Witkamp](http://www.sdopera.org/operahack), UX/UI Design Team Leader for VR/AR/MR projects with Microsoft, Stanford Medicine, and FlightSafety International; among others; and [Ryan Hunt](http://www.sdopera.org/operahack), lead software engineer at the Walt Disney Company. A full list of the advisory panel with bios appears at the end of this release.

“The Getty Innovation Grants support innovation in opera across a very wide spectrum,” shares San Diego Opera General Director David Bennett. “When considering this opportunity, we asked ourselves, what program could have potential impact on the industry but also made sense for San Diego. Since our community has great thinkers in technology and strong engineering programs, Opera Hack seemed like a perfect fit.”

The Opera Hack is made possible by support from OPERA America’s Innovation Grant and supported by the Ann and Gordon Getty Foundation. Sponsored by Microsoft Corporation.

Information about the presentation of the chosen Opera Hack concepts in Summer 2020 will be announced with the winning ideas following the Opera Hack in July of 2019.

**Opera Hack Advisory Panel**

**RYAN HUNT - INTERACTIVE EXPERIENCE**

Ryan Hunt is a Lead Software Engineer with The Walt Disney Company. He has over 20 years of experience working with multimedia technologies including graphics engines, novel user interfaces, virtual reality, and artificial intelligence. Much of his career has been in advertising and entertainment where he has focused on creating unique interactive experiences and solving problems in challenging domains like sound and gesture-based interfaces. Ryan has earned numerous awards for interactive design and programming, including a Clio Award for the 2004 Acura Interactive Showroom, and a Keyart Award for the online film site for Michael Mann’s The Insider.

**C. MURDOCK LUCAS - SCENIC AND MEDIA DESIGN**
Charles Murdock Lucas, member USA 829, is an international scene and media designer based in San Diego, California. Awards and honors include: scene design work exhibited in the Professional/Transformation Exhibit from the USA at the 2019 Prague Quadrennial of Performance Design and Space, the Robert L.B. Tobin Director-Designer Showcase sponsored by OPERA America for production concepts for The Cradle Will Rock, the A. J. Fletcher Opera Fellowship in Scene Design at UNCSA, a nomination for the 2017 San Diego Theatre Critics Circle Craig Noel Awards for Theatrical Excellence for Outstanding Scene Design, and the USITT Scene Design Award sponsored by Rose Brand.

ANNE E. MCMILLS - LIGHTING DESIGN & 3D PRINTING
Anne E. McMills is the Head of Lighting Design at San Diego State University. Her far-reaching career extends across the many facets of the lighting world—from theatre, including Broadway and the West End, to television and theme parks to architecture, industrials, concerts, award shows, dance, and opera. Anne is a proud member of United Scenic Artists, Local 829. In addition, Anne is the author of The Assistant Lighting Designer's Toolkit and 3D Printing Basics for Entertainment Design.

DAVID ADAM MOORE - STAGE DIRECTION, VIDEO, AND PERFORMANCE
With over 60 principal roles to his credit, David Adam Moore is a highly sought-after leading baritone by major opera houses and orchestras worldwide. A celebrated interpreter of contemporary music, he has created roles for some of today’s most important living composers, including Thomas Adès, Peter Eötvös, and David T. Little. Also known for his work as a stage director, composer, and video designer, Moore co-founded two NYC-based arts collectives - GLMMR and Choreo Teatro - with whom he has created music, video, and performance works in venues including the 92nd St. Y, NO Gallery, and The Cell.

VICTORIA ROBERTSON - OPERA PERFORMANCE AND VR
Victoria Robertson is an opera singer, television producer, and virtual reality entrepreneur. She sang with the San Diego Opera for 12 seasons, produced a travel television series for AWE TV, and founded the virtual reality production company World Travel VR. In music, tech, and media, Victoria is known for putting together great teams and executing a variety of creative concepts digitally and live.

VITA TZYKUN - SET AND COSTUME DESIGN
Recent projects include set design for the critically acclaimed World premiere of the (R)Evolution of Steve Jobs at Santa Fe Opera, set and costume design for Faust at Lyric Opera of Chicago in collaboration with the acclaimed sculptor John Frame, costume design for the World premiere of Dinner At Eight at Minnesota Opera, and costume design for the Russian premiere of The Passenger at the Yekaterinburg State Academical Opera and Ballet Theatre, and at the Bolshoi Theater in Moscow. Her numerous film and TV credits include art direction for Lady Gaga’s ABC Thanksgiving Special, production design for several award winning feature films and shorts, and commercials for leading entities such as PBS, DirecTV, Axe, Bulova, and Qualcomm. Tzykun has also served as a panelist on the Opera Panel of the National Endowment for the Arts and taught as a
guest lecturer at the Weill Music Institute at Carnegie Hall. In 2016, the International Opera Awards nominated Victoria Tzykun for Best Design. She is a co-founder of GLMMR.

**DR. CHRIS WARREN - SOUND DESIGN AND COMPOSITION**

Dr. Chris Warren is a sound artist, signal processing researcher, and musical instrument inventor. Warren earned a Ph.D. in Computer Music from UC San Diego studying with Dr. Miller Puckette, author of the Max and Pure Data programming languages, and an M.A. in Music, Science, and Technology from Stanford University. He teaches sound design and digital composition at San Diego State University. His sonic installations have been featured at the Museum of Making Music, the Fleet Science Center, NAMM, and the Havana Biennial.

**MATT WITKAMP - UX, UI, AND VR**

Matt Witkamp, founder and CEO of Kampfire Studios LLC, has been advancing digital experiences for more than 20 years through UX and UI design for companies such as AT&T, T-Mobile, Siemens Medical, Intel, HTC, Comcast, and Stanford Medical. He is passionate about experience in all forms, both digital and non-digital, but his love of technology has lead him to design experiences and UI for everything from the days of DOS, to desktop, to mobile, to TV, to today’s emerging XR. Matt takes a multi-lens approach to leveraging design to realize business opportunities that takes into account not just the design and experience aspect, but also business drivers and market opportunities. Matt was involved early on with the HoloLens and was part of the team that brought x-ray vision to surgeons with Stanford Medical. Since then he has been striving to establish best practices around experience design for immersive technologies.

### The 2018-2019 Season

- **The Marriage of Figaro**
  - Wolfgang Amadeus Mozart
  - October 20, 23, 26, and 28 (mat), 2018
- **All Is Calm: The Christmas Truce of 1914**
  - Peter Rothstein
  - December 7, 8, and 9 (mat), 2018
- **Rigoletto**
  - Giuseppe Verdi
  - February 2, 5, 8, and 10 (mat), 2019
- **Three Decembers**
  - Jake Heggie
  - March 8, 9, 10 (mat), 2019
- **Carmen**
  - Georges Bizet
  - March 30, April 2, 5, and 7 (mat) 2019
- **One Amazing Night – Stephen Powell and Stephen Costello**
  - May 15, 2019

**San Diego Opera Mission Statement**

The mission of San Diego Opera is to deliver exceptional vocal performances and exciting, accessible programs to diverse audiences, focusing on community engagement and the transformative power of live performance.

**San Diego Opera Vision Statement**

San Diego Opera will be recognized internationally as a leading example of adaptability, innovation and sustainability in the operatic arts, promoting diversified programming and unique performance venues with world-class and emerging talent.

**San Diego Opera Core Values Statement**

Through excellence in innovative programming and education, SDO provides a lasting cultural service to the community.

- Our tradition of excellence in fully staged opera is augmented with new models of opera and venues. Our unique and deep commitment to the community propels us to explore ways of increasing affordability and accessibility.
- Through fiscal responsibility and nimble adaptation to the changing marketplace, we protect the future of San Diego Opera.
- Our educational and community involvement coupled with relevant programming will build the audience of the future.