KIDSBOOK
CHICAGO SYMPHONY ORCHESTRA

PHILHARMONIA FANTASTIQUE

The Making of the Orchestra

WORLD PREMIERE
CSO CO-COMMISSION

CELEBRATING THE CENTENNIAL OF THE
CSO’S CONCERT SERIES FOR CHILDREN

CSO SCHOOL CONCERTS
March 26 & 27, 2020 • 10:15 & 12:00

CSO FAMILY MATINEES
March 28, 2020 • 11:00 & 12:45
PERFORMERS
Chicago Symphony Orchestra
Edwin Outwater conductor
Mason Bates writer, music & electronica
Gary Rydstrom writer, director & sound designer
Jim Capobianco story & animation supervisor

PROGRAM INCLUDES
BATES Mothership
BATES Philharmonia Fantastique: The Making of the Orchestra
WORLD PREMIERE AND CSO CO-COMMISSION
Co-commissioned by the Chicago Symphony Orchestra Association, Riccardo Muti, Zell Music Director. Made possible through the generous support of Helen Zell.

Philharmonia Fantastique: The Making of the Orchestra is a concerto for orchestra and animated film that explores how instruments produce sound and how they work together as an ensemble. At this concert, we hope you will discover that the symphony orchestra is a marvel of creative, interactive technology.
Sound is produced on string instruments by plucking or moving a bow across the strings. The bow is a long stick with horsehair stretched across it that a musician pulls along the string, causing it to vibrate. By pressing down on a string with a finger, the length of the vibration changes, which creates different notes.

In Philharmonia Fantastique, each of the four instrument families of the orchestra—strings, woodwinds, brass, and percussion—inhabit different sound worlds. Think of them like four distinct tribes. Their differences lead to a DRAMATIC TENSION that is only resolved when they come together as a unified ensemble.

Let’s explore the sound world of each instrument family. This is where the DRAMATIC TENSION begins!

Vibrations are the name of the game. Sound waves form when a vibrating object causes the surrounding medium (solid, liquid, or gas) to vibrate.
**BRASS**

Brass instruments get their sound from the vibrations of the musicians’ lips inside a mouthpiece. The vibrating air then travels down a long brass tube.

The slides and valves on brass instruments allow the musicians to change the length of the tube. This changes the length that the vibrating air must travel, causing the notes to change.

**WOODWINDS**

Woodwind instruments make their sound when a musician blows air across a mouthpiece or reed.

The flute creates sound when air is blown across the edge of the mouthpiece. When the air is split by the edge, it causes vibrations, like when you blow across the edge of a bottle.

In instruments like the clarinet or oboe, sound is produced when the air travels across a thin piece of wood called a reed. The vibrating reed makes the sound.

Different notes are played by covering holes on the long tube of the instrument, which changes the length that the vibrating air must travel.
Percussion instruments make sound by being struck, shaken, rubbed, or scraped. These actions cause the objects to vibrate and make sounds. Drums have a hollow body that amplifies the noise of a stretched membrane that is hit with a stick or mallet. Maracas are shaken, while bells resonate. Cymbals make a sound when they crash together.

Electronica in the orchestra An electronic musical instrument produces sound using software and electronic circuitry. Electrical circuits and switches send impulses to speakers, causing them to vibrate at predetermined frequencies.

During Philharmonia Fantastique, each instrument family plays a unique theme or melody. As the piece progresses, each family of the orchestra learns to play each other’s themes. It’s like they learn to speak each other’s languages. Listen as the instrument families transcend their differences and unite to create an inspirational piece of music.

Listen and watch as this thrilling performance by the Chicago Symphony Orchestra combines with cutting-edge animation to demonstrate how orchestras represent one of the greatest and most expressive human creations.
MEET THE CONDUCTOR

EDWIN OUTWATER

• Edwin recently collaborated on a project entitled “Sound Health” with soprano Renée Fleming, the Kennedy Center, and the National Institutes of Health.
• In 2017, Edwin conducted a jazz version of Mussorgsky’s Pictures from an Exhibition, with Wynton Marsalis, the Jazz at Lincoln Center Orchestra, and the Chicago Symphony Orchestra.
• He also appeared with the Orchestra of St. Luke’s at Carnegie Hall in a concert for families featuring a world premiere of composer Caroline Shaw, narrated by actor John Lithgow.
• He has conducted the Chicago Symphony Orchestra, New York Philharmonic, San Francisco Symphony, Los Angeles Philharmonic and Seattle Symphony, among many others.
• Edwin Outwater was born in Santa Monica, California. He earned his undergraduate degree from Harvard University in English literature and loves to read.

MEET THE ARTISTS

Mason Bates currently serves as the first composer-in-residence of the Kennedy Center and was the CSO’s Mead Composer-in-Residence from 2010 to 2015. His opera The (R)evolution of Steve Jobs premiered at the Santa Fe Opera in 2017; the live recording of that production was recognized as Best Opera Recording at the 2019 Grammy® awards.

Writer-director Gary Rydstrom has been nominated for 18 Academy Awards, winning seven for his work in sound and sound editing in films, including Jurassic Park, Titanic, and Saving Private Ryan.

Story artist-animator Jim Capobianco has worked on many major animated films, including The Lion King, Fantasia 2000, Finding Nemo, and Inside Out. He received an Academy Award nomination for Best Original Screenplay for Ratatouille.
CHICAGO SYMPHONY ORCHESTRA • RICCARDO MUTI ZELL MUSIC DIRECTOR

DUAIN WOLFE  Chorus Director and Conductor
MISSY MAZZOLI  Mead Composer-in-Residence

VIOLINS
Robert Chen  Concertmaster
The Louis C. Sudler Chair, endowed by an anonymous benefactor
Stephanie Jeong  Associate Concertmaster
The Cathy and Bill Osborn Chair
David Taylor  Assistant Concertmasters
Yuan-Qing Yu  Assistant Concertmasters*
So Young Bae  Assistant Concertmasters*
Cornelius Chiu  Assistant Concertmasters*
Alison Dalton  Assistant Concertmasters*
Gina DiBello  Assistant Concertmasters*
Kozue Funakoshi  Assistant Concertmasters*
Russell Hershov  Assistant Concertmasters*
Qing Hou  Assistant Concertmasters*
Blair Milton  Assistant Concertmasters*
Pual Phillips, Jr.  Assistant Concertmasters*
Sando Sha  Assistant Concertmasters*
Susan Synnestvedt  Assistant Concertmasters*
Rong-Yan Tang  Assistant Concertmasters*

Baird Dodge  Principal
Sylvia Kim Kilcullen  Assistant Principal
Lei Hou  Assistant Principal
Ni Mei  Assistant Principal
Fox Fehling  Assistant Principal
Hermine Gagné  Assistant Principal
Rachel Goldstein  Assistant Principal
Mihaela Ionescu  Assistant Principal
Melanie Kupchynsky  Assistant Principal
Wendy Koons Meir  Assistant Principal
Matous Michal  Assistant Principal
Simon Michal  Assistant Principal
Aiko Noda  Assistant Principal
Joyce Noh  Assistant Principal
Nancy Park  Assistant Principal
Ronald Satkiewicz  Assistant Principal
Florence Schwartz  Assistant Principal

Catherine Brubaker  Youming Chen
Sunghae Choi  Wei-Ting Kuo
Danny Lai  Diane Mues
Lawrence Neuman  Max Raimi
Weijing Wang  Michael Henoch
Assistant Principal
The Gilchrist Foundation Chair
Lora Schaefer  Scott Hostetler

ENGLISH HORN
Scott Hostetler

CLARINETs
Stephen Williamson  Principal
John Bruce Yeh  Assistant Principal
Gregory Smith  J. Lawrie Bloom

E-FLAT CLARINET
John Bruce Yeh

BASS CLARINET
J. Lawrie Bloom

BASSOONS
Keith Buncke  Principal
William Buchman  Assistant Principal
Dennis Michel  Miles Maner

CONTRABASSOON
Miles Maner

Horns
David Cooper  Principal
Daniel Gingrich  Associate Principal
James Smelser  David Griffin
Oto Carrillo  Susanna Gaunt

TROMBONES
Jay Friedman  Principal
The Lisa and Paul Wiggin Principal Trombone Chair
Michael Mulcahy  Charles Vernon

BASS TROMBONE
Charles Vernon

Tuba
Gene Pokorny  Principal
The Arnold Jacobs Principal Tuba Chair, endowed by Christine Querfeld

TIMPANI
David Herbert  Principal
The Clinton Family Fund Chair
Vadim Karpinos  Assistant Principal

PERCUSSION
Cynthia Yeh  Principal
The Dinah Jacobs (Mrs. Donald P. Jacobs) Principal Percussion Chair
Patricia Dash  Vadim Karpinos
James Ross

LIBRARIANS
Peter Conover  Principal
Carole Keiler  Mark Swanson

ORCHESTRA PERSONNEL
John Deverman  Director
Anne MacQuarrie  Manager, CSO Auditions and Orchestra Personnel

STAGE TECHNICIANS
Christopher Lewis  Stage Manager
Blair Carlson  Paul Christopher
Ryan Hartge  Peter Landry
Todd Snick

* Assistant concertmasters are listed by seniority.
† On sabbatical
§ On leave

The CSO’s music director position is endowed in perpetuity by a generous gift from the Zell Family Foundation.
The Louis H. Benton Wagner Chair currently is unoccupied.
The Chicago Symphony Orchestra string sections utilize revolving seating. Players behind the first desk (first two desks in the violins) change seats systematically every two weeks and are listed alphabetically. Section percussionists also are listed alphabetically.
THE STRING FAMILY includes violin, viola, cello, bass and harp. These instruments are made of wood and strings and are played by vibrating the strings using a bow, or plucking or striking the strings with the fingers.

Violin

Viola

Cello

Bass

Harp

THE WOODWIND FAMILY includes flute, oboe, clarinet, bassoon and saxophone. These instruments all have the same basic shape: a long tube with a mouthpiece at one end. The flute is played by blowing across a mouthpiece to create a vibration. Oboe, clarinet, bassoon and saxophone are all played by blowing air into a single or double reed attached to the mouthpiece, creating a vibration that results in sound.

Flute

Oboe

Clarinet

Saxophone

THE BRASS FAMILY includes horn, trumpet, trombone, euphonium and tuba. Brass instruments make a sound when the players vibrate their lips inside a mouthpiece, which is fitted into the instrument. The players can change pitch on a trumpet, horn or tuba by pressing on valves. Trombone players change pitch by moving the slide back and forth.

Trumpet

Trombone

Tuba

Horn

THE PERCUSSION FAMILY includes snare drum, bass drum, gong, triangle, xylophone, timpani and piano, among many others. Percussion instruments are struck, scraped or shaken.

Timpani

Snare Drum

Xylophone

Cymbal

Piano