

About OCO ...

The Olin Conductorless Orchestra (OCO)—an ensemble, minus conductor—features instrumentalists in leadership, communicative, and collaborative roles. Dedicated to orchestral performance in the concerted spirit of chamber music, the orchestra forges individual participation, active listening, and group-motivation into performances that have established it as the only conductorless orchestra composed of engineers—in the world!

OCO is a Project-Based Learning (PBL) course where students operate the classroom, and the professor contributes as guide-on-the-side. In helping to run rehearsals, students develop leadership, teamwork, and communication skills in a large team environment. With an essentially flat hierarchy that incorporates an ever-evolving sense of culture and cooperation as a working ensemble, OCO functions as a team of musicians—regardless of position—comprising students, faculty, and external guests, all dedicated to making good music with intensity, camaraderie, excitement, and humor.



The Olin Conductorless Orchestra



Saturday, December 16, 2017
Powers Hall at the Needham Town Hall
Needham, MA

OCO

Serena Chen, Anne Ku, Shreya Rangarajan,
Brandon Zhang, Lydia Zuehsow—violins
Emma Pan, Maggie Rosner—violas
Kian Raissian, Emma Westerhoff, Rachel Won—cellos
Jeremy Ryan—flute
Eric Miller—alto flute
Katie Hite—flute and bass flute
Sunny Shroff—bass clarinet
Kerry McConnaughay—French horn
Kyle Emmi—trumpet
Diego Alvarez, Paul Nadan—trombones
Joe Sutker—bass trombone
Jonah Spicher—piano
Joseph Lee—timpani
Marie-Caroline Finke—glockenspiel and percussion

Mix and stir ...

OCO Navigators: Diego Alvarez, Anne Ku, Kian Raissian,
and Emma Westerhoff

Sibelius Transcribers: Serena Chen, Kyle Emmi, Marie-
Caroline Finke, Katie Hite, Anne Ku, Justin Kunimune, and
Shreya Rangarajan

Adjudication and professional coaching: Thomas Hill
(principal clarinet emeritus, Boston Philharmonic), Emileigh
Vandiver (University of New Hampshire), Sam Solomon
(Boston University), Diana Dabby (OCO professor)

Re-orchestrations: Diana Dabby

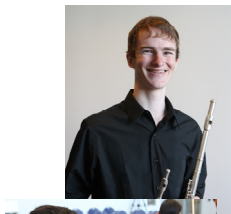


OCO, the Music Program, and Olin College express deep appreciation and gratitude to Carol Wu and Roger Shaffer of Roger's Piano in Natick for providing the Yamaha concert grand for tonight's performances. Roger's Piano has been in business for over 30 years and is dedicated to giving its customers the best musical experience possible.

Many thanks to the following people for their help with OCO:

[William Baez](#) (Facilities personnel), [Holly Bennett](#) (Admin. Asst. for Academic Affairs), [Susan Brisson](#) (Assoc. Director of Admission), [Vivian Bouffard](#) (Learning Continuum Coordinator), [Pedro Cabrera](#) (Facilities personnel), [Linda Canavan](#) (Registrar and Administrator of Curriculum and Academic Programs), [Neiza Correia](#) (Facilities personnel), [Paul Coveney](#) (Admin. Asst. for Academic Affairs), [Michelle Davis](#) (Chief Marketing Officer), [Catherine Didion](#) (V.P. for Development, Family and Alumni Relations), [Noel Espinal](#) (Facilities Asst. Director), [Francisco Fernandez](#) (Facilities personnel), [Marcella Fornagiel](#) (Admin. Asst. for Academic Affairs), [Alia Georges](#) (Asst. Director of Admission and Financial Aid), [Alyson Goodrow](#) (Director of Marketing), [Steve Hannabury](#) (Executive V.P.), [Joe Hunter](#) (Asst. V.P. and Director of Communication), [Ellise LaMotte](#) (Director of Academic Services), [Jayme Larochelle](#) (Facilities Operations Manager), [Vin Manno](#) (Provost and Dean of Faculty), [Robinson Medrano](#) (Facilities personnel), [Susan Mihailidis](#) (Director of Corporate, Foundation and Sponsored Programs), [Linda Miller](#) (Asst. to the Provost and Dean of Faculty), [Rick Miller](#) (President), [Katherine McDonough](#) (Admin. Asst. for Academic Affairs), [Shannon Paleologos](#) (Director of Annual Giving and Family and Alumni Relations), [Emily Petersell](#) (Asst. Director of Admission), [Emily Roper-Doten](#) (Dean of Admission and Financial Aid), [John Sullivan](#) (Program Director, Needham Lions Club), [Nancy Sullivan](#) (Asst. to the President), [Ashlee Talbot](#) (Program Coordinator, Student Affairs and Resources), [Russ Zacharias](#) (Facilities Director), Music Program Assistants [Joseph Lee '19](#) and [Bryan Werth '19](#).

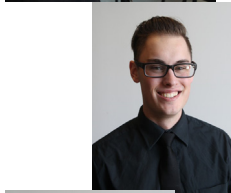
Photo credits: [Michael Maloney](#)



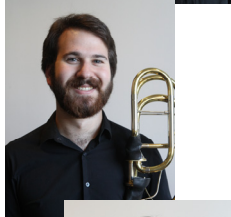
Jeremy Ryan '20 is from Medical Lake, Washington, and has been playing flute for nine years. He also plays piccolo, piano, mallet percussion, and accordion, and composes music in his spare time. He intends to major in electrical and computer engineering.



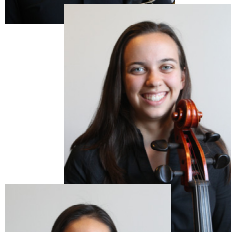
Suraj Shroff '18 is from Nashua, New Hampshire, and is majoring in Mechanical Engineering. He has been playing bass clarinet for 9 years. Outside of OCO, he is heavily involved in Olin Electric Motorsports, Olin's Formula SAE Electric team.



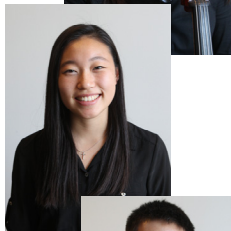
Jonah Spicher '21 is from Casper, Wyoming. He has played piano for ten years, spending three years as an accompanist for several different choirs. He is tentatively planning to major in electrical engineering.



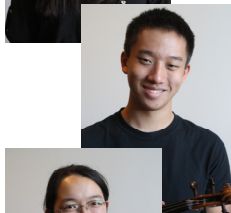
Joe Sutker '18 is from Boonton Township, New Jersey. He has been playing bass trombone since his first year of high school, when his band teacher thought that it would be cool, and he agreed. He has played many other instruments, including tenor trombone and percussion. He's nearly competent at a surprising number of things. Software engineering is one of them.



Emma Westerhoff '20 is from Scottsdale, Arizona. She has been playing cello for eight years, and also plays upright and electric bass in jazz ensembles. With plans to study Electrical and Computer Engineering, Emma enjoys math, soccer, and hiking in the desert.



Rachel Won '21 is from Saratoga, California and is currently on the track of Mechanical Engineering. She has been playing the cello for 8 years and has played in the California Philharmonic Youth Orchestra, Hopebox Charity Orchestra, and J'adore Cello, a 16-cello ensemble.



Brandon Zhang '21 is from Tenafly, New Jersey. He picked up violin in 3rd grade. His major is as of yet undetermined, but probably mechanical engineering. In his spare time, he practices calligraphy, although his handwriting is still illegible.



Lydia Zuehsow '19, from Harwood Heights IL, has been playing violin for 15 years. In her spare time, she enjoys building a self-aware army of robots, experimenting with flame fusion using a 3182° F torch, and knitting.

The Olin Conductorless Orchestra

December 16, 2017

Program

Duet: Mit Zwei Obligaten Augenglasern L. Van Beethoven
Anne Ku, viola
Emma Westerhoff, cello

Suite no. 4 in Eb Major, BWV 1010 J.S. Bach
III. Courante
Kian Raissian, cello

Duo in G Major from Three Duos for Flute and Violin Ignaz Pleyel
Katie Hite, flute
Shreya Rangarajan, violin

Der Spiegel (The Mirror) Duet *attributed to* W.A. Mozart
Allegro
Serena Chen and Lydia Zuehsow, violins

Allegro de Concierto Enrique Granados
Anne Ku, piano

Intermission

Serenade for Winds, op. 44 Antonin Dvorak*
Finale

Serenade for String Orchestra, op. 20 Edward Elgar
Allegro Piacevole

Overture to the Marriage of Figaro W.A. Mozart*

Symphony No. 1 in Bb Major, "Spring", Op. 38 Robert Schumann*
Andante un poco maestoso—Allegro molto vivace

"I am the Doctor" from *Dr. Who* *Murray Gold*

*Mozart wrote the overture to his opera *The Marriage of Figaro* for 2 flutes, 2 oboes, 2 clarinets, 2 bassoons, 2 horns, 2 trumpets, timpani, and strings (16 violins, 6 violas, 4 celli, 2 double basses). Dvorak scored his serenade for 2 oboes, 2 clarinets, 2 bassoons, contrabassoon, 3 horns, cello, and double bass. Schumann composed his first symphony for 2 flutes, 2 oboes, 2 clarinets, 2 bassoons, 4 horns, 2 trumpets, alto trombone, tenor trombone, bass trombone, timpani, triangle, and strings (24 violins, 8 violas, 8 celli, 4 double basses).

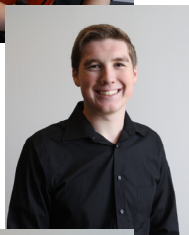
OCO has always had an unusual combination of instruments so these pieces have been re-orchestrated to suit the current instrumentation: 5 violins, 2 violas, 3 cellos, flute, alto flute, bass flute, bass clarinet, French horn, trumpet, 2 tenor trombones, bass trombone, piano, glockenspiel, timpani, and percussion.



Diego Alvarez '20 is from Kirkland, Washington. He started playing piano in 5th grade, and later picked up trombone, composition, and guitar. He plans to study mechanical engineering.



Serena Chen '19 is from Plano, Texas. Her major is Engineering with Computing. She has been playing violin for 11 years. In her spare time, she enjoys drawing snails.



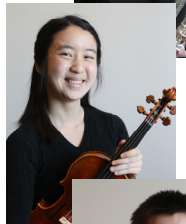
Kyle Emmi '21, from Clovis, California, has played Trumpet since 5th grade after deciding that his arms weren't long enough for trombone. He played in his high school jazz band, wind band, and symphony orchestra. He plans on becoming an aerospace engineer while studying under the guise of being a mechanical engineer.



Marie-Caroline Finke '18 comes from Darmstadt, Germany. Her major is Electrical and Computer Engineering with an interest in sound and renewable energy. In OCO she is playing several percussion instruments.



Kathryn Hite '18 is from Temperance, Michigan, and is majoring in Engineering with a concentration in Software Systems. She has been playing the flute for 13 years and has performed with the Toledo Youth Orchestra and other concert groups.



Anne Ku '19, from Palo Alto, California, has been an active musician for 14 years. She is majoring in Electrical and Computer Engineering.



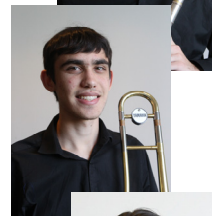
Joseph Lee '19, from Huntsville, Alabama, is studying Electrical and Computer Engineering. He has been playing piano for 13 years and also plays the harp. In addition to playing music, he enjoys music composition and building musical instruments. He is currently working on building his second harp.



Kerry McConaughay '20 is from McLean, Virginia, and has been involved in music for 14 years. She played trumpet in fifth grade and began playing French horn two years later. She has performed with multiple groups including Langley's Wind Symphony, Virginia district bands, McLean's American Youth Symphonic Orchestra, and the Brandeis-Wellesley Orchestra. At Olin, she plans on majoring in Mechanical Engineering.



Eric Miller '19, from Granville, Ohio, has been playing flute for 12 years, before starting Alto Flute for the first time this year. He is majoring in Robotics, which he describes as "basically just an excuse to take whatever classes I want to."



Paul Nadan '20 is from San Carlos, California. He began playing the euphonium in 5th grade, and picked up the trombone two years later. He plans to study aerospace engineering during his time at Olin.



Emma Pan '21 is from Westwood, Massachusetts, and has been playing the viola for 2 years. Before that, she was a violinist for a decade. She has performed with Boston Youth Symphony Orchestras for 6 years, and got the chance to play for the opera Eugene Onegin last year. Her major is currently undecided.



Kian Raissian '20 is from Houston, Texas. He has been playing cello for about 14 years now and has been an active soloist and was a part of Houston Youth Symphony and other ensembles, including the Helios Quartet, which he founded and managed. He is studying Mechanical Engineering. He also enjoys longboarding, playing ultimate Frisbee, and secretly loves SolidWorks.



Shreya Rangarajan '18 is from Baltimore, Maryland, and is majoring in Engineering with a concentration in Biomedical Engineering. She started her performing arts training at the Peabody Conservatory and has been playing the violin, singing, and dancing for 16 years. When she's not involved in arts, she likes to socialize, play sports, and watch Netflix.



Margaret Rosner '20 is from Tacoma, WA and is majoring in Mechanical Engineering. She started playing the viola this year and had previously played the violin for 9 years. In her free time she enjoys playing ultimate Frisbee, reading, and running.