**MIT Biology** 

Undergraduate Celebration 2020

Honoring Graduating Seniors & Award Recipients May 26<sup>th</sup>

Biology

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# **Graduating Seniors by Course**

#### Course 7

Aggarwal, Muskaan Bane, Brigid Burns, Delaney Chang, Crystal Cho, Julia Copeland, Christopher Dogar, Mariam Espiritu, Joseph Ewald, Trevor Flores, Hayley Gardner, Apolonia Harris, Abby Huske, Allison Jeewajee, Swarna Lang, Evan Liao, Laura Majors, Kyra McKinney, Leah Mesyngier, Maia Niederreiter, Hayden Nunn, Taiylor Putnam, Amanda Quan, Anan Reza-Oretega, Gianna Rock, Rachel Tsui, Crystal Weldon, Edward Yu, Fei Zhu, Lena

# Course 7A

Clamon, Lauren Kuffner, Grace Liu, Ming Santiago, Yhiedania Tong-Li, Candace

# Course 5-7

Aguilar Ramos, Miguel Camacho, Karen De La Rosa, Valentina Kline, Madeleine Liu, Chun-Ting (Jack) Liu, Lynn Mashanda, Tafara O'Callaghan, Claire Solomon, Samuel Yim, Leon Zhou, Sherry

# Course 6-7

Bernstein, Emma Carpenter, Kristy Derrick, Joshua Devoe, Camille Ekim, Baris Gu, Karen Gunter-Rahman, Fatima Hicks, Kendyll Hu, Eileen Lee, Seung Patel, Aman Phu, William Poberejsky, David Reilly, Montana Sivaraman, Venkatesh Wang, Cassia Wong, Lawrence Zhang, Kelly

# **Biology Undergraduate Awards**

John L. Asinari Award – For outstanding research in the field of life sciences Abby Harris, '20, Course 7 Miguel Aguilar Ramos, '20, Course 5-7 Wilson Gomarga, '21, Course 20

**Gene Brown Prize** – For academic scholarship, and demonstrated excellence as a teaching assistant Daniel Zhang, '22, Course 7

**Susan Hockfield Prize in Life Sciences** – For a third-year MIT undergraduate student in any area of the life sciences who has demonstrated both exceptional performance and promise for graduate study and research

Tee Udomlumleart, '21, Course 6-7

Ned Holt Prize – For demonstrated excellence in scholarship as well as service to the MIT community Julia Cho, '20, Course 7 Ayesha Ng, '21, Course 7

**Salvador E. Luria Prize** – For outstanding scholarship and research of publication quality Laura Liao, '20, Course 7 Madeleine Kline, '20, Course 5-7

**Merck prize** – For outstanding research and academic performance in biophysical or bioinformatics sciences Venkatesh Sivaraman, '20, Course 6-7 Whitehead Prize – For outstanding promise for a career in biological research through academic scholarship as well as contributions to research and the MIT community Leah McKinney, '20, Course 7

# **Additional Awards**

**Goldwater Scholarship** – This is a competitive national scholarship and MIT can nominate a few students for this scholarship. Vaishnavi Phadnis '22, Course 6-7

**Schwarzman Scholar** – Participants are selected from an applicant of pool over 4,700 candidates and will join fellow Schwarzman Scholars from around the world in China to complete a one-year master's degree in global affairs at Beijing's Tsinghua University. Their education is complemented by internships, career development mentors, highprofile speakers, and opportunities to travel throughout China.

Mariam Dogar '20, Course 7

# **Biology students nominated for Phi Beta Kappa**

Delaney Burns '20 Course 7 Kristy Carpenter '20, Course 6-7 Crystal Chang '20, Course 7 Lauren Clamon '20, Course 7A Joseph Espiritu '20, Course 7 Apolonia Gardner '20, Course 7 Karen Gu '20, Course 6-7 Laura Liao '20, Course 6-7 Maia Mesyngier '20, Course 7 Amanda Putnam '20, Course 7 Venkatesh Sivaraman '20, Course 6-7 Samuel Solomon '20, Course 5-7 Lena Zhu '20, Course 7

# **Course 5-7 Undergraduate Awards**

First-Year Chemistry Achievement Award – Outstanding academic achievement in chemistry

Jeffrey Shi '23, Course 5-7

#### Outstanding UROP Presentation Award – In recognition of the best undergraduate research presentation at the Chemistry UROP Symposium

Agata Bikovtseva '21, Course 5-7

# Research Award – Outstanding contributions in the area of research

Sherry Zhou '20, Course 5-7 Miguel Aguilar Ramos '20, Course 5-7 Chun-Ting (Jack) Liu '20, Course 5-7 Sam Solomon '20, Course 5-7

# Royal Society of Chemistry Certificate of Excellence – Outstanding scholarship

Sherry Zhou '20, Course 5-7 Madeleine Kline '20, Course 5-7 Leon Yim '20, Course 5-7

# **Special Recognition**

# **Special Thanks**

# Biology Undergraduate Research Symposium 2020 Participants

Fatima Gunter-Rahman Ayesha Ng Leah McKinney Abby Harris Tee Udomlumleart Harrison Wang Maia Mesyngier Vaishnavi Phadnis Andrea Garmilla Muskaan Aggarwal

#### BEXEC 2019-2020

Leon Yim William Phu Muskaan Aggarwal Alice Zhou Natasha Joglekar Vaishnavi Phadnis Isha Mehrotra Elaine Wu Leyna Duong Hannah Grupe Katherine Lim Caroline Bao

#### **Department of Biology**

Head of Department: Alan D. Grossman Undergrad Officers: Cathy Drennan Adam Martin Biology Education Office: Janice Chang Joshua Stone

# Tutors 2019–2020

Muskaan Aggarwal Justin Cordero Sarah Dohadwala Joseph Espiritu Diana Faust Sandhya Kalavacherla Anna Khoroshilov Madeleine Kline Phoebe Li Laura Liao Jiaxing Liu Maia Mesyngier Ayesha Ng Vaishnavi Phadnis Madison Sneve Kevin Wesel

# **Student Biographies**

# Muskaan Aggarwal – Course 7



Muskaan Aggarwal is originally from Folsom, California. At MIT, she studied Biology and Ancient and Medieval Studies. The highlight of her MIT experience has been working in the Amon Laboratory to understand the role of chromosomal instability and aneuploidy in tumorigenesis. After graduation, Muskaan will be working in the Harrison/Schmidt Labs on coronavirus research before applying to MD-PhD programs.

# Emma Bernstein – Course 6-7



Emma Bernstein is from New York City, NY. At MIT she studied Computer Science and Molecular Biology and Ancient and Medieval Studies. Motivated by questions about science and society, she spent last summer as a Political Studies Fellow at the Hudson Institute. Outside of class Emma enjoyed running Model UN Conferences, organizing STEM outreach programs for young women, and participating in Interfaith Dialogue as an Addir Fellow. After graduation, Emma will take root in Boston as an Analyst at Analysis Group.

#### Karen Camacho – Course 5-7



Karen Camacho was raised in Miami, Florida but was born in Bucaramanga, Colombia. In addition to studying Chemistry and Biology at MIT, she completed a minor in Russian and Eurasian studies. The highlight of her undergrad was teaching Biochemistry in Russia and Mexico through MIT's GTL program. The highlight of her science education was carrying out a UROP in the Birnbaum Lab at the Koch Institute for Integrative Cancer Research her junior and senior year. When Karen wasn't in lab or class,

she was a cadet in MIT's Air Force ROTC program and a TA for several ESG courses. After graduation, Karen is off to Dayton, OH as an officer in the United States Air Force where she will be working as an agent in the Office of Special Investigations.

#### **Crystal Chang – Course 7**



Crystal Chang was born and raised in sunny Los Angeles, but came to MIT in search of interesting weather and exhilarating experiences with people from all over the world. In addition to studying Biology, she delved into playwriting/acting and three foreign languages (Spanish, Japanese, and Korean). Highlights of her science education included publishing a hepatology paper in the Journal of Hepatology based on clinical research with the National Taiwan University Hospital through a self-curated

MISTI experience and writing a research proposal for a new technique that earned a perfect score from her PI. Highlights of her humanities education included a stint as a performing arts student with rising movie stars at the Shanghai Theatre Academy, the #2 performing arts institution in China, where she performed Beijing Opera, violin, and a self-choreographed dance routine; having a play she wrote about the importance of global humanitarian aid and medicine performed by professional actors and directors; and debating issues such as racism in medicine and legal access to abortion in Medicine in the Hispanic World, a class taught entirely in Spanish. Outside of lab and class, Crystal enjoyed volunteering with Medlingual, a club she founded that trains bilingual students to be volunteer medical interpreters, citizenship class teachers, and community health advocates for homeless shelters and free clinics; directing 10+ dance videos with the MIT Asian Dance Team; and running along the Charles River with friends, although these frequently turned into food runs instead. After graduation, Crystal will be joining the inaugural class of the Kaiser Permanente Bernard J. Tyson School of Medicine on a full merit scholarship covering all tuition and living expenses. She wants to thank all her brilliant professors for going the extra mile and really caring about their students, and leaves in awe of how much she's grown and accomplished. (MIT means so much to her that she'll be back in the future for her wedding ceremony with her boyfriend, who's also an alum!)

#### Julia Cho – Course 7



Julia Cho was born in Seoul, South Korea and grew up in Cupertino, CA. Having had two congenital heart defects and open heart surgery when she was young, Julia has always wanted to be a pediatric cardiologist and pursued pre-med coursework alongside Course 7 at MIT. In addition to her studies, she was an athlete on MIT's Varsity Sailing Team, where she and her teammates competed at and won First Place at the 2018 ICSA Coed Nationals. Her favorite boat is the UFCho, which was named after her. She also loved

working with her fellow dynaBoard members on dynaMIT, a summer STEM program for underserved local middle schoolers. After graduation, Julia will be sticking around the Boston area to matriculate at Harvard Medical School across the river!

# Lauren Clamon – Course 7A



Lauren Claire Clamon never ever not even once in her life ever thought she would grow up to study biology. All things medical scared her, so she was dead certain biology was not the right path. Boy, was she wrong! Lauren began her life in San Diego, California but after a lot of studying at Bonita Vista High School and a lot more archery at the San Diego Olympic Training Center moved to Cambridge to attend MIT. There she planned to study chemistry until her Intro to Bio class proved to be remarkably

interesting and surprisingly fun, drawing her into a life of life sciences. She has since double majored in biology and literature. She combined her love for both fields in her time with MIT's Shakespeare Ensemble, where her favorite job was designing the blood effects for Richard III. She also served as one of the membership directors for MIT's campus radio station WMBR and as DJ of two shows, Theme of the Week and BABEs: The Radio Experience. She is proud to be graduating with her double major and a membership to MIT's chapter of Phi Beta Kappa. She hopes to one day to get a masters in both biology and library science in order to become a science librarian and help researchers with their projects while continuing to learn new things everyday.

# **Christopher Copeland – Course 7**



# Mariam Dogar – Course 7



Mariam Dogar grew up in Dubai and currently lives in Worcester, Massachusetts. In addition to studying Biology, she minored in Urban Studies & Planning and enjoyed being a teaching assistant for 11.011 and 11.111 (a series of negotiation classes) for 2 years. After working in the Strano Group with carbon nanotubes for cancer analyte detection, she decided to instead explore the intersection of policy and science, researching telemedicine and digital healthcare policy with Professor Amar Gupta.

At MIT, you could find Mariam competing against other schools at Mock Trial tournaments, sitting at a booth for a GlobeMed campaign, or singing and dancing at a Camp Kesem event. After graduation, and contingent on global travel opening back up, Mariam is headed to Tsinghua University in Beijing for a Masters in Global Affairs.

### Barıs Ekim – Course 6-7



Born and raised in Istanbul, Turkey, Barış Ekim double-majored in Computer Science and Molecular Biology (Course 6-7) and Mathematics (Course 18) with a concentration in French (21G). Barış also worked as a research assistant in the Computation and Biology Group at CSAIL with Prof. Bonnie Berger, where he worked on efficient algorithms for next-generation sequencing (NGS) data analysis. Outside of class, Barış was the president of the Turkish Student Association (TSA) at MIT, and played

electric guitar for his band Fred Desk alongside his classmates. Barış also liked to write poetry and prose, and go busking with his accordion on Harvard Square. After graduation, Barış is staying at MIT for a PhD in Computer Science.

# Joseph Espiritu – Course 7



Joseph Espiritu was born in Manila, Philippines, and moved to the United States for high school in 2011. Early at the start of MIT, he joined the Koehler Lab specializing in chemical biology and small molecule microarray screening. As his undergrad career went on, he later found a strong interest in teaching, and thus he began working as a teaching assistant for various courses (7.012,7.05, 7.06) as well as teaching 5.12 for the OME. Starting his junior year, he found a strong passion for researching cardiovascular

development and stem cell research, and from there he joined the Boyer Group. When not working, Joseph enjoyed going to Spring Shabu Shabu or mostly playing online games with friends. After graduation, Joseph plans to attend medical school after working in research for one year. He still listens to Old Town Road up to this day. Can't nobody tell him nothin.

#### Hayley Flores – Course 7



Hayley Flores is originally from Chadds Ford, Pennsylvania. At MIT, Hayley majored in Biology and minored in Public Policy. She enjoyed being able to explore her many different academic interests by working in different labs doing projects in neuroscience, child language development, fair housing policy, and healthcare economics. When Hayley wasn't studying in Stud 5, you could find her running along the Charles, eating with her sorority sisters, watching sporting events, enjoying nature, or volunteering

through different clubs. Next year, she will be working in healthcare consulting at Accenture in the Boston office. Hayley wants to thank MIT for all the amazing opportunities and connections she has made over the past 3.75 years.

# Apolonia Gardner – Course 7



Apolonia Gardner is originally from Imperial, California. She came to MIT interested in studying human health and disease and majored in Biology and Brain & Cognitive Sciences to pursue this goal. The highlight of her MIT education has been her research experiences. She began by learning tissue culture and CRISPR methodologies to study a mammalian host defense protein against HIV. She then joined a systems neuroscience laboratory studying the neural basis of cost-benefit decision making. She gained

further experience in the drug delivery field by making drug-excipient nanoparticles predicted by machine learning to improve survival outcomes of mouse models of liver cancer. She also gained experience using microscopy techniques to understand the genetic pathway governing planar-polarized cell divisions in fly embryos. After graduation, Apolonia will attend a joint program in Harvard Virology and Harvard-MIT Health Sciences and Technology (HST) where she hopes to earn a Ph.D. studying genome engineering and viral-vector based gene therapy.

### Fatima Gunter-Rahman – Course 6-7



Fatima Gunter-Rahman grew up in Falls Church, Virginia, near Washington D.C. At MIT, she studied computer science and molecular biology. She conducted research on cognitive reserve in the context of Alzheimer's Disease in Professor Li-Huei Tsai's lab, and spent an exciting summer at EPFL in Switzerland, also studying neurodegeneration. In her free time, she loves to sing and play the piano. After graduation, she plans to stick around for a PhD at Harvard and MIT's HST program.

#### Abby Harris - Course 7



# Allison Huske – Course 7



Abby Harris is a Course 7/Comparative Media Studies double major from Birmingham, Alabama. She spent three of her four years at MIT in the lab of Prof. Graham Walker, where she studied the relationship between cancer chemoresistance and the translesion DNA synthesis repair pathway. Her favorite classes were 7.49 Developmental Neurobiology and 4.354 Introduction to Video. Outside of class, she spent her time blogging for MIT Admissions and late-night DJing at WMBR. She will be headed off to UC Berkeley in the fall to start her Ph.D. in cell biology.

Allison Huske is originally from Chicago, Illinois. After first declaring a major in Computer Science and Biology and then in Bioengineering, she is happy to be graduating with a Biology major and a Literature minor. Allison was editor-inchief of the MIT Undergraduate Research Journal, which she contributed to since her freshman fall. She also played on sMITe, the women's club ultimate frisbee team. Allison plans to work in public health, which turned out to be pretty relevant.

# Swarna Jeewajee – Course 7



Swarna Jeewajee is originally from Mauritius—a small island off the south-east coast of Africa. In her first year at MIT, she fell in love with Biology upon taking 7.013 with Prof. Sive and Prof. Amon. This interest matured into a passion for the field of cancer biology over her four years at MIT. Through MISTI-France, she had the opportunity to conduct research at the Centre Leon Berard Cancer Hospital in Lyon the summer after her first year. In 2018, she spent a summer at The Rockefeller University in New York City investigating mechanisms of resistance to cancer therapy. When she returned to MIT in the fall, she joined the Hemann laboratory where her UROP work has focused on identifying unique genetic dependencies in leukemias that harbor abnormal chromosomal aberrations and remain particularly resistant to common therapeutic regimens. Outside the laboratory and classes, Swarna has enjoyed singing at hospitals, homes for the elderly and homeless shelters around the Boston area with the acappella group Singing for Service. After graduation, Swarna will matriculate to the Tri-Institutional MD-PhD Program (Weill Cornell/Rockefeller/Sloan Kettering) in New York City. She feels incredibly grateful for the experience she has had at MIT; it has shaped her tremendously as a person and has helped her find her passion. With generous financial aid, supportive professors and amazing friends, she has constantly felt encouraged to put her energy into what truly matters to her.

# Madeleine Kline – Course 5-7



Maddy Kline is a senior at MIT studying chemistry and biology, and Spanish. She grew up in the Greater Boston Area, where she, her twin brother, older sister, and pet dog were raised by two psychologists. Throughout college, she worked on globalhealth focused synthetic biology diagnostics research in the Collins Lab at IMES. She also pursued her interest in health equity through GlobeMed at MIT. One of the highlights of her MIT career was going to South Africa for a course on the HIV epidemic. Outside of

her healthcare endeavors, Maddy has been a student interviewer for the AMITA Women's Oral History Project, which involves interviewing women who graduated from MIT about their experiences as women at MIT and in science and tech. She has also sung all across campus, including at President Reif's house, with the Chorallaries of MIT. Maddy is a dedicated singer, a mediocre runner, and a lover of dark chocolate and puppies. Next year, she is beginning an MD-PhD program where she seeks to work at the intersection of global health, scientific research, and patient care.

# Grace Kuffner – Course 7A



Grace Kuffner is a 2020 double-majoring in biology and theater arts. On the biology side, she is passionate about the intersection between basic science research and clinical applications as they relate to medically underserved populations, and hopes to pursue an MD-PhD starting fall 2021. She has spent four years as a UROP in Dr. Li-Huei Tsai's lab researching the effect Down Syndrome on astrocytes and neural progenitor cells. On the theater side, Grace loves all kinds of acting, and is president

of the MIT Shakespeare Ensemble and a member of the MIT Musical Theater Guild, as well as a local professional actor in Boston. A highlight of her time at MIT was delivering a talk on the topic of eyebrows and global warming at MIT's 2018 BAHFest (Bad Ad Hoc Hypotheses Festival), a "scientific" comedy event. Pictured is the vital research that went behind that talk.

#### Laura Liao – Course 7



Laura Liao is a Course 7 major and WGS minor from Sammamish, Washington. Since freshman year, she has worked in the Jacks Lab performing research on mouse models of lung adenocarcinoma. Laura is very passionate about promoting social justice, and she spends much of her free time improving student health and campus culture at MIT through her exec positions in MedLinks and PLEASURE. She also enjoys reading historical fiction, gourmet cooking, and shooting the breeze with her friends

on Burton 2. In August, she will be moving to Chicago to attend the Feinberg School of Medicine at Northwestern University.

# Jack Liu – Course 5-7

Jack Liu comes from Taipei, Taiwan. He studied Chemistry in National Taiwan University for one year before transferring to MIT, where he developed his interest in biology, especially in secondary metabolism. Jack worked in Jing-Ke Weng's lab at Whitehead for two years, and is most proud of his magic mushroom project. He later spend a summer at UCLA working with Yi Tang and then a semester at Harvard Medical School in Jon Clardy's lab. Outside the lab, Jack is an avid cyclist and raced with the MIT cycling team. He is also a brother of the ZBT fraternity. Jack enjoyed traveling around through studying abroad: he spent a summer at Imperial College London and a semester at Tsinghua University, Beijing, making the number of universities he has been part of a total of six. Jack is determined to escape from the harsh winter in east coast so he decides to pursue his Ph.D in Chemistry at Standard this fall.

# Lynn Liu – Course 5-7



Lynn Liu is from Orange, CT. She majored in Chemistry and Biology and minored in Spanish. Outside of academics, she worked in the Lees Lab in Koch Institute, was on the Varsity Sailing team, and was president of Colleges Against Cancer. After graduation, she will be attending the NYU Grossman School of Medicine.

# Kyra Majors – Course 7



Kyra Majors is originally from Newport News, VA. In addition to studying Biology, she did her HASS concentration in Political Science. The highlight of her political science education was taking a class in Constitutional Law. The highlight of her science education was conducting research with Jette Lengefeld in the Amon Lab studying cancer in mice. When Kyra wasn't in the lab or in class, she enjoyed being a sister of DPhiE, doing community service, and trying out new restaurants in the city. After graduation, Kyra is headed to NYU for an MS in Biology focusing in bioinformatics and systems biology.

# Leah McKinney – Course 7



Leah McKinney grew up in Minden, Nevada. At MIT, she majored in Course 7 (Biology) with a minor in Ancient and Medieval Studies. Her favorite experience at MIT was her UROP in Prof. Alan Grossman's lab studying the regulation of DnaA as a transcription factor in Bacillus subtilis. She lived in E-entry in MacGregor and loved to spend her free time hanging out with her wonderful entry-mates and playing games. In the fall, Leah will be joining the Cellular and Molecular Biology PhD program at the University of Wisconsin-Madison.

# Maia Mesyngier – Course 7



Maia is a biology major originally from Swarthmore, PA. While at MIT, her research interests led her to Hidde Ploegh's lab, where she spent over three years developing single-domain antibody based molecular tools to study and enhance immune responses to cancer. Outside of academics and research, Maia was very involved in GlobeMed@MIT, served as a MedLink and Freshman Associate Advisor, and was a member of the Varsity Track and Field and Cross Country teams. After graduation, Maia

will miss taking study breaks with her Burton 4 family, walking to class in the morning with Maddy Kline, and running along the Charles with friends to de-stress. Next year, Maia will be joining the Harvard/MIT MD-PhD program to pursue her interests in immunology, infectious diseases, and global health.

# Aman Patel – Course 6-7



Aman Patel is originally from Sugar Land, Texas. At MIT, he studied computer science and molecular biology (course 6-7), ultimately graduating with both Bachelor's and Master's of Engineering degrees. Aman is very thankful to have conducted research at the Broad Institute and MIT CSAIL, and he also greatly enjoyed his summer internships in England and the Bay Area. Serving as a teaching assistant and as a board member of DynaMIT are other highlights of Aman's time at MIT. When not

working (which unfortunately wasn't very often), Aman spent his time watching and playing sports, reading about history, and hanging out with friends. After graduation, Aman will pursue a PhD in computer science at Stanford, where he will focus on machine learning and computational biology.

#### William Phu – Course 6-7



Originally from Salem Massachusetts, William Phu will always cherish the time he spent at MIT. In addition to his technical classes, William took many classes offered by the Writing department, where he discovered a new love for creative writing. The highlight of his scientific education was researching the effects of noncoding variants on disease susceptibility with Dr. Olivia Corradin. William is proud to have served the undergraduate community as a member of the Biology Undergraduate Students Association and is

thankful for the opportunities it gave him to meet faculty in the Biology department. His favorite memories of the past four years include the countless nights spent baking and cooking, exploring restaurants in Boston, and staying up late into the night hanging out with friends. After graduation, William will be working as a computational biologist before returning to graduate school for his Ph.D.

#### Amanda Putnam – Course 7



Amanda Putnam is originally from Taunton, Massachusetts, where she spent her childhood hunting insects in the woods and her teenage years in a flurry of academics and community service and friends. At MIT, she majored in biology, but also studied public policy and education. When not in class, Amanda volunteered with student government (Dormcon and Random Hall) and Medlinks. Her favorite things about MIT were her friends and Random Hall community, so she spent as much her four

years with them as possible, taking on whatever adventures came their way. After graduation, she plans to teach high school biology for a few years before pursuing a career in STEM education policy or public policy more generally.

#### Anan Quan – Course 7



Anan Quan, or Ann as her friends call her, is originally from Beijing, China. After attending high school in Cape Coral, Florida, she majored in Biology at MIT, and concentrated in Spanish. The highlights of her undergraduate education included the IAP she spent in Madrid learning Advanced Spanish Communications, as well as the Hallmarks of Cancer taught by Professor Jacks and Vander Heiden. When Ann wasn't in class, she enjoyed her role as a Medlinks and Peer Mentor in Baker. Additionally,

as chair of the Senior Week committee, and former chair of the UA Events Committee, she loved planning events for her peers and the MIT community. She also loved playing IM hockey and hanging out with her friends at Skullhouse. After graduation Ann plans on taking a gap year doing research in the UK and Mexico, before attending medical school.

### Gianna Reza-Ortega – Course 7



Gianna Reza-Ortega is a double major with Biology and Chemical Engineering, and a concentrator in Latin American Studies. She went to high school in Mill Valley, California, but also calls Mesa, AZ and El Paso, TX home. Her favorite science classes were Building with Cells as taught by Hazel Sive, and The Science of Race, Sex, and Gender as taught by Abha Sur. She spend most of her time on campus organizing in student groups such as Camp Kesem, Senior Haus, Mujeres Latinas, and UPOP; she often relaxed by cooking with

her roommates or bouldering at a gym in South Boston. Post graduation Gianna plans to work in the public health sector and volunteer for local political organizations in Brooklyn, NY.

#### **Rachel Rock – Course 7**



Rachel Rock grew up on Long Island (in a house convienently resting against the woods, just a walk away from Sweetbriar Nature Center!) Respect for the environment saw Rachel very happy to serve as Envionmental Chair of her undergraduate dorm, McCormick. Rachel majored in Biology and really gained from hands-on experience with animal behavior as well as optogenetic technologies at the MIT, MA and later Salk Institute, CA Tye Lab. Rachel pursued this path of research because she 1) has an honest love of laboratory rodents

and 2) feels thorough understanding of such core model organisms could have massive benefits in biomedical research. Rachel is very excited to be be enrolled in UCSF's Biomedical Sciences program for PhD study starting this Fall. Rachel was a Fulbright award semifinalist and has been awarded a Diabetes Center Fellowship for study at UCSF. Her core research areas of interest are metabolism, cognition, and the gut microbiome. Outside of the lab, Rachel, who highlighted women in science as a feature writer for MIT's Undergraduate Research Journal, MURJ, looks forward to contibuting to UCSF's student magazine, Synapse. Additionally, Rachel is excited to gain inspiration from the artistic culture of San Fransisco, where she hopes to use art as a tool for building community in her lab team and living group just as she did during undergrad at MIT.

#### Samuel Solomon – Course 5-7



Sam is originally from Rockville, Maryland. At MIT, Sam pursued the sciences across Chemistry and Biology (5-7) as well as Physics (8). Outside of school, Sam was active in the Marine Robotics Club, the ESG community, and the varsity dive team. Spending a significant time at the pool, Sam won 3 CSCAA Scholar All-American titles for diving, competing in the national championships 3 years in a row (rip 2020 Covid-19). Next year, Sam will be heading west to that 'other Tech school' in Pasadena to pursue a PhD in Medical Engineering.

# Candace Tong- Li – Course 7A



Candace Tong-Li is from Wellesley, Massachusetts. At MIT, she majored in biology and earned a minor in literature. Candace has always been fascinated by the intricacies of living systems, and pursued this interest through cancer and neuroscience research. She conducted research in the lab of Professor Troy Littleton at the Picower Institute for Learning and Memory, studying synaptic connections and how disruptions in signaling contribute to neurological diseases. While pursuing these endeavors in science,

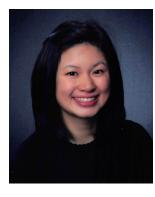
Candace has remained very active in the humanities. She is the author and illustrator of several children's books, and is currently working on a novel which champions young women in science. Music is also a huge part of Candace's life. She served as President of the MIT Ribotones, a service-oriented music group which performs for hospitals and senior residences. Her investment in education led her to serve on the board of the Educational Studies Program (ESP), and teach abroad in Germany. After graduation, Candace will be working at Boston Children's Hospital, conducting research to understand the mechanisms of neurodegenerative diseases and pain. She will embark on a medical career rooted in research and patient care.

# Crystal Tsui – Course 7



Crystal Tsui is originally from Hong Kong but has also lived in NYC and North Carolina. At MIT, she majored in biology and chemical engineering. Her interest in research persisted throughout the undergraduate years, thanks to the experiences at the Prather Lab and the Langer Lab. Outside of class, Crystal enjoyed being a part of Singing for Service and dance teams. After graduation, Crystal is pursuing a Ph.D. in bioengineering at Stanford University.

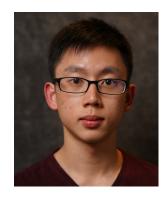
#### Cassia Wang – Course 6-7



Cassia Wang is from Jacksonville, Florida. She studied Computer Science and Biology and minored in Music. Her interests led her to pursue several projects in her undergraduate career in computational neuroscience (Harnett Lab), Parkinson's detection using machine learning, and the generation of novel proteins using ML. Apart from coursework, she served as a Medlink in McCormick Hall, and was part of Christians on Campus. She found ways to relax by playing hymns on the piano or her guitalele. She is

incredibly grateful for the opportunities that the Biology Department offered. She would like to thank Mary Gehring (Course 7 advisor), Joshua Stone, and 6.129 BioCEL for the opportunity to learn the most interesting programming language, Gro.

#### Leon Yim – Course 5-7



Leon Yim is originally from Taipei, Taiwan. During his time at MIT, he enjoyed studying chemistry and biology and doing research in both fields. In particular, he enjoyed learning about immunology and its role in cancer research. When Leon wasn't in class or lab, he was also involved in the Biology Undergraduate Student Association, MIT Borderline, and MIT Emergency Medical Services. He enjoys photography and reading whenever he could. After graduation, he hopes to be able to continue doing research and learning about biology.

#### Sherry Zhou – Course 5-7



Sherry Zhou's hometown is Vancouver, Canada, though she has been living in the Bay Area since middle school. In addition to majoring in Chemistry and Biology at MIT, she is minoring in French and has been very involved in the Terrascope first-year learning community. Her favorite aspect of her scientific research experience in the lab of Prof. David Sabatini and under the supervision of postdoc Kacper Rogala, where she began UROPing since freshman fall, has been the opportunity to pursue an

independent research project focused on elucidating the structure of a protein since junior fall. Her highlight of her French studies was her first trip to France as a January Scholar in France during IAP 2019. Terrascope has been a major part of Sherry's time at MIT; her favorite moments have been serving as an Undergraduate Teaching Fellow (UTF) for 12.000 and SP.360, the three Terrascope spring break trips she went on, and producing a Terrascope audio postcard this spring encapsulating the Terrascope experience of her and some fellow students. Outside of lab (where she spends most her time), the Terrascope room, and classes, Sherry can be found gardening with UA Sustainability, running MedLinks meetings and events as the MedLinks Residential Director for New House, and baking fancy cakes for her friends' birthdays and lab celebrations. After MIT, Sherry will find herself in even colder temperatures and more snow than Cambridge since she will be living

in Rochester, Minnesota, where she will be matriculating at the Mayo Clinic Medical Scientist Training Program and possibly trying ice fishing at the recommendation of her postdoc.

# Lena Zhu – Course 7



Lena Zhu is originally from the UK and grew up in the Chicago suburbs. At MIT, she double-majored in course 7 (Biology) and course 9 (Brain and Cognitive Sciences) and minored in Biomedical Engineering. She conducted research in the Grodzinsky, Van Vliet, and Tsai lab, was a Burchard scholar, participated in the Singapore-MIT Undergraduate Research Fellowship and the MIT-Imperial Research Exchange, and travelled with MISTI to Israel to teach and London to intern at a mental health

pharmaceutical startup and a femcare startup. On campus, she held various leadership positions, including vice-president of MedLinks, committee member for Asian Christian Fellowship, and director of advocacy for GlobeMed. Lena was also a TA for 9.00 Introduction to Psychology and a tutor for 9.40 Neural Computation. In her free time, she loves staying up talking with friends, playing tennis, trying new food places in Boston and Cambridge, and training for half-marathons with friends. After graduation, Lena is excited to move back to the UK to start medical school at the University of Oxford.