

# Natural Selections

A NEWSLETTER OF THE ROCKEFELLER UNIVERSITY COMMUNITY



**Jingyi Chi**



**Margaret Fabiszak**



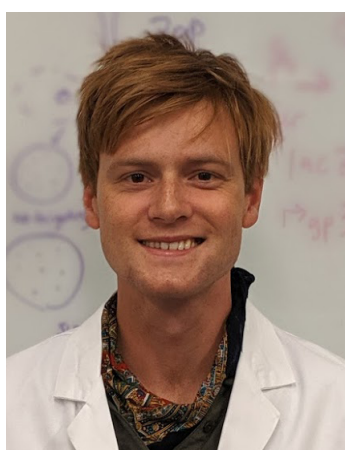
**Caitlin Gilbert**



**Rachel Leicher**



**Nicole Infarinato**  
*"Feel the fear, and do it anyway."*



**Jakob Træland Rostøl,**  
*"Another day, another dollar"*

## Graduating Class of 2021

MEGAN E. KELLEY

*Natural Selections* would like to honor and celebrate the 2021 graduating class from The Rockefeller University. On Thursday, June 10 at 2:30 p.m., Rockefeller will hold its second [virtual convocation](#) and confer doctorate degrees upon thirty-three graduate students. To the future doctors, congratulations! Your years of hard work and perseverance are an inspiration. We wish you all the best in the next phases of your careers and lives. ■

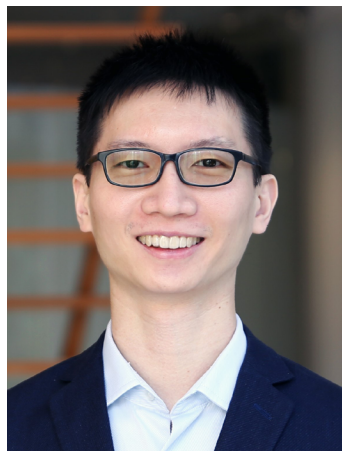
**Sanjeethan Baksh**  
**Caner Çağlar**  
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**Tiên Minh Thủy Phan-Everson**  
**Artem Serganov**  
**Rohan R. Soman**  
**Elitsa Stoyanova**  
**Tony Sun**  
**Taku Tsukidate**  
**Putianqi Wang**  
**Xiao Wang**  
**Ross Weber**  
**Robert Williams**



**Fanny Matheis**



**Elisabeth Anne Murphy**



**Xiphias Ge Zhu**



PHOTO COURTESY OF METROGRAPH PICTURES

## Sisters with Transistors

LANA NORRIS

Women have often been overlooked in the history of electronic music. Their mastery of new technology and alien sounds enabled them to innovate outside of traditional male-dominated structures, but even collaborations with John Cage, Merce Cunningham, Karl Stockhausen, MGM Studios, and Coca-Cola failed to cement their pioneer status.

*Sisters with Transistors*, a documentary film directed by Lisa Rovner, presents a remedial history chronicling the defining female figures of electronic music. The eighty-four-minute film is divided into roughly ten sections of public-domain, concert, interview, and even experimental cinema footage documenting each composer. The archival collage, like the creative history it depicts, is initially disjunct but coheres later on; artist Laurie Anderson narrates but the musical soundtrack is the real throughline.

To create their new musical vocabulary, these composers used an array of existing technology and also developed their own. Clara Rockmore popularized the theremin (an electronic instrument controlled by hand movements in air rather than physical contact). Suzanne Ciani fell in love with Buchla modular synthesizers. Éliane Radigue used the ARP 2500 to create airplane-inspired soundscapes. Daphne Oram collected tape machines from World War II and basic lab equipment to establish first a BBC electronic music division and then her own studio. When available tools were insufficient, Wendy Carlos helped advance the Moog keyboard, Bebe

Barron built her own circuitry, and Laurie Spiegel programmed compositional software for Macs.

Electronic music lends itself to interdisciplinary collaboration, and Maryanne Amacher reached beyond art and technology to integrate scientific research into her compositions. Conscious that the mammalian ear introduces distortions—phantom tones—which modify acoustic input,<sup>1</sup> Amacher “established practical and conceptual groundwork that centered auditory processes in composition.”<sup>2</sup> These women were doing the basic science of composing: there was no guaranteed profit or application from their efforts. In fact, electronic music was unpopular with both labor unions and the public alike. But the aesthetic influence of World Wars and space exploration eventually required new sounds. The MGM sci-fi *Forbidden Planet* (1956) featured Bebe Barron’s music as the first all-electronic film score; the film’s dying monster was the sound of a “dying” circuit. Seven years later, Delia Derbyshire—an Oxford mathematician turned composer—created the original *Doctor Who* theme song and shifted English public opinion on electronic music. Suzanne Ciani became the first woman to score a major Hollywood movie in 1981, and electronic music transitioned into

<sup>1</sup> Hudspeth, A. ‘Integrating the active process of hair cells with cochlear function’, *Nat Rev Neurosci*, 15 [online]. Available at: <https://doi.org/10.1038/nrn3786> (Accessed 02 May 2021)

<sup>2</sup> Cimini, A. and Dietz, B. (eds.) (2020). *Maryanne Amacher: Selected Writings and Interviews*. Brooklyn, NY: Blank Forms Editions

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public consciousness and pop music with the help of Wendy Carlos’ *Switched-On Bach* album.

These composers went beyond tinkering with radios: their work made social demands. They challenged traditional structures and founded influential departments. Oliveros explicitly correlated her electronic music with societal responsibilities during the Vietnam and Cold War eras, and her theoretical writings are still instructive today. She insisted that deep listening is radical attentiveness that gathers meaning, interprets, and ultimately shapes culture by deciding on action. These composers did exactly that, changing our soundscapes and cultural practices; *Sisters with Transistors* turns up their sound. ■

*Sisters with Transistors* had its U.S. premiere through Metrograph online 23 April 2021 and at the time of writing was only available through 06 May 2021. <https://sisterswithtransistors.com/>



# Pets of Tri-I

AUDREY GOLDFARB

A few weeks ago, a new resident moved into my apartment. We are already a full house: four humans, one cat, 500ish worms, and possibly some undetected mice or roaches residing in the walls. So, when a perky little axolotl dropped their bags in our doorway, I was a bit concerned with how they'd fit in. Luckily, I had nothing to be worried about. "Boba" is a delightful but unobtrusive housemate, and they even set their tank up right in front of the door to greet us all when we get home! This month, I finally made some time to get to know Boba better and also learned some things about axolotl biology. Boba's answers were translated by César Vargas and Marley Kern.

**Audrey Goldfarb: What does it mean to be "neotenic"?**

**Boba:** I am a baby. Basically, I am forever a baby salamander, never a grown-up salamander. So, I'll never go through metamorphosis like my frog and salamander cousins.

**AG: What is the most juvenile thing about you?**

**B:** My humans say I'm picky because I like my worms cut up into little pieces and they have to wash them for me. I spit my food out when I don't want it.

**AG: Conversely, are you especially mature in any way?**

**B:** No...not really.

**AG: If you could, what would you want to be when you grow up?**

**B:** Well, I don't really grow up, I just get bigger! But when I'm big I wanna be a worm biologist so I can study worms and figure out which is the tastiest!

**AG: What are your hobbies?**

**B:** Going with the flow and hanging out in the floating garden in my tank.

**AG: Do your humans give you treats?**

**B:** Not yet, they said when I'm bigger they'll let me try new foods.

**AG: Do your humans give you words of affirmation?**

**B:** Mmmhmmm! They tell me how cute and cool I am. I like it when they talk to me.

**AG: What is an issue you're passionate about?**



**B:** Composting! It's where the humans keep my worm dinners! They say it's good for other stuff too, but I don't know what else it would do.

**AG: Do you have any hot takes?**

**B:** I think fish are overrated, much better as snacks than pets. Also, I don't get why there's a big deal about my extinction, like I'm obviously alive, why do they say I'm going extinct?

**AG: Would you consider donating your body to science?**

**B:** Yup! I can grow my body parts back anyway, so I can donate an arm and a leg if science asks me!

**AG: Do you get lonely?**

**B:** Not too lonely, I'm watching the fluffy pet that runs around outside my tank.



**AG: Your tank is in a perfect spot to see everyone coming and going throughout the day. Do you find human behavior entertaining?**

**B:** Yeah! They look so funny on two legs, like, why do they do that? I like four legs much better. Sometimes their coming and going also interrupts my naps, but I know they are busy humans.

**AG: Describe your perfect Saturday.**

**B:** Take a walk around the tank, find a good spot to float, and nap the day away dreaming about worms.

**AG: What is your favorite thing about your humans?**

**B:** They take good care of me and give me yummy worms! ■

All Photos Courtesy of CÉSAR VARGAS





The Maestà and predella paintings by Duccio and workshop, Sienna.

## Culture Corner: Image and Image: How Photographic Reproductions Enhance the Experience of Art

BERNIE LANGS

*Duccio di Buoninsegna and His School*, by James H. Stubblebine, is a two-volume set of books examining the fascinating period of early Italian Renaissance art from 1285 up to about 1330. The second volume features over 500 black and white photographs of the paintings discussed in volume one, including each of the surviving works of Duccio (b. c1255-60; d. 1319) and many of those by his assistants and fellow artists in Sienna.

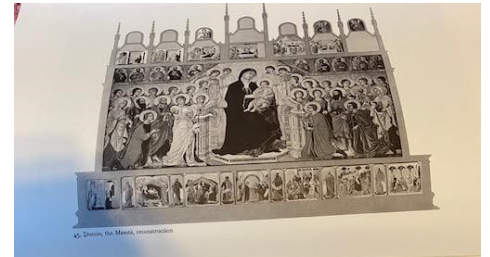
Art experts and novices alike prepare their pilgrimages to museums, churches, galleries, and civic and cultural centers by studying ahead of time the artifacts they'll encounter. Full color and black and white reproductions in books such as Stubblebine's provide the essential tools for comprehending the history of an original piece, including the painter's personal background, how his or her creations reflect the historical epoch in which they were constructed, where an individual painting fits into the overall oeuvre of the artist, and the circumstances under which the work of art was commissioned. When lacking detailed primary documentation, art historians painstakingly examine and opine about individual paintings, sculptures, etc., in the hope of identifying the artist who created it.

Reading Stubblebine's detailed analysis of every known work by Duccio and his school, one senses that the study itself is in some cases as equally gratifying as viewing the actual work of art. The real thing is, of course, usually superlative to the printed duplicate, but that does not take away from the important role played by art historians who share their expertise, supplemented

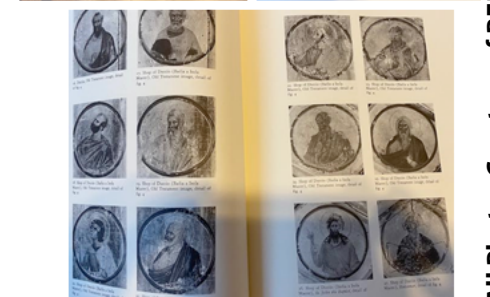
by photographic replicas, to train and prepare dedicated readers on what to look for in the presence of original art.

*The Maestà* is a masterpiece of early Italian Renaissance painting by Duccio and a perfect example of how reading about art assists in the enjoyment of the object. I have viewed reproductions of the central panel of *The Maestà* for decades, along with the sixty autograph or workshop-produced smaller works that complement it. Upon seeing it in person in Sienna, it became clear that no book, photo, or film could replicate the stunning beauty and overwhelming presence of the painting. The colors are muted yet unexpectedly bright at appropriate times, with the bold central figures of the Virgin and Child surrounded by a multitude of Saints presented in awe-inspiring symmetry. Duccio's mystic expression is placed within the confines of idealized beauty that's neither of heavenly eternity, nor set in a static "time and place." Somehow the subject and painting are also outside the realm of our tangible world.

Stubblebine's description of the painting in *Duccio and His School* and the Volume Two book plates are of service in explaining its meaning and where it lies in historical context within the progression of art history. The book's analysis of the dozens of works created to accompany *The Maestà* is extraordinarily helpful, since when you are in the presence of such wonder, there's no conceivable way to take it all in unless you have hours and hours to spend in that one single room, choosing



Photographic plates of *The Maestà* in *Duccio di Buoninsegna and His School (Two Volumes)* by James H. Stubblebine, Princeton University Press; First edition (March 21, 1980)



*The Rucellai Madonna* (1286), *The Uffizi Gallery, Florence.*

*The Rucellai Madonna and its rondels in detail; plates in Vol. 2 of Duccio di Buoninsegna and His School (Two Volumes)* by James H. Stubblebine, Princeton University Press; First edition (March 21, 1980)

All Photos Courtesy of BERNIE LANGS

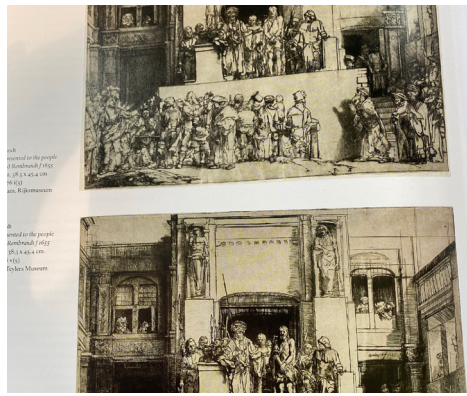


to abandon the multitude of additional treasures that Sienna offers elsewhere. At home, reading in the evening by lamplight, one has the luxury of time and multiple sittings with the book for a careful study of the entire project.

Duccio's *The Rucellai Madonna* (1286) has the honor of being one of the first masterworks on display when entering The Uffizi Gallery in Florence. It is situated close to similarly large wonders by Duccio's brethren of the late 1200s and early 1300s, Cimabue and Giotto. Reproductions of *The Rucellai Madonna* are unable to capture its essence and power of presentation, but as with the sixty predella works of *The Maestà*, there are thirty small rondels surrounding the Virgin, Child, and angels, which most visitors to the museum give but a cursory glance. With an in-depth study such as Stubblebine's book, the reader is treated to a Sherlock Holmes-like revelation and tale of how art historians identified as best they could who is represented in these small works and what meaning the figures may have held in Duccio's time.

One of Kenneth Clark's finest books is *Rembrandt and the Italian Renaissance* (1966), a detailed study of how Rembrandt van Rijn (1606-1669) in his prints and paintings was influenced by the Italian works of art he was most likely exposed to during his lifetime. A memorable sequence in the book is the enthusiastic description of varying states of Rembrandt's print created in 1665, *Christ Presented to the People* (*Ecce Homo*). Clark undertakes an exacting discussion of the architecture of the scene and how Rembrandt developed and made radical changes on the etching's plate as he worked out the ultimate expression of the scene, aided by what he learned from the Italian masters of the Renaissance. These pages about the prints are in many ways much more interesting than the actual images on paper themselves.

While watching the 2004 movie *The Passion of the Christ*, I noticed that director Mel Gibson's set depicting ancient Jerusalem for the *Ecce Homo* scene of the Christ story owed a great deal to Rembrandt's print. The movie, dubbed by one film critic as "the most violent film ever made," displays *Ecce Homo* as a revelation guided by the director's use of the setting in which the action unfolds, thereby giving the moment a power unequaled in other films center-



Two states of 1665 print by Rembrandt, *Christ Presented to the People* (*Ecce Homo*). From *The Rembrandt Book* by Gary Schwartz, Harry N. Abrams, Inc." (October 1, 2006)



Photo of television image on Amazon Prime Video of *The Passion of the Christ* (2004);



*The Allegory of Good and Bad Government*, fresco panels by Ambrogio Lorenzetti (1338 and May 1339), Palazzo Pubblico Sala dei Nove, Sienna

ing on the New Testament. The sequence in *The Passion* when Pontius Pilate shouts out to the angry mob below him in the ancient square his infamous declaration *Ecce Homo!* (Behold the Man), enhances the understanding of Rembrandt's prints as a study in the delicate balance of place and people in art, with classic architecture manipulated in service of religious expression and emotion.

Standing in Siena's Palazzo Pubblico's *Sala dei Nove* to view the fresco series painted by Ambrogio Lorenzetti, *The Allegory of Good and Bad Government* (1338 and May 1339) is one of life's great pleasures. I've seen countless photos and posters of the walls, which display in a complicated allegory warning to the politicians

of late medieval Siena that corruption, dishonesty, and ignoring the will of the people is but a path leading to inevitable disaster. When I walked into the chamber, all of my past "training" seemed to dissipate, and the many chapters I'd read about the cycle's meaning and history refused to be called forth to consciousness. In addition, I was literally shocked by how many large sections of the frescos had disappeared forever due to the merciless, ravaging Hand of Time, leaving sections of exposed plaster here and there. As I finally began to get my bearings, the wonder of the art overwhelmed me and the sumptuous details of Lorenzetti's masterpiece spoke of varying joys, pains, dances, and deaths, a wonder of experience. ■



# Father's Day

AILEEN MARSHALL

Father's Day this year is June 20. Founded by a woman who was raised by her widowed father, it has been celebrated in this country on the third Sunday in June for almost a hundred years. Despite its popularity, it took more than sixty years to be recognized as a federal holiday in the United States.

Sonora Smart Dodd is the person credited with starting the Father's Day tradition we now practice in the United States. She was born in 1882 in Arkansas to Civil War veteran William Smart and his wife Ellen. The family moved to a farm outside of Spokane, Washington in 1889. In 1898 Sonora's mother died giving birth to her sixth child. William raised all six children with the help of his only daughter. Sonora later married John Dodd. In 1909 she heard a church sermon about the newly established holiday, Mother's Day. She felt strongly that men like her father should be honored, too. She approached church ministers about having such a day on June 5, her father's birthday. The ministers felt they didn't have enough time by that day, so they held it on June 19, 1910, the third Sunday of that June. Dodd also appealed to shopkeepers, the YMCA, and politicians. During the 1920s Dodd attended the Art Institute of Chicago, but after graduation she returned to Spokane and again worked to get support for and promote her idea.

In 1913 a bill declaring Father's Day was introduced in Congress but did not pass due to fears that it was just a commercial holiday. In 1916 President Woodrow Wilson celebrated by sending a telegraph to Spokane to raise some flags. He also supported making Father's Day a holiday but couldn't get it passed. President Calvin Coolidge recommended making it a holiday in 1924, but never issued a proclamation. In 1966, President Lyndon Johnson issued a presidential proclamation honoring fathers on the third Sunday in June. Finally in 1972, sixty-three years after Dodd first started petitioning, President Richard Nixon made Father's Day an official federal holiday.

There was evidence for the politicians' fear of commercialization of the holiday. Even when Dodd first started promoting the holiday, she had the help of several trade associations, who realized that they could benefit from a new holiday,



Hiking tour on Father's Day, Vatertagswanderung, in Germany

Photo Courtesy of WIKICOMMONS

particularly manufacturers of menswear and tobacco. The Great Depression spurred retailers to further promote men's gifts for that day. By the 1980s the Father's Day Council noted that it was a "second Christmas for the men's gift-oriented industries."

Some sources claim that the tradition of Father's Day was started in West Virginia, but this is not the case. In December of 1907, a coal mine exploded in Monongah, West Virginia. Over three hundred men were killed. The following spring, Grace Golden Clayton proposed a service in her church to honor all the fathers among the victims. It was only meant to be a one-time event, held on July 5, 1908. The sermon was never published, the event was never promoted beyond that specific date and town. It wasn't celebrated again until many years later when Father's Day had become popular.

Many European countries celebrate fatherhood on March 19, also known as Saint Joseph's Day. The Catholic Church promoted this custom as far back as 1508. Early Spanish and Portuguese immigrants continued this tradition here. Many other countries around the world have taken up the American-style celebration of Father's Day in June. Germany has had a unique practice since the 1700s. They celebrate a men's day or gentleman's day on Ascension Thursday, which is forty days after Easter. Groups of men will walk to some destination pulling a wagon full of wine and beer bottles and some provincial food, usually



Photo Courtesy of RECIPELION

including ham. This goes back to an old farming tradition where a town would recognize the man with the most children with a prize. During the twentieth century, the tradition had become an excuse to drink heavily. Germany's Federal Statistical Office reports that traffic accidents increase by threefold that day.

Today the practice in the United States is to give one's father conventionally gender-oriented gifts such as ties, tools, or sports gear. Some families may get together for a Father's Day brunch or cook-out. And there are many greeting cards sent each year. It will be interesting to see how the holiday evolves in the future. ■



## New York Rhymes: Haiku

KONSTANTINA THEOFANOPOULOU

Sun shines remembrance  
My skin pores still sweat your name-  
deafening, silence.

*by* Konstantina



Poetry: Dr. Konstantina Theofanopoulou (Instagram: [@newyork\\_rhymes](#))

One line art: Mikaella Theofanopoulou (Instagram: [@m\\_theta\\_art](#))



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The Rockefeller University's PRISM, MSK's LGBTQ+ PRIDE ERN, & Weill Cornell Medicine  
present

# 2021 VIRTUAL PRIDE CELEBRATION



Friday, June 25 from 7:00pm-8:00pm

Featuring Performances By: Local NYC drag queens (To be announced)

Registration will be required prior to event. More details to follow.

**LGBTQ+ Pride**  
MSK Lesbian, Gay, Bisexual, Transgender, and Queer+ Pride



**Weill Cornell  
Medicine**



**PRISM**





# Celebrate PRIDE!

Friday, June 18, 12:00-1:00PM

Presenter: Barbara E. Warren Psy.D.

Assistant Professor of Medical Education & Director for LGBT Programs and Policies, Mount Sinai Health System

Dr. Warren will lead a presentation and discussion about academic medical center's efforts to identify and support LGBTQ+ clinicians, trainees and staff

Join Zoom Meeting

<https://zoom.us/j/95666693545?pwd=QVBtOE50S0srOXJ4bTRzMm9HMIbPbUT09>

No need to pre-register. Contact [nes2014@med.cornell.edu](mailto:nes2014@med.cornell.edu) if any questions



**Weill Cornell  
Medicine**

**LGBTQ+ Pride**

MSK Lesbian, Gay, Bisexual, Transgender, and Queer+ Pride



**PRISM**

**We are proud to be part of this WCMC event that will fall under the greater umbrella of our Tri-I Virtual Pride series!**

**There is no need to pre-register,  
simply join with the link below:**

<https://zoom.us/j/95666693545?pwd=QVBtOE50S0srOXJ4bTRzMm9HMIbPbUT09>

**Contact [nes2014@med.cornell.edu](mailto:nes2014@med.cornell.edu) with any questions.**