

# Natural Selections

A NEWSLETTER OF THE ROCKEFELLER UNIVERSITY COMMUNITY

## Politics Under the Microscope

JOANNA YEUNG

*Politics Under the Microscope* (PUTM) is a student-led podcast by graduate students Joanna Yeung, Ellie Thompson, Naira Abou-Ghali, and Nina Glenn. PUTM aims to capture the thought process of policy makers as they respond to complex problems and to discuss the implications those policies will have for the scientific community and broader society. On the morning of Saturday March 6, Joanna and her fellow colleagues shared their perspectives on being a part of Politics Under the Microscope.

**What is PUTM? How would you describe our missions and values?**

**Ellie Thompson:** PUTM is like an octopus because we do so many things. We advocate for the use of a scientific perspective when analyzing and discussing political, social, and contemporary issues. Through our podcast, we also aim to recruit and retain underrepresented minorities in STEM

in addition to recruitment of scientists into the political landscape.

**Nina Glenn:** The heart of PUTM really comes back to education. Ultimately, we want to give people the tools to be well-informed citizens who can create tangible actions based on that information. Our goal is to empower people after educating them so that they can take an informed and rational viewpoint into these discussions to educate other people and to continue educating themselves.

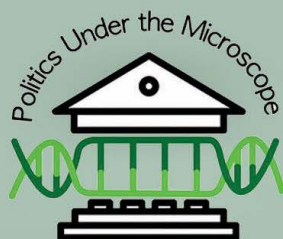
**Joanna Yeung:** Not only is PUTM about educating other people but also about educating ourselves. We are all young scientists trying to learn more science policy and PUTM was the perfect excuse for me to get more involved with science policy.

**How did the PUTM members all meet each other?**

**Naira Abou-Ghali:** The Grants Office at Weill Cornell is really proactive about sending opportunities. While I was scrolling through my emails, I saw an opportunity to get funded for a science policy themed podcast through Research America. I thought starting a podcast would be the perfect way to learn about science policy, but I needed other people with me because I knew I couldn't do it alone. I sent a message through the SEPA (Science and Education Policy Association) Slack group and I was lucky enough to have Joanna, Ellie, and Nina reply. The rest is history.

**ET:** Within the span of a week of meeting each other, we were able to work on the Research America grant, submit it, and actually get funded!

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1st Year Ph.D. Student  
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**JOANNA YEUNG**

2nd Year Ph.D. Student  
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**Out of all the episodes PUTM has produced so far, what kinds of discussions have been really inspiring or insightful to hear about?**

**ET:** The Reverend Holt interview was the most powerful to me. As scientists, we are so focused on the lab bench. But Reverend Holt made me realize, “Will the science I do get to the people that we care about? Will it be accessible to everyone in society?” Scientists have a role with what happens with our science and how our science is used to benefit the community as a whole.

**NAG:** For me, it was also Reverend Holt’s interview. I can remember getting goosebumps from just her introduction. She is a black woman who was not born at a hospital because at the time, it wasn’t allowed. She takes us to the rest of her journey of advocating for the underserved and under-represented when it comes to their health-care. That interview highlighted the journey of one woman that had a background in science as a nurse but didn’t actually work at the bench and she is doing incredible work for equitable access. As a scientist, we can take the extra steps to advocate for policies that bring our research out there and guarantee equitable access. We are only 1500 words away from making an impact, which is the length of a policy brief. It was just an incredible perspective to hear.

**NG:** Something that stuck out to me in Representative Moulton’s interview was when he mentioned K through 12 education. He noted that it’s great to care about college education, but a lot of people don’t make it to that point. It’s important to invest in what’s there (scholastic resources before the undergrad/grad level). It shows how essential it is to have well-informed policy makers because they are who we point to in society.

In Representative Houlahan’s interview, she talked about how nonlinear paths in science still matter, but are not always considered when we think about the way that policies or school policies are made. For instance, what kind of support is there for a single mother in grad school? We have to think about what the broader society looks like and not just what we look like. We need to consider how we can use our personal stories to empower other people who might have entirely disparate stories

but are going through a similar experience. The biggest takeaway was the ability to use policy to see these recurring themes in science and being able to connect different pieces of society together.

**JY:** What I really took out of the Reverend Holt interview was the prevalence of mistrust towards COVID-19 vaccines. I’ve lived in a very privileged bubble and haven’t considered that people could have mistrust towards something that I would have absolute trust towards.

In addition, [Representative] Houlahan’s interview made me think about my privilege when she talked about her experience as a grade 11 chemistry teacher. She said something along the lines of “do you know how hard it is to teach grade 11 chemistry when the students that you’re teaching have grade three to four reading level?” This made me aware of how many people don’t have access to high quality education throughout their whole lives and as a result, have difficulty with learning more complex concepts because they lack those foundational skills. It was really insightful for me to just learn about people outside of my little bubble that I exist in.

#### What are PUTM’s future plans?

**ET:** With regards to outreach plans, we have been offered [a] guest instructor opportunity with HypotheKids to teach underserved 11th and 12th graders in the New York city area about the practical applications of science.

**JY:** We have a lot of cool episodes in mind that we haven’t gotten to yet. One topic we are interested in covering is climate change and the policies around that. We’re also super excited about the mental health series.

**NAG:** We are also planning an episode series on feminism and misogyny in STEM. We would like to talk about protecting women, especially women of color in science. You read these bone chilling accounts of the way that some women of color specifically are treated in high knowledge environments and it’s just unacceptable. That is a really important thing that we have to address as well.

**For more information about Politics Under the Microscope, check out our website, social media accounts, and add us to your playlist on Spotify! ■**

## Natural Selections

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# Mindfulness for Skeptics: Is Meditation a Waste of Time?

SEAN WALLACE

As an enthusiastic meditator, I am delighted that mindfulness is now a household word. An increased awareness of the benefits of meditation has led more people to try mindfulness practices to help combat stress, anxiety, and other afflictions, often at the suggestion of health care professionals. Mindfulness is a form of meditation that typically involves sitting quietly and focusing the attention on the sensation of the breathing. Experienced meditators claim that this practice helps to cultivate desirable mental states, including feelings of tranquility, equanimity, and even bliss. This practice may result in lasting changes in everyday life, including increased ability to focus on a task without being distracted, to deal with stressful situations in a detached manner, and to avoid getting caught up in negative emotions. In a nutshell, mindfulness makes you happier.

Meditation is an ancient practice that is traditionally associated with Eastern religions, including Buddhism and Hinduism. Meditation, like all religious practices, involves a fair amount of ritual and is accompanied by certain beliefs about the nature of the universe that do not sit well with a modern scientific worldview. When meditation was introduced to the West in the 1970s, its association with mysticism was met with skepticism by the scientific community. Western students of meditation were associated with the psychedelic hippie culture of the 1960s and 70s, which further reduced the credibility of meditation as a serious practice. Despite the flourishing of secular approaches to meditation, its origins as a mystical practice and its ongoing association with “spirituality” (whatever that may mean to you) can still be off-putting for some people. Meditation in its most fundamental form, however, is simply a technique that involves using attention in specific ways to train the mind. There is no need to sit cross-legged on a cushion, burn incense sticks and chant in Tibetan to meditate (although by all means do if you find it helpful). Modern approaches to meditation have adapted the ancient practice of mindfulness for a secular audience.

Today mindfulness is a billion-dollar industry. Overblown claims about its utility as a cure for all modern ailments can make mindfulness seem like a trendy health fad. A comparison is often made between meditation and physical exercise. Just as physical exercise improves the health of the body, so does mental exercise improve the health of the



PHOTO COURTESY OF MONETI/ADOBE STOCK

mind. The problem with this analogy, from the point of view of the skeptic, is that the benefits of physical exercise are obvious for all to see, while the benefits of meditation are primarily mental and much more difficult to ascertain. When faced with an Olympic athlete and a couch potato, nobody doubts that physical exercise can improve the functioning of the body. When an experienced meditator claims that their practice makes them feel better, the skeptic is not so easily convinced. To make things worse, most people find their first attempts at practicing mindfulness to be underwhelming. Focusing on the breath or any other subject for a period of time is surprisingly difficult. Novice meditators may doubt whether the effort is worthwhile.

The benefits of meditation take some time to become apparent. There are countless examples of anecdotal evidence for these benefits. I have an anecdote of my own; I have been practicing mindfulness meditation for several years now, and I am convinced that it helps me feel less stress, sleep better, and has improved my overall mental well-being. But there are also countless examples of people who are convinced of the healing powers of

crystals or homeopathy. For a skeptic who has tried to meditate and found no benefit, why persist with a practice that takes up valuable time?

Fortunately, we do not need to rely on anecdotes to be confident that mindfulness practice results in tangible benefits. Despite the initial hesitation of the scientific community to take meditation seriously, there has been an explosion of research papers on the subject in recent years. A PubMed search for ‘mindfulness’ has approximately 20,000 hits today. There is, however, still plenty for the skeptic to object to even here. Most scientific studies on meditation are epidemiological in nature and involve comparing groups of meditators to non-meditators for the traits of interest. Controlling for confounding variables is notoriously difficult in these kinds of studies. Individuals who choose to take up meditation practices are likely to be more health conscious than the general population and separating the effects of meditation from those of diet or exercise, for example, is challenging. There is, therefore, a great deal of

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variation in the quality of the research papers published on mindfulness. However, there have been many rigorous, well-controlled studies that have been able to attribute improvements in mental function to specific mindfulness practices.

Mindfulness practice is often undertaken in the form of a Mindfulness-Based Stress Reduction (MBSR) course, as pioneered by Jon Kabat-Zinn. These programs typically involve thirty minutes of daily meditation over an eight-week period, including mindfulness of the breath and body scans, where the attention is focused on bodily sensations. There have been hundreds of studies that show beneficial changes in individuals who participate in one of these courses. One study used fMRI to assess the brain activity of participants who had completed MBSR courses. Participants were presented with disturbing images as stressors and researchers found significant decreases in amygdala activity that correlated with reduced self-reported stress reactivity. A similar study found reduced levels of stress hormones when individuals who completed a MBSR course were exposed to stressful situations. A third study found that after completing the course, participants demonstrated increased ability to concentrate on specific sensory inputs. These changes were observed following about thirty cumulative hours of mindfulness practice, but improvements in attention have been observed in novice meditators who have been instructed in mindfulness meditation for as little as ten minutes. While these effects are certainly transient, they show that even small doses of mindfulness can be helpful.

For those who wish to take their meditation practice deeper, there have been studies of long-term meditators with thousands of hours of practice under their belt, showing profound changes in the brain, including a reduction in baseline activity in regions of the prefrontal cortex that are associated with wandering minds. These studies demonstrate that experienced meditators are less likely to be lost in thought even when they are not actively engaged in their meditation practice. For a comprehensive and critical analysis of the scientific studies of meditation, I strongly recommend reading *Altered traits: science reveals how meditation changes your mind, brain and body*, by Daniel Goleman and Richard J. Davidson.

I hope that this article has convinced skeptics that meditation is an activity that is worth considering. Even hard-nosed materialists who balk at the idea of spirituality can benefit from training the mind. If you are starting

out with a meditation practice, it is important to have realistic expectations. The benefits of meditation are gradual, and patience is required. Novice meditators often give up because they are unable to focus on their breath for more than a few seconds and they realize how thoroughly out of control their mind is. This realization is actually a sign of progress. Most people are not aware that they spend most of their life in a state of distraction. Once you notice you are distracted, you can choose to return the awareness to the breath, even if only for a few seconds before you are lost in thought again. Repeat this process infinite-

ly, and the ability to notice what is going on in your mind will gradually strengthen. Everything you experience, feel, and care about takes place in your mind. Often it is your reaction to life's events, and not the events themselves, that influences the quality of your existence. The ability to observe your inner mental state at any moment is a skill that allows you to get off the rollercoaster of reactivity that so often dictates your responses to situations. This enables you to respond in more positive ways to events as they occur, and ultimately improves the quality of your life and the lives of the people you interact with. ■

## New York Rhymes

KONSTANTINA THEOFANOPOULOU

EMIT

Time

I flip it around: emit

I emit

I emit time

I emit seconds, hours, years

My breaths emit clockwise cyclic motivations

On watch.

My breaths break

I emit words

They come out in structure, one after the other,  
stamping the fleeting present,

they emit future.

My breaths break upon you.

They now emit present.

One breath comes by and brings the other, a sequence of present –

Quasi cyclic motivations

Counter-clockwise

My breath surrenders.

*Ky* Konstantina

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

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

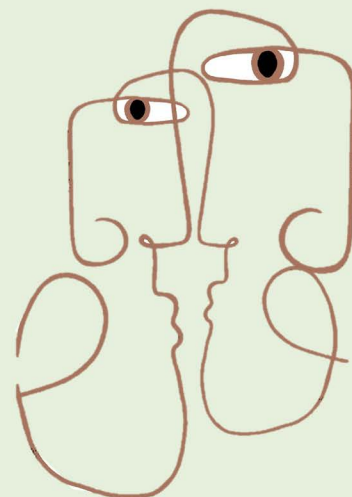




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*"Earth Day 50th Anniversary Celebration - U.S. Army Garrison Humphreys, South Korea - Apr. 22, 2020"*

## Earth Day

AILEEN MARSHALL

April 22, 2021 will be the 51st Earth Day. What started as an educational initiative in the United States has evolved into an annual global event to advocate for the environment.

The roots of Earth Day go back as far as the 1962 publication of Rachel Carson's *Silent Spring*. That was the first impetus that made Americans aware of the effects of pollution. On January 28, 1969, an oil well off the coast of Santa Barbara, California spilled three million gallons of oil and killed more than 10,000 sea creatures and birds. The news coverage caused an increase in public awareness and support for the environment. Then, at the 1969 United Nations Educational, Scientific and Cultural Organization (UNESCO) Conference, a proposal was made to honor the Earth on March 21, 1970; the day of the vernal equinox, also known as the first day of spring. The United Nations still observes

Earth Day on March 21 and rings a Japanese peace bell at the exact moment of the equinox.

Senator Gaylord Nelson (D-Wisconsin), inspired by the youth activism at the time, proposed a national environmental teach-in day for April 22, 1970. He chose that day because it didn't interfere with finals and most students would still be on campus. He recruited Dennis Hayes, a youth activist at Stanford University, to oversee coordinating activities. Senator Nelson provided his office staff to help Hayes. The United Auto Workers union was the largest financial contributor and provided office supplies. Hayes later said the first Earth Day wouldn't have been possible without their support. Hayes changed the name to Earth Day which caught on with the media. He is still on the board of the organization today.

The first Earth Day in 1970 was celebrated in over 10,000 schools across the country and many cities including New York, Philadelphia, Washington DC, Chi-

cago, and Los Angeles. Here in New York a group of Columbia University students got Mayor Lindsay to close part of Fifth Ave for the occasion. He also made Central Park and Union Square available for festivities. Paul Newman and Ali McGraw spoke in Union Square to much press coverage. In Philadelphia, Senator Edmund Muskie, Ralph Nader, Allen Ginsburg, and Harvard biochemist George Wald spoke. In Washington DC, Pete Seeger performed and members of Congress gave speeches. It was later that year that bipartisan support established the Environmental Protection Agency (EPA) and the Occupational Safety and Health Administration (OSHA). [The Earth Day organization](#) has helped advocate for many environmental protection laws since then, including the Endangered Species Act.

Since 1970, the event has grown and evolved. By Earth Day 1990, the event could be promoted on the internet and over

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email, as well as on television. Funding was in the millions, allowing the event to go global. Over 140 countries participated. That year, the focus was on recycling. There was a live phone call from the state of Washington to an international group of climbers on Mount Everest. The team of climbers from China, Russia, and the United States collected two tons of trash from the mountain. In 1995 the website [earthday.org](http://earthday.org) was established. By Earth Day 2000, 184 countries had joined in. Almost half of a million people gathered on the Washington Mall to hear Leonardo DiCaprio and others speak. In 2017, the organization coordinated with the March for Science, a group that advocates for science literacy and evidence-based policies. The 50th Earth Day in 2020 was celebrated on-line due to the COVID-19 pandemic, another example of the effects of environmental issues. The focus had shifted to citizen science and community engagement. There were three days of live stream events, with Bono, and even Pope Francis joining in.

Earth Day is now considered the largest secular event in the world. This year's theme is Restore Our Earth, with a focus on clean-up events particularly in areas disproportionately affected by climate change. To learn more about the organization and this year's activities, go to [earthday.org](http://earthday.org). ■

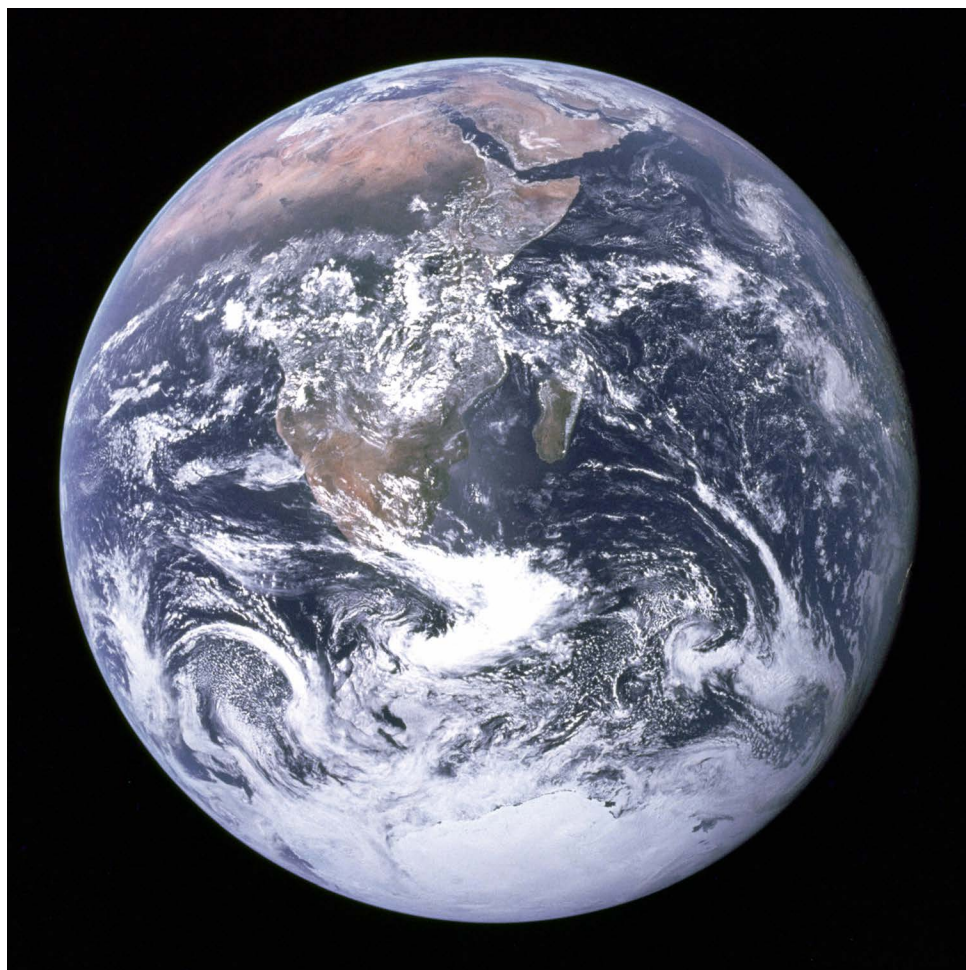


PHOTO COURTESY OF WIKIMONS

"The Blue Marble is a famous photograph of the Earth taken on December 7, 1972, by the crew of the Apollo 17 spacecraft en route to the Moon at a distance of about 29,000 kilometers (18,000 mi). It shows Africa, Antarctica, and the Arabian Peninsula. It has become a famous symbol for Earth Day."

## Natural Expressions

### Art

Jennifer Groves, Program Manager in the Research Support Department at The Rockefeller University and visual artist is offering a mixed media collage instruction class. This class in vision boarding/collage making will take place via [Zoom](https://zoom.us) from 1-2:30 p.m. on Saturday, April 24, is \$20 per person, and can be tailored to the interests of the students. Students are asked to bring their own materials and can email Groves at [grovesj@mail.rockefeller.edu](mailto:grovesj@mail.rockefeller.edu) to sign-up or for more details. Examples of Groves' artwork can be viewed on her [Instagram](https://www.instagram.com/).

### Music

Santa Maria Pecoraro Di Vittorio of

the Rice Laboratory at The Rockefeller University announces the international CD release of the Chamber Orchestra of New York performing Ottorino Respighi's music. Vittorio was a violist in the orchestra, which performed pieces such as *Ancient Airs and Dances Nos. 1-3* and *Violin Concerto "all'Antica."* The album is available from Naxos Records and can be listened to [online](https://www.naxos.com/).

Nick Didkovsky, Bioinformatics Group Supervisor in the Heintz Laboratory at The Rockefeller University, recently played guest guitar on Frank Pahl's latest record, "In Cahoots: Vol 3." Describing the collaboration, Didkovsky said Pahl was "one of my favorite composers, and it was a joy to arrange some guitars for one track on his new release." You can view Didkovsky playing his parts on his [YouTube page](https://www.youtube.com/), while the full album

is available on [Pahl's Bandcamp page](https://pahl.bandcamp.com/).

Bernie Langs of The Rockefeller University Development Office announces the release of two songs this month, "Turn Off the TV Set" and "Till There Was You." Langs composed and recorded "Turn Off the TV Set," while Richard Spanbock, drummer and songwriter for the Robbins Lane Band wrote the lyrics. Langs performed "Till There Was You," originally written in 1950 by Meredith Wilson and covered by The Beatles in 1963. You can listen to ["Turn Off the TV"](https://www.youtube.com/watch?v=...) and ["Till There Was You"](https://www.youtube.com/watch?v=...) on Langs' SoundCloud page. ■

Email Megan E. Kelley at [mkelley@rockefeller.edu](mailto:mkelley@rockefeller.edu) to submit your art/music/performance/sporting/other event for next month's "Natural Expressions" and follow @NatSelections on Twitter for more events.

## Culture Corner: *The Plot* and the Process of Writing a Novella

BERNIE LANGS

Over the past twenty-five years, I've written over two dozen novellas and abandoned about a dozen others mid-creation. Each writer has their own process, and it is the process itself that is so satisfying when creating fiction. Some authors map out an outline of their plot in advance, while others maintain biographical files for each of their characters, ensuring that their motivations and behavior remain consistent with their backstories. I use a "real time" methodology by filling in details as I create images to apply over the primer coat on the canvas of imagination. This allows for events to spontaneously roll out and evolve as I act as a somewhat passive chronicler rather than omniscient power, creating the illusion that the characters maintain free will responding instinctively to unexpected situations.

My books are inspired by revelations and chance events witnessed in day-to-day life. For example, after visiting an antique arts establishment where a gallery assistant explained to me the meaning of several celestial maps engraved by Andreas Cellarius, I began writing a story centered around the magical images, with the gallery scenario setting off the action (*The Lamentation for the World*). While watching the James Bond film *Skyfall*, when Bond's ancestral house in the wilds of Scotland appeared onscreen, I thought, "I'm going to put a ghost in that old mansion" (*The Ghost of Whispering Pines*).

Once I receive that spark of an idea, I intuitively sense the main characters who will undergo the book's adventures. At times, I use personality traits of my friends or borrow perceived and implied personas from strangers I see in passing for the demeanor of individuals appearing in the novella.

Once I have the major premise in mind, I commence each writing session knowing at most two vaguely imagined scenes of action at a time so as not to get ahead of the story. I write with key phrases of dialogue and basic events at the ready prior to sitting down at the computer. I never want to know how a book will end until very late in the process. With characters behaving in a "real time" world, each personality develops naturally and interacts with new arrivals to the action, veering off in unexpected ways. Early in the writing of one of my older books, I found a secondary character taking over as the main character after realizing through his dominating actions and ideas



The Plot by Bernard Langs is available as a Kindle Book on [Amazon](#).

that he was much more interesting than the original protagonist (*The Minister of Peace*).

My books eventually morph into complex and intriguing puzzles and after about eighty or so pages, it dawns on me how everything fits together. This unexpected "reveal" of what has unknowingly been going on the entire time is my favorite part of the

creative process.

My most recent novella, *The Plot*, was inspired by several eureka moments that coalesced prior to committing pen to paper. While watching the sci-fi movie *Annihilation*, I suspended my imagination and saw

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the actors as they truly were—people saying lines of a script with a camera and crew lurking unseen nearby. Yet the cast was so engrossed in the setting and their roles, it was as if their space had become a reality located somewhere between our world and one of film fantasy.

Another inspiration for *The Plot* was a trip to London and Florence in 2018. At dinner in a restaurant in Florence, I spied a mysterious middle-aged man dining alone, obviously held in high esteem by the wait staff. I told my wife, “I don’t know what my next book is going to be about, but it’s going to begin in *this* restaurant with *that* guy at *that* table.” Which is exactly how it is played out in chapter one of *The Plot* with those very words spoken by one of the central characters.

The lead characters in the novella are Robert Halle, based on the persona of the true-to-life 58-year-old British actor, Ralph Fiennes, and his younger counterpart, Guy Randolph, based on the physical traits and personality of Leonardo DiCaprio. With an actress, Felicity Felicitas, modeled after the British star Lily James, the three are working on a free-form film directed by an innovative young Argentinian director, Alejandro Alencia, whom I created as an amalgamation of several real-life current foreign directors. Their movie is being shot in Florence with additional scenes taking place at a Palladian Villa and Hampton Court Palace in the UK. The actor Halle portrays an intelligence agent, Karl Smythe, in service to England trying to unravel the mystery of why a novel written by Randolph’s character, Justin Teagle, has set off an international crisis the nature of which has yet to be completely understood.

Robert Halle acts as the narrator of the action both as himself and as his film persona, Agent Smythe, and the reader discovers that when he and Guy Randolph undergo the best “take” of a scene, their reality as actors completely vanishes and they become unwittingly immersed into the world of Alecia’s arthouse film, *The Plot*. The movie characters face growing danger as the situation in the film becomes dire, and the actors are forced to gamble prior to the cry of “Action!” that they will emerge from the fantasy before any permanent harm is inflicted upon them. As the stakes grow higher in the movie they are filming, the chances increase that Halle and Randolph will lose the capacity to escape from Alencia’s fantasy, yet

they are willing to risk their lives to find out what will ultimately occur in the alternative movie reality.

I knew that at some point I would have to explain the details and specifics of what lurks behind the espionage in the imaginary film world. My own understanding of where the book was ultimately going began when I caught sight from a distance of an Italian friend of mine and thought, “She knows more about Italy than I’ll ever know—she truly *embodies* Italy.” A new character came to life at that moment, “The Contessa,” living in a villa designed by Palladio in the Veneto who receives both spy and novelist to lay out in detail what it is that they are chasing. Days later, I spotted on the streets of Manhattan a tastefully dressed, 55-year-old woman and I introduced her as The Contessa’s counterpart, “The Madonna,” ruling mystically and benevolently over Florence within the film being shot in *The Plot*.

What would The Contessa reveal to be the plot of *The Plot*? Turned out to be another “plot,” the Pazzi Conspiracy of fifteenth century Florence where Giuliano de’ Medici was assassinated in the famous Duomo cathedral. I have no memory of creating the idea. I only recall writing the pages of passionate and dryly humorous discussion at The Contessa’s villa where she explains through an acerbic translator to the intelligence agent Smythe and novelist Teagle, the far-flung idea that although they speak together in the year 2018, Giuliano de’ Medici, her dearest nephew, is, as they speak, en route with an entourage of angelic *psychopomps* to his final resting place. Prior to his expected beatitude, she tells them, Giuliano is to have an audience with God and during that meeting she fears that he will take advantage of the Being’s fondness of him to encourage the deity to undergo the swift destruction of all the world. Giuliano, The Contessa notes, is convinced that Mankind’s penchant for pitiless violence and other outrages of the soul have left the species unworthy as creations of the Divine. The Contessa believes that unless Smythe and Teagle travel back to April 28, 1478 and prevent the assassination of her nephew, God will heed the call of this most beloved son of Florence and in a single immediate stroke, destroy the earth.

*The Plot* ends at the meeting between the two actors and the Italian actress who had portrayed The Madonna with Giuliano de’ Medici not as their film characters but as themselves. The four of them speak seated at a long snacking table inside of a New Jersey Turnpike-style rest stop somewhere in

the Heavens, an oasis and illusion created to make the living interlopers feel natural and at home somewhere in the obscure reaches of the Heavens. The savvy, intellectual, and dashing charismatic Giuliano, with selected passages of his speech translated into Italian, makes complex and salient points about the terrible and destructive behavior of Mankind throughout history. When I initially read back his diatribe, I was surprised that his impassioned observations were in no way reflective of my own thoughts on the subject, but an expression in accordance with the personality of the character of Giuliano and seemingly under his control. I had become a passive stenographer recording the presentation of his “case” against Mankind. His manner of speaking and his complex, convoluted expression of ideas made *The Plot* more an intellectual read than I planned when setting out to write the tale. I had wanted to present an exciting fantasy about the nature of movies and reality and now, almost out of nowhere, I had this historical banking scion arguing on moral grounds for the destruction of the human species.

Once I knew and understood what the last chapter would entail, I anticipated a very dark ending to *The Plot*. In the long run, I did not go through with it because I didn’t want to be responsible for a work of fiction that damns the world to instantaneous oblivion. The pleas voiced by Halle and Randolph in defense of humankind, their metaphoric “client,” make a strong counter argument in opposition to Giuliano’s damnation, centering on allowing humankind to proceed undeterred to a potentially better future or to a natural demise of its own making, rather than one guided by divine decree. The ultimate ending of *The Plot* is ambiguous, leaning towards the notion that Giuliano prevails after having expressed his disappointments to a “Higher Being” about humankind’s failure to fulfill ideals of love, justice, artistic expression, and scientific creativity. His greatest disappointment is how individuals lazily withdraw from the difficult task of realizing their relationship with the Divine, ceding the responsibility to various established religions as herded congregants, and handing over the vital, essential purpose of unique souls to ignorant and greedy “priestly castes” throughout history.

In March of 2021, I remain creatively exhausted from the time and work I put into the book over two years ago and there is a very good chance that *The Plot* will be my last novella. ■

# Pets of Tri-I

AUDREY GOLDFARB

This month I had the pleasure of meeting Luna, the incredibly sweet English cream golden retriever. She lives with her parents Tatsuya Araki, a Ph.D. student in the Victoria Lab at The Rockefeller University, and Jingwen Zhou, a senior research technician at Memorial Sloan Kettering Cancer Center. Luna approaches every interaction as an opportunity to make a new friend, and given her delightful personality, she rarely fails.

**Audrey Goldfarb:** How did you first meet Tatsuya and Jingwen?

**Luna:** We first met in Utica, New York where I was born. I greeted my pawrents with the cutest puppy dance they had ever seen! We had an instant bond!

**AG:** What is your favorite game to play?

**L:** It has to be tug of war game with my dad-do!

**AG:** What is the best thing that happened to you this week?

**L:** Sleeping over at friends' place and they gave me lots of treatos!

**AG:** Do you have any dog friends?

**L:** I am friends with almost every doggo on this campus, but Pal the corgi is my bestie!

**AG:** Who are your favorite human friends, other than your family?

**L:** This is a hard one—I love every human who says hi to me!

**AG:** What is your love language?

**L:** Happy waggy dance with a plushie toy in my mouth!

**AG:** What are you most excited about today?

**L:** Hehe... it might be insignificant, but I had some really sweet oranges that made my day!

**AG:** What do you think people appreciate about you?

**L:** I am not picky at all and will help with everything you don't eat!

**AG:** If you could have a superpower, what would it be?

**L:** Snow day every day!



**AG:** Describe your perfect Saturday.

**L:** Double breakfast + playdate with friends + snack party + knockout next to my humans

**AG:** If you could be a different animal for a day, what would you be and what would you do?

**L:** I would become a cat and try to be friends with that cat sister with whom I never got along...

**AG:** What is your favorite thing about Tatsuya and Jingwen?

**L:** I can burp and fart in front of their faces with no shame!

**AG:** What would Tatsuya and Jingwen do without you?

**L:** They better not have fun behind my back... I'm watching you guys! Always! ■



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