

LGBTQ+

SCIENTIST SHOWCASE



Kat Muloma

1997–

Astrochemist
(they/them)



Have you ever taken a moment to think about stars and how they are created? If so, you are in good company —meet Kat Muloma!

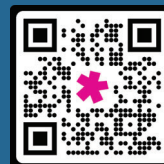
Born in Eldoret, Kenya, Muloma immigrated to the United States as a young child with their family, settling in Indianapolis, Indiana. Muloma's initial interest in science started in a high school AP biology class. Their love of chemistry was planted as a freshman at Hope College when they mistakenly attended the wrong chemistry class, but were encouraged to continue by the professor. Muloma's current fields of study, astrochemistry and stellar formation, were further influenced by reading Richard Muller's *Now: The Physics of Time*, a book on quantum mechanics.

After graduating in 2019, Muloma began working in research with various organizations. In 2020, they completed a fellowship with the Simons Observatory at Princeton University, investigating the origins of grains of silicon carbide (SiC) that were formed before the birth of our Sun. That summer, they were also involved in the formation of #BlackInChem and #BlackInAstro, and was part of the #BlackInX movement that highlights the diversity of the Black diaspora in America. Muloma's long-term goals include becoming a teacher and mentor so that they can continue to share their love of science with children from underrepresented communities.

"I envision a world where little black, brown, and queer children are drawn to scientific spaces because it is where fairness, passion and pushing against the status quo are not just tolerated but encouraged because these are the qualities that make a great scientist."

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Alan Hart

1890–1962

Medical Doctor

(he/him)



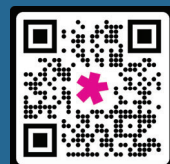
In the early 1900s, an active tuberculosis diagnosis was like a death sentence. The infection, transmitted through airborne particles, was treatable in its beginning stages but relied on early detection. Dr. Alan L. Hart was one of the first to realize that X-rays, already used to detect broken bones and tumors, could also be used to screen for the lesions caused by the infection.

Growing up in Albany, Oregon, Hart excelled in academics from a young age, graduating high school as class salutatorian and becoming the first woman to receive the prestigious Saylor medal from the University of Oregon Medical School. After completing medical school and his physical transition in 1917, he took an internship at San Francisco Hospital but had to leave town after being outed by a former classmate, a pattern that would repeat itself for several years.

In 1925, he transferred to the Trudeau School of Tuberculosis in New York. He continued his work in various hospitals and sanatoriums and earned his master's degree in radiology from the University of Pennsylvania. In 1929, Hart was appointed director of radiology at Tacoma General Hospital. He would spend the next two decades of his life working as an expert consultant in tubercular radiology. In the late 1940s, Hart relocated to Connecticut, earning another master's degree in public health from Yale. After WWII, he began to take synthetic testosterone, which deepened his voice and allowed him to grow facial hair. He spent the rest of his life in Connecticut with his wife, continuing his TB research and supporting patients with advanced conditions.

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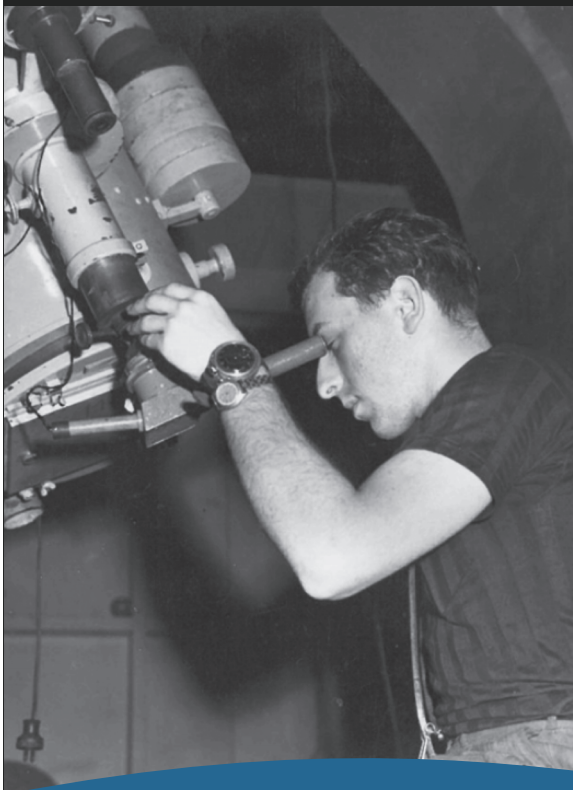
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Frank Kameny

1925–2011

Astronomer & Activist
(he/him)

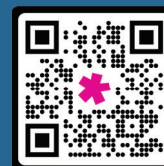


Frank Kameny spent over half his life advocating for gay rights. He petitioned the Supreme Court after his termination from the U.S. Army Map Service, worked to have homosexuality declassified as a mental disorder by the American Psychiatric Association (declassified in December 1973), and drafted bills to decriminalize the existence of gay men. But before he became an activist, Frank Kameny loved to look at the stars.

Born in New York City, Kameny knew from a young age that he was going to be an astronomer. He formed an astronomy club at his high school, graduated at just 16, and enrolled at Queens College to study physics in 1941. After returning from service in WWII, he finished his degree and continued his studies at Harvard under Dr. Cecilia Payne-Gaposchkin. In 1956, he earned his Ph.D. in astronomy and wrote his thesis *A Photoelectric Study of Some RV Tauri and Yellow Semiregular Variables*. For his research, he spent time at the Steward Observatory in Arizona, the Armagh Observatory in North Ireland, and Harvard's Oak Ridge Observatory. At Oak Ridge, he and fellow astronomer Harlan Smith spent a summer treating a 61-inch telescope with aluminum, which would later be used for the first detection of red dwarf star HD 114762 b.

Kameny's work showed such promise that Harvard offered to sponsor its publication in *The Astrophysical Journal*—however, the thesis would never be published. Later that year, Kameny was arrested in San Francisco, which led to his dismissal from the Army in 1957. This dismissal became the catalyst for the activism that he would continue for the rest of his life.

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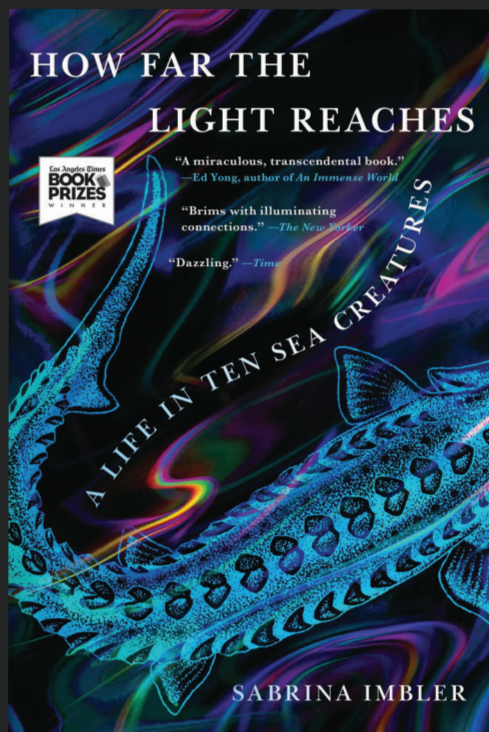
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How Far the Light Reaches

by Sabrina Imbler
(they/them)



Sabrina Imbler (they/them) is a queer, mixed race Chinese-American author and science journalist. In 2020 they published their first book *Dyke* (geology), which explores coming out and compares it to geological timelines and the formation of volcanoes. They currently reside in Brooklyn with their partner and their cats, Sesame and Melon.

How Far the Light Reaches is a collection of short essays, each centered on a different marine animal whose behaviors mirror author Sabrina Imbler's own experiences. From the brooding habits of the purple octopus (*Graneledone boreopacifica*), who guard their eggs for years without eating (and memories of Imbler's Chinese immigrant mother's anxieties about size and cultural assimilation), to salps (*Salpa fusiformis*) and how they congregate in beautiful, unpredictable swarms



(reminiscent of queer gatherings on the rocky east end of Riis Beach, under the shadow of an old tuberculosis sanatorium), Imbler draws unexpected yet relatable connections between the lives of marine animals and their own lived experiences.

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