On December 14, 1929, during a holiday shopping season darkened by the greatest stock-market crash in American history, Simon S. Martin bought a parrot for his wife, Lillian, at a pet shop on North Eutaw Street, in Baltimore. It was not, as it happened, a well parrot. Hoping to surprise his wife, Martin seems to have asked his daughter, Edith, and her husband, Lee Kelmey, the owner of an auto repair shop, to take care of the bird and bring it over to his house in Annapolis in ten days’ time. By Christmas Eve, the parrot must have shown signs of illness: puffy eyes, a drooping head, and feathers as ruffled as if it had flown through a squall. Come Yuletide, the Martins had a dead parrot on their hands.

The pet-shop owner, who may have been wise to the fact that Simon Martin was secretary of the Annapolis Chamber of Commerce, at first offered a replacement, although by New Year’s, when Lillian Martin and Edith and Lee Kelmey fell dangerously ill, he was back-peddling, denying that he had ever sold Martin a bird. Meanwhile, the Kalmey’s were getting sicker and sicker, showing symptoms of both pneumonia and typhoid.

On January 6th, a local doctor examined the patients. He had just read a newspaper article about something called parrot fever: it had shown up in Argentina months earlier, when an actor playing a sailor had caught it from his stage parrot. The disease, also called psittacosis, had since spread through South America and Europe. No one seemed to know much about it except that it was deadly. The doctor sent a telegram to the U.S. Public Health Service, in Washington: “CAN YOU PLACE SUPPLY PARROT FEVER SERUM OUR DISPOSAL IMMEDIATELY.” Unfortunately, there was no serum, or any known treatment. The mayor alerted the governor. Within forty-eight hours, epidemiologists from the Baltimore City Health Department, the Maryland Department of Health, the United States Navy and Army, and the Public Health Service, including a team of men from the Hygienic Laboratory in Washington, arrived on the scene. Someone called the newspaper.

“PARROT DISEASE Baffles Experts” the Washington Post reported in an issue that went to press the night of January 8th, thrilling readers with a medical mystery that would capture the nation’s attention with the prospect of a parrot-fever pandemic. Reports, cabled and wired across land and sea, were printed in the daily paper or broadcast, within minutes, on the radio: tallies, theories, postmortems, more to fear. Before it was over, an admiral in the U.S. Navy ordered sailors at sea to cast their pet parrots into the ocean. One city health commissioner urged everyone who owned a parrot to wring its neck. People abandoned their pet parrots on the streets. Every sneeze seemed a symptom. As the story grew, it took on certain familiar—and, as it turned out, durable—features, features that borrow as much from pulp fiction as from public health: super-scientists fight super bugs in race to defeat foreign menace invading American homes, beneath the very Christmas tree.

Epidemics follow patterns because diseases follow patterns. Viruses spread; they reproduce; they die. Epidemiologists study patterns in order to combat infection. Stories about epidemics follow patterns, too. Stories aren’t often deadly but they can be virulent: spreading fast, weakening resistance, wreaking havoc. During the recent swine-flu panic, Joe Biden warned Americans not to ride the subway or fly on an airplane, and pharmacies ran out of surgical masks. Why was it so hard to tell, as the story was breaking, if a flu outbreak of pandemic proportions was under way? The world is a far better place for the work epidemiologists do. Maybe, though, we
could do with a few more narratologists. The stories about epidemics that are told in the American press—their plots and tropes—date to the nineteen-twenties, when modern research science, science journalism, and science fiction were born. The germ theory of disease dates to the mid-eighteen-hundreds. Pasteur developed a rabies vaccine in 1885, launching a global battle against infectious illness. By the nineteen-twenties, scientists had developed a vaccine for diphtheria; other vaccines, like the one for polio, would take decades, but hopes ran high. In "The Conquest of Disease" (1927), Thurman B. Rice, a professor of sanitary science, predicted the eradication of sickness itself.

Meanwhile, ordinary people learned to blame germs, not God, for catastrophes like the pandemic of 1918, when at least fifty million people, including nearly seven hundred thousand Americans, died of influenza. Germ theory, which secularized infectious disease, had a side effect: it sacramentalized epidemiology. The nineteen-twenties witnessed the inauguration of what the historian of medicine Nancy Tomes has called the “epidemic exorcism,” the hair-raising account of a disease that threatens to destroy the human race. The genre’s master was a bacteriologist turned journalist named Paul de Kruif. He had taught at the University of Michigan and worked for the U.S. Sanitary Corps, studying the gangrene bacillus. After the war, he turned to writing. In 1925, his collaboration with Sinclair Lewis led to the publication of “Arrowsmith,” a novel about a young doctor fighting bubonic plague—an early medical thriller, for which de Kruif received twenty-five per cent of the royalties. In 1926, de Kruif turned to nonfiction, publishing “Microbe Hunters,” a book of profiles of scientists, starting with Leeuwenhoek, who can see tiny things the rest of us can’t, things that are trying to kill us.

"Microbe Hunters," which inspired a generation of young readers to pursue careers in science, appeared a month before the first issue of Hugo Gernsback’s Amazing Stories, the first magazine of what is now called science fiction. Many of its stories concern the work of laboratory scientists; the issue of July, 1929, included “The Purple Death,” the story of a young doctor who keeps a copy of "Microbe Hunters" on his desk.

The coming plague was Paul de Kruif’s bread and butter. Three months before Simon Martin bought his wife a parrot for Christmas, de Kruif issued a warning in the lead article of Ladies’ Home Journal: "In American milk today there lurks a terrible, wasting fever, that may keep you in bed for a couple of weeks, that may fasten itself on you for one, or for two, or as confused. Was parrot fever really something to worry about? Reading the newspaper, it was hard to say. "NOT CONTAGIOUS IN MAN," the Times announced. "Highly contagious," the Washington Post said. Who knew? Nobody had ever heard of it before. It lurked in American homes. It came from afar. It was invisible. It might kill you. It made a very good

The media fueled fears of a parrot-fever pandemic; then the story went into reverse.

even for seven years—that might culminate by killing you.” What was this dread malady? Undulant fever. “At least 50,000 people are sick with it at this very moment,” their ailment virtually unknown to “their baffled doctors.” De Kruif’s article, titled “Before You Drink a Glass of Milk,” scared a lot of people and sold a lot of magazines. Boasting of its success, the editor of Ladies’ Home Journal explained, "Nobody had ever heard of undulant fever before."

The experts who descended on Annapolis in early January, 1930, weren’t half as baffled as the Washington Post made them out to be, but the reading public must have been at least twice story. In the late hours of January 8th, editors at the Los Angeles Times decided to put it on the front page: "TWO WOMEN AND MAN IN ANNAPOLIS BELIEVED TO HAVE PARROT FEVER."

The next day, in Toledo, Mrs. Percy Q. Williams, whose husband had just returned from Cuba with two parrots, died in Mercy Hospital; in Baltimore, Mrs. Louise Schaeffer succumbed to what had at first appeared to be pneumonia. (Women, many of them widows, constituted the majority of the outbreak’s victims. There were suggestions that lonely old women had got the disease by feeding their parrots mouth to mouth. Some called the disease "old maid’s pneumonia."). Those deaths
would normally have been unremarkable: two older women fading away in the cold of winter. Not this week. On learning that Schaeffer "had been in contact with a parrot several days before she became ill," physicians suspected parrot fever and ordered an autopsy, whereupon the Surgeon General, Dr. Hugh Smith Cumming (a eugenicist best known to history for launching the Tuskegee syphillis experiment, that same year), warned Americans to stay away from recently imported parrots. He insisted that he "did not fear an epidemic," but that, of course, only got people talking about one. Although the results of Schaeffer's autopsy were not yet available, "BALTIMORE WOMAN DIES" made it onto the front page of the Chicago Daily Tribune on January 11th and "PARROT FEVER KILLS 2 IN THIS COUNTRY" appeared on page 3 of the Times. That paper also reported on efforts to trace deadly Argentine parrots that had come to the United States through what were called, as if they were criminals, "two suspected New York dealers."

Some people were worried about more than parrots. On January 11th, after several clerks in the poultry department of a Toledo store started coughing, the city's Health Department launched an investigation into "incipient cases of psittacosis." Two days later, in a story that appeared on the front page of William Randolph Hearst's San Francisco Examiner, the Associated Press announced that the country's scientists had declared war: "The disease-fighting armament of the nation today was directed against a new and mysterious enemy." The microbe hunters had taken out their microscopes.

In the years following the First World War, a great many American scientists were looking for sources to fund their vital research. The nation's scientific organizations hired publicity firms. In 1926, a coalition of scientists launched a campaign to raise "A National Fund for the Support of Research in Pure Science." Half the battle, though, had to do with winning over the public, and de Kruif's work made clear that stories were powerful ammunition. Before the First World War, journalists didn't generally report on science, and they certainly didn't profile scientists. After the war, scientists tried writing for newspapers and magazines, attempting to explain the value of their work, but, year by year, the number of scientists writing for a popular audience fell while the number of journalists specializing in science writing rose. Perhaps the era's most effective pro-science publicity machine was the Science Service, a wire service founded in 1920 and edited by a chemist named Edwin E. Slosson. Its purpose was to promote scientific research by feeding stories to newspapers. The service, Slosson said, would not "indulge in propaganda unless it be propaganda to urge the value of research and the usefulness of science." Financed by the newspaper publisher E. W. Scripps, and later by the American Association for the Advancement of Science and the National Research Council, the Science Service reached a fifth of the American reading public by the mid-nineteen-thirties.

What a microbe hunter needed to do to get funding was to hunt and kill a microbe, preferably a lethal one that nobody had ever heard of before. On January 6, 1930, when that family doctor sent his telegram to the U.S. Public Health Service, the message was sent on to the Hygienic Laboratory, where Dr. Charles Armstrong, a forty-five-year-old pathologist, was charged with heading the investigation. Armstrong wanted to contain the outbreak, urgently; he also wanted to develop a serum, to save the lives of people already infected. Doing so would require experiments; those experiments required infected parrots and infected people. To gather subjects, Armstrong needed to spread the word about psittacosis. What Armstrong needed was a parrot-fever panic.

As Armstrong arrived in Annapolis, a team of public-health officials was sent to that North Eutaw Street pet shop in Baltimore—where four employees were now sick—to track down the purchasers of all the recently imported parrots. Not all those parrots had stayed in town. Mrs. Hugh Lett bought a parrot in Baltimore on December 18th; the bird died on New Year's Eve; Mrs. Lett took sick on January 7th, by which time she was in Cambridge. Armstrong wired messages to public-health officials across the country, asking them to be on the lookout for psittacosis. In city after city, parrot dealers handed over to investigators sick parrots and lists of the people who had bought parrots for Christmas. Dead birds, some of which were exhumed, were shipped to Washington. Cases of suspected psittacosis cropped up in Providence and Chicago, New Haven and Los Angeles. The home of an Ohio family was quarantined after yet another Christmas parrot died. Inevitably, there were cases merely "simulating psittacosis," like the parents of fifteen-year-old Lillian Muller, of the Bronx, who had bought their daughter a parrot, imported from Argentina, at a pet shop in Harlem. The Times offered reassurance: "The Mullers' parrot has been eating regularly and has exhibited no signs of drooping." (One constabulary note: the A.P. reported from North Adams, Massachusetts, on January 13th, "A parrot in a local..."
family, whose name was not given out, recently died.” Polly?)

By January 15th, the Times reported fifty cases nationwide, including eleven in New York City, and seven deaths, including one in Queens and one in Yonkers. Doctors insisted, in vain, that “there was no occasion for general alarm,” and “stressed the fact that in none of the cases reported so far in New York has the diagnosis been definitely established as psittacosis.” Later that day—after the Times went to press with the death count—authorities revealed that blood tests on the New York dead had all come out negative. The Times, whose coverage of parrot fever was, all things considered, a model of restraint and clarity, made a point of announcing those negative tests. Elsewhere, though, autopsies and blood cultures that came out negative for psittacosis didn’t make it into the papers. By now, Lillian Martin and Edith and Lee Kalmey were fast improving; this was not widely reported, either. People who got better simply fell out of the news.

The nationwide sweep for psittacosis soon supplied Armstrong with enough samples—parrots, healthy, sick, and dead; the blood from infected humans; and even the scrapings from Lillian Martin’s birdcage—to begin his work, which he conducted in two basement rooms in the Hygienic Laboratory, aided by his technician, Henry (Shorty) Anderson. “Those parrots were sure mean bastards,” Armstrong said. Armstrong and Anderson wore rubber gloves, put trays filled with creosol in the doorways, and covered the birds’ cages with disinfectant-soaked curtains. They were not, however, especially fastidious. “The only thing hygienic about the Hygienic Laboratory was its name,” one researcher there said. Armstrong explained, “If we’d got too careful, we’d have spent all our time being careful and how could we have found out anything about it?”

This was yet another hallmark of the swashbuckling microbe hunter, who lacked the fussiness of the housewife. “Germ” became a household word in the nineteen-teens. By the twenties, Americans, and especially housewives, lived in fear of germs. Not only did newspapers and magazines run almost daily stories about newly discovered germs like undulant fever but their pages were filled with advertisements for hygiene products, like Listerine (first sold over the counter in 1914 and, in many ways, the grandaddy of Purell), Lysol (marketed, in 1918, as an anti-flu measure), Kotex (“feminine hygiene,” the first menstrual pad, introduced in 1920, a postwar conversion of a surgical dressing developed by Kimberly-Clark), Cellophane (1923), and Kleenex (1924; another Kimberly-Clark product, sold as a towel for removing makeup until a consumer survey revealed that people were using it to blow their noses). Perhaps because kitchens and laboratories have much in common, journalists like de Kruijff strove to underscore the manliness of the microbe hunter. Armstrong, de Kruijff wrote, “was definitely not the kind of man who would even own a parrot, let alone kiss it.”

Armstrong and Anderson and other government scientists worked night and day. On January 13th, the Chicago Daily Tribune reported a landmark success: "PARROT FEVER GERM ISOLATED."

The parrot-fever story made the malady out to be virulent, mysterious, and exotic, despite these facts: the disease was not baffling; it had been identified in the nineteenth century; it was known to infect members of the Psittacidae family, which includes parrots, parakeets, macaws, and cockatoos; in the nineteenth-thirties, the only birds likely to be contagious were those brought to the United States during the last months of 1929; it is possible to catch the disease only from an infected bird (people can’t spread it); it infected them, and continues to infect today, between one and two hundred Americans every year. There was a danger, to be sure. Psittacosis is now easily treated with antibiotics like doxycycline, but that wasn’t the case in 1930, when one in five people infected with the disease died. Nevertheless, the only people who had much to worry about were people who had been in close contact with certain tropical birds very recently imported from South America.

Psittacosis incited, if briefly, a sizable panic among people who, by any reasonable measure, had nothing to fear. That was dangerous. Even as the story unfolded, what to make of parrot fever and just how much responsibility the press or the scientific community bore for the panic proved matters of dispute. But what happened next seems nearly as dangerous as the panic itself: people suddenly started insisting that parrot fever didn’t exist.

"U.S. ALARM OVER PARROT DISEASE NOT WARRANTED," the Chicago Daily Tribune declared, on January 15th. Less than two weeks into the story, parrot fever looked, suddenly, silly. Parrot fever became a national joke. A Washington correspondent for the Times filed a story about a parrot owned by Secretary of State Henry Stimson. The parrot, named the Old Soak, had been locked in the basement of the Pan-American Building, "not because he has psittacosis" but because he had a habit of swearing. The Wall Street Journal ran this joke: what did the janitor say when the professor at the Polytechnic Institute asked him why he was cleaning the lab with carbolic acid? "So none of de Poly students gets dis new parrot fever." Even the straight stories weren’t taken seriously. A parrot foundling made its appearance early yesterday morning when a green bird with a chipped beak was discovered in the vestibule of John Schreyer’s home, 25-27 Humphreys Street, East Elmhurst, Queens, the Times reported, whereupon jailbirds at Sing Sing offered asylum for all unwanted parrots; the warden said, "The inmates here think this talk about parrot fever is nonsense."

A pro-parrot lobby formed. On January 17th, six of the country’s leading importers of winged pets, including the Odenwald Bird Company, the Imperial Pet Shop, and the Dahle Bird Company of Philadelphia, gathered at the Hotel Commodore in New York, where they founded the Bird Dealers’ Association of America. Prussia and Bavaria, suffering from their own outbreaks, had already instituted parrot embargoes. The bird business was in a bad way. The Bird Dealers fought back by claiming that the disease did not exist, had never existed in human beings, “and that the scare over ‘parrot fever’ had been chiefly brought about by the active imagination of a Baltimore newspaper man.”

Exaggeration breeds exaggeration. The counter-story spread as widely as the story had. And the Bird Dealers had a point about the imagination of newspapermen. The first American doctor to believe he had seen psittacosis had read about it in the newspaper. The Martin’s doctor probably read Hearst’s Baltimore
Association, reminded Americans that
“the possibility of unusual disorders
must be ever present in the medical
mind.” Who knew what might infect
us next? Parrot fever ought to serve as
draft that “it is no longer possible for
any person or any nation to live in
isolation.” The world, in short, was a
dangerous place.

Or was it just a gullible one? “Every
winter, America has to have a new mal-
dady, and this year it is Parrot Fever,” a
columnist for the Post wrote. “People
are getting all worked up over this new
‘parrot-fever,’” a writer for Life scoffed,
“but Lord! it’s been endemic at the Ca-
pitol since Polly was an egg.” E. B. White
figured that the country was suffering
from nothing so much as a bad case of
the heebie-jeebies, brought on by ex-
tension exposure to newspapers that were
forever issuing warnings about sharks in-
festing the beaches of New Jersey, an-
thrax spores contaminating unsterilized
shaving brushes, and noxious gases es-
caping from iceboxes in the middle of the
night. In an issue that went to press on
January 20th, The New Yorker’s Talk of
the Town included a piece by White call-
ing parrot fever merely “the latest and
most amusing example of the national
hypochondria”:

There have been hundreds of national
menaces, keeping us all on tenterhooks,
keeping the populace feeling the national
pulse and applying the national stethoscope.
Psittacosis is one of the best, because one of
the most picturesque. What will probably
happen will be that some reporter will invent
a disease traceable to something that hap-
pens to everybody; “Otis heart” from riding
in elevators, maybe, or “corn-flakes itch”
from eating breakfast food, and we’ll all die
of autosuggestion.

That hasn’t happened quite yet, but
we still can’t tell whether we are all about
to die or whether we are being sold a bill
of goods. This condition is chronic.

On January 22, 1930, the Post re-
ported that Lillian Martin and Edith and Lee Kalmey had recovered.
Herbert Hoover prepared to sign an ex-
cutive order banning the importation
of parrots. The story seemed more or
less wrapped up. But then, terribly,
scientists starting dying. On January 23rd,
Dr. Daniel S. Hatfield, the chief of
the bureau of communicable diseases
of the Baltimore City Health Depart-
ment, succumbed to psittacosis. Hat-
field’s colleague Dr. William Stokes
died on February 10th. Shorty Anderson
died on February 8th. That same
day, Charles Armstrong was admitted
to the U.S. Naval Hospital with a fever
of 104 degrees.

The director of the Hygienic Labora-
tory, George McCoy, insisted on taking
over Armstrong’s work himself. He took
blood from a patient who had recovered
from psittacosis and injected it into Arm-
strong’s veins. Armstrong improved, and
eventually recovered. Afterward, he
wrote a report, according to which there
had been a total of a hundred and
sixty-nine cases of psittacosis nationwide,
and thirty-three fatalities. In his report,
Armstrong credited the press, without
which, he believed, “this outbreak would
largely have escaped detection.” Arm-
strong’s work earned him a place in
de Kruij’s 1932 sequel to “Microbe
Hunters,” a book titled “Men Against
Death.”

In February and early March of 1930,
while Armstrong was still recov-
ering, nine other people at the Hy-
genic Laboratory became sick. Psitt-
cosis seemed to have contaminated
the whole building. On March 15th,
McCoy ordered the building evacu-
ated. Alone, he walked down the stairs
to Armstrong’s basement laboratory.
He killed, with chloroform, every par-
rot, mouse, pigeon, guinea pig, rat, and
monkey that had been used in the psit-
cacosis experiments. “He murdered and
murdered and made a slick and clean
job of it,” de Kruij wrote. He burned
the bodies in the building’s incinerator.
He sealed all the windows. The fumi-
gation squad arrived at 2 P.M. and
began spraying the building with cyanide.
Sparrows flying fifty feet over the build-
ing froze, mid-flight, and fell to earth.
The next day, the headline in the Post
read, “PARROT FEVER PANIC SEIZES
LABORATORY.” Two months later, on
May 26, 1930, Congress rewarded the
Hygienic Laboratory by expanding it
and granting it a new name: the Na-
tional Institute of Health.

DEPARTMENT OF SELF-AWARENESS
From the Portola (Calif.) Reporter.

In Quincy, a caller requested to be taken
to jail. He said that he was “drunk and being
an ass.” He said that he was being verbally
abusive and couldn’t stop. No arrest was
reported.