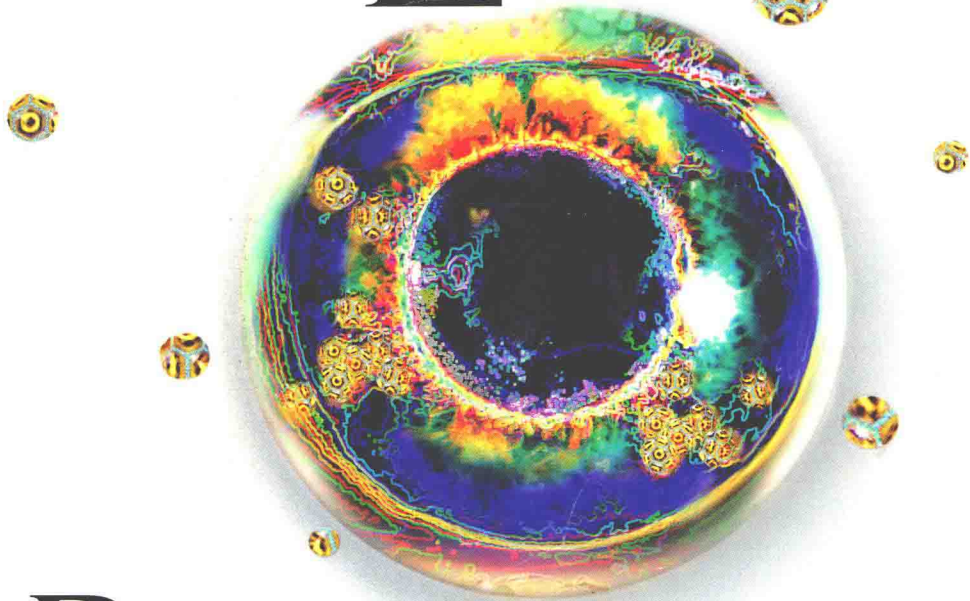


THE COBRA EVENT

A NOVEL



RICHARD
AUTHOR OF *THE HOT ZONE*
PRESTON

THE COBRA EVENT

A NOVEL

Richard Preston



RANDOM HOUSE
NEW YORK

The Cobra Event is a work of fiction. The characters and companies in it have been invented by the author. Any resemblance to people living or dead is strictly coincidental.

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Library of Congress Cataloging-in-Publication Data
is available.

ISBN 0-679-45714-3

Random House website address: <http://www.randomhouse.com/>

Printed in the United States of America on acid-free paper

9 8 7 6 5 4 3 2

FIRST EDITION

*This book is dedicated to my brother
David G. Preston, M.D.,
and to
all public health professionals,
wherever they may be*

*It is the greatest art of the devil
to convince us he does not exist.*

—BAUDELAIRE

The Reality Behind *The Cobra Event*

This book is about biological weapons—the modern version of what were once known as germ-warfare weapons. The creation of advanced biological weapons using methods of genetic engineering and biotechnology is sometimes called “black biology.” My previous book, *The Hot Zone*, which was about the threat of emerging viruses, particularly the Ebola virus, led me naturally to biological weapons: What is a bioweapon? Who has them? What can these weapons do? The characters and story developed here are fictional, not based on any real persons or contemporary events, but the historical background *is* real, the government structures are real, and the science is real or based on what is possible.

The Cobra Event is also about forensics, which is the science of looking at physical evidence to analyze a crime and identify its perpetrator. I call the particular forensic operation in this book a “Reachdeep operation.” *Reachdeep* is a term invented by me, but it is in fact a special type of criminal investigation, and it is defined by a partly classified presidential order known as National Security Directive 7. If a biologic terror attack were to occur in the United States, there are organizations that would implement an operation similar to Reachdeep. My sources include people at the Federal Bureau of Investigation, in the U.S. military, and elsewhere in the government who have been given the task of preparing for a Directive 7

emergency. At one point I was at the F.B.I. Academy in Quantico, Virginia, where I heard an F.B.I. scientist who knows a lot about biological weapons describe them to a class of agents in training. He said in a simple way, "You will be dealing with this during your careers." The room became very quiet. You could have heard a pin drop. I would say they believed him.

I pursued the subject of biological weapons with the same reporting methods I've used for my previous books, which were nonfiction. The nonfiction roots of this book run deep. I conducted numerous interviews with experts, some of whom did not wish to go on the record by name but were willing to give detailed factual information on condition of anonymity. My sources include eyewitnesses who have seen a variety of biological-weapons installations in different countries, and people who have developed and tested strategic bioweapons. They are scientists, medical doctors, and technical people, both military and nonmilitary. They understand what they have seen, and they describe it with precision.

As I drafted this story, I re-interviewed people, telling them the story as it developed, asking them, "Could this happen? Is this how the U.S. government would work? How would you respond to *this*?"

The transparent substance I call "viral glass" in this book is an actual material. I have chosen not to give its technical name or describe it too precisely. I have deliberately distorted and blurred certain key aspects of the bioweapons-making process so as not to publish a deployable recipe.

The biosensor technology that I call "Felix" does not presently exist but is in development. Biosensor research is often classified, so I have had to make educated guesses as to what may be possible. What I call the "hand-held Boink" biosensors actually do exist now in prototype form. (I call them Boinks because I imagine them giving off a chiming tone when they detect a biological weapon.) They have been partly developed by the United States Navy.

The natural strain of the virus in this book is real, and engineered strains of it have been developed with a broadened host range. They are capable of infecting but not necessarily replicating in the cells of mammals, including humans. The virus has great peaceful potential because it is so versatile. Its versatility also makes it a potential weapon. I have imagined the engineered form of the virus that appears here as Cobra, but it should be taken as one example of a wide range of possibilities that actually exist for the construction of advanced bioweapons. The knowledge is public, the techniques are commonplace. The dark apple hangs on the tree.

FOR MANY YEARS THE scientific community told itself and the public that biological weapons were not much of a problem, but recently there has been a painful shift in thinking. Many scientists have come to believe that biological weapons are a serious threat that has not been reckoned with. People close to this process have described it to me as an opening of the eyes. Even so, some experts are reluctant to talk too freely about biological weapons, for fear that the information could spark bioterrorism or might encourage countries to cross the threshold into biological weaponry. Other experts say that the problem has become so bad that the public simply must be told. I say that problems that aren't moved into the light of general public discussion become less manageable as time goes by. Public awareness can help shape a constructive response from governments and scientists around the world far more effectively than the lone warnings of a few experts.

In case anyone should accuse me of being "anti-science," let me say that I am exactly the opposite of that. Open, peer-reviewed biological research can reap great benefits. Genetic engineering is a process, like metallurgy. Steel can be used for ploughshares or swords. What is dangerous is human intent. The next emerging virus may not come from a tropical rain forest; it may come from a

bioreactor. In a deeper sense it will come from the human mind. To think that the power of the genetic code is not being bent toward weapons is to ignore the growing body of evidence, the lessons of history, and the reality of human nature. As Thucydides pointed out, hope is an expensive commodity. It makes better sense to be prepared.

RICHARD PRESTON

September 1997

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Part One

TRIAL

Arc of the Circle

NEW YORK CITY, LATE 1990S

KATE MORAN was an only child. She was seventeen years old and lived with her parents in a loft apartment on the top floor of a handsome old building to the west of Union Square, just on the edge of Greenwich Village. One Wednesday morning in late April, Kate was slow getting up. She had woken in the middle of the night in a sweat, but it went away, and she fell back asleep, into bad dreams that she could not remember. She came awake with a fresh cold, and she could feel her period coming on.

“Kate!” It was Nanette, the housekeeper, calling to her from the kitchen. “Katie!”

“Okay.” She didn’t like being called Katie.

She sat up and found a Kleenex and blew her nose, and went into the bathroom. She brushed her teeth, then went back into the bedroom and dressed in a flowered dress that she had found in a flea market. The mornings could be chilly this time of year, so she put on a sweater.

Kate had wavy russet hair, beautiful hair with natural pale highlights, which she wore medium length. Her eyes were grayish blue or bluish gray, depending on the light and the weather and her mood (or so she liked to think); complicated eyes. Her face was changing fast. She could almost see the bones of the woman emerging, yet she had found that the more she stared at her face in a mirror the less she understood it. She thought about this as she

brushed her hair, pushing it back so that the two platinum earrings in her left ear were visible.

Kate's mother called her the Packrat, because she accumulated things. The worktable in the corner of her room was littered with old cigar boxes covered with their original illustrations, plastic boxes, metal containers, purses, bags, puzzles. Things that opened and closed. There was an old dollhouse that she had found in a junk shop in Brooklyn and had been taking apart, cannibalizing it for a project. She reached into the dollhouse and pulled out a prism made of glass, and the smooth white skull of a vole, with tiny yellow teeth, that she had bought at a bone shop in SoHo. She held the prism up to the light falling through the skylight of her bedroom, and just to see what it would look like, she held the vole's head behind the prism. No colors appeared; you needed direct sunlight. She stuffed the objects into her knapsack. They were going to become part of the Box that she was constructing in Mr. Talides's art room at the Mater School, a private girls' school on the Upper East Side.

"Katie!" Nanette was calling.

"Okay, okay." She sighed and threw her knapsack over her shoulder and went out into the living area—a large open space with polished wood floors and antique furniture and rugs. Her parents had both already left for work. Her father was a partner in a Wall Street investment house, and her mother was an attorney at a midtown law firm.

In the kitchen, Nanette had poured orange juice and toasted a bagel.

Kate shook her head. She wasn't hungry. She sneezed.

Nanette tore off a paper towel and handed it to her. "Do you want to stay home?" "Uh-uh." Kate was already out the door and into the elevator.

It was a glorious morning. She hurried along Fifteenth Street to Union Square, striding on long legs, heading for the subway entrance. The ash trees in the square were threatening to break bud. Puffy white clouds drifted in a blue sky over the city, winds whip-

ping in from the southwest, bringing a warmer day than Kate had expected. The daffodils were mostly gone and the tulips were blown and flopping their petals. Spring was beginning to give way to summer. A homeless man passed Kate going in the other direction, leaning into the warm wind as he pushed a shopping cart piled high with plastic garbage bags full of his possessions. She threaded through the stalls of the farmer's market that filled up the northern and western sides of the square, and at the subway kiosk she ran down the stairs and caught the uptown Lexington Avenue express.

The train was crowded, and Kate found herself crushed in a corner of the first car by the front window. It was where she had liked to stand when she was a girl riding with her mother and father, back when they had more time to take her places. You could look out the window and see the steel columns marching by under the car's headlights, and the track extending out into seemingly infinite darkness. Switches and branches whirled past, and if you were on an express train that caught up with a local on the adjacent track, there would be a moment when the two trains were locked together in a shuddering rush forward.

She didn't like it. The lights flashing in the tunnel made her feel sick. She turned away. Then she found herself looking at the faces in the subway car. The faces bothered her. If you look at too many faces jammed together, every face begins to look alien. People in the subway can look . . . humanoid.

The Mater School was only a few blocks from the Eighty-sixth Street subway station. Kate was still running a little late, and by the time she got to the stone parish building that housed the school, the younger girls had mostly gone inside, although some of the upper-school girls were hanging around on the steps.

"Kates, I have to tell you something." It was her friend Jennifer Ramosa. They walked in together, with Jennifer talking about something that Kate didn't follow. Kate felt strange, as if a feather had brushed across her face. . . .

A gong rang . . . and there was the headmistress, Sister Anne Threader, going by. . . . For a moment Kate had a feeling of ver-

tigo, as if she were staring into a black pit with no bottom, and she dropped her knapsack. It hit the floor with a smack. There was a sound of breaking glass.

"Kate? You moron. What's the matter with you?" Jennifer said.

Kate shook her head. It seemed to clear. She was going to be late for homeroom.

"What's going on, Kates?" Jennifer asked.

"I'm fine." She picked up her knapsack. It slushed and rattled. "Something broke. Damn, I broke my prism." She headed into class, annoyed with herself.

AT ABOUT TEN O'CLOCK in the morning, Kate went to the nurse's office and got some Tylenol. It didn't help her cold, which was getting worse and worse. It was a real sinus cold. Her mouth was hurting a lot; it felt bumpy and it stung. She was debating whether or not to go home. She decided to go to art class and leave after that.

The art teacher, Peter Talides, was a balding, middle-aged painter, likable and disorganized, and his art room was a satisfying place. Students hung out there during the day and after school hours. Kate settled herself at a table in the corner of the room, near the window, where her assembled Box was taking shape. It was an ambitious construction, a kind of a house, made of pieces of doll-houses and all kinds of found objects. Kate felt dizzy and weak. She tried to work on the house but couldn't remember what she had planned to do with it. She felt as if she had never seen it before and as if some other person had built it.

"I want to go home," she said out loud.

The students looked at her. She started to stand up—she intended to go back to the nurse's office—when suddenly she felt really dizzy. "Oh, no," she said. She got partway to her feet, and found she couldn't stand. She sat down heavily on her work stool.

"What's the matter, Kates?" Jennifer asked.

There was a crash. Kate had slid off the stool and landed on the floor beside her worktable.

Peter Talides came hurrying over. "Are you all right?"

"I'm sick," Kate said in a thick voice. She began to tremble. She was sitting on the floor with her legs out straight. "My mouth hurts."

Talides bent over her. "We need to get you to the nurse," he said.

She didn't answer. Her teeth were chattering and her face was flushed and feverish.

Peter Talides was frightened. Kate's nose was running with clear mucus that flowed down over her lips. It was gushing out, as if she had a very bad cold. Her eyes flicked over his face without seeming to see him.

"Someone tell the nurse," he said. "Go on! Go!" To Kate he said, "Just sit still, okay?"

Kate said, "I think I'm going to throw up."

"Can you stand up?"

"No. Yes."

He helped her to her feet. "Jennifer. Prasaya. Please take Kate to the bathroom, will you?"

The two girls helped Kate out of the room and into the bathroom, while Peter Talides waited in the hallway.

Kate stood in front of the sink, hanging on to it, wondering if she was going to throw up. Something moved inside her mind, as if some being that was not Kate but *was* Kate was in agony. There was a mirror over the sink. For a moment, she couldn't bring herself to look. Then she opened her mouth. The inside of the mouth reflected in the mirror was dotted with black blood blisters. They looked like shining ticks feeding there.

She screamed and hung on to the sink, and screamed again. She lost her balance and crumpled to her knees.

Peter Talides ran into the bathroom.

He found Kate Moran sitting on the floor, looking at him with glassy eyes. The clear mucus was running out of her nose and