It was a cold night in a city that knows it can’t keep a secret. A crowd of scientists schmoozed around a marbled lobby in a downtown office building, talking quietly and eating hors d’oeuvres.

About 7 pm, they wandered into a conference room for the occasion of the second “Science is Murder” program of the Washington Academy of Sciences, December 21, 2010.

Academy President Mark Holland welcomed everyone. He made a pitch for membership in the Academy and extolled the virtues of the Journal of the Washington Academy of Sciences. He expressed appreciation for donations of refreshments from Barrel Oak Winery and the Martarella Winery. (Do we see a pattern here?)

President Holland turned the microphone over to Kathy Harig, owner of the Oxford, Maryland bookstore “Mystery Loves Company,” to moderate the immoderately mysterious panel. Ms. Harig introduced the panelists, four accomplished authors of mysteries involving science: Lawrence Goldstone, Ellen Crosby, Louis Bayard, and Dana Cameron. While most mysteries involve science, these authors’ works do so in more meaningful ways.

Lawrence Goldstone’s books are usually historical (no surprise, since he holds a PhD in American constitutional history). They include Out of the Flames, The Friar and the Cipher, and Anatomy of Deception. His latest book, The Astronomer, is set in Paris among the heretic-burning of the 1500s. In it, a young man is pressed into the service of the Inquisition, where he acquires doubts about the wisdom and justice of what was going on as he pursues his investigations and learns of scientific discoveries.

Ellen Crosby is a freelance journalist. Her mysteries are all set in the Virginia wine country, where she lives. Some of the attendees had been drinking the products of those very vineyards earlier. She has five books in her wine country series. Their alliterative titles include The Viognier Vendetta, The Riesling Retribution, and The Bordeaux Betrayal.

Louis Bayard has written three historical thrillers: The Black Tower, The Pale Blue Eye, and Mr. Timothy. He has earned high praise from The New York Times and The Washington Post. The Post placed him “in the upper reaches of the historical thriller league” and the Times placed him on its Notable Authors list for 2009. The central character of his fiction, Eugene Francois Vidocq, was an actual detective in the 1800s, at the beginning of scientific forensic analysis.

Dana Cameron was the only scientist on the panel. (It’s unusual for an archeologist to be referred to as the scientist in the room, Ms. Cameron volunteered.) She writes the Emma Fielding archeological mysteries. She won the 2007 Anthony award for best paperback original and the 2008 Agatha award for best short story. The Emma Fielding character of her books asks questions similar to the ones Ms.
Cameron does in her archeology.

Ms. Harig asked the panelists: “None of your novels are weighty, scientific tomes. How do you balance the science and the mystery aspects when your readers might be new to the science you discuss?”

Cameron: There are common threads. Many of the procedures and concerns are the same. Detectives, like scientists, try to maximize the usefulness of the data. To speak to the uninitiated, I often have a new graduate student, a kid who wanders up to the project, or a reporter on the site. By explaining matters to such characters, I can get the readers educated without lecturing to them.

Bayard: For me, it is good that I write historical mysteries, because it is a subtractive process. You have to go back and figure out all the things that people didn’t know. And they are many. Black Tower is set in 1818 Paris. They knew nothing of DNA or even bacteriology. But Vidocq, the hero, was in fact the father of modern criminology. He was the first to use ballistics and plaster of paris imprints. He was the first to recognize the implications of fingerprints. It is exciting to me that, with all the differences and advantages current detectives have, the spirit of Vidocq lives on.

Crosby: I’m a journalist. When I started to write mysteries set in the wine country, the only thing I knew was that I liked to drink wine. I did what any journalist does; I asked a lot of questions. I like explaining something nobody understands and making it interesting and fun. My neighbor, Donna Andrews (one of last year’s panelists) has a concept she calls the “info dump.” You can have enormous gobs of information about something like, say, how to spray for powdery mildew. Too many details like that can quickly suffocate the plot.

You’ve got to weave the winemaking in. I talk to people. I talk to the winemaker. I write what I learn from them and use their words as my characters’ words. In the right amounts and the right context, it can make the story more interesting.

Goldstone: I’m pleased to be here, because I get to say something every writer dreams of saying (pause) -- “I’d like to thank the Academy.”

There is a balance. For our kind of audience, readers will stay with you as long as you don’t “dull them out.” It might be more of a challenge for a different kind of audience, but all of us write for people whose interests go beyond their own disciplines. As long as the technical aspects can be woven into the plot and spoken from interesting characters, the interest of the audience will hold. Even with historical characters, you can put words in their mouths. In Astronomer, Rabelais showed up. He was, historically, such an outrageous character that it’s hard to imagine something he would not have said. I don’t find it such a difficult balance, and I get as many comments favoring the informative parts as the entertaining plots.

Harig: Dana, you give us insight into the working life of an archeologist in your Emma Fielding books. Are you aiming for accuracy, suspense, or both? How would you describe her character and her involvement with crime?

Cameron: Both. One of my goals was to depict archeology in realistic fashion. I wanted to let people know archeology happens everywhere, not just in Greece and Egypt. I’d read a lot of books where archeologists were funky, unrealistic, sometimes unsavory, adventurers -- Indiana Jones types. I wanted to let them know we are just mild mannered, professorial types.
Archeology is suspenseful. Often the surprise is on last day of the dig. It is a proven fact. It will be when it's raining, when half the crew has already gone home, when you have no more money and no more time.

Emma and her relationship with crime, that's a good question. She gets involved with a person who’s there. She realizes she has the ability to take clues from the past and reconstruct what went on. She feels she should, because she can, and it involves someone close to her. She gets engaged and embroiled, to the point where, by book six, she is thinking about whether she should continue teaching archeology or take up forensics for real.

Harig: What are your favorite digs that you’ve been on, and how do they find their ways into your books?

Cameron: All of them! I’ve worked on fabulous sites. The one that started me writing was an English fort site on the coast of Maine, roughly contemporary with Jamestown. It lasted only a year, 1607 - 1608. It was a perfect time capsule. My boss and I were surveying the site, and a guy came out with a gun, to steal artifacts. There were no valuable artifacts; it was a collection of broken household trash. Most of my books are set in New England, because of that experience. They reflect the historic houses I’ve worked on there.

I’ve also worked at the British Museum and I was a Fellow at the Winterthur Library and at the Peabody Essex Library. Behind the scenes there is a treasure of good artifacts. I was writing my fourth book when I should have been writing a monograph. My books do reflect the research sites, but I put better artifacts in the books. It’s more fun that way.

Harig: Ellen, your character comes to Virginia from France. Her father died and she comes to take over the winery. What suggested that to you?

Crosby: Well, first, we should be glad I wrote about a vineyard. If it had been a dairy, we would be drinking milk tonight.

How did I get into writing about Vineyards? I was posted to London in the 1990s. There I wrote a book about Moscow. On a holiday back here, we had a friend who, when he came to dinner, always brought a Virginia wine over. My husband, who is French, would always look at the bottle and wonder, should we use this for the vinaigrette or what? Then one day, the friend rented a van and took us, the whole family, on a tour of Virginia wineries.

Back in London, my publisher asked, “What did you do on holiday?” I told her about the terrific weekend we’d had, and she said, “That would be a great setting for a book.” She pushed pretty hard, and I thought, “I will write one.”

I got out a map of Virginia and found the nearest vineyard to my house, and that set my next book at the Swedenburg Vineyard in Middleburg. And that’s the very scientific explanation of how my books got located in Virginia wine country.

Harig: But you met a very interesting person there.

Crosby: I did. Juanita Swedenburg welcomed me and taught me everything she knew about growing
grapes and winemaking. She had been horrified to discover it was against the law to ship wine to New York. She had a friend, a local lawyer who sued New York. New York sued back. It became a constitutional issue; it went back to the states being able to regulate alcohol. My husband came home from work one day and said, “Juanita is in the Financial Times.” After the groundwork was laid, big-gun lawyers came down from New York to take her out to lunch. They wanted to take on the case. She said, “My lawyer was good enough for me when you people didn’t know who I was, and he’s going with me to the Supreme Court.” He did, and they won. She died about a year after case was won.

Harig: Larry, what suggested your book to you? What research do you do to bring your characters to the page?

Goldstone: Research? It’s fiction.

I’d written six books with my wife. Many of them had an element of the tension of empiricism in conflict with theology or religion. There was a common pattern, where empiricism confronted religious dogma, and empiricism gradually won out, sometimes after considerable hardship.

The early 1500’s was a time of great purity in religious interpretation of empirical matters. Pope Leo was confronted with the problem that the calendar was off. Copernicus was called in about 1516; he told Pope Leo that it might have something to do with the Sun. Pope Leo was interested, but he was too busy building St. Peter’s. He started indulgences to help pay for it; that caused Martin Luther to post his 95 theses, and Leo quickly lost his astronomy bug.

Copernicus went off to Poland and continued to work on his theory. He knew he was in a delicate area. Thomas Aquinas had incorporated Aristotle’s thinking into Catholicism. He made Earth the center of the Universe because it seemed reasonable that, since man was the center of God’s attention, man’s home should be the center of the Universe.

So I thought, okay, what happens if people, kind of, get wind of it? That’s how I got the germ. Then I got to bring in all the interesting characters, Servitus, Rabelais, and others. It’s delicate, because you want the facts to be consistent with history, but it’s fun because you get to invent facts and dialogue also. It was great fodder for a story, if you can hold it together.

Harig: Lou, you’ve written a number of stories about science and detective work in history. Now you have this character, Vidocq, who invented forensics and applied scientific methods to his work. Did he, like Copernicus, encounter skepticism about his methods, and was he always a detective?

Bayard: Yes, he did encounter skepticism.

Your second question was very delicately phrased. Vidocq earlier was a convict. He escaped from many French prisons. He worked his way back to Paris; he was tired of running; he was being blackmailed by many of his former compatriots including his ex-wife, and he volunteered to work for the police as an informant. He went back to prison as a spy, and he was so successful, he worked his way up the chain of command. Within a year or two, crime in Paris was down. He founded the first private detective agency, which was a model for Pinkertons. Even more controversial: he staffed it with ex-cons, like himself. He was featured in works by Victor Hugo and Honore de Balzac. Dickens and Melville alluded to him. Hugo divided him in two; he was a rich enough character for two characters.
Without him, I’m not sure modern detective work or detective fiction would be the same. I’m not sure we would have Sherlock Holmes.

**Harig:** When you are stuck, whom do you turn to?

**Goldstone:** On a technical matter, I turn to experts. In *Anatomy of Deception*, I got a referral from my gastroenterologist, who referred me to a man who had studied with one of my characters. With the 16th century, you can’t do that. Mostly, the research is where I turn. Ptolemy and Copernicus have been extensively translated into English.

**Crosby:** The short answer is, I turn to experts. I contact the Fairfax County Police. Juanita was hard to get to; she did not use email; she did not have an answering machine. I’m always hoping for one expert who has a sense of whimsy who will tell you how to kill people. Once when I tried that, I was lucky I did not get turned in to Homeland Security, before the police found I was a writer.

**Bayard:** At the risk of coming off as lower class, I do a lot of research on Google. I found an extensive history of Vidocq there, which I later learned was about half incorrect. But, as a novelist, I feel free to make stuff up.

I got a question once from a copy editor who wanted the “scholarly citations” regarding a French psychologist from the early 18th century. I said, “There are none, because I made him up.”

Readers go out of the way to tell us all the things we did wrong. I’m sure we all have experiences with people who come to us with great details about what we did wrong. I think of them as people with lots of cats. One told me that I should know that poinsettias were not in English drawing rooms in 1842. I did know, but I’m a whore for a good detail. I feel that, as a historical novelist, I have a duty to err on the side of the story.

**Cameron:** I ran into a similar thing. I was asked to write a werewolf story for Christmas. I thought, “Okay, to the reference books.” It took me a good ten minutes to think, “Wait a minute, this is fiction!” There is an extensive canon on werewolves and vampires, but you don’t have to read it.

I was asked by the Boston Noir editor Dennis Lehane if I’d like to contribute a story. I said, “Oh my God, yes, please.” But I didn’t want to sound like I was following a formula for writing noir. I set it in 1740 in Boston, on the wharves. It had many of the conventions, such as an embattled young woman with no one to protect her. I deliberately did not read much about how to write noir. When I finished, I felt, “Okay, it’s noir, but it’s my noir.” My academic training taught me to value accuracy. It was a hurdle for me, then, to learn that, when I’m stuck, I can just make something up.

**Goldstone:** The Amazon review is the bane of modern writer. One knocked me down two stars because I had the potato in Europe 20 years before it happened. And it wasn’t like I made it a French fry.

**Harig:** Okay, final question: What are you working on now?

**Cameron:** I’m taking the idea that archeologists have traits and skills in common, and updating it. I’m working on an espionage novel. Ellen [Crosby] has helped me. It’s been a lot of fun, learning to be a spy. I’m learning gunplay. Hopefully, it will go to a smart, savvy editor. Also three short stories, one about my Fangborn vampires and werewolves, and two noir.
Bayard: I have a book coming out called the School of Night. It’s set partly in Elizabethan England and partly in modern Washington. The School of Night was a group of Elizabethan scholars who were rumored to dabble in dark arts. It included Christopher Marlowe and Walter Raleigh. Actually, the hero of the book is a man named Thomas Herriot, who, unfortunately, did not leave many papers. We are still trying to figure out what he knew and when he knew it. He drew a picture of the moon before Galileo. He knew of the law of refraction. He was encouraged to keep quiet, like Galileo.

Then, the next book is about sainthood in the Catholic Church. It’s about the whole business of confirming sainthood, which is an interesting, complicated process. [Here, Mr. Goldstone quietly advised Mr. Bayard to get an unlisted phone number.]

Crosby: I just turned in my sixth book in my wine country series. I just got it back. I’ll be doing revisions over Christmas. I’m not supposed to talk about it yet. There are two more in the making.

I have two publishers, Scribners, for hardcover, and Pocket, for paperback. They are both part of Simon and Schuster, but they are completely different companies. The illustration Scribners put in the hardcover catalog is an elegant thing, with a classy etching of F. Scott Fitzgerald, done for his 100th birthday. The Pocket illustration is of a swinging chick in a bikini on a surfboard in the Keys. I am very impressed that there can be such radically different icons associated with these two presentations of the same book.

Goldstone: I have a book coming out in February called Inherently Unequal. It’s about the shameful record of the Supreme Court in civil rights cases from 1865 to 1903. That’s my day job, the Constitution. I’m finishing another thriller about when heroin was first marketed as a cough medicine for children.

But what I am really working on is a book about my kid’s piano teacher. One day, this woman, Vernona Gomez by name, showed up for a recital in a Yankees hat. “What’s she doing in a Yankees hat?” I asked. A nother parent said, “Do you know who that is? That’s Lefty Gomez’s daughter.”

Years went by. One day, she called. “Can I come over?” “Yes.”

[She brought over her material. She was working on a book and she had interviews with people who didn’t give interviews. Mr. Goldstone referred her to his agent. Against his wife’s advice, he declined to get involved himself, at that time.

Six months later, the agent was burned out on the project. Gomez’s son, a lawyer, had “completely obnoxed” the agent. Goldstone called and begged the agent to do it. The agent said, “I’ll do it if you’ll do it.” So Goldstone is doing it, with Ms. Gomez.]

It’s an unbelievable trove of material of an American Odyssey. Her father was best friends with Babe Ruth. He was Joe DiMaggio’s roommate for seven years. This guy grew up dirt poor. The day Castro marched into Havana, Lefty was at Ernest Hemingway’s house with an invalid passport. He’d been asked to go down there by John Foster Dulles after Nixon had been spat on in South America. Hemingway sent him to the Hotel with instructions to stay inside. The Castro people weren’t going to let anybody out without a valid passport. They found out who he was and Fidel Castro gave permission for him to leave.
**Lefty, An American Odyssey**, will be out in 2012.

**Harig**: That's it for the formal program. Any questions from the audience?

**Question 1**: You all have such breadth. How do you find the time? Do you all have day jobs?

**Cameron**: I just stay in my pajamas for an extra hour. I can't do anything else in pajamas, and I'm comfortable working that way, and I built on my day job that way. I'm a full-time writer now, I'm a recovering archeologist. You never get over that completely. Our vacations are all about broken things (artifacts). It's more fun when you can devote your whole time to a project.

**Bayard**: Stealing time is almost the writer's vocation. I used to write for nonprofit groups and others. I knew I was becoming successful when I found I could carve out two or three hours. Now, it is close to my day job. Writers, all of us here, have so many pins in the air, we are quite busy. And there is nothing more depressed than a writer between books.

**Crosby**: I worked as an economist on Capitol Hill. Then my husband got posted to Switzerland. I thought I'd work, but couldn't get a work permit. We went to Moscow, and there I gravitated toward journalism, which is hard to sell as a free-lance. Then I turned to nonfiction, which is better. It is full time; I have a book a year. My husband says he had no idea our lives were going to be like this. Fortunately, we don't live on what I make. He brings home the good paycheck.

**Goldstone**: I teach at a local community college. I write for my work. Writing doesn't pay terribly well. You get regular advances, and sometimes you score, but usually not. It's like the old garment center joke -- lose a little on every garment, but make it up in volume.

You have to need to write. If you don't have the need, the business will just chew you up.

[The writers agreed that they need to have more than one project going. If one stalls, they can keep going on others.]

**Question 2**: How difficult is it to develop the conversation that goes on between characters within the plot line?

**Goldstone**: My dialogue works best when I am a reporter and when I am “watching.” With experience, you develop an ear and an eye. You “hear” the characters; you “see” the scenes. When the characters sound tinny, you know you are off. You feel it. You change it.

**Bayard**: There are perils in writing historical fiction. I started *School of Night* in Elizabethan, and I found I hated it. It sounded too stilted. I had to create a new style of dialogue that was more modern but with Elizabethan style touches. That seems to work better.

The second peril is making your characters mouthpieces for your research. You are tempted to teach the reader everything you learned about Grecian sewers. If you sprinkle too many historical facts into the dialogue, the characters don't seem real.

Henry James said there was no such thing as a good historical novel. You are forcing them to say things they would never say. But I think there is a way of working it, and it does require an ear.
Crosby: I was in radio, and I read all my books out loud. I usually read with my cat, who is pretty discerning and critical. I think that’s why all my books are unabridged audio books. You catch all the little words that don’t work.

Cameron: I do that, too. I read them to my husband. Historical facts? You don’t want to put in all the tidbits. You have to develop a feel for “just enough.” Paring it down between a dissertation and dialogue between criminals, that takes some work.

Question 3: How do you deal with the perceptions and misperceptions of your audience?

Crosby: The greatest one I deal with is the assumption that wine is not made in Virginia. That actually has been kind of fun. I travel a lot, in California, especially, they are surprised that people make wine in Virginia. It is a pleasure to educate them.

Goldstone: In books on the 15th century, you don’t find much of that. Few people know much about the 15th century. In the end, you trust your research. You’ve done the reading; the critics are usually less well informed. The overly particular criticisms are often from people who want to justify not liking the book.

You need to accept that, no matter how good a book is, not everybody will like it.

Bayard: Writing about Tiny Tim, I was writing about a character I loathed. My purpose was to turn him into a character I liked. When I wrote about Poe, it was about a period of his life few people know about, when he was a cadet at West Point. There are many myths about Poe, for example, that he was a drug addict. There is no evidence to support that.

I am reminded of the John Ford line, in “Liberty Valance”: when the myths and the truth conflict, publish the myth. I guess we just create our own new myths.

Cameron: It usually isn’t a problem with the archeologists. But I had a character once who was an army brat. A real army brat thought I hit a chord exactly wrong. I haven’t had people call me out on having vampires cure people. I’ve cast vampires as sort of misunderstood superheroes. So far, I’m getting away with it.

I got a nice note from the Massachusetts Office of Historic Preservation, from the state archeologist. She was enthused about how I had presented women in historical settings, running pubs, getting beaten by their husbands. She had also deduced that must be true.

Archeologists often tell me they read my books because they are just like their own lives. I say, “I’m so sorry!”

People often want my characters to be just like them. I find that very funny.

Harig: Thanks to everybody for coming.

Peg Kay recalled one of the high points from the program of the previous year: Donna Andrews doing a remarkably animated imitation of a Penguin in Heat. Cameron remarked that she had been present at another penguin exhibit when Andrews recalled that eponymous penguin. [vide Donna Andrews’ The Penguin Who Knew Too Much]