Greetings!
We are pleased to bring you our eighth edition of CORE News (COlorectal Research in Epidemiology). We hope that this newsletter finds you and your family well.

This is a busy month for us. First, we have moved from our leased location in downtown Seattle to our new building on the main Fred Hutchinson Cancer Research Center campus at southeast Lake Union. Our state-of-the-art new building is equipped with a nutrition kitchen, exercise lab, and prevention clinic and will facilitate many new studies in public health. This move finalizes a 15-year long project to bring together in one location the four divisions of Fred Hutchinson: Basic Sciences, Clinical Research, Human Biology, and Public Health Sciences. We are grateful that the move went smoothly.

While we may not be unpacked, this move came just in time for CORE Studies to host our upcoming international consortium meeting. As you know, CORE Family Studies is a part of the Colorectal Cancer Family Registry (CFR), an international consortium of six research institutions. The CFR is governed by a Steering Committee that is made up of investigators from each of the research institutions, representatives from the National Cancer Institute, the community at large (a colorectal cancer survivor), and the research community. This leadership group meets monthly by teleconference and bi-annually in-person to discuss study progress and to develop new research topics. We will give you an update on the meeting in the next edition of CORE News.

Thank you once again for your contributions to CORE Studies!

Warmest regards,

John D. Potter
MD, PhD

Polly Newcomb
PhD, MPH
Traditional Colonoscopy vs. Virtual Colonoscopy

Do you need to schedule a colonoscopy but are procrastinating, maybe because you are dreading the procedure? Have you heard about virtual colonoscopy and wonder if it might be the substitute you’ve been waiting for? We have compiled a list of points to consider. While we hope that you find this helpful, you should discuss the pros and cons of each test with your doctor.

**Who performs the test?**

**Traditional:** Gastroenterologists—medical doctors specializing in the gastrointestinal system—perform colonoscopies.  
**Virtual:** Radiologists—medical doctors that specialize in diagnostic radiology or radiation oncology—perform virtual colonoscopies.

**How will I need to prepare for the procedure?**

**Both:** The preparation for both procedures is the same and involves a thorough cleaning of the colon. You will be asked not to consume solid food for the day or two before the procedure, but to adhere to a liquid diet instead. Patients must also drink a liquid preparation such as GoLytely or Fleet PhosphoSoda to cleanse the bowel, followed by plenty of clear liquids. Some patients are given an enema before the procedure.

**What happens during the test?**

**Traditional:** Patients are usually sedated before the procedure, although patients may request no sedation. The patient’s colon is then inflated with air to make it easier to be examined. Next, a colonoscope (a flexible, lighted tube equipped with a small camera) is inserted into the anus, through the rectum, and into the colon. The colonoscope is connected to a video camera that transmits images to an adjacent screen that the doctor views during the procedure. The doctor scans the images for suspicious lesions and polyps or other abnormalities.

**Virtual:** Patients are not sedated for the procedure. As with a traditional colonoscopy, the colon is first inflated with air. An x-ray is then taken of the patient’s abdomen with a computed tomography scanner (also called a CT scan or CAT scan). A computer reconstructs the image into a 3-dimensional, “virtual” picture of the colon. The radiologist then examines the images for suspicious lesions and polyps or other abnormalities and sends a report to the referring physician.

**How long does the test take and what is the recovery time?**

**Traditional:** Following sedation, the colonoscopy procedure usually takes 20-30 minutes. After the procedure, patients are kept for about an hour to be monitored and to recover from the sedation. Patients are advised not to drive and to arrange for a ride home from the test. While patients often do not feel like immediately returning to work, they can usually resume normal activities later in the day.

**Virtual:** The virtual colonoscopy procedure usually takes about 10-15 minutes. Patients are alert and able to drive themselves home after the test and most are able to return to work, although some people experience gas and bloating.

**How effective is the test?**

**Traditional:** The traditional colonoscopy is considered the “gold standard” for colorectal cancer screening. During a colonoscopy, the doctor can examine the entire colon and remove or biopsy suspicious lesions and/or polyps.

**Virtual:** While a New England Journal of Medicine study found that virtual colonoscopy was as effective in detecting colon cancer as the traditional colonoscopy, it was less effective in detecting smaller polyps.
Participant Spotlight: Bev Schrick

We are proud to introduce Bev Schrick, a CORE Studies participant since 2001. She was diagnosed in August 2000 at the age of 61 with Stage IV colon cancer. She underwent surgery and received chemotherapy following the diagnosis. Three years have passed since she received treatment for colon cancer, although she regularly consults with doctors for check-ups. Mrs. Schrick has been a registered nurse for 21 years. In October 2003, she sat down with Cara McDermott of CORE Studies to talk about her experience.

I went in for a physical and had a hemoccult test. It was the faintest, faintest of blue [a sufficiently positive test for blood]. My doctor suggested a sigmoidoscopy, but I decided to have a colonoscopy instead. I was very lucky to have chosen that—the tumor was in the transverse colon, beyond the reach of a sigmoidoscopy. They might not have found the cancer if I only had a sigmoidoscopy. I didn’t have any of the symptoms of colon cancer—no bleeding, no diarrhea, no constipation, and no abdominal pain.
I had the physical on Friday, the colonoscopy on Wednesday, and surgery on the following Friday. I was in the hospital approximately a week. The doctor told me that the tumor had spread to my lymph nodes and to my liver, and that the tumors in my liver were inoperable. I started chemotherapy shortly thereafter.

CORE: What did you find helpful?
I wanted a lot of information about cancer, so I learned a lot about colon cancer and the different treatments that are available. Some people might find all the information disconcerting or overwhelming, but I found it to be very helpful. I read Journeys with the Cancer Conqueror: Mobilizing Mind and Spirit by Greg Anderson as well as How to Live Between Office Visits by Bernie Siegel. I found both of those books to be very helpful. My doctor gave me different Internet sites to visit, and I learned a lot from reading those sites. I consulted with a naturopath for advice on diet and vitamins in conjunction with my chemotherapy and other treatment. I also read Andrew Weil [a doctor who emphasizes the mind-body connection] for information. I used visualization during chemotherapy to help me get through it, and the hospital staff was a wonderful source of support.

The things that helped me most with my diagnosis and treatment were positive thinking, prayer, exercise, nutrition, family, meditation, and trust in my doctor. I took classes at the MultiCare Mind/Body Medical Institute in Tacoma, which reinforced my belief in the mind’s ability to help us heal our bodies. I think many people underestimate the power of the mind. I feel that the body can heal itself with your help.

CORE: What happened after your diagnosis?
While my cancer diagnosis was difficult for me, the diagnosis also affected my family. I don’t think people realize that as much as it impacts you, it also impacts the people who love you. My family was a tremendous support. They put together a bag that hung on my IV pole during chemotherapy that had nice sayings in it to boost my spirits. My daughter brought little angels that hung off the chemo pole as well.

CORE: What would you tell people who have been recently diagnosed with colorectal cancer?
One piece of advice I have is to be comfortable with your doctor. Find another doctor if your doctor doesn’t answer your questions or isn’t receptive. I would also recommend having someone else go to treatment and doctor visits with you to help record information. It can be difficult to follow everything that the doctor is saying, especially if your mind is elsewhere. Another word of advice would be to practice common-sense infection control. For example, my husband screened visitors and didn’t allow sick people to see me while I was receiving chemotherapy.

CORE: What would you tell people who have been recently diagnosed with colorectal cancer?

If there were only one thing that I could say, it would be that cancer is not a death sentence. When people hear “cancer” they think certain things and I want to let them know that it’s not a death sentence. There are cancer survivors out there.
Mango Orange Smoothie

The days are getting longer, meaning summer is right around the corner! This yummy smoothie recipe, courtesy of the 5 A Day campaign (www.5aday.org), is a great way to enjoy the nice weather and beat the heat. It packs 3 servings of fruit and 4 grams of fiber per serving.

Preparation time: 10 minutes or less
Servings: 1
Ingredients:
• 1 ripe mango, peeled and pit removed
• 1 cup fresh orange juice
• 1/2 cup vanilla nonfat yogurt
• 1 tsp honey

Directions:
Place all ingredients into a blender and purée on high until smooth, about 60 to 90 seconds. Pour into a chilled glass and serve immediately.

<table>
<thead>
<tr>
<th>Nutrition Facts for Smoothie</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amount Per Serving – 1 cup</td>
</tr>
<tr>
<td>Calories</td>
</tr>
<tr>
<td>Total Fat</td>
</tr>
<tr>
<td>Saturated Fat</td>
</tr>
<tr>
<td>Cholesterol</td>
</tr>
<tr>
<td>Sodium</td>
</tr>
<tr>
<td>Total Carbohydrate</td>
</tr>
<tr>
<td>Dietary Fiber</td>
</tr>
<tr>
<td>Protein</td>
</tr>
</tbody>
</table>

Genetics 101:
Avastin—A New Advance in the Treatment of Colorectal Cancer

On Thursday February 26, 2004, the Food and Drug Administration (FDA) approved the drug Avastin for use in treatment for metastatic colon cancer (colon cancer that has spread beyond the colon). Avastin is a “targeted therapy” drug, a broad class of new cancer drugs that has been developed by concentrating on the genetics of cancer. While this drug is not a cure for cancer, it represents a significant advance in colon cancer treatment.

In order to grow, a tumor needs a blood supply to provide the tumor with oxygen and nutrients. Cancerous tumors release proteins that act as messengers, telling the body to create more blood vessels, increasing the blood supply to the tumor, and allowing the tumor to grow. Avastin works by blocking the release of these proteins, thereby preventing new blood vessel growth, which limits the blood supply to the tumor, and slows the tumor's growth.

In a randomized, clinical trial of more than 800 patients with metastatic colorectal cancer, patients given Avastin in combination with irinotecan (IFL), 5-fluorouracil (5FU) and leucovorin, the standard chemotherapy combination, survived about five months longer than patients given IFL alone. While Avastin does occasionally cause some serious side effects, overall the side effects were more benign and less frequent than standard chemotherapy drugs because Avastin concentrates specifically on the cancerous cells rather than all growing cells. Avastin is currently under investigation for its use in treating other forms of metastatic cancer, including non-small cell lung cancer, pancreatic cancer, and renal cell carcinoma.

Research Update!

Since our last newsletter, two new research proposals submitted to the National Cancer Institute have been funded and are now underway! One project will study the risk factors for hyperplastic polyps, the most common non-neoplastic polyps in the colon. Emerging evidence suggests that these polyps may indeed have the potential to progress to cancer and our research will help identify those that may become more serious later on.

The other proposal will study different approaches to colorectal cancer education. In this study, CORE Study’s Dr. Deborah Bowen is working in collaboration with Dr. Dennis Ahnen at the University of Colorado, a CFR consortium investigator. Some of you may receive a letter from us in the next few months about this study.

Our research proposals are ongoing. Look for more updates in future issues of CORE News.

Colorectal Cancer Awareness Month

On March 1, to kick off Colon Cancer Awareness Month, Jeff Brown, Colon Cancer Alliance (CCA) President, and Katie Couric, Today Show host, unveiled a new CRC emblem called the Blue Star Symbol. Lapel pins can be ordered through the American Cancer Society at 1-866-227-7914 or online at http://www.ccalliance.org.
Talking With Your Doctor

While colorectal cancer (CRC) is the second-leading cause of cancer death in the U.S. for both men and women, it is also one of the most preventable and curable cancers, with a cure rate of more than 90% when detected early. However, early detection is only possible through screening (or close surveillance if you have already been diagnosed with CRC). So, talk to your doctor about CRC screening/surveillance, and go prepared to cover the following topics.

Risk factors:

1) **Age.** Are you 50 or older? Colorectal cancer is more common in people over 50.

2) **History of polyps.** Has a doctor ever found polyps in your colon or rectum? While colorectal polyps are not cancerous, they can develop into colorectal cancer. People with polyps are at higher risk of developing CRC.

3) **History of gastrointestinal diseases.** Have you ever been diagnosed with inflammatory bowel disease (e.g., Crohn’s disease, ulcerative colitis)? People who have been diagnosed with these conditions are at higher risk of developing CRC.

4) **Familial adenomatous polyposis (FAP) and Lynch syndrome (HNPPC).** Have you ever been diagnosed with FAP or HNPPC? These conditions increase a person’s risk of CRC.

Family history:

1) **Have any of your first-degree relatives—parents, siblings, or children—ever been diagnosed with CRC?** If yes, what was the relative’s age at diagnosis? People with a family history of CRC are at a higher risk of developing CRC themselves, especially if the family member is a first-degree relative and/or the affected relative developed CRC at a young age.

2) **Has more than one relative been diagnosed with CRC?** If more than one of your family members has had CRC, then your chances of developing it increases.

Symptoms:

- **Have you experienced any of the common symptoms of CRC?** Common symptoms include: rectal bleeding; blood in the stool; a change in bowel habits; stools that are narrower than usual; bloating, fullness, and cramps; diarrhea, constipation, or the feeling that your bowel does not empty completely. **However, keep in mind that these are common symptoms to many other, less serious conditions. Also, remember that most colorectal cancers are present without any symptoms, especially in the early and most treatable stages.** Don’t avoid screening because you don’t have symptoms.

Insurance coverage:

- **Does your insurance cover CRC screening?** Coverage varies by insurance company and Medicaid coverage varies by state. Medicare covers a screening sigmoidoscopy. Contact your local county health department for information on colorectal cancer screening if you do not have health insurance and are low income.

Test options:

What kinds of tests will your doctor recommend? Familiarize yourself with the different surveillance and screening tests for CRC. Your doctor may recommend one or more of these tests, depending on your medical history, your family’s health history, and the presence of any symptoms of CRC.

- **Fecal Occult Blood Test (FOBT) or Hemoccult** is a test that checks for blood in the stool.
- **Sigmoidoscopy** is an examination during which a doctor looks at the inside of the rectum and lower portion of the colon through a lighted tube.
- **Colonoscopy** is an examination during which a doctor looks at the entire colon and rectum through a flexible, lighted instrument called a colonoscope.
- **Double Contrast Barium Enema** is a procedure that involves x-rays of the lower intestine taken after a patient is given an enema containing a white dye, or barium.

For more information

- The Cancer Information Service at 1-800-4-CANCER


100 Questions and Answers About Colorectal Cancer

(Jones and Bartlett Publishers, Inc., 2003, paperback, $16.95) by David S. Bub, MD, Susannah Rose, MSSW, and W. Douglas Wong, MD.

This informative book addresses many aspects of coping with a colorectal cancer diagnosis—from the physical to the emotional—in a reader-friendly format. The book is divided into five manageable sections focusing on answers to commonly asked questions about colorectal cancer, such as "If someone in my family has colon cancer, how does that affect my risk?" and "How can I manage the stress of my diagnosis?"

Authored by two oncology surgeons and a cancer care social worker, coupled with commentary from actual colon and rectal cancer survivors, this book provides a unique, "insider's" perspective.

Study Staff

Investigators: John D. Potter, MD, PhD
Polly A. Newcomb, PhD, MPH
Deborah J. Bowen, PhD

Project Manager: Allyson S. Templeton, MS
Project Lead: Cara McDermott
Biospecimen Coordinator: Beth Nolan
Follow-up Coordinator: Ann Arney, MEd
Genetic Counselor: Ksenia P. Koon, MS

Contact us:
Cara McDermott
Fred Hutchinson Cancer Research Center
P.O. Box 19024, M4-B402
Seattle, WA 98109-1024
1-800-276-0127
cmcdermo@fhcrc.org

Contact us! Have you moved? Are you planning to move? Do you have comments or suggestions for a future newsletter? Please call the study line at 1-800-276-0127 to keep us updated or to request information at any time.