

A large photograph of a modern Mayo Clinic building at sunset. The sun is low on the horizon, creating a bright lens flare and casting a warm glow over the scene. The building's facade is dark, and the words "MAYO CLINIC" are prominently displayed in large, white, three-dimensional letters on the right side.

MAYO CLINIC

Familial Colon Cancer Family Registry Newsletter

VOL 01, NO. 01, 2024

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Welcome

Welcome to the Mayo Clinic Familial Colon Cancer Family Registry (CFR) Newsletter!

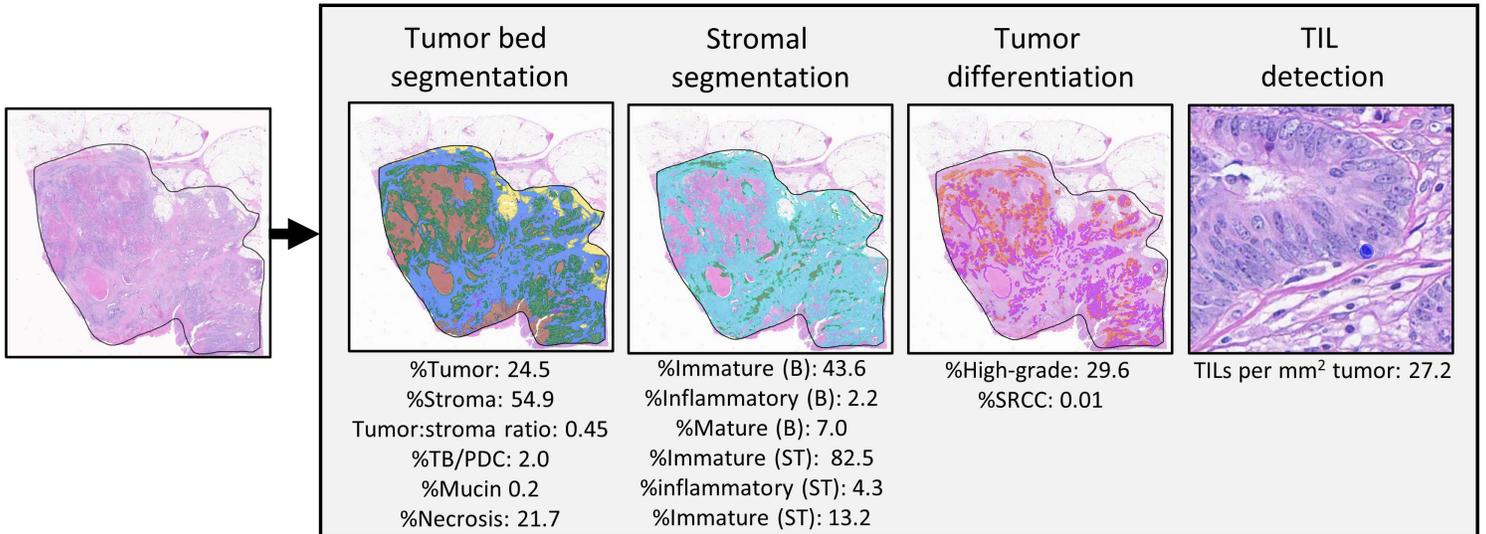
We are pleased to announce that the US National Institutes of Health (NIH) has recognized the continued importance of our research and has renewed its funding for Mayo Clinic CFR for the next five years. Since our registry began in 1997, the CFR has grown to 43,000 participants from approximately 15,000 families across Australia, New Zealand, Canada, and the USA.

We want to take this opportunity to celebrate your volunteer efforts for the Mayo Clinic CFR! Thank you very much for your time and commitment and we hope you will continue to support cancer research.



Rish Pai, M.D., Ph.D.
Principal Investigator,
Colon Cancer Family Registry
Mayo Clinic

QuantCRC



A digitized slide of colon cancer tissue, shown here, was analyzed by QuantCRC. It provided information about 15 features. This information allowed researchers to better predict how the tumor would behave. In the future, this new AI tool, and others like it, may provide patients and oncologists with additional information to help guide therapy and follow-up.

AI in Colon Cancer

You've probably noticed that Artificial Intelligence (AI) has become a popular buzzword in many industries, and health care is no exception. There are many benefits of AI to the health care industry, and one of the most exciting is its potential to improve detection, diagnosis, and treatment of cancer. Physicians and other health professionals will soon have new AI tools in their toolbox to fight against cancer. One recent advancement is using AI to complement the information that pathologists see through their microscopes. Pathologists routinely evaluate colon cancer tissue under the microscope and provide information to patients and other health care professionals that can help determine next steps in their treatment. With digital pathology (making a digital image of tissue microscope slides), pathologists can now use AI tools to better understand colon cancer tissue and how it might develop. In one recent study by the CFR, over 6,500 colon cancer tissues were evaluated by an AI tool called QuantCRC that measures 15 features in a colon cancer image.

COLON CANCER ON THE RISE IN YOUNG ADULTS

Colorectal cancer cases have steadily increased in adults below 50 years of age since the mid-2000s. While the number of cases in adults 65 and older have been decreasing, cases of adults 50 years and below have increased by 2% per year since 2011. Additionally, this increase in incidence is often found at more advanced stages of the disease. It is increasingly important to educate young adults about factors that may increase risk of CRC including family history, inflammatory bowel disease, diabetes, obesity, and environmental exposures like alcohol use and smoking. Although genetic syndromes are most associated with young patients with CRC, these

cases are often stable over time. Industry experts are turning to environmental factors such as diet to potentially be a leading cause of this sudden increase. However, more research is required. The American Cancer Society recommends patients of average risk begin screening as early as 45 years old. Your participation in the Colon Cancer Family Registry continues to increase researchers' knowledge of colorectal cancer and will lead to many future discoveries and prevention efforts.

To see more of the amazing discoveries made thanks to you, check out our website at coloncfr.org.

“Pathologists can now use AI tools to better understand colon cancer tissue and how it might develop.”

Retirement

DR. NORALANE LINDOR

Since our last newsletter, our Principal Investigator Dr. Noralane Lindor has retired from the Mayo Clinic after a tremendously successful career. Dr. Lindor joined Mayo Clinic in 1993 and was instrumental in advancing the field of medical genetics, particularly the genetics of colon cancer. She led the Mayo Clinic CFR for over 20 years and felt a deep connection to this study and its participants. We wish her the best in her retirement, and we are sure she will be as successful in this next phase of her life as she was in leading the CFR.



Website

Our updated website, coloncfr.org, contains detailed information on the number of participants in the study as well as the ongoing scientific and medical studies that have been made possible through your participation.

Upcoming Activities

As we continue to build our knowledge of CRC and build the Mayo Clinic CFR, we are pleased to inform you of upcoming information coming your way! In the next few months, you will receive a follow-up survey from Mayo Clinic. We are excited to check back in with you and want to give you the opportunity to update us on your life and experiences since we last connected.

If your contact information has changed or you would like to receive your survey in a different format than mail, please fill out the below information and mail back to us using the pre-paid return envelope included.

Please cut along dotted line and mail in return envelope.



Mayo Clinic Familial Colon Cancer Family Registry

CONTACT INFORMATION UPDATE

Name _____

Address _____

City _____ State _____ Zip Code _____

Email Address _____

I would like to receive my survey (check one):

- Emailed to the email above
- Mailed to my new address above

[Learn more at mayoclinic.org](https://www.mayoclinic.org)

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