



UNIVERSITY OF MARYLAND
SCHOOL OF MEDICINE

Center for Celiac Research
20 Penn Street, S303B
Baltimore, Maryland 21201
410-706-8021

Alessio Fasano, MD, Medical Director
Carlo Catassi, MD, MPH, Co-Medical Director

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Dear Friends:

At this time of Thanksgiving, we're filled with gratitude for our many kind friends who have generously supported the Center for Celiac Research (CFCR) for the past 13 years. Let's think back over the past year and reflect on some of the Center's accomplishments and how your donations have made all this possible. What you give today will ensure a better tomorrow for the celiac community and a stronger CFCR now and into the future.

2009—Dr. Fasano and the CFCR “MAKE THE BIG TIME”!!!!!!!

- ❖ **Dr. Fasano Brings CD to the Front Page of Scientific American** – Dr. Alessio Fasano has published an article in *Scientific American* (a publication that interprets scientific developments to lay readers; the most highly regarded of its genre) entitled “Surprises from Celiac Disease”. The article features the evolution of celiac disease, the history of the diagnosis and research on the disease, and how the condition may hold important implications for other autoimmune disorders.
- ❖ **Dr. Fasano Named Researcher of the Year** – Dr. Fasano has been named the 2009 Researcher of the Year by UMB during Founder's Week. Several events that marked this occasion included a special lecture entitled “CD: The Key to Unlock the Door to Autoimmunity”, an Italian art exhibit and a gala dinner with live auction of the artwork. Dr. Fasano was also honored with special awards from the University of Salerno and the Consul of Italy in Baltimore.
- ❖ **Proceedings of the National Academy of Science (PNAS)** – Dr. Fasano published an article in the prestigious **Proceedings of the National Academy of Science** that pinpoints the precise molecule that makes up zonulin, which he identified in 2000. This study will enable a more detailed and thorough study of zonulin and its relationship to CD and a series of other inflammatory disorders.
- ❖ **Dr. Fasano's Discoveries Lead to Alba Therapeutics Continuing Clinical Trials** – The CFCR continues its close partnership with Alba Therapeutics. Through the donations from our supporters, the Center is able to continue performing crucial research to optimize the effort of the ongoing clinical trials.
- ❖ **Innate Immune Study** – The CFCR is currently investigating the body's natural response to gliadin in people with and without CD to identify the event(s) which are responsible for the development of CD in people with a genetic predisposition to develop the disease. Understanding this pathway may offer new therapies for CD and may also provide insight into other autoimmune diseases. Moreover, an in-depth investigation of the inborn immunity may explain why the majority of individuals exposed to gluten do not develop the disease.
- ❖ **CFCR Celebrates Master's Class in Celiac Disease** – The CFCR, in conjunction with the universities of Ancona and Salerno, has developed the first worldwide master's program in CD. This program has accelerated physician education in diagnosing, treating, and managing CD patients worldwide. We are very proud to report that the second class of 10 students will graduate in December 2009.
- ❖ **Natural History of Celiac Disease** – Epidemiological data suggest that the incidence of CD has been increasing during the past few decades. The CFCR is currently investigating the natural history of undiagnosed CD and its complications in the U.S. This is being done by screening archived blood samples and corresponding data which spans back in time. Our data suggests that during the past 40 years the prevalence of CD has doubled every 17 years, and that untreated CD subjects show a higher incidence of osteoporosis and associated autoimmune disorders. By understanding the natural history of CD, the CFCR can better comprehend how CD symptoms develop, why some patients experience complications, and possibly discover the mechanisms of co-morbidity with other autoimmune diseases.
- ❖ **Infant Nutrition and Risk of Celiac Disease: Proposal for an Intervention, Prospective, Multicenter Study** – The CFCR continues to work on this study and has enrolled over 700 babies worldwide to establish the possibility of a timeframe in which the introduction of gluten to an infant's diet may prevent the onset of CD in genetically at-risk infants. The Center will follow these children, until 18 years of age, to determine if the timing of gluten introduction affects the development of CD or merely delays the onset. We have now expanded to 40 worldwide centers. To enroll in this study, please visit our website and click on research.

- ❖ **Possible Link Between Schizophrenia and CD/Gluten-Sensitivity** – There is evidence of a link between schizophrenia and CD that dates back as far as 1961. A theory for this association suggests that gluten serves as an environmental trigger in individuals predisposed to schizophrenia. This theory is supported by a series of ecologic data linking a decreased prevalence of schizophrenia with low grain consumption. The CFCR is currently investigating this link with 1,419 schizophrenic patients and the preliminary observations suggest that 1 out of 5 could potentially benefit from a gluten-free diet. This pilot study was published in June 2009 in the Schizophrenia bulletin.
- ❖ **Celiac Disease Research Registry** – In order to learn more about gluten related disorders, their complications and co-morbidities, the Center for Celiac Research has established a Celiac Disease Research Registry.
- ❖ **Summer Internships** – This past summer we had 13 students participate in the program, some of which have already applied for next year. These students range from high school juniors to medical students. Depending on the individual student's strengths and interest, the students were paired with staff and were able to participate in most areas of research. One of our summer students has put together a proposal to determine the prevalence of Celiac disease in the Navajo Population. This study will help determine if the current prevalence of CD among the Navajo Indian is truly 0.004% or if it is severely under diagnosed.

OUR GOALS FOR THE FUTURE

- ❑ To implement the diagnostic tools necessary to eliminate the intestinal biopsy for confirmation of CD
- ❑ To better understand the genetics of CD
- ❑ To continue developing innovative strategies for the treatment and prevention of CD
- ❑ To continue to provide the most accurate and up-to-date information on CD to health care professionals, government agencies and industry
- ❑ To study the psychological impact on the newly diagnosed patients and their families
- ❑ In conjunction with John Hopkins University there is currently a proposal for a randomized double blind, controlled trial to determine the effectiveness of the gluten-free diet in the treatment of schizophrenia
- ❑ With the Navajo Nation, we will be embarking on a study to determine the prevalence of Celiac Disease in the Navajo Population

HOW YOU CAN GET INVOLVED

- ❖ **9th International Walk/Run for Celiac Disease** - Cities and countries continue to join our efforts to increase the awareness of CD and to raise funds for local and national initiatives and research. Over the past 8 years, over \$2 million has been raised. Log onto www.celiacwalk.org for more information on how to join our efforts.
- ❖ **Chip In For Celiac** - Our 2nd golf tournament was held in Baltimore and was very successful. We are also pleased to report that tournaments were also held in Iowa and CT. See our website for more information and organize one in your area.
- ❖ **Celiac Awareness Bracelets & Magnets** - The CFCR has distributed more than 50,000 "Making Tracks for Celiacs" bracelets worldwide. Please assist us in our goal to increase the awareness of CD and raise funds for research.
- ❖ **Christmas Lights for Celiac** - Celebrate the holidays, increase CD awareness and raise funds for the Center www.komar.org/cgi-bin/christmas_webcam. More than \$40,000 has been raised through this enjoyable site. Email your friends!
- ❖ **Estate Planning** - Have you remembered the CFCR in your estate planning? www.celiaccenter.org/plannedgiving

For more detailed information on our exciting studies & projects, please visit our website www.celiaccenter.org.

We are excited about our accomplishments over the past 13 years and look forward to meeting and exceeding our goals for the coming year. Our annual fund campaign continues to be an important part of the CFCR as it provides unrestricted support for the operation of the Center. Your support will allow us to accelerate our goal of finding an alternative treatment/cure for CD and continue to improve the quality of life for all patients and their families with CD.

Let's honor and celebrate our remarkable accomplishments over the past year by making a generous contribution to the annual fund campaign!

HAPPY HOLIDAYS!!



Alessio Fasano, MD
Medical Director



Pam King
Director of Operations