IWMF NEWSLETTER

TORCH

July 2010

Volume 11.3

International Waldenstrom's Macroglobulinemia Foundation

INSIDE THIS ISSUE

The distinguished Ask the Doctor panel from the 2010 IWMF Educational Forum in Las Vegas, Nevada. Moderated by Dr. Robert Kyle (lower left), the Ask the Doctor panel is the now-traditional final act of an IWMF Educational Forum. Questions, submitted in advance by Forum attendees, are posed to the panel of experts by Dr. Kyle, and a lively discussion frequently ensues. The 2010 panel, from left to right: Dr. Steve Treon, Dr. Gwen Nichols, Dr. Morie Gertz. More photos from the 2010 Ed Forum on page 17. Photos courtesy of Jack Whelan.

EPIGENETICS – LOOKING AT CANCER DEVELOPMENT AND TREATMENT IN A NEW WAY

by Sue Herms, IWMF Trustee

In order to understand epigenetics, we first need to review a quick definition of genetics. If you remember from your high school or college biology class, genetics is the study of the DNA in a cell – the DNA is encoded in genes that are found on your chromosomes and that carry the instructions for building all of the proteins that make each living thing unique. DNA is passed along as each cell divides in your body and is also passed from generation to generation in eggs and sperm.

Derived from the Greek, the word epigenetics literally means "above" genetics. Epigenetics is the study of chemical markers that modify genes but are not part of DNA itself. Like DNA, they can be passed on from cell to cell and from one generation to the next. These modifications are superimposed on top of our genes to tell them whether they should be active or inactive. For example, every cell in your body has the same DNA; however, some cells are specialized for

Epigenetics, cont. on page 2

Epigenetics, cont. from page 1

use in the heart, the bones, the brain, the nerves, the stomach, etc. These cells become specialized because different sets of genes are turned on or off at different points in cell development, leading to differences in the types and amounts of proteins produced and determining how the cells look, grow, and act. This is epigenetics in action.

How does the process of epigenetics turn your genes on or off? We currently know of two major methods. The first, called DNA methylation, directly affects your DNA. In this process, chemical tags called methyl groups are attached to or removed from the backbone of your DNA in specific places. A methyl group consists of a carbon atom and three hydrogen atoms and can act as a "red light" by turning certain genes off, or as a "green light" by turning certain genes on. Another way to think of DNA methylation is that it acts like a light switch to turn a gene on or off. This ultimately affects the types and/or amounts of proteins produced by the cell.

Epigenetics, cont. on page 30

A WORD FROM THE *TORCH* EDITOR

Dear *Torch* Readers,

Those of you who responded to the recent survey ranked the *Torch* at the top of the services provided to the IWMF membership. The *Torch* is your newsletter, published four times a year by the talented Torch Team whose names are listed in the box below. Each and every person on the Torch Team is committed to making the IWMF *Torch* a unique and important source of information for those concerned with the disease Waldenstrom's macroglobulinemia and its management. Your vote of appreciation is very satisfying to all of us.

For your Team,

Alice

P.S. Constructive comments and suggestions are always welcome.

The IWMF *Torch* is a publication of:
International Waldenstrom's Macroglobulinemia Foundation
3932D Swift Road • Sarasota, FL 34231-6541
Telephone 941-927-4963 • Fax 941-927-4467
E-mail: info@iwmf.com • Website: www.iwmf.com

This publication is designed to provide information about the disease Waldenstrom's macroglobulinemia. It is distributed as a member service by the International Waldenstrom's Macroglobulinemia Foundation, Inc., to those who seek information on Waldenstrom's macroglobulinemia with the understanding that the Foundation is not engaged in rendering medical advice or other professional medical services.

PRESIDENT
Judith May

EDITOR
Alice Riginos

EDITOR EMERITUS
Don Lindemann

MEDICAL NEWS EDITOR
Sue Herms

SENIOR WRITER
Guy Sherwood

SUPPORT GROUP NEWS
Penni Wisner

IWMF-TALK CORRESPONDENT
Mitch Orfuss

PROOF EDITOR
Jim Bunton

CULINARY EDITORS
Penni Wisner
Nancy Lambert

LAYOUT
Sara McKinnie

SCIENCE ADVISOR
Ron Draftz

HAVE YOUR SAY

The *Torch* welcomes letters, articles or suggestions for articles.
If you have something you'd like to share with your fellow WMers,
please contact Alice Riginos at 202-342-1069 or ariginos@sy-thetis.org

IWMF is a 501(c)(3) tax exempt non-profit organization Fed ID #54-1784426. Waldenstrom's macroglobulinemia is coded 273.3 in the International Classification of Diseases (ICD) of the World Health Organization.

PRESIDENT'S CORNER

BY JUDITH MAY

Ed Forum Report

I'm happy to report the great success of the 2010 IWMF Educational Forum. Our thanks are due to Vice President for Research Tom Myers and the members of his committee who worked so tirelessly to plan the Ed Forum. This year Tom revised the format followed in the past and expanded it to provide more information to patients and caregivers and more opportunities for networking, sharing, and getting to know one another. Four plenary sessions opened the Forum on Friday morning, and on Friday afternoon we held five patient breakout sessions. Presentations were made on Saturday, both morning and afternoon. Sunday morning was reserved for our very popular Ask the Doctor panel. The Ed Forum of 2010 concluded with the business meeting, the annual report by the Board of Trustees to the IWMF members. Most attendees of the Las Vegas Ed Forum arrived on Thursday and stayed until Sunday. Due to the wonderful ambiance of the JW Marriott resort, many opted to come even earlier and stay on for a day or two at the end.

At the awards luncheon on Saturday, we welcomed two more members into the Ben Rude Heritage Society: Ray Soborowicz from Wisconsin and Eleanor Moore from Arkansas. We very much appreciate their contributions and will use them wisely to fund research.

At the Ed Forum luncheon, the very pleased Torch *editor, Alice Riginos, receives a citation from the Board of Trustees presented by President Judith May.*

We presented an award to *Torch* editor Alice Riginos for her dedication to excellence in editing and managing the *Torch*. We are very fortunate to have Alice in this role, a retired professor of Classics and WM patient who has expanded and upgraded the quality of our newsletter. The *Torch* received the highest marks of all the Foundation's services from members who responded to the recent survey.

Awards were also presented to Richard Weiland and Roy Parker. Dick Weiland, who served as the IWMF Vice President for Fundraising, retired from the Board of Trustees in April. There is more information about Dick and his four years of developing the structure of our fundraising program on page 4 of this issue of the *Torch*. Roy Parker, who left the Board last year, was the first chair of the international committee and developed its structure during his three years in this role. To both Dick and Roy: we are very appreciative of your efforts and of your commitment to carry out the mission of the Foundation.

Executive Vice President Bill Paul, left, presents Roy Parker with an award for his service as a former member of the Board of Trustees.

At the luncheon we acknowledged with deep appreciation the grants to defray Ed Forum costs made by Steve Kirsch, a member and patient, and by Millennium Pharmaceuticals. The Foundation is very grateful for their support.

Upcoming Events on the IWMF Calendar

October 6 - 9, 2010: The Sixth International Workshop on Waldenström's Macroglobulinemia is to be held in October, the location this year is Venice, Italy. The Workshops were established to enable researchers who study our disease to meet and discuss the status of their research projects. They report their data and present interpretations that are then questioned and critiqued by their fellow researchers. Highly technical discussions and frankly offered opinions characterize these meetings, which are held every other year. In this strictly professional setting, important advances are made in understanding WM. Workshops are not designed for patients, and registration is restricted to the WM research community.

October 10, 2010: On the day after the conclusion of the Workshop, IWMF's International Patient Forum in Venice on October 10 is designed for international members who, for the most part, have not been to an Ed Forum, have not met other patients, and have not had much exposure to physicians and researchers presenting information directly to patients and answering their questions. We expect a large number of WM patients from Italy and Greece and other European countries. The room capacity can seat only 200 attendees, so I ask our international members to register soon. Information on how to register is now on the IWMF website: www.iwmf.com

June 2011: The IWMF Board is planning our next Ed Forum for June of 2011 to allow sufficient time between the Summit meeting in Orlando, March 9-11 and the Ed Forum. We are exploring several different locations and are looking at dates in mid to late June. As soon as the details are confirmed we will send all members an e-mail notification from the IWMF office.

Transition at the Top

On Friday night at the Ed Forum's welcome dinner I had the pleasure of introducing Bill Paul, our Secretary-Treasurer, who

President's Corner, cont. on page 4

President's Corner, cont. from page 3

was recently elected to a new IWMF office, that of Executive Vice President. This is the position filled by the individual in line to become the next President. A period of transition has already begun, at the conclusion of which I will step down as President. Bill and I are working together this year, and we will decide at a future date when the transfer of the title and responsibility will formally take place.

I have been your Board President for five years and have thrived while following in the footsteps of our first Presidents, Arnold Smokler and Ben Rude. I have dedicated myself to our mission and have worked to improve and expand all our activities. I was a charter member of the first Board of Trustees, elected in June 1998 at the Atlanta Ed Forum. I will remain active with Board projects and will assist Bill whenever he asks, but I feel firmly that it is healthy to have turnover of officers and trustees. I look forward to the day when I can enjoy sitting in the audience of an Ed Forum and listen to our wonderful presenters. I will be delighted to have the time to mingle and talk with all of you.

For the time being, Bill and I are working together and sharing the work. Bill is meeting all my contacts so that this transition will be very smooth and he will be prepared to carry on. I know you will give Bill the support you have shown toward me. Your trust and support have continuously reminded me of why we do what we do as trustees and officers.

Stay well,

Judith

DICK WEILAND STEPS DOWN AS IWMF VP AFTER YEARS OF FUNDRAISING

Our Board of Trustees has been both honored and fortunate to have a professional like Dick Weiland supporting our fundraising efforts for the past four years. Following a career in professional fundraising, Dick dedicated many volunteer hours to our organization. While family and personal health challenges require Dick to step down from IWMF Board work, he will still be helping as a volunteer consultant and partner with the rest of the fundraising committee.

During his tenure, Dick worked extensively with all the Trustees and officers, from the President to the Treasurer to other committees such as research and finance. He was instrumental in developing a new and very efficient fundraising structure during his four years as Vice President for Fundraising. He established a number of charts, graphs, and different methods to indicate the direction taken by fundraising efforts. Dick's presentations were always thorough and complete. He applied the methods of a professional fundraiser to enable the Foundation to track exactly which funds had been received and which funds were outstanding, either through pledges or other planned gifts such as wills and bequests. In four years Dick has made our fundraising program far more efficient. The Board is thankful to have had Dick on our Executive Committee and looks forward to having his continued advice as a fellow volunteer. Thank you, Dick, for sharing your time and expertise with the IWMF family!

President Judith May and out-going Vice President for Fundraising Dick Weiland at the appreciation luncheon.

The IWMF Board of Trustees

BEN RUDE HERITAGE SOCIETY 2010: REACHING FOR $1 MILLION

BY DICK WEILAND, FORMER VICE PRESIDENT FOR FUNDRAISING

The 2010 Ed Forum appreciation luncheon once again featured a special welcome to the members of the Ben Rude Heritage Society. Ben Rude, the second IWMF President, passed away six years ago, but his legacy of leadership continues through the Ben Rude Heritage Society with the help of his spouse, Laurie Rude, the chairperson of the Society. This year we welcomed the founding members of 2008, the members of 2009, and two new members of 2010.

Laurie announced that gifts from donor families since 2008 now bring the total to over $900,000! Expressing gratitude on behalf of the Foundation to all the families who have contributed in the past, Laurie presented a brief biography of the 2010 new members: Raymond Soborowicz and Eleanor Moore. We thought you might be interested in reading about their backgrounds as well.

Ben Rude Heritage Society 2010, cont. on page 5

The gifts of both new members honor WM patients close to them and provide touching examples of generosity rooted in friendship and family affection.

Raymond Soborowicz was the third child in a Polish family of eight children whose birth dates spread over 26 years. Ray served in the Air Force for eight years, including time in Korea. Returning to civilian life, he pursued a college degree and was graduated from the University of Wisconsin at Eau Claire. Ray then went to work as a programmer at Boeing Aircraft in Seattle. An avid outdoorsman, he loved hunting, fishing, mountain climbing, and being in the wilderness of the northwest. After an intense bout with polymicrobial sepsis (not WM), Ray passed away last summer. He was memorialized in a full military ceremony at the Tahoma Cemetery in July, and his ashes were spread over Mount Rainier, the mountain he loved and enjoyed so much. His gift to the IWMF was made in tribute to the sister with WM whom he dearly loved.

Eleanor Moore grew up on a farm outside of Lincoln, Nebraska. Her husband, Edgar Moore, was an insurance salesman. As a family they resided in Des Moines, Iowa, where their two children grew up. After the sale of the farm in the 80s, the couple moved to Arkansas. Lesley Moore, one of their children, attended Northwest Missouri State University where she pledged a sorority with our own IWMF Trustee Cindy Furst (and you might suspect – correctly – that Cindy played a part in making this gift happen). Lesley and Cindy have been very close friends for the last 40 plus years. Both moved to Colorado in 1971, and Leslie proved to be a super caregiver for Cindy after her WM diagnosis in 2004. Then in 2009 Eleanor, Leslie's mom, made her estate plans and told her two children to each pick a charity to which half of the remainder of their mother's estate would be paid at the time of her death. The IWMF was one of the "winners." Eleanor is now 92 and still living in Arkansas, where Cindy Furst will visit her and personally bring a very warm expression of gratitude for Eleanor's generous gift to all of us.

Judith closed this portion of the luncheon by noting that we do not have to be business tycoons to participate in the Ben Rude Heritage Society. She requested that we contact Dave Benson, our part-time development officer, if we are thinking about personal estate planning while also trying to find a way to enable the IWMF to continue to follow its mission and to serve its membership. This goal, Judith reminded us, is accomplished by estate gifts to either the Member Services Fund or the Research Fund – or both.

More information and directions can be found on the Inquiry Forum printed on page 6.

FIRST TIME AT THE FORUM

by Ron Ternoway

Attending your first IWMF Educational Forum is like being in the middle of a fabulous 3-D action movie.

The dynamic doctors you've read about spring to life before your eyes – Morie Gertz, Steven Treon, Stephen Ansell, Gwen Nichols, Marvin Stone. The wizards of WM have convened and, at their head, is their ageless don, Robert Kyle. Supported by a cast of dozens, these and other WM experts weave a message of determination, progress, and hope.

Behind the scenes, President Judith May, IWMF Office Manger Sara McKinnie, and a team of Trustees and volunteers deftly choreograph the script, direct and record the action unfolding on a set worthy of awe – the stunning JW Marriott Resort in Las Vegas, Nevada.

And the audience! But wait a minute, where are all the sick folks? Such energy, such vitality, so many smiles in the crowd – have I stumbled into a joggers' convention by mistake? Everyone I speak to is articulate, intelligent, and fascinating. There is an airline pilot from India, a water geologist from Minnesota, a French-Canadian who now lives in Las Vegas and works with the famous Cirque du Soleil. What discovery will the next conversation bring?

As one of twenty-odd denizens of the Great White North at the Forum I beam with pride as my compatriots mount the podium: Dr. Guy Sherwood kicks off the show on Friday morning with a scintillating immunology lecture; on Saturday afternoon the poised and impossibly youthful Dr. Julie Neilsen reveals the exciting potential of vaccines for WM; and bringing the presentations to a close, the hilarious Dr. Joe Mikhael turns solo Rituxan therapy into a stand-up comedy routine. Brilliant performances all around!

I was diagnosed with Waldenstrom's macroglobulinemia in the spring of 2007 and have subsequently received Rituxan and Fludara treatments, so on Friday afternoon I head for the veterans' breakout. Moderated by Dr. Neil Massoth, clinical psychologist and New York City support group leader and WM veteran, several dozen survivors tell their stories, provide guidance, and bring news of various experiences on current clinical trials.

Positive personal results are reported from the panobinostat (LBH589) clinical trial at the Dana-Farber Cancer Institute at Harvard, together with encouraging reports from the ofatumumab (humanized Rituxan) trial at Weill Cornell

First Time at the Forum, cont. on page 7

THE BEN RUDE HERITAGE SOCIETY ENROLLMENT

The International Waldenstrom's Macroglobulinemia Foundation (IWMF) cordially invites you to become a member of the Ben Rude Heritage Society. Your legacy is an inspiration to others. Please indicate below your acceptance of enrollment in the Ben Rude Heritage Society. We hope also that you will consider providing information about your legacy so that we have a full understanding of your wishes. If possible, please attach supporting documentation. Thank you.

LEGACY GIFT

I/We have arranged a legacy gift for the benefit of IWMF through my/our:

❑ Will ❑ IRA/Retirement-Plan Beneficiary Designation ❑ Trust ❑ Charitable Remainder Trust

❑ Other *(please specify)*: _____

Additional Information: _____

DESIGNATION

This gift is to be used for *(please check one)*:

❑ IWMF's Greatest Need ❑ The Following Purpose: _____

GIFT DETAILS

As of this date, the value of my/our gift is: the sum of $_____ or _____% of my/our estate or other gift plan, with the current value of the IWMF portion estimated at $_____. I/we understand that my/our estate **is not** legally bound by this statement of gift value.

RECEIPT OF GIFT

This gift will be received by IWMF after the life of:

❑ The First Donor ❑ The Surviving Donor/Spouse ❑ Other Individual(s): _____

❑ As a Contingency to the Above

BEN RUDE HERITAGE SOCIETY HONOR ROLL LISTING:

Name(s): _____

❑ Please enroll me/us in the Ben Rude Heritage Society using the Honor Roll listing above.

❑ Please do not list my/our name(s) in the Honor Roll and _____in all other publications.

❑ Typically, IWMF recognizes Heritage Society membership with a crystal recognition piece.
Check here if you prefer not to receive this token of appreciation.

Donor Signature:_____ Date of Birth: _____ Date: _____

Donor Signature:_____ Date of Birth: _____ Date: _____

Please note that all information will remain confidential to IWMF. For further information about the Ben Rude Heritage Society, please contact Dave Benson at 952-837-9980.

Medical College, bendamustine and Rituxan at Dana-Farber, and trials involving RAD001at Dana-Farber and Mayo Clinic. In the whole scheme of things, it seems to be a good time to be a WM veteran.

The Forum organizers have thoughtfully served up a varied program with appeal for WM rookies and veterans alike. When proceedings get too scientific, there are yoga sessions, numerous breaks, sumptuous meals, and a thought-provoking and uplifting keynote address at the Friday evening welcome dinner by Dr. Joel Goodman, founder and director of The HUMOR Project.

Dr. Joel keeps us in stitches with his stories while quietly building an unassailable case for the value of humor as therapy. As soon as I get home I'm going to make and wear a button he showed us that brought tears of laughter to my eyes: *Save Time – See It My Way!*

For the past couple of months I have been helping out on the development of the new IWMF website, and the Ed Forum provides a much-anticipated opportunity to meet some of the fellow volunteers who have been only e-mail acquaintances and cell phone voices until now.

As an intermittent participant on IWMF-Talk and a dedicated reader of the *Torch* newsletter, I have often admired the writing of the *Torch's* medical news editor, IWMF Trustee and publications chair Sue Herms. Sue's ability to describe such things as proteasome inhibitors and monoclonal antibodies in a clear and intelligible way is awesome. And here she is in person, smiling, helpful, welcoming!

Trustee Marty Glassman is my boss on the website committee, one of several hats he wears on the Board. He may have set a world record for most meetings attended at a single Ed Forum, but he was still kidding and wryly smiling as he bade me farewell on Sunday.

Alice Riginos, also a website colleague, has diligently applied her skills as a Classics professor to make the *Torch* newsletter my most anticipated and favorite mailbox item. It was such a treat to meet her and to see her recognized with an IWMF special achievement award for her editorial contributions to the *Torch* at the Ed Forum luncheon.

Before the Forum I had an inkling as to the dedication and work ethic of our President, and after meeting Judith May in person I can appreciate what a warm, compassionate, extraordinary person we have at the helm of our organization. We are truly fortunate.

Which brings me to one quibble – the title of "the movie." It's called the *International Waldenstrom's Macroglobulinema Foundation Educational Forum.* Pretty catchy, but after seeing the show I would change the F-word to **"Family."** Because family is what the IWMF means to me now.

By the time you read this, DVD recordings of "the movie" will be available for $35 and can be ordered from the office or at www.iwmf.com.

And be sure to catch the sequel – there's always a sequel! The next IWMF Educational Forum will be in mid to late June 2011, location not yet set. Whenever, wherever, I'm looking forward to seeing you there!

Ron Ternoway was diagnosed with WM in April 2007. This was his first Ed Forum. He lives in the beautiful seaside village of Chester, Nova Scotia, Canada. rternoway@eastlink.ca

THE SECOND IWMF INTERNATIONAL PATIENT FORUM ON WM

Venice, Italy, will be the location for the much-anticipated Sixth International Workshop on Waldenström's Macroglobulinemia (IWWM6). The top WM researchers and clinicians in the world will meet 6-9 October 2010 in this historic and beautiful city. IWWM6 is not open to WM patients. However, on Sunday, 10 October, after the conclusion of IWWM6, the Second IWMF International Patient Forum on WM will be hosted by the IWMF.

Internationally renowned WM experts, such as Drs. Robert Kyle, Steven Treon, Eva Kimby, and the IWWM6 conference co-chairs Dr. Enrica Morra and Dr. Giampaolo Merlini, will lecture on topics including biological and clinical features of WM, treatment of WM, complications in WM, future directions in WM treatment, as well as answering questions in a collaborative "ask the doctor" panel (a very popular feature at annual IWMF Educational Forums!). Afternoon sessions will consist of interactive breakout sessions and a patient panel. IWMF president Judith May, as well IWMF Vice President and Research Committee Chair Dr. Tom Myers and myself, will be on hand to discuss IWMF member services and our active research program.

The International Patient Forum will be held at the majestic Hotel Molino Stucky Hilton in Venice. Breakfast and lunch are provided. There are no fees to register for and to attend the International Patient Forum. However, attendance is limited to 200 registrants.

The conference is filling up, so interested WM patients and caregivers are encouraged to register soon. Brochures with full details and registration form are now available through www.iwmf.com.

See you there!

Guy Sherwood

THE 51ST ANNUAL MEETING OF THE AMERICAN SOCIETY OF HEMATOLOGY: PART 1

BY GUY SHERWOOD, M.D., IWMF TRUSTEE

The 51st Annual Meeting of the American Society of Hematology (ASH) was held December 2009 in New Orleans, Louisiana. Very interesting lectures about WM and lymphomas in general were presented, and a large number of scientific posters were available for viewing. As mentioned in my article in the previous *Torch*, I will now try to summarize the salient points of the lectures and posters that I feel are applicable to WM patients and caregivers. What follows is Part 1. In the next *Torch* I will conclude the summary of the 51st ASH Annual Meeting in Part 2 and give you my personal impressions on the future of WM research directions as evidenced by the scientific presentations given at this meeting.

These brief summaries are edited for jargon; interested individuals are recommended to access the official ASH website www.hematology.org for more detailed information on any of the topics discussed.

THE BIOLOGY AND GENETICS OF WM

A series of short lectures about the biology of the non-Hodgkin lymphomas (NHL) focused on classification of the different subtypes of lymphoma as well as the development of newer and more effective treatments for these diseases. The new World Health Organization classification of NHL will change the way lymphomas are treated (transformed lymphoma and mantle cell lymphoma in particular). Newer insights into the biology of transformed lymphoma have resulted in newer therapeutic agents and an increased role for stem cell transplants in the management of patients with this disease.

A regulatory hormone secreted by the liver called hepcidin controls the body's iron balance. Hepcidin inhibits the absorption of dietary iron and the iron mobilization from body stores (such as the bone marrow). Hepcidin levels correlate with iron restriction. When a patient receives iron therapy, hepcidin expression increases; conversely, when a patient is anemic or hypoxic (has low oxygen levels) hepcidin expression decreases. Therefore a feedback loop exists to either limit or increase iron absorption. Hepcidin is also upregulated by the cytokine interleukin-6 (IL-6), and since lymphomas in general are characterized by high levels of interleukin-6, hepcidin is overproduced and thus contributes to the anemia seen in many lymphoma patients, WM patients included. The IWMF Research Committee has approved a project researching the role of hepcidin in WM for the laboratory of Dr. Rafael Fonseca, the Mayo Clinic, Scottsdale, AZ.

Jak/Stat inhibitor TG101348

Dr. Stephen Ansell from the Mayo Clinic, Rochester, MN, presented new research on his area of interest: immunoglobulin production and cell death in WM. As discussed at past IWMF Ed Forums, Dr. Ansell's research shows that the cytokine IL-6 increases the secretion of IgM by WM cells. Furthermore, IL-6 secretion is regulated by a number of other pathways, including the Jak/Stat pathway. A Jak/Stat inhibitor, TG101348, was used in the reported study to determine the effect on IL-6 and IgM production of inhibiting the Jak/Stat pathway and also the impact on cell proliferation and viability in WM. Dr. Ansell's research indeed showed that TG101348 inhibited IgM production and growth of WM cells. Drugs that inhibit the Jak/Stat pathway are therefore a possible future option in the treatment of WM.

IgM Multiple Myeloma

Dr. Steven Schuster, Dr. Vincent Rajkumar, and Dr. Robert Kyle of the Mayo Clinic, Rochester, MN, reviewed computerized database records of all patients seen at the three Mayo Clinic sites (Minnesota, Arizona, and Florida) over the past 30 years whose records came up when the database was searched for both 'IgM' and 'Myeloma'. IgM Multiple Myeloma (MM) and WM are two different IgM monoclonal gammopathies. Distinguishing these two diagnoses is important because the treatments differ from one another.

The researchers defined IgM MM as a plasma cell disorder with a serum IgM (regardless of level), a particular genetic abnormality t(11;14) seen in approximately 1/3 of IgM MM patients (and absent in WM patients), and/or bone lesions related to the underlying plasma cell disorder. While the median overall survival duration for the IgM MM patients was noted to be similar to that of non-IgM MM patients, it is much shorter than what would be expected for WM survival. The authors conclude that distinguishing IgM MM from WM is important because the treatments differ for both diseases.

Genetic Studies in Familial WM

Zachary Hunter, from the Dana-Farber Cancer Institute, Boston, MA, presented recent research in the genetic studies in familial WM. This research is supported in part by the IWMF. As has been previously described by Hunter and this team of young researchers engaged in an on-going study, up to 20% of WM patients have a first degree relative with either WM or a closely related B-cell disorder, for example chronic lymphocytic leukemia (CLL). 482 WM patients and their first and second degree family members were enrolled in this study, for a total of 148 families. Families were classified as: Sporadic (1 case of WM present); Familial WM (2 or more cases of WM present); and Familial Mixed B-cell (other B-cell disorders present in other family members, whereas only a single member is a WM patient). Results showed

The 51st Annual Meeting, cont. on page 9

that among the 148 families enrolled, 60.1% were Sporadic, 11.5% were Familial, and 28.4% were Familial Mixed B-cell.

Detailed analysis of genetic data was presented. Of particular interest was the genomic region that affects the glutathione S-transferase gene GSTM1 (an enzyme important in both normal cellular metabolism and detoxification). The deletion of GSTM1 is implicated in 46.7%, 34.6%, and 91.9% of individuals from the Sporadic, Familial WM, and Familial Mixed B-cell cohorts respectively.

WM TREATMENT AND COMPLICATIONS

Allogeneic stem cell transplantation

Allogeneic stem cell transplantation ("donor" transplants) is a risky procedure that is used as salvage therapy for many blood cancers. Fortunately, recent advances in donor selection, conditioning regimens, graft-versus-host disease management, and supportive care have greatly reduced the risks of this difficult procedure and improved overall outcome for patients with lymphomas. Cases involving patients with various lymphoid malignancies such as CLL and follicular lymphoma were presented.

Everolimus (RAD001)

Dr. Irene Ghobrial of the Dana-Farber Cancer Institute, in collaboration with Dr. Morie Gertz of the Mayo Clinic and others, presented data from a Phase II trial of everolimus (RAD001) in relapsed or refractory WM. Everolimus (RAD001) is an oral agent targeting raptor mTOR (mTORC1) which is a complex biochemical cell pathway that controls cell proliferation and survival. 50 patients were treated, their median age was 63 years, and all had an IgM count of over 1000 mg/dL. The patients received 10 mg daily oral dose of RAD001. They were evaluated at months 2 and 6, and every 3 months thereafter until disease progression.

The overall response rate was 70%, with a partial response rate of 42% and a minor response rate of 28%. The median duration of response has not yet been established. Over half of the patients exhibited side effects, the most common of which was cytopenia (deficiency in number of red blood cells, white blood cells, and platelets). The majority of patients exhibiting side effects had their RAD001 dose reduced. Dr. Ghobrial and her collaborators concluded that in patients with relapsed WM, RAD001 has high single-agent activity and manageable toxicity.

The "Rituxan Flare"

Dr. Guang Yang from the Dana-Farber Cancer Institute presented his research into the phenomenon known as the "Rituxan Flare." Rituximab (Rituxan) is used frequently in the treatment of WM to reduce high levels of IgM, yet many clinicians and researchers have noted a paradoxical rise or flare in serum IgM levels following rituximab administration. This so-called Rituxan flare, which can occur within hours of its administration, affects 40-50% of WM patients and can lead to symptomatic hyperviscosity and worsening of other IgM related symptoms. Dr. Yang and his team also observed a similar flare phenomenon in 3 WM patients receiving IVIG therapy (IgG administered intravenously). This observation prompted them to research the mechanism causing the flare (now called the IgM flare) in the hope of developing preemptive treatment strategies.

Using state of the art immunologic laboratory assays and techniques, they were able to demonstrate the probable role played by other "bystander" immune cells, such as monocytes, in producing an IgM flare. When stimulated by either rituximab or IVIG, these bystander immune cells were shown to release the cytokine interleukin-6 (IL-6). The cytokine IL-6 is known to play an important role in stimulating WM cells to secrete IgM. When Dr. Yang's group examined IL-6 levels in WM patients who received rituximab, both in those who experienced an IgM flare and in those who did not, they found a spike in IL-6 levels for those who did experience the flare. The spike in IL-6 levels correlated with the time course of the IgM flare.

In addition, indications are that it is through FcgRIIA specific binding that cell surface receptors of the "bystander" immune cells are stimulated by Rituxan, leading to the release of IL-6.

Dr. Yang's study suggests that an IgM flare resulting from the administration of either rituximab or IVIG to a WM patient depends on the IL-6 released from other immune cells to stimulate WM cells in secreting increased amounts of IgM. Blocking the release of IL-6 from immune cells should therefore be considered in WM patients receiving rituximab and IVIG therapy in order to prevent a potential IgM flare.

Effect of Nucleoside Analogue Therapy on T-Cells

Dr. Ross Brown, from the Institute of Hematology, Royal Prince Alfred Hospital, Sydney, Australia, studied the effect of drugs used in nucleoside analog therapy (such as fludarabine and cladribine) on the T-cells in the blood of patients with WM. T-cells play an important role in the immune system's control of the tumor in patients with monoclonal gammopathies such as WM and MGUS and have been shown to confer a significant favorable prognosis in patients with MM. Recently other studies have attributed to nucleoside analogue therapy an increased incidence of transformation to aggressive lymphoma. Dr. Brown's study shows that nucleoside analogue therapy also has a markedly negative influence on the presence of beneficial cytotoxic T-cells in WM patients.

IgA and IgG Hypogammaglobulinemia

Zachary Hunter and Dr. Steven Treon from the Dana-Farber Cancer Institute presented an interesting poster on an all-too-familiar problem for WM'ers: infections, predominantly respiratory in nature. Recurrent infections are commonly observed among patients with WM and are often attributed to reduced levels of IgA and IgG (hypogammaglobulinemia). 207 untreated WM patients were reviewed in this study:

The 51st Annual Meeting, cont. on page 10

median age of 60, median IgM of 2,910, and median bone marrow infiltration of 40%. Of these patients, 63.3% had low serum IgA, 58.0% had low serum IgG, and 49.3% were abnormally low for both. It is interesting to note that the bone marrow infiltration, serum IgM levels, complete blood counts, absolute lymphocyte counts, beta-2 microglobulin, and the WM International Prognostic Scoring System score did not correlate with the degree of hypogammaglobulinemia. The presence of enlarged lymph nodes and/or enlarged spleen, however, was associated with a lower incidence of hypogammaglobulinemia. The presence of IgA, IgG, or combined IgA and IgG hypogammaglobulinemia did not predict for the occurrence of recurring infections. Lower IgA and IgG levels were associated with disease progression in watch-and-wait patients.

Changes in IgA and IgG levels in 93 patients who underwent treatment for WM were also analyzed. After a median follow-up of 12 months, no significant improvements in the IgA and IgG levels were noted for any type of therapy. Patients whose levels were checked after 1, 2, and 3 years or more post therapy, or patients achieving a major remission including complete response, also had no significant improvements in the IgA and IgG levels. Genetic analysis was done in 19 WM patients with IgA and/or IgG hypogammaglobulinemia, and mutations in certain relevant genes were noted. The researchers suggest that, while IgA and IgG hypogammaglobulinemia are common in WM patients, their presence does not predict for recurrent infection risk and that IgA and IgG hypogammaglobulinemia persist in WM patients despite successful treatment.

Hepatitis C Virus and Waldenstrom's

Dr. Alessandra Tedeschi and Dr. Enrica Morra of the Department of Hematology, Niguarda Ca' Granda Hospital, Milano, Italy, reviewed the clinical and biological implications of hepatitis C Virus (HCV) positivity in WM patients. Infection with the hepatitis C virus has been associated with an increased risk of developing B-cell lymphomas and disorders via chronic immune stimulation. This retrospective study evaluated the impact of HCV in WM patients with or without HCV infection. 140 WM patients were tested for HCV infection: 21 cases (15%) were detected. HCV positivity was associated with reduced platelet counts, reduced neutrophils and granulocytes, lower hemoglobin, and with the presence of autoantibodies, cryoglobulins, and splenomegaly. An unexpected association of HCV positivity and tumor burden markers beta-2 microglobulin and lactate dehydrogenase was noted. More importantly, however, this interesting retrospective study demonstrated that patients with HCV infection fared as well as patients without HCV. The authors conclude that all patients can receive the same treatment, including intensive chemotherapy and monoclonal antibodies, without developing further toxicity.

Prognostic Factors for Survival Following 2-CdA Therapy

Dr. Sheeba Thomas from the M.D. Anderson Cancer Center, Houston, TX, presented a retrospective study on the prognostic factors for survival after 2-CdA based therapy for symptomatic WM patients. Well-defined prognostic factors include hemoglobin, platelet count, albumin, beta-2 microglobulin, gender, age, IgM level, hyperviscosity syndrome, prior therapy, and presence of splenomegaly and/or organomegaly. These prognostic factors were predictive of overall survival among patients with symptomatic WM treated first-line with 2CdA-based regimens. 10 year overall survival rates were better defined by age (age under 65 years 62% vs. age greater than 65 years 30%) and by the International Prognostic Scoring System for WM (IPSSWM), as opposed to the International Staging System for Multiple Myeloma (ISSMM). Dr. Thomas concluded that new treatments are needed to improve the survival of patients with WM who are of older age or who have a higher IPSSWM risk score or higher stage ISSMM disease.

NEWER THERAPEUTIC AGENTS AND COMBINATION THERAPIES

New Humanized Monoclonal anti-CD20 Antibody: RO5072759 (GA101)

Dr. Gilles Salles from the Université de Lyon, France, studied a new humanized type II monoclonal anti-CD20 antibody in a Phase I study of RO5072759 (GA101) in relapsed or refractory NHL patients who are positive for CD20. Preliminary data determined that GA101 has improved antibody-dependent cytotoxicity and enhanced direct cell death when compared to Rituxan (rituximab is a type I monoclonal anti-CD20 antibody).

In this study, GA101 was administered intravenously as a single agent to patients on days 1, 8 and 22, and subsequently every 3 weeks for a total of 9 infusions. Doses were carefully increased in order to determine the safety, tolerability, dose-limiting toxicity, and the pharmacokinetics of GA101. The median age of the participants in the trial was 64 years (39-83). There were 13 follicular lymphoma, 4 mantle cell lymphoma, and one of each diffuse large B-cell, WM, small lymphocytic, and lymphoplasmocytoid lymphoma patients. 95% of the patients had been previously exposed to Rituxan. Half of the patients had undergone stem cell transplants. The most common adverse event was infusion-related reaction to the first infusion (as occurs typically with Rituxan). Responses occurred at all dose levels, with an overall response rate of 43%. All responding patients had follicular lymphoma, of whom 6 had prior autologous stem cell transplantation. The author concluded that GA101 is a next generation anti-CD20 antibody that shows promising efficacy in this difficult-to-treat patient population. (Author's note: of interest is the clinical trial that is combining GA101 with bendamustine in indolent and aggressive NHL.)

Bortezomib and Rituximab

Dr. Ghobrial reported on her Phase II trial of weekly bortezomib (Velcade) in combination with rituximab

The 51st Annual Meeting, cont. on page 11

(Rituxan) in relapsed or relapsed and refractory WM. For a total of 6 cycles, all patients received intravenous bortezomib weekly at 1.6 mg/m^2 on days 1, 8, 15, per cycle of 28 days, and they received rituximab 375 mg/m^2 weekly on cycles 1 and 4.

The majority (78%) of the 37 patients treated completed the study: 5% attained complete remission or near complete remission; 46% partial response; 30% minor response. The median time to progression was 16.4 months. Grade-3 peripheral neuropathy (PN) occurred in only 2 patients (5%). Dr. Ghobrial's study demonstrated that the combination of weekly bortezomib (as opposed to twice a week as seen in earlier studies) and rituximab was effective in relapsed WM patients and avoided significant neurological toxicity, principally PN.

Bortezomib, Low-dose Dexamethasone, and Rituximab (BDR)
Dr. Meletios Dimopoulos and Dr. Pierre Morel, two well-known WM clinicians from the European Myeloma Network, reported on another Phase II trial involving weekly bortezomib, low-dose dexamethasone, and rituximab (BDR). A large Phase II multi-center trial was started in March 2007 to assess the toxicity and activity of the combination BDR in WM patients who had not been previously treated. The investigators administered one course of single agent bortezomib (Velcade) intravenously at the "standard" dose of 1.3 mg/m^2 on days 1, 4, 8 and 11 in order to prevent the "IgM flare" effect seen with rituximab. Ten days later, the patients began a regimen of four courses of 35 days duration each, during which they received Velcade weekly at a dose of 1.6 mg/m^2 on days 1, 8, 15 and 22. During courses 2 and 5, immediately after the administration of Velcade, patients received 40 mg of intravenous dexamethasone followed by rituximab. Patients therefore received a total of 8 infusions of rituximab. A single dose of dexamethasone was given before each dose of rituximab to reduce allergic reactions and to possibly take advantage of synergism between rituximab and dexamethasone. Prophylaxis for herpes zoster was given to all patients.

Of the 38 patients treated with BDR, 23% were rated as low-risk, 31% were rated as intermediate risk, and 46% as high-risk according to the International Prognostic Scoring System (IPSS) for WM. Results from 31 patients were evaluated as follows: 1 patient had a complete response, 16 patients had a partial response, 5 patients had a minor response, 4 patients had stable disease, and 5 patients unfortunately had progressive disease despite therapy. In those patients who did respond, a minor response occurred within 2 months of treatment.

Plasmapheresis was not required in any patient before or after treatment with BDR. The "IgM flare" phenomenon was not seen in any patient and this was felt to be as a result of "pre-treatment" with Velcade. Low grade peripheral neuropathy was seen in 44% of patients; however, severe neuropathy (grade 3-4) was at a very low level in only 7% of patients. Severe pulmonary problems (grade 3-4) attributed to Velcade were experienced by 3 patients. This toxicity resolved completely after the administration of steroids, and 2 of the 3 patients continued treatment. The dose of Velcade was reduced in 30% of the patients, primarily because of peripheral neuropathy.

Drs. Dimopoulos and Morel have demonstrated in this study that the BDR regimen is effective in patients with symptomatic WM.

Dexamethasone, Rituximab and Cyclophosphamide (DRC)
Dr. Dimopoulos also reported for the Greek Myeloma Study Group, Athens, Greece, on a long term follow-up analysis of a Phase II study done between November 2002 and April 2006 involving 72 patients receiving initial treatment for WM with dexamethasone, rituximab and cyclophosphamide (DRC). The protocol for this study included intravenous dexamethasone 20 mg followed by rituximab 375mg/m^2 on day 1 and oral cyclophosphamide 100 mg/m^2 twice a day on days 1 to 5 (a total dose of 1000 mg/m^2). DRC courses were repeated every 21 days for six courses. 83% of the patients achieved a response including: 7% complete, 67% partial, and 9% minor responses.

This report covers the update done in June 2009 and gives a follow-up, after a minimum of 36 months following DRC treatment, on the 42 patients fulfilling the criteria for progressive disease. Median time to progression was 35 months and the median time to next treatment was 51 months. Enlargement of the lymph nodes (lymphadenopathy) was the only significant factor associated with a shorter time to progression. At the time of reporting, 14 patients had experienced progressive disease but had not yet required further therapy. Second line treatment was administered to the remaining 28 patients with progressive disease. 7 patients were retreated with rituximab alone, 8 patients with DRC, and 4 patients received rituximab combined with other agents. 16 patients (84%) achieved a minor response or better. No patient developed myelodysplastic syndrome or secondary acute myeloid leukemia, but one patient developed diffuse large B-cell lymphoma. Patients without progressive disease were observed without treatment.

This long-term follow-up of patients enrolled in the original Phase II study shows that the DRC regimen conferred significant median time to progression (35 months). Patients who developed disease progression responded again to rituximab-based regimens. This well-done study demonstrates that DRC is an effective and safe treatment option for WM.

FROM IWMF-TALK

BY MITCH ORFUSS

The online TALK discussion was as active and varied as ever in the most recent three months of postings. Following is a sampler of the action, giving *Torch* readers who do not follow TALK day to day a wide-ranging sense of the many issues that are raised and the help, empathy, and experienced-based understanding that TALK readers and writers provide to each another as their conditions ebb and flow.

Exercise and Stress

A lively discussion speculated on the question of a "WM gene" common to all diagnosed with the disease and the possible triggers in the activation process.

Fay Langer, a cryo patient, stated that she does not believe that we have 'all been dealt the WM gene'. Fay believes her WM was not caused by a WM gene but instead was caused by long-term side effects from radiation 30+ years ago. **Colin Parrish** asserted that there is ample evidence we have all been genetically dealt the WM gene. Colin has long contended that the 'trigger' for the early onset of his WM was physical exertion of compulsive running combined with job stress. Colin believes the biochemistry of strenuous physical activity can weaken the immune system and 'feed' the emergence of cancer cells.

Linda Jane's experience presents a puzzle in trying to pinpoint what led WM to assert its presence. She writes that she had a serious weight issue and was under a great deal of stress. But it was when she took on a strong medically supervised weight loss program plus exercise that her diagnosis was made. At first she thought WM was "payback" for not controlling her diet and not exercising. But then she began to wonder if the diet regime and the exercise possibly combined to trigger her disease. However, a slimmer Linda Jane does admit to feeling better with fresh air and exercise and also normal blood pressure. Others might claim she was on the road to better managing a diagnosis of indolent cancer when she changed her lifestyle.

Appetite During Treatment

Gwen Cherko's husband had begun treatment with Rituxan and bendamustine with no side effects but had lost his appetite for every food but juice. Gwen asked for suggestions on foods that her husband might tolerate. He does not want to drink Boost or Ensure, having not liked them much in the past. **Hank Stupi** was reminded of when he was being treated with Cytoxan and used to stock up on TastyKake Peanut Butter Tandy Cakes. "Not the most healthy of foods, but one of the only things that I've loved since childhood," wrote Hank. After eating hundreds during the Cytoxan treatment, he lost the taste for them. I remember also eating lots of tapioca pudding, an all time favorite as well. Hank suggested that Gwen's husband think indulgently about foods that he might enjoy. **Liane Cochran-Stafira** added that there is a fruit-juice version of Boost that one might find acceptable. **Sue Pruce** responded that Boost or Ensure mixed with ice cream or sherbet can work by removing the chalky taste and providing nutrition. A straw also helps.

Double Vision

Patty Kuper wrote that her **Dennis** had four episodes of double vision while watching TV, lasting about 3 to 5 minutes. His oncologist, although believing it could be a WM neuropathy but wanting to rule out more serious possibilities, scheduled a brain MRI. **Joanne Slate** replied that she'd had frightening double vision as well. Her vision had merely been blurry before then. She started solo Rituxan (not just for the vision problem) and within a week the double vision was gone and hasn't returned. Joanne adds that she had had very high blood pressure and kidney problems along with 90% bone marrow involvement.

PET Scans

When **Shirley Shepard** landed in the ER with terrible abdominal pain, her doctor recommended a PET scan. Getting to a larger center for this was a challenge. **Bob Reeber** told Shirley that, though he is not a doctor and can't advise why her doc recommended PET, he wouldn't expect a PET scan to have higher resolution than a CT scan but would suggest asking the doctor what the advantage of a PET scan over a CT scan is and which has less radiation. **Dr. Tom Hoffmann** cautioned that the PET does not pick up small lesions and it can have other false positives. **Wanda Huskins** added that for her CT scans came first, then a biopsy, and finally a PET. **Dr. Guy Sherwood** added that, though PET scans are helpful in certain circumstances, they do not replace astute clinical judgment. Tests can often be misleading, so treat the patient not the test.

From IWMF-Talk, cont. on page 13

HOW TO JOIN IWMF-TALK

Here are two ways to join:

1. Send a blank e-mail to: *iwmf-talk-subscribe-request@lists.psu.edu*

   Make sure to enter the word "subscribe" as your subject, and do not sign or put anything in the message area (make sure you do not have any signature information in there). Also, do not put a "period" after "edu" or it will reject. Once approved you can post by sending e-mail to *iwmf-talk@lists.psu.edu*
2. Contact Peter DeNardis at *pdenardis@comcast.net* and provide your full name

From IWMF-Talk, cont. from page 12

Bone Marrow Biopsies

John L. Sauer wrote that his one bone marrow biopsy was easy. He had heard how painful they were and had been dreading it. His oncologist prescribed two Vicodin an hour before the procedure. He did feel the pressure sensation as they twisted off a sample from his hipbone, but John felt no real pain. He described a dull ache similar to recovering from a hard kick. Another **John** wrote that he had received his BMB the day after being whisked into the hospital because his platelet count tanked. A young resident was practicing how to do a BMB. John took pain-killers ahead of time. After the resident missed three times, a more experienced RN took over and extracted the needed sample. Afterwards, John felt minor pain only.

IVIG Infusions

Peter DeNardis asked if anyone has had an allergic reaction to IVIG, similar to a Rituxan reaction. Several months prior, Peter's nurses started his IVIG at a certain infusion rate and gradually increased it until the process was complete. Later he had another IVIG infusion via IV needle with four little bottles of IVIG fluid after pre-meds of Benadryl and Tylenol. Peter exhibited a strong reaction early on – chills, shakes and blue fingernails – so they pumped Benadryl and oxygen. The reaction reversed in half an hour. **Gary Francell** said the same thing happened to him, and it was humorously called "shake & bake." He began with chills – the shake part – and by the time the trauma nurse arrived, Gary was baking. They dumped ice on Gary and got his temperature down quickly, but all in all it was not fun and Gary stated he would not do it again. **Bob Reeber** empathized and said it sounded like what happened to him at his first Rituxan infusion nine years ago. He said, however, that with regard to IgG infusions, he had had two in the prior two months, after which his year-long sinusitis infection cleared up. He still has a bit of congestion in one ear and what he hopes is just temporary hearing loss. Bob had no trouble with either IgG infusion after one Benadryl and two Tylenols.

Rituxan

Betsy Frank asked readers for feedback about how long it took their Rituxan to start working. **Arno Muller,** who at 24 years since diagnosis has one of the longest experiences on record of living well with WM, answered that in 2003 he had IgM of 8000 and Serum Viscosity 4. After 4 rounds of solo Rituxan in December of 2003 his IgM flared in January of 2004 and his hemoglobin hit a new low. It was not until March of 2005 when his IgM was down to 4000 and his HgB at 14.6 had returned to normal that it was clear that the Rituxan was "really working." And then his numbers kept improving until January 2008 when Arno's IgM was down to 1300.

Since then his IgM has risen slowly and symptoms developed. After 6 years and 5 months since his first round of 4 Rituxan infusions he is again being treated with solo Rituxan x4. But in the meantime he is enjoying a good life, and he advises WM patients to give treatment the time it needs "to work their miracles." Arno recommends patience, enjoying life, and smelling the roses – a wonderful note on which to end this TALK summary.

Other topics since our last *Torch* was published include discussion about Velcade, over-treatment, blurry and double vision, defining remission, and many others relevant to surviving and thriving with WM. There is never a good time to have WM, but there has never been a better, more hopeful time either.

REMISSION, RELAPSE, AND TREATING MGUS SOME DEFINITIONS & COMMENTS

by Ron Draftz

Some questions were posed recently on IWMF-TALK by a newly diagnosed patient concerning remission and whether it is appropriate to treat MGUS. Those questions and replies to each of them are repeated here primarily for other newly diagnosed members of the IWMF.

Q1. *I keep reading about different patients achieving a remission status after treatment, but I thought that WM was incurable. How is that possible?*

R1. **Remission** due to treatment is not a cure but a decrease or diminishment in the tumor burden. A reduced tumor burden is generally indicated by a reduction in IgM concentration and an improvement in blood numbers such as an increased hemoglobin concentration and/or a reduction in symptoms. Therefore, a **remission** occurs following treatment when IgM drops in concentration and either continues to decrease or remains at some plateau. When our IgM rises again or our symptoms return, we are in **relapse**, indicating that our tumor burden has again become active. However, we may not need additional treatment for some number of years until the intensity of our symptoms dictates the need for treatment once more. Those returning symptoms are often the very same symptoms that caused us to take the previous treatments.

Q2. *It seems that some patients have treatment and then go into a real remission with no evidence of cancer cells in the blood, symptoms, or detectable IgM, elevated SV (serum*

Remission, Relapse, and Treating MGUS, cont. on page 14

viscosity), etc. Do some people really go into remission without WM ever coming back?

R2. There are some patients who have reported that they have been without any detectable trace of monoclonal IgM or symptoms for quite a few years (one currently at ten years since treatment). The absence of a measurable monoclonal IgM concentration by serum protein electrophoresis (SPEP) along with normal blood values and no symptoms is considered a **full or complete remission.** But a complete remission is not a proven cure. The problem with proving a cure is that there are no definitive tests with sufficient sensitivity that can do so at this time. In a **partial remission,** there generally will be a measurable mono-IgM concentration by SPEP and perhaps some slight symptoms. But, again, that partial remission is the period when the IgM is reduced along with symptoms and both remain at some plateau or continue to reduce in concentration or severity, respectively.

It is tempting to describe those who do not have any sign of WM for many years as cured, and we certainly hope they are.

Q3. *When a patient is in "watch-and-wait" (W&W) is he continuing to grow tumor cells until symptoms become so bad that he needs treatment?*

R3. "Watch-and-wait" is used to describe a period when treatment is not needed. That designation can apply to those patients in remission or in relapse and also to others who have yet to be diagnosed with WM, such as MGUS patients (monoclonal gammopathy of undetermined significance), or to those with symptoms who have yet to be treated (sometimes called smoldering WM). Those who are in relapse do indeed show signs of some tumor cell activity, and even those in a MGUS status or in a smoldering WM status may also exhibit tumor activity that could eventually require treatment for a first time. An increase in IgM concentration is often the first sign of tumor activity and that can occur without the presence of symptoms, though the reverse happens, too.

Q4. *If some people really go into remission for good, then why don't more people get treatment initially and be done with it? I hate the thought of waiting around while tumor cells and symptoms develop that could affect or damage my organs, eyes, etc., without my knowing until the damage is irreversible. Can you explain why this early treatment prior to symptoms isn't done?*

R4. The reasons for not treating WM before there are symptoms that warrant treatment are the following:

1. All treatments and drugs carry some toxicity or damage to our system and some are very toxic with significant side effects. Even Rituxan has side effects which can be hazardous to a few who use this drug. So it is unwise to take the risk of using a drug when there is no benefit from using the drug and when it may instead produce illness in a patient who has no symptoms. In a simple example, using two aspirin tablets a day because we might get a headache exposes one to potential anti-clotting problems and both internal and external bleeding, to say nothing of the potential to develop ulcers.
2. Almost all of the treatments will destroy some percentage of our healthy B-cells. Those B-cells provide essential immunoglobulins – IgG, IgA, IgM, IgD, IgE – that combat illness and infection. Have you noticed reports by those who receive treatment that they often develop sinus and lung infections or shingles because their immunity was reduced by treatments?
3. Since we cannot cure WM we need to be sure that we do not become refractory (non-responsive) to the drug that may control our WM and its symptoms. Overuse or premature use may eventually make that particular drug, and perhaps ones like it, no longer effective in reducing our disease burden. Using our drugs only when needed is often known as "saving our silver bullets."
4. Taking a treatment when it is not needed is fruitless, and those in a MGUS status and their hematologists may not know if they have WM, MM, or some other non-Hodgkin lymphoma so they may not even be able to select a drug appropriate for treating their disease.

Many have spoken of the anxiety of not knowing when their disease will cause problems, and so they, like you, remain worried about what will happen and when. What they eventually discover after they have had treatment due to symptoms is that the cycle continues. There will be a next time for treatment again, but it will be easier that next time to recognize the symptoms that require treatment since they are often the same or similar. Then there will be less anxiety about when to treat. So why rush to treatment since it is not a question of *if*, so much as *when*? Your *when* may not occur for many years.

MEDICAL NEWS ROUNDUP

BY SUE HERMS, IWMF TRUSTEE

Azacitidine Not Recommended for Approval in the UK for Treatment of Myelodysplastic Syndrome – The National Institute for Health and Clinical Excellence in the United Kingdom has recommended that the drug azacitidine (Vidaza) should not be used to treat people with a range of blood and bone marrow conditions, including myelodysplastic syndrome (MDS). At £45,000 (roughly $65,200) per patient, the drug was said to be too expensive, although it has been proven to extend lives by nine months. Celgene, the drug manufacturer, intends to appeal the decision.

Note: see "Epigenetics: Looking at Cancer Development and Treatment in a New Way," page 31 for further information about azacitidine.

Two New Clinical Trials Will Combine Ofatumumab (Arzerra) and Bendamustine (Treanda) – Two new clinical trials are about to begin using the humanized anti-CD20 monoclonal antibody ofatumumab (Arzerra) in combination with bendamustine (Treanda). One trial will evaluate the combination in previously untreated patients with indolent B-cell lymphoma and is being conducted at University Cancer Institute in Boynton Beach, FL. The other is not yet actively recruiting but will compare the combination vs. bendamustine alone in patients with indolent B-cell lymphoma who have relapsed following rituximab-containing therapy.

Bendamustine (Treanda) to be Tested in Combination with Lenalidomide (Revlimid) and Dexamethasone in Relapsed Multiple Myeloma – The Multiple Myeloma Research Consortium announced the initiation of a Phase I/II study of bendamustine (Treanda) in combination with lenalidomide (Revlimid) and dexamethasone in patients with relapsed multiple myeloma. The trial is being conducted at Mayo Clinic in Minnesota, City of Hope Cancer Center in California, and the University of Chicago.

Oral PI3Kinase Inhibitor to be Combined with Bendamustine (Treanda) and Rituximab in Phase I Trial – Calistoga Pharmaceuticals is planning a Phase I study to investigate its drug CAL-101 in combination with bendamustine (Treanda) and rituximab in patients with relapsed or refractory indolent non-Hodgkin's lymphoma or chronic lymphocytic leukemia. CAL-101 is an oral PI3kinase inhibitor that has demonstrated an ability to cause cell death or decrease cell proliferation in a number of lymphoma cell lines in pre-clinical studies.

Certain Autoimmune and Inflammatory Disorders Increase Risk of Developing LPL/WM – Chronic immune stimulation appears to be associated with lymphoplasmacytic lymphoma (LPL)-WM. A joint study by Karolinska University in Sweden, the National Institutes of Health in the U.S., and Malmö University Hospital in Sweden evaluated the association between a personal or family history of many immune-related and or/inflammatory disorders and the subsequent risk of developing LPL-WM. Swedish population-based registries were used to identify 2,470 patients with LPL-WM along with 9,698 matched control subjects and almost 30,000 first-degree relatives of patients or control subjects. An increased risk of LPL-WM was associated with a *personal* history of the following autoimmune diseases: systemic sclerosis, Sjögren syndrome, autoimmune hemolytic anemia, polymyalgia rheumatica, and giant cell arteritis. An increased risk was also associated with a *personal* history of the following infections: pneumonia, septicemia, pyelonephritis, sinusitis, herpes zoster, and influenza. A *family* history of Sjögren syndrome, autoimmune hemolytic anemia, Guillain-Barré syndrome, cytomegalovirus, gingivitis/periodontitis, and chronic prostatitis also was associated with an increased risk.

NIH Study Reports that Familial WM Has Greater Association with Autoimmune Diseases, Infections and Certain Chemical Exposures – The National Institutes of Health also designed a questionnaire-based study to examine clinical and environmental factors possibly involved in WM development in a cohort of WM patients. The study compared 103 WM patients and 272 unaffected relatives. Some patients were from families with multiple WM cases, some were from families with WM and other B-cell disorders, and some were sporadic (non-familial). In this study, the WM disease process appeared to be similar among patients regardless of family history. Familial WM patients were more likely than unaffected relatives to report a personal history of autoimmune disease and infections, as well as exposure to farming, pesticides, wood dust, and organic solvents.

Anti-CD20 Antibody Called Ocrelizumab Tested in Phase I/II Trial in France – The Department of Hematology, Claude Huriez Hospital in France, announced results of a Phase I/II trial of the anti-CD20 antibody ocrelizumab in patients with relapsed/refractory follicular lymphoma. Ocrelizumab was well tolerated, with infusion-related reactions being the most common toxicity. The objective response rate was 38%, and with a follow-up of approximately 28 months, the median progression-free survival was 11.4 months. In addition to being fully humanized, ocrelizumab increases antibody-dependent cellular cytotoxicity, compared to rituximab.

New Drug Targets Enzyme Btk In Clinical Trial – PCI-32765 is a new drug being assessed in a Phase I clinical trial at Virginia G. Piper Cancer Center in Arizona. The trial, conducted in collaboration with the Translational Genomic Research Institute, targets an enzyme called Bruton-tyrosine-kinase, or Btk. An overproduction of Btk contributes to the proliferation and spread of lymphoma and leukemia cells. PCI-32765 is produced by Pharmacyclics, and preclinical

Medical News Roundup, cont. on page 16

studies showed that the drug arrested cancer cell growth and caused cell death.

Pixantrone May Not Be Approved for Treatment of Lymphoma – Cell Therapeutics suffered a setback as an advisory panel to the U.S. Food and Drug Administration said the company had not collected enough data on its experimental lymphoma drug pixantrone to warrant marketing approval. Cell Therapeutics wants to sell pixantrone under the name Pixuvri for treating non-Hodgkin's lymphoma that has stopped responding to other treatments. While the company presented data that 20% of 140 patients in its study had a major decrease in their disease, the study tested less than half the number of patients originally planned and included just eight U.S. patients. FDA reviewers also said that heart damage and decreased white blood cells were more common with pixantrone vs. other cancer drugs. The panel decision makes it unlikely that the FDA will approve pixantrone without additional data.

European Study Determines Risk Factors That Influence Autologous Stem Cell Mobilization – A study from the European Institute of Oncology in Milan, Italy, presented data that found several factors detrimentally influenced the ability of patients to mobilize peripheral stem cells prior to autologous transplantation. These factors were previous treatment with three or more chemotherapy lines and previous treatment with purine analogs or with Y-90-ibritumomab tiuxetan (a radioimmunotherapy drug).

European Group Reports on Prognostic Factors for Autologous Stem Cell Transplantation in WM – The Lymphoma Working Party of the European Group for Blood and Marrow Transplantation analyzed the results of autologous stem cell transplantation (ASCT) in patients with WM and determined the prognostic factors that had a significant impact on outcome. Between 1991 and 2005, 158 WM patients were assessed. Median time from diagnosis to transplantation was 1.7 years; 32% of the patients had experienced treatment failure with at least three lines of therapy, and 93% had sensitive disease at the time of transplantation. Median follow-up for surviving patients was 4.2 years. Non-relapse mortality was 3.8% at one year, and ten patients developed a secondary malignancy. The relapse rate was 52.1% at five years, while progression-free survival and overall survival were 39.7% and 68.5%, respectively at five years. The study concluded that ASCT is a feasible procedure in young patients with advanced WM, although it should not be offered to patients with chemoresistant disease or those who have received more than three lines of therapy.

New Product Approved for Autologous Stem Cell Mobilization – The U.S. Food and Drug Administration and the European Medicines Evaluation Agency have approved a new stem cell mobilization agent called plerixafor for autologous transplantation in lymphoma and multiple myeloma patients. A study conducted at the Department of Haematology, Catalan Institute of Oncology in Spain used plerixafor plus granulocyte colony stimulating factor to mobilize stem cells in patients who failed previous mobilization attempts. Seventy five percent of these patients were able to mobilize an adequate number of stem cells with no severe drug-related events.

European Study Reports on Subcutaneous Cladribine Combined with Rituximab – A multi-center European study described the use of cladribine given subcutaneously in combination with rituximab in the treatment of newly diagnosed/previously treated patients with WM. Twenty nine patients were enrolled, and therapy consisted of rituximab (375 mg/m^2) on day one followed by cladribine (0.1 mg/kg) for five consecutive days, administered monthly for four cycles. With a median follow-up of 43 months, the overall response rate was 89.6%, with 7 complete responses, 16 partial responses, and 3 minor responses, without any difference between untreated and previously treated patients. No major infections were observed, and no patients developed myelodysplasia or transformation to high-grade lymphoma. Response to therapy was correlated with the nucleoside transporter hCNT1, and low levels of this transporter were found in those patients who failed to achieve a complete response. The study suggests that hCNT1 might be beneficial in predicting clinical response to such a combination treatment.

Oral Vitamin C Reduced Activity of Bortezomib (Velcade) in Multiple Myeloma Cells – Oral vitamin C significantly reduced the activity of bortezomib (Velcade) in cells from multiple myeloma patients who had been taking 1000 mg of vitamin C daily, according to a study conducted by Dana-Farber Cancer Institute and the University of Bologna, Italy. Further studies are planned with mouse models to confirm this finding.

Dana Farber Plans Phase I Trial of Pomalidomide, Dexamethasone, and Rituximab in Relapsed/Refractory WM – Dana-Farber Cancer Institute is planning to conduct a Phase I study of the oral drug pomalidomide in combination with dexamethasone, and rituximab in relapsed or refractory WM. Pomalidomide is a newer immunomodulatory agent, similar to thalidomide but without some of the toxic side effects associated with thalidomide therapy. It has been studied in clinical trials of multiple myeloma patients.

The University of Athens in Greece Validates International Prognostic Scoring System for WM – The School of Medicine at the University of Athens in Greece independently validated the International Prognostic Scoring System for symptomatic WM patients (ISSWM) and assessed whether the addition of elevated serum lactate dehydrogenase (LDH) levels may add to the strength of the system. This study assessed 335 patients treated mainly with alkylating agents (43%) and rituximab-based therapies (47%), and the

Medical News Roundup, cont. on page 18

AN ED FORUM ALBUM: LAS VEGAS 2010

Photos courtesy of Jack Whelan and Mary Brown

ISSWM was able to discriminate three groups of patients with significantly different overall survival and cause-specific survival, as predicted. In addition, high serum LDH was predictive of a subset of patients with both shorter overall survival and cause-specific survival.

Phase I Results Reported for Everolimus in Relapsed/Refractory WM – A collaborative Phase I study of everolimus (Afinitor or RAD001) showed encouraging single-agent activity in relapsed/refractory WM, as reported by the Mayo Clinic in Minnesota. Everolimus targets the mTOR pathway, which is thought to control cell proliferation and survival. Fifty previously treated WM patients were given daily oral everolimus, with 4 weeks of treatment being considered as one cycle; patients were treated until unacceptable toxicity or disease progression occurred. Everolimus achieved an overall response rate of 70%, and an additional 16% of patients had stable disease over the course of the study. In 62% of patients, the disease remained progression-free at the end of 12 months. Dose reductions for toxicity were made in 52% of patients, most commonly for cytopenias.

GlaxoSmithKline Suspends Study Enrollment of Resveratrol-Derived Drug for Multiple Myeloma – GlaxoSmithKline suspended enrollment in a drug study designed to mimic the benefits of resveratrol after kidney damage developed in some patients with multiple myeloma. Resveratrol is a substance found in red wine which is thought to slow the effects of age-related diseases. The compound, known as SRT501, was being administered to 24 multiple myeloma patients, as a single agent and in combination with Velcade. After five patients developed kidney damage, no additional volunteers were admitted to the trial. GlaxoSmithKline had previously completed two studies of the drug in diabetics and saw no signs of kidney complications.

European Group Reports Long-Term Study of Rituximab Maintenance in Follicular Lymphoma – The European Organisation for Research and Treatment of Cancer (EORTC) reported on the long-term outcome of its Phase III randomized study of rituximab maintenance in follicular lymphoma. Overall, 465 patients were randomly assigned to received either CHOP or R-CHOP therapy. Those in complete or partial response after therapy were randomly assigned to either maintenance treatment with rituximab once every three months or to observation. After 6 years of follow-up, rituximab maintenance significantly improved progression-free survival (3.7 years vs. 1.3 years). The 5-year overall survival was 74% in the rituximab maintenance arm vs. 64% in the observation arm. However, rituximab maintenance was associated with a significant increase in infections.

Swiss Group Reports on Long-Term Response of Single-Agent Rituximab in Follicular Lymphoma – The Swiss Group for Clinical Cancer Research published results of its study of rituximab as single agent therapy in follicular lymphoma, with the goal of determining the proportion of patients who were long-term responders. Between 1998 and 2002, chemotherapy naïve or pre-treated patients received 4 weekly doses of rituximab. Those responding or with stable disease were randomized to receive either four additional doses of rituximab given at 2-month intervals or to receive observation. With a median follow-up of 8.9 years, the median event-free survival (time until progression, relapse, second tumor, or death) was 24 months for the treatment arm and 13 months for the observation arm. No significant difference in event-free survival was noted between chemotherapy naïve and pre-treated patients. In addition, patients in the treatment arm had approximately a 25% and a 20% chance to remain in remission at 5 and 8 years, respectively.

Clonal Expansions of Cytotoxic T-Cells Found in Blood of WM Patients – A joint study reported by Australian and Chinese researchers reported on the presence of cytotoxic T-cell clones in the blood of WM patients. T-cells contribute to host-tumor interactions, and it was previously discovered that expansions of these clonal T-cells are typically found in approximately 50% of multiple myeloma patients, conferring a more favorable prognosis. The researchers found that similar T-cell clones are present in 70% of WM patients. Nucleoside analog therapy significantly decreased these T-cells, which were found in only 6% of WM patients who had received such therapy.

New Small Molecule Drug Targets BCL6 in Lymphoma – A study presented by Weill Cornell Medical College in New York reported on a new small molecule drug that targets BCL6, an oncogene implicated in the development of lymphoma. Although BCL6 is an attractive therapeutic target, it has not been previously considered easy to treat with small molecules. Using computer-aided drug design, researchers identified a compound called 79-6 that binds specifically to a part of the BCL6 molecule that allows it to carry out its cancer-causing functions. The small molecule compound reduced lymphoma tumors in mice and killed primary human lymphoma cell cultures.

Aprepitant Reduces Nausea and Vomiting in Bone Marrow Transplant Patients – Some of the most debilitating side effects of bone marrow transplantation include nausea and vomiting from the high-dose chemotherapy and radiation delivered prior to transplantation. A Loyola University Health System study has found that the drug aprepitant (Emend) can dramatically reduce both nausea and vomiting when combined with other anti-nausea drugs. Seventy-three percent of patients receiving aprepitant plus standard anti-nausea drug therapy experienced no vomiting during the study period, compared with 23% of patients who received a placebo instead of aprepitant. Most anti-nausea drugs work by blocking signals from the stomach, but aprepitant acts to block nausea and vomiting signals from the brain.

COOKS' HAPPY HOUR: OLIVE TRICKS & TREATS

BY PENNI WISNER AND NANCY LAMBERT

The noble olive, gift of the goddess Athena and basis of the much-touted Mediterranean diet, provides a happy hour for Penni and Nancy. Penni also shares some insights on being a savvy consumer.

Building on our spring theme of vegetable pestos and purees, in this column we'll work with olives – marinating them, crushing them, pureeing them to make the various tapenades you spend big bucks for in the store. Olives, as you know (but I will remind you nonetheless), are full of monounsaturated fats – healthy fats (cue the trumpets and sound a blast for healthy fats) – that have a positive effect on cholesterol.

Nancy and I both prefer to love what we eat. When the food is good for us, too, well, then we get to eat the cake and the icing both. We hope you use olive oil as your everyday cooking oil – not vegetable oil, corn oil, or even sunflower oil. Canola oil if you must, or grapeseed oil, otherwise why not opt for the flavor and health benefits of olive oil?

Allow me one short detour to briefly discuss quality in olive oil. Remember that olive oil is actually fruit juice. It doesn't stay fresh forever, especially if it's in a clear bottle and kept in a warmish place such as near the stove. Instead, it will oxidize and go rancid. Rancid oil is not healthy. Very unfortunately, it is not unusual to bring home a new bottle of olive oil from the supermarket that was rancid when it was bottled. Don't believe a label that says "extra-virgin" is any kind of a quality guarantee. It is our job to guard against being duped. Learn a bit about olive oil by tasting samples at specialty markets and farmers' markets. And buy your olive oil from stores with a high turnover and whose integrity you trust. Here in San Francisco, I buy most of my cooking olive oil at Trader Joe's and buy higher-quality oil in stores that specialize in having an assortment of unique, flavorful olive oil. These special oils do cost more. You do not cook with them but drizzle them over salads and use them for our current topic, olives.

Nancy and I first starting talking about olive spreads a couple of years ago. Here is a collection of ideas ideal for lazy, summer happy hours when you want to maximize outdoor time and minimize kitchen time. Unless, of course, the kitchen is outdoors.

Here's Nancy's favorite olive sandwich spread, but let's call it Green Olive Tapenade. In a food processor, chop together pitted green olives (about 1 1/2 cups or 6.5 ounces drained weight), 1/3 cup toasted pecans, and just enough Greek salad dressing to make a spreadable paste. Please do not use green olives stuffed with pimentos. And before you run out to the store for salad dressing, let us remind you that we showed you how to make vinaigrettes in a previous column. We hope you've been practicing. In which case, you can make your own Greek salad dressing with white wine vinegar, olive oil, salt, pepper, oregano, maybe a touch of lemon zest. To emphasize the "Greek" in your green olive spread, whirl in an ounce or so of feta.

To make the classic dark and pungent tapenade from the south of France, start with about 6 or 7 ounces of drained, pitted kalamata olives; 4 drained, oil-packed anchovy fillets; 2 tablespoons capers; 2 or 3 cloves garlic; a large handful of fresh, flat-leaf parsley or basil or a mix of both; the leaves from several sprigs of fresh thyme; a small spoonful of Dijon mustard; a small splash of brandy; a squeeze of lemon juice; some freshly ground black pepper; and a small glug of olive oil, about 2 tablespoonfuls. Whirl all this together in a food processor until you have a rough paste. Taste and adjust the seasonings. If you like heat, add a pinch of chili flake. You shouldn't need salt. If the idea of anchovies turns your stomach, leave them out. But they are the secret ingredient that adds a sort of wild, savory complexity. Plus anchovies are a terrific source of Omega 3 fatty acids (more good fat!), so Nancy and I encourage you to take your medicine in the form of these delicious little flavor power packs. So much nicer than a gel cap, don't you think?

Tapenade is amazingly versatile, toss hot pasta with several tablespoonfuls as a quick pasta sauce, spread the tapenade on toasted or grilled bread and top with strips of roasted red pepper, put a spoonful on top of a bruschetta spread with white bean puree and on top of deviled eggs – or mix it into your egg salad. Try it mixed into potato and macaroni salads, too. I love it as a spread on crackers or toast with goat cheese. Actually, just about any cheese would work for me except soft-ripening brie types and I'm not sure about blue cheese in this application either. One thing I do know, however, is that tapenade is my favorite topping for burgers, especially buffalo burgers. Try it and see for yourself.

If we live in an area blessed by a great olive bar, we probably don't need to flavor our own. Except that it's fun and you get to put a personal stamp on an olive mix with almost no effort at all. One of the simplest of all olive presentations is to simply warm cracked green olives in sherry with a strip of orange or lemon zest. Serve the olives warm. Watch them disappear. You can gussy them up if you must by adding a bay leaf (I always do but I have a bay tree so it's easy), sliced garlic, and fennel seeds. Or try garlic, toasted and lightly crushed cumin and coriander, lemon zest, and chili flakes.

Leave out the sherry and simply pack your green or drained black olives in a jar with fresh olive oil and the flavorings above. Go crazy and add some herbs such as a sprig of rosemary, several of thyme, and/or oregano or marjoram.

Maybe you've tried fried olives in a restaurant. These are easy to make at home. Simply heat about an inch of olive oil in a

Cooks' Happy Hour, cont. on page 20

Cooks' Happy Hour, cont. from page 19

skillet. Dip fat, green Spanish olives in beaten egg and then toss them in flour. Shake off the excess and fry the olives in the olive oil until lightly browned all over. Serve them hot.

Do you love the intense, oil-cured black olives? If so, here's a super simple salad adapted from New York Times food columnist Mark Bittman: relieve juicy oranges of the peel and pith, slice them into thin rounds, and set aside. Pit enough oil-cured black olives to make about a cup. Put them in a food processor with maybe a teaspoon of fresh thyme leaves (lemon thyme would be wonderful here) and about 1/4 cup olive oil. Pulse the olives so they retain some texture. Scrape the rough paste into a bowl. Cut a red onion into very thin slices and toss them in a bowl with some white wine vinegar or lemon juice. Let sit just until the color blooms, about 10 minutes. You can also do this ahead of time. To assemble the salad, arrange several overlapping orange slices on each salad plate, center a spoonful of the black olive paste on the oranges, and then scatter some onions across the top.

Don't put your blender away quite yet. Plan now for fall: identify a source for garden-ripe tomatoes. Oven-dry them and then puree them. Yet another way to capture summer and enjoy it all winter long in soups, pasta sauces, as part of cheese courses. And on and on!

Our motto: Eat Well to Stay Well

SUPPORT GROUP NEWS

EDITED BY PENNI WISNER

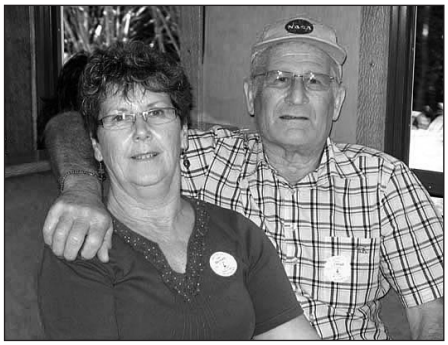
We are very glad to welcome the new international support group already "under sail" in New Zealand. And welcome, too, to the group lining up in eastern Kansas. Elsewhere new leaders are taking over established groups, and some of the new leaders introduce themselves below.

If you are interested in joining or visiting a group, please contact the appropriate support group leader. Names and contact information are printed on pages 25-26.

IWMF CHAPTERS – INTERNATIONAL

NEW ZEALAND

The brand new group in New Zealand, led by **Michael Goldschmidt,** has decided to call itself 'Waldo New Zealand.' He writes, "Hi! I am Michael Goldschmidt and I live in 'Godzown.' What a great place to live! I was diagnosed with WM in 2000 and have been fortunate enough to have managed without treatment to date. **Bronwyn,** my wife of 42 years, and I have two sons, and between them they have given us three lovely grandchildren (two girls and a boy) whose ages range from 20 months to 12 years. At 73 I have been retired for some eight years and occupy my time as a house-husband while Bronwyn works part time. I am very involved with the local Lions Club as Treasurer, am a founding member and a group leader of the local University of the Third Age (U3A). I'm a keen sailor. I first built and learned to sail a 20-foot trailer yacht and now am a crew member on a 35-foot Keeler. When I am on the helm there is only one speed, and that's flat out! It is a great way to forget whatever problems the world throws at you!"

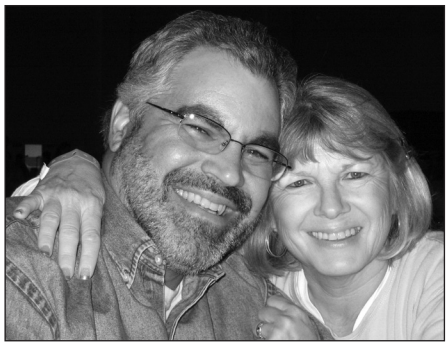


From the very new New Zealand support group: Michael and Bronwyn Goldschmidt. Michael is "on the helm" of this latest addition to the international support groups.

IWMF CHAPTERS – USA

ARIZONA

Ed Nadel, long-time leader of the Arizona support group, has help now thanks to co-leader **John Dethloff.** John wrote to introduce himself, "I live on the west side of Phoenix in Buckeye, Arizona. I was diagnosed with WM in 2005. I look forward to this time next year in that my better half, **Sara**, and I plan to retire from education with 38 years of experience and lasting memories. Our two golden retrievers, Parker and Lucky, will enjoy having more quality time with us. I also thank my doctors at the Piper Cancer Center and the Mayo Clinic here in Scottsdale for the five years of recovery and the opportunity to hold our first



John and Sara Dethloff of the Arizona support group. John is stepping up as new co-leader of the group as he retires from many decades in the classroom.

Support Group News, cont. on page 21

grandchild this April. Sara and I are looking forward to many years of attending IWMF functions and realizing the support of fellow patients who care about each other and work to make for a better life for all of us."

CALIFORNIA

Orange County

As planned, the southern California IWMF support group met on 24 April to share WM experiences. Each of the group of 26 had time to speak, often provoking lively discussion. Notices for the fall meeting will be sent as soon as plans are firm. Please send e-mail contact information to the group leaders as that is the preferred method of communication.

Sacramento and Bay Area

Alyce and **Terry Rossow,** the new support group leaders, led their first meeting in May and are full of good plans, including "satellite" meetings in the various areas served such as East Bay, South Bay, etc. Introducing herself in this column, Alyce writes: "I was diagnosed with WM in January 2004 and have been on watch-and-wait since then. I did go for several second opinions when my first doctor at Kaiser suggested treatment based upon my blood test scores. I changed to another Kaiser doctor I found through support group members. In September 2005 I was diagnosed with breast cancer. I had a mastectomy, but no chemotherapy. Whenever I have a new symptom I wonder if the WM is getting worse or if am I just getting older. The first IWMF Ed Forum I attended was in Tampa, FL, in 2005. I went to the next one in Seattle in 2006 and then the most recent one in Las Vegas. I have always learned a lot from the meetings. I am a retired special education teacher and I still tutor children several afternoons a week. Terry is a retired electrical engineer. He will provide technical and logistical support for the group. We live in Livermore in the East Bay region of San Francisco. We like to hike together and are both active in our Unitarian Universalist church. Terry and I look forward to the challenge of leading the San Francisco and Sacramento support group."

Alyce and Terry Rossow, the new support group leaders of the Bay Area and Sacramento group, share a love of the great outdoors.

At the May meeting, **Tom White,** who attended the 2010 IWMF patient Educational Forum for the first time, gave a detailed report of his impressions. Retired now, he worked at Genentech on Rituxan! Alyce also summarized some of the talks that had particularly spoken to her during the conference, for instance the research on individualized vaccines for WM. Tempting snacks followed the tradition of this support group. Alyce made a lovely sherry bundt cake. Eugene Turner, already well known in the group for his amazing brownies, has put himself on a low-gluten diet; he brought 100% spelt flour cupcakes. The **Gaska's** brought crates of the ripest possible strawberries from a ranch just down the road from them.

COLORADO & WYOMING

Dr. Jeffrey Matous, of the Rocky Mountain Cancer Center, spoke to a large and enthusiastic group of WMers and their families. Dr. Matous has about 40 WM patients, seeing many of them in conjunction with their local oncologists who are less informed about WM. His office has just been approved by the FDA to administer clinical trials as an outreach location for the Dana-Farber Cancer Institute. This is a huge benefit to patients in the area. Dr. Matous spoke about treatments, clinical trials, and the future for WM patients for about 45 minutes and then took questions for another 90 minutes. The meeting was a joint effort by the IWMF and the Lymphoma & Leukemia Society (LLS). The LLS brought a great breakfast to open the event and helped secure the wonderful large meeting room at Presbyterian St. Luke's Hospital. The three most recently revised IWMF booklets were distributed. Some members had planned to come from as far away as northern Wyoming (a five to six-hour drive), but due to snowy weather the day before, they weren't able to attend. A sharing and discussion meeting is planned for early summer to review information from the recent Las Vegas Ed Forum.

At the recent support group meeting in Denver, from left to right: patient Sheila Lammers, Dr. Jeff Matous, and patient Theo Cooper.

SUPPORT GROUP LEADERS TALK LIST

This list is only for support group leaders to use in communicating with each other about support group issues. It is designed for the leaders to share their experiences and ideas for facilitating our IWMF support groups. Contact Cindy Furst at *cindyfurst@msn.com* if you would like to participate.

Support Group News, cont. on page 22

The recent meeting of the Chicago area support group packed the conference room at Lutheran General Hospital.

FLORIDA

Ft. Lauderdale Area

The southern Florida IWMF support group had its spring meeting on Sunday 14 March. Dr. Steve Treon was the guest speaker with about 60 persons present. Dr. Treon spoke on the recent developments in WM research. Refreshments were provided by the LLS. Their representative made a presentation regarding the financial benefits available to WM patients through the society. **Charlie Koch,** co-leader of the group, attended the support group leader conference held just before the Las Vegas Educational Forum and also worked behind the scenes setting up the attendee registration packets and helping at the registration desk throughout the forum. On Saturday 19 June the group also held its summer meeting. This meeting was a traditional support group meeting that included a discussion of WM related issues and provided time for those in attendance to describe their current WM status with interaction by Dr. Daren Grosman who was also available to answer questions. Light refreshments were served. Copies of the newest IWMF publications and many other handouts were made available for those in attendance to take home with them.

Tampa

Rita O'Brien is a new co-leader in Tampa Bay, Florida. At the ripe young age of 55, Rita owns her own company and works full time with her husband, **John.** She is blessed with wonderful children, a beautiful granddaughter, and the family dog, Barley, a chocolate lab. Rita was officially diagnosed with WM six years ago. During that time she has had two separate six-month treatments of CHOP and is currently completing a two-year-every-three-month rituximab maintenance regimen. Rita sees an oncologist in Tampa and makes yearly visits to the Bing Center for WM in Boston. Since agreeing to co-lead the Tampa Bay chapter of the IWMF, wonderful opportunities are starting to develop. The most exciting is a contact with the LLS suncoast chapter in Tampa. The staff is reaching out to the group, and the society has much to offer! Details on the next meeting will be posted soon.

IDAHO

The eastern Idaho support group is quite small with just five active members (two patients, two caregivers, and the widow of a former member). But each member continues to focus on mutual support, providing educational material to the local cancer care facility, oncologists, oncology nurses, primary care providers, and also providing telephone contact numbers to group members. Mutual support falls in the realm of sharing and caring and meetings are so very informal that they literally take place around the kitchen table. The format adheres to the 'pop philosophy' stenciled on the kitchen wall of one member: "The fondest memories are made when gathered around the table." The intimate group calls itself a Waldenstrom family and welcomes any and all wishing to join.

ILLINOIS

The Chicago area support group includes SE Wisconsin. It had its first 2010 general meeting on Saturday 24 April with an excellent turnout filling the conference room at Lutheran General Hospital. The families of three new members attended, including a family from Wisconsin. Everyone enjoyed two 20-minute videos from the Third International Patient & Physician Summit on WM, including presentations by Dr. Rummel on bendamustine and Dr. Treon on Velcade. A lively discussion benefited both old and new members. The group's second annual summer picnic is planned for Saturday 14 August, to be hosted by **Hugh** and **Jackie Edfors** of

Support Group News, cont. on page 23

Naperville, Illinois. If you plan to be in the Chicago area this summer and would like to join the fun, call **Don Brown** at 630-323-5894 for a great social event that certainly will have its share of side conversations.

KANSAS

Karen Davis will lead the eastern Kansas support group that is starting up in the Kansas City area. She was diagnosed with WM about a year ago and has been trying to learn as much about it as possible. Her desire to meet other people with WM led her to volunteer to start a support group. She loves to travel with her husband, to sew, and to curl up with her cat and read a good book.

NEW ENGLAND

Boston

At the latest New England support group Dr. Guang Yang spoke to us about his work at the Dana-Farber Cancer Institute's Bing Center. He has been looking into polymorphisms, or genetic differences, in certain cells that appear to affect the ability of rituximab to eliminate B-cells. Another area that Dr. Yang spoke about has to do with the rise in IgM – frequently described as a flare – that some patients experience after receiving Rituxan. At the time of the flare, researchers have noted a parallel rise in the level of IL-6, a cytokine or protein that is released by other cells involved in the immune system response. Dr. Yang took and answered several questions on both areas of research.

NEW YORK

Eastern NY/Western New England

The focus of the May meeting was **Ron Goss'** report to the group about the IWMF Las Vegas Educational Forum. It was his first Forum and he met lots of great WMers from many states (and other nations) and was quite impressed with the members, dedicated leaders, doctors, and how everything was so well organized. He was especially impressed with all efforts to develop new drugs to improve treatment effectiveness and the IWMF funding of grants for research. Ron also saw great potential in the conferencing proposal by **John Paasch** and **Don Brown** to produce Webex "Internet meetings." The group hopes to join with other support groups in having such a meeting with key WM doctors and will be working on its technical ability in order to be ready when the program is available. Ron also mentioned the formation of a DFCI study group on peripheral neuropathy and WM, a promising German drug study, and efforts to find a vaccine for WM. The tentative date for the annual picnic is 21 August and several potential sites were mentioned. By the time this issue is in the mail, details should be all set.

Rochester, Western and Central NY

Stephen French, a member of the Rochester group since 1998, has volunteered to lead it now. He writes, "I was diagnosed in 1998 by a rheumatologist treating me for a rheumatoid condition. She got that problem solved but others remained. Many tests and doctors later, the hematologist/oncologist diagnosed not multiple myeloma but Waldenstrom's macroglobulinemia. I started chemo immediately with chlorambucil, then fludarabine, followed by Rituxan (still

Stephen French, traveler, gardener, and educator is the new leader of the Rochester support group.

Support Group News, cont. on page 24

Members of the New England support group gathered to hear Dr. Guang Yang of the DFCI (at far right) speak about his latest research focusing on rituximab.

experimental then) and finally Cytoxan. Cytoxan reduced the IgM to 400 mg/dL. That was in early 2002. I have been on watch-and-wait since that time and my IgM remains unchanged. The support group now numbers about 12. I like to garden, read, travel, and teach computer skills to folks over 50 via the SeniorNet program."

EASTERN OHIO, WESTERN PENNSYLVANIA, & WEST VIRGINIA

Support group members met at the home of **Marcia** and **Glenn Klepac** and welcomed newly diagnosed member **Carolyn Kauffunger** with her husband, **Bob,** and **Natalie** and **Morris Finder** who recently relocated to Pittsburgh from Albany. At the potluck dinner all enjoyed creative fruit-and-vegetable contributions with a focus on healthy eating. The meal ended with **Shari Hall's** "fresh from the garden" rhubarb-custard pie. A lively discussion centered on the critical issue of obtaining optimal medical care for WM with members outlining their options: primary WM oncologist at a major cancer center such as Dana-Farber with local oncologist in a "standby" capacity to handle routine tests or emergency situations; primary local oncologist with occasional consultations at a major cancer center; or sole reliance on local oncologist for care. The importance of personal choice and values in the decision process regarding medical care was clearly evident. **Dr. Neal Makens,** a retired pathologist and WM patient, gave a very thorough and insightful report on the Ask the Doctor panel from the Ed Forum. Marcia Klepac reviewed new clinical trial opportunities. No shortage of medical advice with this group: three nurses and one physician in attendance. Group members look forward to continuing their fellowship at a meeting later this summer.

WESTERN OHIO, EASTERN INDIANA, & NORTHERN KENTUCKY

The WOEINKY group had a creative idea for a meeting. In May they got together to watch Randy Pausch's "The Last Lecture."

OREGON/SOUTHWEST WASHINGTON

Quarterly meetings occur on the fourth Saturday (12:00 to 2:00 pm) of January, April, July, and October, unless a speaker cannot come on the scheduled date, then the schedule shifts to accommodate the speaker. The April support group meeting date fell on the same day as the LLS Oregon Blood Cancer Conference and members voted to attend this event rather than hold a separate meeting. Planned by Sue Sumpter, RN, MS, the local LLS patient services manager, the conference was an all-day event for health care personnel, patients, and other interested persons. The next meeting will be on 24 July. Support group members who attended recent educational events will share their perspectives on the IWMF Educational Forum, the Oregon Blood Cancer Conference, and Dr. Treon's visit in May to the Washington IWMF support group meeting in Seattle. Those who could not attend those three events will at least hear some of the highlights. Sue Sumpter will also share her personal story of how she was drawn to the LLS and her role as a very dedicated and passionate advocate for patients with blood cancers.

PENNSYLVANIA

Philadelphia

In April the Philadelphia area support group hosted Dr. Jennifer Armstrong, a local oncologist. Dr. Armstrong started off with a little quiz to find out how much attendees knew about our Waldenstrom's. She was surprised at the high level of knowledge. Hooray! She talked about how WM is classified, what it is, and its treatments and symptoms. Afterwards she took many questions from the group, including questions about peripheral neuropathy, Rituxan, clinical trials, and plasmapheresis. Twenty-two people attended including one new patient. Three people brought refreshments, so lots of yummy snacks to eat fueled the last, chit-chat centered, half hour of the meeting.

SOUTH CAROLINA

The South Carolina WM support group will hold its next meeting in downtown Charleston, SC, on Saturday 17 July 2 to 4 pm, at the American Cancer Society's "Hope Lodge." New WMers as well as "veterans" will share their experiences with WM (diagnosis, treatment, and overall health). The group is fortunate to have **Sue Herms** (the *Torch* medical news editor) on hand to bring everyone up to date with the latest advances in the genetics of WM, new and better treatments, not to mention understanding the basics of WM. Date and location of the fall meeting has yet to be determined but may be in the Florence area.

WASHINGTON

Over 50 people from Washington, Oregon, and British Columbia gathered in Seattle in May to hear Dr. Steven Treon as well as a presentation by Dr. David Maloney of the Fred Hutchinson Cancer Research Center. Dr. Treon addressed research updates in genetics and treatment, and Dr. Maloney spoke about stem cell transplantations – when and how they might be considered in WM. Jim Coe, leader of the Seattle chapter of the Lymphoma Research Foundation, gave a brief presentation. He outlined the various programs and conferences supported by the LRF.

IWMF SUPPORT GROUP CHAPTER LISTINGS

ALABAMA
Mal Roseman
770-392-1255
malroseman@comcast.net

ARIZONA
Phoenix
John Dethloff
623-388-7152
jdethloff1@cox.net

Ed Nadel
480-502-5045
enadeL63@aol.com

ARKANSAS
Eastern
Bill Paul
901-767-6630
Billpaul1@juno.com

CALIFORNIA
Los Angeles
Kathie Coen
310-454-7127
kdcoen@roadrunner.com

Orange County
Emil Parente
949-388-9666
pnepar@cox.net

Marty Glassman
949-458-7147
mglassman@cox.net

Sacramento/
San Francisco Bay Area
Alyce & Terry Rossow
925-447-8881
Rossow@ieee.org

COLORADO
Bill Bass
303-753-0070
303-808-5734 cell
basswilliam9@gmail.com

Cindy Furst
970-667-5343
970-227-4686 cell
cindyfurst@gmail.com

Roy Parker
303-470-6699
roypar@gmail.com

CONNECTICUT
Francoise Lampe
203-431-1455
wmfgL@sbcglobal.net

Bob Hammond
203-426-2772
Rhamm17@aol.com

Linda McIntosh
860-460-6445
lynmac47@aol.com

DELAWARE
Karen Pindzola
717-845-5937
karenpindzola@yahoo.com

FLORIDA
Ft. Lauderdale Area
Charlie Koch
954-476-8726
bonnie143@bellsouth.net

Theo Vagionis
954-564-9262
wesport2@msn.com

West Coast
Herb Kallman
239-466-6911
margerina@aol.com

Tampa
Rita & John O'Brien
813-654-4986
promo1rita@verizon.net

Linda Rothenberg
352-688-0316
A1pets@tampabay.rr.com

GEORGIA
Atlanta
Mal & Judy Roseman
770-392-1255
malroseman@comcast.net

HAWAII
(Nov. – Apr.)
Sandy Skillicorn
808-891-2882
jLsLs@aol.com

IDAHO
Eastern
Barbara Britschgi
208-522-2130
cbrits@cableone.net

Western
Judy Clark
208-888-0346
jzclark@cableone.net

ILLINOIS
Chicago
Don Brown
630-323-5894
Ldonbrown@msn.com

EASTERN INDIANA
Marion Petry
mLpetry123@earthlink.net
937-438-8850

Gayle Backmeyer
divagayle@comcast.net
765-962-3746

KANSAS
Eastern
Karen & Joe Davis
785-266-0121
karenjdavis@gmail.com

KENTUCKY
Marion Petry
mLpetry123@earthlink.net
937-438-8850

KENTUCKY (cont.)
Gayle Backmeyer
divagayle@comcast.net
765-962-3746

MARYLAND
Catherine Naylor
301-229-0319
catherinenaylor@verizon.net

MASSACHUSETTS
Boston
Lynne & Joe Mara
781-749-0204
jmara@nordicgroupusa.com

Judy Christensen
781-335-5698

MICHIGAN
Peter & Barbra Boyse
989-415-9936
peterdboyse45@charter.net

MINNESOTA
Minneapolis/St. Paul
Michelle Blazek
651-730-0061
mandsblazek@aol.com

MISSISSIPPI
Bill Paul
901-767-6630
billpaul1@juno.com

MISSOURI
Northwestern (KC Area)
Karen & Joe Davis
785-266-0121
karenjdavis@gmail.com

MONTANA
Barbara Britschgi
208-522-2130
cbrits@cableone.net

Regional Contact:
Cindy Furst
970-667-5343
970-227-4686 cell
cindyfurst@gmail.com

NEVADA
Eastern
Gerri McDonald
801-484-0360
gerri-sLc@comcast.net

Las Vegas
Robin Grenz
702-657-3860
Rgrenz1@cox.net

NEW ENGLAND
Boston
Lynne & Joe Mara
781-749-0204
jmara@nordicgroupusa.com

Judy Christensen
781-335-5698

NEW ENGLAND (cont.)
Western MA, VT & CT
Mel Horowitz
518-449-8817
wmcure@yahoo.com

NEW MEXICO
Regional Contact:
Bill Bilbro
575-642-4987
wbilbro@gmail.com

NEW YORK
Albany
Mel Horowitz
518-449-8817
wmcure@yahoo.com

New York City
Neil Massoth
201-444-6253
nmassoth@aol.com

Rochester
Stephen E. French, Sr.
585-621-3317
sfrench@rochester.rr.com

NORTH CAROLINA
Bob Zehner
804-796-3571
bobnbetsz@comcast.net

Don Nolan
828-692-1114
nondolan@aol.com

NORTH DAKOTA
Regional Contact:
Cindy Furst
970-667-5343
970-227-4686 cell
cindyfurst@gmail.com

EASTERN OHIO
Shariann Hall
330-533-4921
shari19@juno.com

Marcia Klepac
412-421-2437
marciaklep@hotmail.com

WESTERN OHIO
Marion Petry
mLpetry123@earthlink.net
937-438-8850

Gayle Backmeyer
divagayle@comcast.net
765-962-3746

OKLAHOMA
Western
Regional Contact:
Bill Bilbro
575-642-4987
wbilbro@gmail.com

OREGON
Joan Berglund
503-668-5037
rjbergie@verizon.net

IWMF SUPPORT GROUP CHAPTER LISTINGS

OREGON (cont.)
Carol Auger
503-746-7990
j.auger@comcast.net

PENNSYLVANIA
Philadelphia
Karen Pindzola
717-845-5937
karenpindzola@yahoo.com

Harrisburg
Terrie Eshleman
717-665-7393
tmesh74@ptd.net

W. PENN, E. OH, WV
Shariann Hall
330-533-4921
shari19@juno.com

Marcia Klepac
412-421-2437
marciaklep@hotmail.com

RHODE ISLAND
Linda McIntosh
860-460-6445
lynmac47@aol.com

SOUTH CAROLINA
John & Paula Austin
803-644-6002
jhaustin@bellsouth.net

SOUTH DAKOTA
Regional Contact:
Cindy Furst
970-667-5343
970-227-4686 cell
cindyfurst@gmail.com

TENNESSEE
Central & Western
Bill Paul
901-767-6630
Billpaul1@juno.com

Eastern
Regional Contact:
Myrna Daniel
706-539-2866
mdmermer@yahoo.com

TEXAS
Dallas
John Knutson
972-726-7790
johnknutson@tx.rr.com

Steve Pine
214-244-5515
iwmf4steve@verizon.net

TEXAS (cont.)
Houston
Barbara & John Manousso
713-840-0828
wm@manousso.us

Western
Regional Contact:
Bill Bilbro
575-642-4987
wbilbro@gmail.com

UTAH
Gerri McDonald
801-484-0360
or 801-232-5811
gerri-sLc@comcast.net

VIRGINIA
Bob Zehner
804-796-3571
bobnbetsz@comcast.net

WASHINGTON
Malcolm Brewer
206-772-7430
clanbrewer@gmail.com

Kristen Jenson
425-483-6605
Kristen@jensonfamily.org

WASHINGTON D.C., NORTHERN VA
Catherine Naylor
301-229-0319
catherinenaylor@verizon.net

WISCONSIN
Northwest WI
Michelle Blazek
651-730-0061
mandsblazek@aol.com

Southeast WI
Don Brown
630-323-5894
ldonbrown@msn.com

WYOMING
Bill Bass
303-753-0070
303-808-5734 cell
basswilliam9@gmail.com

Regional Contact:
Cindy Furst
970-667-5343
970-227-4686 cell
cindyfurst@gmail.com

INTERNATIONAL SUPPORT GROUPS AND CONTACTS

AUSTRALIA
Gareth Evans
WMozzies-owner@yahoogroups.com

BELGIUM
Joanna Van Reyn
+32 9 335 46 60
joanna.vanreyn@cmp-vlaanderen.be

CANADA
Alberta
Cam Fraser
403-281-8278
cmfraser@shaw.ca

Stu Boland
403-281-0271
stu_boland@hotmail.com

Montreal
Regional Contact:
Sandra Proctor
450-672-4336
sandra.proctor@sympatico.ca

Nova Scotia
Susan Gagnon
902-446-9533
Suemar3@hotmail.com

Ottawa
Jan Jones
613-722-2385
janellejones@rogers.com

CANADA (cont.)
Janet Cherry
613-596-1413
janet.parcher.cherry@sympatico.ca

Toronto
Arlene Hinchcliffe
905-337-2450
wmfc@noco.ca

Vancouver
Charlene Kornaga
250-474-7011
dennischarlene.kornaga@shaw.ca

DENMARK
Steffen Stello
+45 3582 7707
Mobile: +45 2123 7707
snejka@mail.dk

FINLAND
Veikko Hoikkala
+35 8500 48 4864
veikko.hoikkala@dnainternet.net

FRANCE
Nicole Bastin
+02.54.37.89.52
nicbastin@aol.com

GERMANY
Regional Contact:
Dr. Rolf Pelzing
rolf.pelzing@t-online.de

GREECE
Alexia Kapralou
+30 210 6858574
kapralou_alexia@hotmail.com

INDIA
Regional Contact:
Anil and Vasundhara Somani
+91 98300 49300
asomani@vsnl.com

Mumbai & Western India
Sanjeev Kharwadkar
91-98210-69769
92-22-6691-9957
swkharwadkar@yahoo.co.in

IRELAND
Anne Staples
annehstaples@yahoo.ie
+35 353 9158825

ISRAEL
Moshe Kwart
+97 254 2270527
m.kwart@tehilot.com

JAPAN
Regional Contact:
Sanjeev Kharwadkar
+81 03-6712-1887
+81 090-9971-4541 mobile
swkharwadkar@yahoo.co.in

NEW ZEALAND
Michael Goldschmidt
+03 384 5399
goldschm@paradise.net.nz

THE NETHERLANDS
Regional Contact:
Marlies Oom
+31 (0) 73.52.17.643
moom@planet.nl

UNITED KINGDOM
Nigel Pardoe & Cheryl Luckie
+44 020 8579 8120
info@septemberservices.com
cheryl.luckie@
septemberservices.com

Sussex
Mike Dewhirst
+44 1323 841735
mkdewhirst@yahoo.co.uk

Birmingham & West Midlands
Geoffrey Willsher
+44 0121429 1038
willsher.s@btinternet.com

THE LIFELINE

If you can't get to a local support group meeting, use our IWMF Telephone and Email Lifeline to call a WM veteran. The Lifeline provides telephone numbers and email addresses of IWMF volunteers who will answer questions about their first-hand experience with specific treatments for WM.

**The Lifeline is seeking volunteers who speak a language other than English. If you would like to volunteer, please contact the IWMF business office at 941-927-4963 or info@iwmf.com.*

TREATMENTS

ALLOGENEIC STEM CELL TRANSPLANTS

Eileen Sullivan 617-625-6957
ebsullivan27@comcast.net

2-CdA (CLADRIBINE) WITH RITUXAN

Bernard Swichkow 305-670-1984
theswichkows@aol.com

Brent Wingett 805-466-2345
bwingett@charter.net

BORTEZOMIB DEXAMETHASONE & RITUXIMAB (BDR)

Joe Gallo 941-493-1809
galljocon@verizon.net

Ron Linford 865-657-9895
rongl@aol.com

CHLORAMBUCIL

Janice Stein 415-346-6620
janicemstein@aol.com

CRYOGLOBULINEMIA

Fay Langer 904-625-3135
fhlanger@gmail.com

FLUDARABINE with cyclophosphamide (Cytoxan)

Penni Wisner 415-552-6579
penniw@pacbell.net

FLUDARABINE with Rituxan

Marty Kopin 310-390-1546
mkopin@yahoo.com

Jerry Block 301-460-9799
Jblock35@comcast.net

Eileen Sullivan 617-625-6957
ebsullivan27@comcast.net

ORAL CYTOXAN

Lou Birenbaum 314-961-5591
lbirenbaum@aol.com

PLASMAPHERESIS

Fred Bickle 805-492-4927
Flb134@msn.com

RAD 001

Tom Howenstine 419-542-8921
Howen978@verizon.net

(revlimed) LENALIDOMIDE

Christopher Patterson 617-632-6285
christopher_patterson@dfci.harvard.edu

RITUXAN

Charles Vassallo 201-947-6977
cvassallo@nj.rr.com

James Townsend 352-376-3664

Allen Weinert 603-863-5347
anweinert@gmail.com 760-568-2918

SPLENECTOMY

Kathleen Ugenti 631-470-0971

Patricia McCue ..... 239-348-3456 winter
802-468-5779 summer

STEM CELL TRANSPLANT

Howard Donley 307-587-3397
donleyh@tctwest.net

THALIDOMIDE

Mel Horowitz 518-449-8817
wmcure@yahoo.com

VELCADE

Jeff Atlin 905-707-5640
jeffatlin@hotmail.com

SPECIALTY TOPICS

CAREGIVING

Lynn Bickle 805-492-4927
Flb134@msn.com

Brad Alexander 972-529-2002

CLINICAL TRIALS

Tom Hoffmann 501-868-8305
Thh97c@msn.com

Guy Sherwood 765-282-4377
guysherwood@comcast.net

HEARING IMPAIRED TTY FACILITY

Betty McPhee 905-775-3413
bjmcphee@hotmail.com

LATEST RESEARCH

Bert Visheau 905-528-1789
visheau@mcmaster.ca

NEWLY DIAGNOSED

Guy Sherwood 765-282-4377
guysherwood@comcast.net

Sallie Moore 516-795-3746
Smoore6042@aol.com

SOCIAL SECURITY DISABILITY

Howard Prestwich 815-233-0915
prestwic@mwci.net

WATCH AND WAIT

Mel Horowitz 518-449-8817
wmcure@yahoo.com

Renee Paley-Bain 203-744-7851
paleybain@aol.com

YOUNG WM

Nobby Riedy 650-879-9104
knobby@wildspaces.net

Bob Bailey 770-664-8213
Laurabailey64@gmail.com

REQUEST FOR TELEPHONE AND E-MAIL LIFELINE VOLUNTEERS

Recently, the office has heard from patients who have questions about perifosine and ofatumumab. If you have experience with perifosine and/or ofatumumab and would be willing to answer questions and share experiences about these treatments, we would appreciate hearing from you and to publish your contact information in the Lifeline that appears in each issue of the *Torch* and at the IWMF website. The Telephone and E-mail Lifeline is a valuable resource for putting patients in touch with each other so that they may discuss WM disease-specific issues.

THE LIFELINE

INTERNATIONAL

BELGIUM
Joanna Van Reyn ..... +32 9 335 46 60
joanna.vanreyn@cmp-vlaanderen.be

DUTCH SPEAKER
Lia van Ginneken-Noordman ..... 00-31-(0)70-3475520
Ginneken.noordman@wxs.nl

FINNISH SPEAKER
Veikko Hoikkala
veikko.hoikkala@dnainternet.net

FRENCH SPEAKER
Guy Sherwood 765-282-4377
guysherwood@comcast.net
Sybil Whitman 506-450-3970
hcouture@nbnet.nb.ca

FRENCH LANGUAGE TALK LIST
http://sympa.medicalistes.org/wws/info/waldenstrom

GERMAN SPEAKER
Roy Parker (Colorado, USA) 303-470-6699
roypar@gmail.com
Sybil Whitman (New Brunswick, CANADA) 506-450-3970
hcouture@nbnet.nb.ca

GERMAN LANGUAGE TALK LIST
Http://www.leukaemie-hilfe.de/foren.html?&tx_mmforum_pi1(action)=list_topic&tx_mmforum_pi1(fid)=14

SPANISH SPEAKER
Peter Mitro 440-247-3460
stonehill@earthlink.net
Betsy Beazley 510-527-5827
betsybeazley@gmail.com
Gladys Mendieta 215-860-9216
Gladysmendieta@aol.com
Leon Maya 865-694-9581
veraleon@comcast.net

SPANISH LANGUAGE TALK LIST
iwmf-talk-espanol-subscribe-request@lists.psu.edu

SWEDEN/NORWAY
Anne Odmark ..... +46 18-14 05 13
ag.odmark@gmail.com

NORDIC COUNTRIES TALK LIST
iwmf-talk-nordic-subscribe-rquest@lists.psu.edu

UNITED KINGDOM LIFELINE

2Cda (CLADRIBINE)
Roger Brown ..... +44 01285 650107
Rogerbrown961@btinternet.com

FLUDARABINE
Ken Rideout ..... +44 1278 782108
ken@4rosetree.fs.co.uk

FLUDARABINE AND RITUXIMAB
Mike Dewhirst ..... +44 1323 841735
dewhirst_6@hotmail.com

OPTHALMOLOGY
Terry Betts ..... +44 01992 583643
tjb-planning@freeuk.com

PLASMAPHERESIS
Roger Brown ..... +44 1285 650107
Rogerbrown961@btinternet.com

RITUXAN
Nigel Pardoe ..... +44 0208 326 3270
pardoe@aol.com

UK SUPPORT GROUP ONLINE FORUM
Raphael Altman
raltman@btinternet.com

CANADA LIFELINE

CLINICAL TRIALS
Jan Jones (Ottawa, ON) 613-722-2385
janellejones@rogers.com
Rod Anderson (Cobourg, ON) 905-372-2410
rod@rodmer.com

TTY-HEARING IMPAIRED
Betty McPhee (Bradford, ON)
bjmcphee@hotmail.com
Fluent in American Sign Language

NEWLY DIAGNOSED
Jeff Atlin (Toronto, ON) 905-707-5640
jeffatlin@hotmail.com
Rod Anderson (Cobourg, ON) 905-372-2410
rod@rodmer.com

WAIT & WATCH
Jim Bunton (Toronto, ON) 416-621-7864
jbunton@sympatico.ca
Debbie Irwin (Toronto, ON)
Debbie.Irwin@Mecglobal.com

CVP/RITUXAN
Betty Mcphee (Bradford, ON) 905-775-3413
bjmcphee@hotmail.com
Ritwik Ray (Toronto, ON) 416-693-0910
ritwik@rogers.com
Rod Anderson (Cobourg, ON) 905-372-2410
rod@rodmer.com
Debbie Irwin (Toronto, ON)
Debbie.Irwin@Mecglobal.com

FLUDARABINE
Jeff Atlin (Toronto, ON) 905-707-5640
jeffatlin@hotmail.com
Gary Dvorkin (Mississauga, ON)
annawill@sympatico.ca
Bert Visheau (Hamilton, ON)
visheau@mcmaster.ca

RITUXAN
Rod Anderson (Cobourg, ON) 905-372-2410
rod@rodmer.com
Gary Dvorkin (Mississauga, ON)
annawill@sympatico.ca
Susan Gagnon (Halifax, NS)
suemar3@hotmail.com
Bert Visheau (Hamilton, ON)
visheau@mcmaster.ca

STEM CELL TRANSPLANT
Sybil Whitman 506-450-3970
hcouture@nbnet.nb.ca

VELCADE
Jeff Atlin (Toronto, ON) 905-707-5640
jeffatlin@hotmail.com
Rod Anderson (Cobourg, ON) 905-372-2410
rod@rodmer.com

VETERANS
Jan Jones (Ottawa, ON) 613-722-2385
janellejones@rogers.com
Bert Visheau (Hamilton, ON)
visheau@mcmaster.ca

SINCE MARCH 2010, THE FOLLOWING CONTRIBUTIONS TO THE INTERNATIONAL WALDENSTROM'S MACROGLOBULINEMIA FOUNDATION WERE MADE IN MEMORY OF:

In memory of Olga Anderson:
Edward & Theresa Anderson
Brenda Banks
James Bunton
Deborah Corbett
Monique Godard
Helen Grant
Arlene Hinchcliffe
Susan Holoff
Alice & Michael Homonko
Jan Jones
Kiwanis Club of Perth-On-Tay
William & Micheline Kowal
Carol Kowbel
Lucinda Landau
Barrie Leach
Allan & Susan MacIntyre
Richard & Kathleen Mongeau
Carla Piatti
Bradd & Linda Thompson
Liliana Tommasini
Brian & Nancy Williams

In memory of Richard D. Anderson:
Chris, Lisa, Grace, & Noah Anderson
David Anderson
Susan Bolks
Barbara Jones
Narman & Gayle Kelley
Lance Oakland
Bernard & Ruthanne Osterland

In memory of Jim Berg:
Frances Berg

In memory of Jerry Berman:
David Johnston

In memory of Irene Bilsbrough:
Mr. & Mrs. M.R. Bailey
Mr. & Mrs. N.C. Bailey
Mrs. B. Bilsbrough
Mr. & Mrs. J.N. Bilsbrough
Mr. J.T. Bilsbrough
Mr. & Mrs. K. Coleman
Mr. & Mrs. M. Cooper
Mr. & Mrs. C. Coton
Mrs. A. Cox
Mr. & Mrs. E. Crosswaite
Mr. & Mrs. M. C. Davis
Mr. & Mrs. N. Derbyshire
Mr. E. Dyer
Mr. & Mrs. G. Faulkner
Mrs. M. Grace
Mr. & Mrs. M. Hopwood
Mr. & Mrs. B.J. Hunt
Miss L. Jenkins
Mr. & Mrs. R. Johnson
Mrs. Ling Kemp
Angela Lister
Mr. & Mrs. N. Mann
Mr. Ken Manuel
Betty Mellor
Mr. & Mrs. B. Oliver
Mr. & Mrs. R. Pearson
Mrs. T. Povall
Mr. & Mrs. I. Peirce
Mr. & Mrs. D. Rigby
Mrs. G. Ross
Mr. & Mrs. K. Ryder
Mr. & Mrs. G. Sheehan
Mr. & Mrs. J. Silver

In memory of Irene Bilsbrough (cont.):
Mrs. Janice Smith
Mr. & Mrs. J. Stoney
Mr. & Mrs. P. Stoney
Mr. & Mrs. P. Stoney
Mr. & Mrs. D. Taylor
Mr. & Mrs. M. Torkington
Mr. & Mrs. J.E. Vynne
Mr. P. Wardle
Mr. & Mrs. K. Whitlow
Mr. & Mrs. D. Wright
Mr. & Mrs. B. Young

In memory of Agner Tilghman Sanger Boyd:
Harry & Pamela Ampagoomiam
Barbara Beaver
Phillips & Patricia Boyd

In memory of Dr. Blythe Brown:
Marina Skulsky

In memory of Terry Cherry:
Ron & Betty Anne Benes

In memory of Bob Duncan:
Sandra & Gene Patton

In memory of Elda L. Eldridge:
Jim Eldridge

In memory of Peter Ferrari:
Doris King

In memory of Frank Forde:
Charles & Grace Wagner

In memory of Louis de Give:
Shirley Shepard

In memory of Ann Gray:
Jan Van Nort

In memory of Richard Holoff:
Olga Anderson
Barbara Bowlby & Mary Jo Thompson
The Birch & Sostek Families

In memory of Patricia Horrigan Fischer:
Hess Corporation

In memory of Jerry Fleming:
Rudy Ray Seward

In memory of Dolly Hunt:
Marilyn & Gregory Fitzwater

In memory of Cyrus Allan Karper:
Maegan Beard
Jerry & Anne Buell
Jeff Cecil
Russell & Irene Cook
The Dooley & Reaver Families
Margie Everhart
Katherine Flynn Henry & Deron Henry
John & Nancy Hull
Joe King
Knouse Foods Cooperative
Jeffrey & Retha McCleaf
Robert & Julie Moore
Jerry & Linda Neth
Lee & Suzanne Powell
Dawn Rutledge
Julie Sayers
Charles Schlichter, Jr.
George Wildasin, C.E., Inc.
Paul & Phyllis Woerner

In memory of Fred Kilker:
Genevieve & John Lucas

In memory of Lucille Kinsella:
Nick & Arline Tufano

In memory of Kraig Scott Kint:
Tom Carrall
Mr. & Mrs. David Clark
Kyle Kint
Karl & Marge Kint
Jeanette Meyers
Doug & Carolyn Robertson

In memory of Bonnie Koch:
Charles Koch

In memory of Gus Kohler:
John & Linda Coulter

In memory of Cheryl Kuhn:
Juan & Tracy Alvarez
Andy Howard & Debbie Stulberg
Liza, Doug, Morgan, & Benjamin Kunz
Geri & Teri Larkee
Jeff Nelsen
Rachie Oftedahl
Bob & Ellen Shattuck
Gloria Young

In memory of Irwin Lampert:
Mr. & Mrs. Noah Fields

In memory of David T. Lively:
Jessica Lively

In memory of Hans Mueller:
Bradd & Linda Thompson

In memory of Kara Olson:
Al Halloran

In memory of Patricia Overman:
Bob & Dana Overman

In memory of George Saretsky:
Ann, Doug, & Dana Saretsky

In memory of Philip P. Shepard, Jr.:
Ronald Shepard

In memory of Lawrence Sommers:
Eric & Susan Alter
Tricia Ann & Gregory Tyndorf

In memory of Norman Spector:
Syracuse University Alumni Club of Northern NJ

In memory of Ed Soppa:
Al Halloran

In memory of William "Bill" Tanner:
Dana Anderson and the Agents and Staff of Coldwell Banker
Ann Marie & Charles Rosenfeld

In memory of Irving Tencer:
Phyllis & Noah Fields

In memory of Donald J. Voelker:
Bruce McComb & Jan Lyddon
Norma Voelker

SINCE MARCH 2010, THE FOLLOWING CONTRIBUTIONS TO THE INTERNATIONAL WALDENSTROM'S MACROGLOBULINEMIA FOUNDATION WERE MADE IN HONOR OF:

In honor of James F. Dimino:
Cheryl Mueller

In honor of John Eldridge:
Jim Eldridge

In honor of Joseph Endler:
Carolyn MacNaughton
David Neal

In honor of Suzanne Fleming:
Rudy Ray Seward

In honor of Denise Friedrich:
Donna & Bob Cusolito
The Donovan Family
Phyllis Friedrich
Meagan Judge & Jim Lanza
Deb & Jim Lanza
Jason Lanza & April Briere

In honor of James Hinchcliffe:
Cathy Lyon
Bill & Connie Paul

In honor of Robert Kelson:
Ms. Caroline Cioppa
Mr. Dennis Ducatelli
Miss Kelly Duff
Karen Evans
Mr. & Mrs. Jason Hamm

In honor of Robert Kelson (cont.):
Mrs. Ann Marie Kelson
Austin Kelson
Mr. Richard Kelson
Mr. &Mrs. Rob Kelson
Mr. & Mrs. John Lucas
Mrs. Lina Madia
Mr. & Mrs. Charlie Martonotti
Mrs. Cheryl Kelson Mulhall
Mr. & Mrs. Ted Mulhall
Mr. & Mrs. Ronald Peasley
Mr. Kevin Percoski

In honor of Don Lindemann:
Neal Makens

In honor of Ken Miller:
Rebecca Miller

In honor of Mike Pennington:
Karen Blocksom

In honor of Diane Raney:
Suzanne, Lisa, Bob, Stan, Zach, Ben, Nick, & Makenna Grycza

In honor of Roda Salvador:
Pardo Albino

In honor of William Sears – Happy Birthday:
Gary & Belinda Lavergne

In honor of Ronald & Ann Shelffo's 50th Wedding Anniversary:
Dyanne & Kevin Koithan

In honor of Ronald Shelffo:
Carolyn Lisa & Justina Cacioppo

In honor of Robert Shustak:
Donald Shustak

In honor of Christopher Southey:
Melvin Keeler

In honor of Norman L. Thompson:
Patricia B. Thompson

In honor of Bert Visheau:
Bertram Visheau

In honor of Rita Ziats:
Linda Morrow

Epigenetics, cont. from page 2

The second epigenetic process, called histone modification, indirectly affects the DNA. Histones are spool-like proteins that enable the very long DNA molecule to be tightly coiled into the chromosomes inside the cell nucleus. A variety of chemicals can grab hold of the tails of histones, changing how tightly or loosely they package DNA. If the wrapping is tight, a gene may be hidden from the cell's protein-making machinery and consequently switched off. If the wrapping is looser, a gene that was formerly hidden may now be turned on.

Just as we know that our DNA can change because of mutations, our epigenetics can also change during our lifetime. Lifestyle and environmental factors can expose us to chemicals that change our epigenetic profile. In other words, what we eat and drink, whether we smoke, what medicines we take, what pollutants we encounter, how quickly we age, may affect this process. Look at the case of identical twins. Although they share the same DNA, their bodies may not be exactly identical. One twin may develop arthritis or diabetes, for instance. At least some of these differences are due to changes in our environment that affect our epigenetics.

Research has shown that shortages or excesses of food during a person's childhood can cause epigenetic changes that lead to diabetes, obesity, and early puberty. Genes become epigenetically modified to deal with adverse conditions and then pass on to offspring who may enjoy more comfortable conditions. Changes that made sense during a time of hunger can then transfer to children and grandchildren who live in a time of abundance.

One of the pioneering epigenetic studies was performed by a Swedish preventive-health specialist named Dr. Lars Olov Bygren. He wondered about the long-term effects that feast and famine years in the 19th century might have had on children growing up in a remote area of northern Sweden – and not just on them but their children and grandchildren as well. Using historical records to analyze a sample of 99 individuals, Dr. Bygren determined how much food had been available to parents and grandparents when they were young. Boys who enjoyed rare overabundant winters and who went from normal eating to gluttony in a single season produced sons and grandsons who lived far shorter lives, as much as 32 years shorter. Later studies also confirmed significant drops in lifespan and discovered that they applied to females as well. Simply put, the data suggested that a single winter of overeating as a youngster could initiate a chain of events that would lead one's grandchildren to die decades earlier than their peers did.

A large-scale ongoing study in Great Britain is looking at the association between smokers and health problems in their offspring. Men who as boys had started smoking before age 11 – just as their bodies were preparing to enter puberty – had sons with significantly higher body mass indexes than other boys the same age. It appears that epigenetic changes are occurring on genes in the Y chromosome of smokers that

Epigenetics, cont. on page 31

are being passed on to their sons. This means that the sons of men who smoke in pre-puberty may be at higher risk for obesity and other health problems well into adulthood, and it's likely that these sons will also have shorter life spans.

Experiments have also shown how foods can cause epigenetic changes in the womb. In 2003 Duke University researchers conducted an experiment on pregnant mice that carry a particular gene for yellow coats and an associated likelihood for obesity and diabetes. The researchers fed one group of these pregnant mice a diet rich in B vitamins (folic acid and vitamin B12). Another group of genetically identical pregnant mice did not receive this prenatal nutrition. The B vitamins acted as methyl group donors – they caused methyl groups to attach more frequently to this gene in the fetal mice, thereby altering its expression. The mothers treated with B vitamins produced healthy brown mice that were of normal weight and not prone to diabetes.

Why is the study of epigenetics important to someone who has WM? For many years, it was thought that cancers are caused only by mutations in the DNA itself. That is one reason why there was such a push in the 1990s to complete the Human Genome Project, when medical researchers created a detailed map of all the genes in the human body. We now know that cancer can be caused by epigenetic changes as well. For example, adding or removing methyl groups (DNA methylation, as discussed above) can switch genes involved in cell growth off or on. If these changes occur at the wrong time or in the wrong cell, they can convert normal cells into cancer cells that grow out of control. If a gene is inappropriately switched on or off during cancer development, a treatment to reverse this process could stop or even reverse the growth of the cancer.

Also, if we can determine risk factors from our diet or environmental exposures that cause epigenetic changes, we may be able to predict those who are more likely to develop cancer and use measures to try to prevent its occurrence.

In 2004 the FDA approved the first epigenetic drug, azacitidine (trade name Vidaza), to treat myelodysplastic syndrome, often referred to as a type of pre-leukemia. Azacitidine blocks DNA methylation in the abnormal (myelodysplastic) cells, thereby activating tumor suppressor genes that had been turned off when they were methylated as a result of the epigenetic process. When these tumor suppressor genes are now activated, they can begin to suppress the disease again. The Dana-Farber Cancer Institute has evaluated the effects of azacitidine in WM cell lines and reported that it induced apoptosis (programmed cell death).

Vorinostat, also called Zolinza, is another epigenetic drug used in the treatment of cancer. Specifically, it is one of a class of drugs called histone deacetylase (HDAC) inhibitors that interact with histones, in the manner described above, by causing them to be more tightly coiled and "hiding" or silencing gene expression. The HDAC inhibitors are one of the fastest growing classes of new drugs now becoming available for the treatment of many forms of cancer, including lymphoma and multiple myeloma. At least 80 clinical trials are testing more than eleven different HDAC inhibitory agents for both hematological and solid malignancies. Vorinostat is currently approved for cutaneous T-cell lymphoma. In the laboratory it has induced apoptosis in WM cell lines and is at present being tested on B-cell lymphomas in combination with other cancer therapies in Phase I/II clinical trials.

Yet another HDAC inhibitor of interest in WM is called LBH589 or panobinostat, manufactured by Novartis. Panobinostat is currently in a Phase II clinical trial for relapsed/refractory WM at Dana-Farber. The drug is oral and is administered once a day on Monday, Wednesday, and Friday of each week for four weeks; trial participants may continue to receive the drug for as long as they are benefiting. Panobinostat is also being combined with everolimus (RAD001) in Phase I/II clinical trials at Mayo Clinic for multiple myeloma, non-Hodgkin's lymphoma, and Hodgkin's lymphoma.

Now that we are beginning to understand the importance of epigenetics in causing disease, several projects are attempting to determine, on a large scale, just where and how epigenetic changes can impact specific disease development. In Europe, a consortium of public and private institutions began collaborating on the Human Epigenome Project in 2000, with the idea of mapping DNA methylation sites in seven different human tissues. The project has now been expanded to map DNA methylation sites in all 30,000 human genes in approximately 200 tissue samples. In 2008, the National Institutes of Health in the U.S. started a comparable project called the Roadmap Epigenomics Program, which is a five-year, $190 million push to accelerate research into the epigenetic modifications that alter gene behavior. Making an epigenetic map will not be easy. Not only does one's epigenetic pattern change over time, it also differs in every major cell type. Researchers say this will be time-consuming but possible. As our knowledge of epigenetics expands, it is anticipated that our efforts to diagnose, treat, and prevent cancer and other diseases will improve.

International Waldenstrom's
Macroglobulinemia Foundation
3932D Swift Road
Sarasota, FL 34231-6541

Telephone 941-927-4963 • Fax 941-927-4467
E-mail: info@iwmf.com. • www.iwmf.com
IWMF is a 501(c)(3) tax exempt non-profit organization
Fed ID #54-1784426

Non Profit Org
US Postage
PAID
Manasota, FL
Permit No. 133