



Lymphatic Research MATTERS

A PUBLICATION OF THE LYMPHATIC RESEARCH FOUNDATION

SPRING/SUMMER 2003

LRF Founder Receives Prestigious National Award

Research!America (RIA) recently honored Wendy Chaite at its annual awards dinner, held at the National Academy of Sciences in Washington, DC, for "Exceptional Contributions as a Volunteer Advocate for Medical or Other Health Related Research." Other honorees included President George W. Bush, Actor Michael J. Fox, Former Senator Connie Mack, Nobel Laureate Dr. Paul Berg, and The American Society for Cell Biology.

"Wendy has been, from the beginning and throughout, an inspired, indefatigable, creative organizer of nearly unparalleled resourcefulness. She has moved mountains, both literal and figurative, to accomplish an unheralded list of advances for the cause that inspires her, namely, to create a vibrant, productive investigative field for lymphatic research and, in a subsidiary manner, to stimulate effective interactions with government, with industry, and with the academic community... When, one day, the field of lymphatic research, biology, and medical care is as well established as its more common counterparts, it will be beyond question that the credit for the rebirth and development of this field will belong to Wendy Chaite."

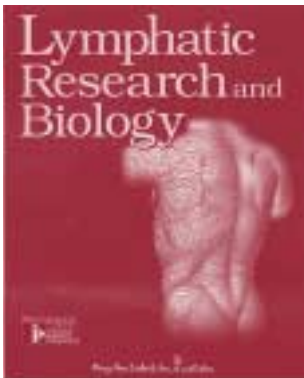
— Stanley G. Rockson, MD, Stanford University School of Medicine



RIA President, Mary Woolley and RIA Chairman, Former Congressman Paul Rogers present LRF Founder, Wendy Chaite with a RIA Advocacy Award at the National Academy of Sciences in Washington, DC

Excerpts from Wendy Chaite's Acceptance Speech: It is an extraordinary honor and privilege for me to be here to accept this important award. When I started LRF 4 1/2 years ago all alone in my windowless basement office – never, could I have imagined that I would be here this evening. All I knew at the time was that my little girl was born with a rare, systemic, progressive, lymphatic disease...with an uncertain prognosis, little treatment, and no cure. While her particular condition is rare, lymphatic diseases are quite common. My husband and I shared the agony of millions of other lymphedema and lymphatic disease patients, who hope to find answers – and find that none exist. The relative "medical ignorance" we encountered was not merely a reflection of our child's "rare" condition. Rather, the abyss stemmed from the lack of basic scientific knowledge about "lymphatics in general" and the "lymphatic system" as a constituent structure of the human body.

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First Two Issues of Journal Published

It is with a great sense of enthusiasm that LRF is able to introduce *Lymphatic Research and Biology* (LR&B). Published by Mary Ann Liebert Inc., publishers, this journal has been created to provide an interdisciplinary forum for the world's leading biomedical investigators to discuss current and anticipated developments in lymphatic biology and pathology. The contents of the first issue chiefly reflect the proceedings of an LRF-sponsored workshop symposium, also entitled *Lymphatic Research and Biology*, held May 4, 2002 at the National Institutes of Health. For this workshop, a select group of investigators and thought leaders gathered in a

"think tank" to discuss the imperatives for current and future lymphatic research. One day earlier, a companion conference, entitled *The Lymphatic Continuum*, took place. The proceedings of the first day meeting are published in the *Annals* of the New York Academy of Sciences. To order a copy of the *Annals*, visit www.nyas.org. To receive a free on-line copy of LR&B's inaugural issue, visit www.liebertpub.com/lrb.

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- Chaite Elected to RIA Board

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Founded in July 1998, LRF is a 501(c)(3) not-for-profit, tax-exempt organization whose mission is to promote and support research that will lead to therapeutic advance and, ultimately, a cure for lymphatic disease, lymphedema, and related disorders. LRF's program goals include: fostering related medical and scientific disciplines to participate in lymphatic research; increasing public and private funding and support for lymphatic research by government, industry, foundations and individuals; fostering collaboration and the exchange of information and resources within the scientific and medical community; providing research grants and awards; and promoting a national tissue bank and patient registry.

From The President

It seems astonishing that so much has been accomplished since founding LRF in July 1998. There is great cause for enthusiasm and hope as we celebrate our *Fifth Anniversary!* LRF has made such extraordinary strides and has been a significant catalyst for change in the field of lymphatic research. A groundswell of support is building – from government, industry, academia, patients, and from those who so generously support LRF financially and through in-kind donations.

LRF has begun to break through the “medical ignorance barrier” and doors are beginning to open that will help support and sustain our important mission. As LRF continues onward, we are uniquely poised to take our efforts to the next level. The research in this field is on the very verge of an exponential explosion and the achievements thus far will pale in comparison to what lies ahead.

We thank all of you who have believed in us all along and we welcome all newcomers to our cause. We need and rely on your support as we continue the search for improved understanding of how the lymphatic system functions and importantly, to find improved treatments and a cure for its diseases. Please help us celebrate LRF's fifth anniversary by making a donation to mark this special occasion.



Wendy Chaite, Esq.
Founder and President

RESEARCH MATTERS

Chaite Elected To Nation's Leading Research Advocacy Board

Wendy Chaite has been named to the Board of Directors of **Research!America** (RIA), a national alliance for discoveries in health. She will serve as the representative for RIA's individual members for a three year term. RIA is the nation's leading not-for-profit, non-partisan voice for making medical and health research a higher national priority. Its membership represents more than 450 academic institutions, independent research laboratories, teaching hospitals, private industries, professional societies, voluntary health agencies and philanthropies. As a board member, Ms. Chaite joins an array of prominent figures including **Sam Donaldson** of ABC News, **Judy Woodruff** of CNN, the Presidents of the **American Medical Association (AMA)**, **Association of American Medical Colleges (AAMC)**, **Association of Academic Health Centers (AAHC)** as well as the CEOs of the **American Cancer Society (ACS)** and **American Heart Association (AHA)**. For more information about RIA, visit www.researchamerica.org.

First Two Issues of Journal Published

Continued from Page 1.

The second issue of the LR&B Journal, enters a new and exciting chapter for, in this issue, LRF has the distinct privilege to publish the first reports of *original investigation* submitted to this journal for *peer review*. In this light, it is altogether fitting that the featured original investigations should span the spectrum “from bench to bedside.” At one end of this spectrum, **Hayes et al.** describe an investigative tool that can be predicted to substantially enhance *in vitro* study of lymphatic microvascular function. The authors describe successful isolation, culture, and characterization of a line of endothelial cells derived from the rat mesenteric micro-lymphatic circulation. In another original report, **Stanton** and colleagues report the results of their quantitative investigations into the *in vivo* compartmental variability of lymph flow in patients with breast cancer-related lymphedema. Taken together, these two studies help to delineate the spectrum of work before us as, collectively, we try to solve the mysteries of lymphatic function and disease. Today, these two research endeavors represent two widely disparate sets of investigative questions and approaches, but it is to be fervently hoped that the gap between them will narrow progressively as the mysteries yield to scrutiny. It is with great anticipation that LRF looks forward to sharing many such observations within the pages of LR&B. To submit manuscripts or subscribe to the journal, visit www.liebertpub.com/lrb.

MAKE A DONATION IN CELEBRATION OF LRF'S FIFTH ANNIVERSARY (JULY 1998 – 2003)

A “Home” for NIH Grant Applications

As a result of LRF's advocacy efforts, the National Institutes of Health (NIH) Integrated Review Groups within the Cardiovascular Sciences Integrated Review Group (IRG) shall now address **lymphatics**. This change is part of an extensive NIH study section grant review process restructuring. Under the reorganization, the Hypertension and Microcirculation Review Group (HM) shall address grant applications studying “*lymphatics, including functional biology, mechanisms of fluid exchange, propulsion of lymph and lymphatic tone, pathophysiological processes contributing to primary and secondary lymphedema, and treatment of lymphedema.*” The Cardiovascular Differentiation and Development Review Group (CDD) shall review grant applications for “*studies of lymphangiogenesis including the origins, commitment, differentiation, and organization of the lymphatic vascular system.*” At last, a “home” for specific lymphatic disease grant applications, which will, over time significantly impact this historically neglected field of research. For more information visit, www.csr.nih.gov/PSBR/CVS/CVS_guidelines.pdf.

Premiere Research Conference: Applications Now Being Accepted

A source of great pride and accomplishment for LRF is its role in the establishment of a **Gordon Research Conference** series entitled *Molecular Mechanisms in Lymphatic Function and Disease*. The purpose of the conference is to provide an international forum for the presentation and discussion of cutting-edge scientific discoveries in molecular mechanisms in lymphatic function and disease and to foster collaborations and the exchange of information and resources. Gordon Research Conferences are known for being the overall best meeting in a given field. The meeting will be held biennially, on even years beginning in 2004; alternating between March in Ventura, California and May in Tuscany, Italy. **The initial meeting has been scheduled for March 7-12, 2004 in Ventura, California.** It will be chaired by LRF's Scientific/Medical Advisory Board Chair, **Dr. Stanley Rockson**; and Co-Vice Chairs will be **Drs. Kari Alitalo**, University of Helsinki, and **Geert Schmid-Schoenbein**, University of California - San Diego. To participate or learn more about the Gordon Research Conference, visit www.grc.org.

The Cutting Edge — Research Abstracts of Interest

Exciting Breakthroughs in Lymphatic Research

■ **Prox1 is a Master Control Gene in the Program Specifying Lymphatic Endothelial Cell Fate.** Hong YK et al. *Dev Dyn* 2002 Nov; 225(3):351-7. Findings validate that Prox1 is a key player in the molecular pathway leading to the formation of lymphatic vasculature and identify Prox1 as a master switch in the program specifying lymphatic endothelial cell fate.

■ **VEGF-C Gene Therapy Augments Postnatal Lymphangiogenesis and Ameliorates Secondary Lymphedema.** Yoon YS, et al. *J Clin Invest* 2003 Mar 1; 111(5):717-725. Authors investigated the impact of local transfer of naked plasmid DNA encoding human VEGF-C (phVEGF-C) on two animal models of lymphedema. This gene transfer led to a decrease in thickness and volume of lymphedema, improvement of lymphatic function and attenuation of the fibrofatty changes of the skin, the final consequences of lymphedema. This novel strategy may merit clinical investigation in patients with lymphedema.

■ **Interstitial Flow as a Guide for Lymphangiogenesis.** Boardman KC et al. *Circ Res* 2003 April 18; 92(7):701-3. Authors characterize the process of lymphatic regeneration by uniquely correlating interstitial fluid flow and lymphatic endothelial cell migration with lymphatic function. Data suggests that interstitial fluid channeling precedes and may even direct lymphangiogenesis.

■ **The Same Endothelial Receptor Controls Lymphocyte Traffic Both in Vascular and Lymphatic Vessels.** Irjala H et al. *Eur J Immunol* 2003 Mar; 33(3):815-24. Findings suggest that CLEVER-1 is involved in regulation of lymphocyte recirculation and migration of leukocytes to sites of inflammation and is a potential new target to control inflammation.

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ATTENTION RESEARCHERS

Exploding Field of Research

Opportunity for Advancement

Make your mark! Currently, only a handful of researchers, clinicians, and industry leaders have devoted their resources to the study of lymphatic research and disease. So, the field is ripe for major discoveries and advancements. If you've considered this area of study, practice, and/or research and development, the time has never been better to do something about it. And if you haven't considered the possibilities, now would be an excellent time to do so. A great deal of work remains to be done and many opportunities are available. Identifying preventive measures. Developing diagnostic and imaging tools. Discovering treatments and cures. Improving clinical care. The opportunities are endless.

National Institutes of Health Initiatives:

For more information, contact the Trans-NIH Coordinating Committee for Lymphatic Research and Disease at changh@nhlbi.nih.gov and/or goldmans@nhlbi.nih.gov

Gordon Research Conference Series—Molecular Mechanisms in Lymphatic Function & Disease:

To be held biennially, commencing March 7-12, 2004 in Ventura, CA. For more info, visit www.grc.org

Lymphatic Research and Biology Journal:

An authoritative, peer-reviewed journal that focuses on the interdisciplinary research of lymphatic biology, disease and therapeutics. To submit manuscripts and/or subscribe, visit www.liebertpub.com/lrb

The Lymphatic Continuum - Lymphatic Biology and Disease, May 2002 NIH Conference Proceedings:

Published in the *Annals of the New York Academy of Sciences*, Vol. 979. To order a copy, visit www.nyas.org/books/vols/v979.html

Conquering Lymphatic Disease: Setting the Research Agenda, May 2000 NIH Conference Proceedings:

For free video access visit <http://video.biocom.arizona.edu/video/lymph>

Lymphatic Research Foundation

39 Pool Drive, Roslyn, NY 11576

www.lymphaticresearch.org

MAKE A DONATION IN CELEBRATION OF LRF'S FIFTH ANNIVERSARY (JULY 1998 – 2003)

FUNDRAISING MATTERS

Join LRF'S Butterfly "Truly Jewelry" Fundraising Campaign

LRF has launched a *Butterfly Truly Jewelry*® Fundraising Campaign - 100% of all proceeds supports research. The national symbol for lymphedema is the "Butterfly of Hope," a creation of activist **Jeanne Tassis**. For a minimum donation of \$10*, you will receive a delightful butterfly jewel pin (rhinestones and/or other beautiful adornments). They make a perfect gift and will look lovely on just about any outfit. These pins are "truly jewelry" and can be worn by everyone, not just patients or medical service providers.

We are looking for volunteers to help promote this campaign. This is a great way for individuals, support groups, service providers, vendors, schools, civic organizations, and others to help raise funds for research. It's simple and easy and takes virtually no time. For more information, contact Myrna Barzelatto at 914-686-0365 or via e-mail at mbarzel@aol.com. Won't you please help us spread our wings for hope?

**Plus \$2.00 for shipping and handling costs (S&H); LRF will cover S&H for those who order 10 or more pins.*



Top: LRF Board Member Myrna Barzelatto with Americana Manhasset representatives and volunteer Ford Agency model

Bottom: Champions for Charity® breakfast at Millie's Place



Tennis Event: Raising a Racquet for Lymphatic Research

A Round Robin Tennis Luncheon was held in New York at **Sportime**, who donated use of the facility for the day. **Panera Bread Bakery-Café** donated breakfast and lunch for the fundraiser. Over \$3,000 was raised for research!

Right: Tennis luncheon organizers Paige Sirota, Eileen Balbera, Karen Palevsky, Sue Rich and Amy Katz (missing from photo: Meryl Ben-Levy)

Shopping Benefit for Lymphatic Research

This past winter, more than eighty supporters of LRF journeyed out in ice and snow to enjoy a morning breakfast at **Millie's Place**, kicking off LRF's participation in **Champions For Charity**®. This annual holiday shopping benefit raises funds for over 50 charities. The breakfast featured a **Barney's New York** fashion show. Participating stores of **Americana Manhasset** and **Wheatley Plaza** donated 25% of designated pre-tax purchases to charities chosen by their customers. LRF raised nearly \$10,000 through this program. Mark your calendar for LRF's 2003 Champions Kick-off Breakfast at Millie's on December 3. Thanks to all those who participated in the 2002 Campaign. We hope we can count on you again!

Nashville Songwriters Strike a Chord for LRF

In March, Nashville celebrities and artists performed at an LRF Nashville Songwriters Concert. Artists included **Robin Wiley**, **James Dean Hicks**, **Rob Crosby**, **Brett James**, and **Todd Cerney**. LRF Vice President **Calina Burns** is the creator and organizer of this very successful entertainment program, which raises funds for LRF. For more information about other shows in the series, contact Calina at CalinaBurns29@aol.com.



James Dean Hicks



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SUPPORT MATTERS

New, Improved Brochure To Promote Lymphatic Research Now Available



LRF's brochure has a new look and an upbeat message: *Imagine: The Possibilities. The Opportunities. The Satisfaction. There is Hope!* We want to reach out to a wide community of concern for lymphatic research, lymphatic disease and lymphedema. We need to reach patients, medical service providers, researchers, industry, and the general public through far-reaching dissemination of this attractive and informative brochure. The brochure has separate inserts specifically designed to address particular interests of target audiences, including the patient community, the medical and research community, and the public-at-large. If you would like to help spread the word about the importance of and critical need for lymphatic research, please contact Carol Ell at 516-625-9675 or via e-mail at lrf@lymphaticresearch.org. Special thanks to *Pixel Imaging, Inc.* and *Rally Graphics, Inc.* for donating their services to create and produce this outstanding communication piece.

Newly Designed Website On Its Way

With the generous support of computer programmer, **Michael Coleman** of **Canyon Road Media, Inc.**, Nashville, TN and the efforts of LRF Board Member, **Calina Burns**, LRF is proud to announce that its entire website is being redesigned to provide visitors information about important developments and advancements in the field of lymphatic research. Moreover, the newly-designed site will eventually allow researchers to share and exchange information and resources within a secure venue; will be a resource for posting research abstracts; and will allow patients to find out about clinical trials and other issues of particular interest to the patient community. The website will also provide volunteers and donors information about LRF fundraising and advocacy activities and programs. Everyone will benefit from the informative and educational lymphatic-related materials that will be available – at the press of a button. Until then, please visit our current website at www.lymphaticresearch.org and be sure to register with us to receive future mailings.

LRF Founder Receives Prestigious National Award

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I kept asking myself why at this point in history, with unprecedented medical and scientific advancements, was there so little known about the lymphatic system? Why is it missing from medical school education? Why wasn't industry working toward developing lymphatic-related therapeutics, imaging techniques and diagnostic tools? Why wasn't there government initiatives or federally-funded lymphatic research programs? As a parent of a child with systemic lymphatic disease and lymphedema, the dismal state of the science was unacceptable. I had to do something. With the support of my husband, I gave up my professional career and founded LRF in order to promote and support lymphatic research and to help bring this important field of science into the 21st Century. The rest is history. What started out as a simple act of love and devotion after the birth of my child – to provide *her* with a better quality of life – has evolved into, what I believe is, my *"life's calling"*. I know I can be a catalyst for change not only for lymphatic investigation, but for the broad field of biomedical research. Hundreds of millions of people worldwide suffer with diseases related to the lymphatic system. The advancement of lymphatic research has important implications not only for lymphatic disease and lymphedema, but for cancer, AIDs, infection, inflammation, immunity and many others conditions and processes. The promise of scientific breakthrough and medical advancement are boundless.

The Gift of Hope

A GENEROUS DONATION HAS BEEN MADE TO THE
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IN HONOR OF _____
ACKNOWLEDGEMENT CAN BE MADE TO:

In loving memory of _____
The family has requested that donations in his/her memory be made to the
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ROSLYN, NEW YORK 11576
(516) 625-9675

Memorial & Gift Cards Available

Please contact LRF if you wish to send a contribution in someone's honor or memory. LRF provides gift card notification to acknowledge gifts made. Pre-printed funeral cards are available upon request. Your gift will honor someone you love and affirm the hope of a healthy future for millions suffering from lymphatic diseases and lymphedema!

I WANT TO CONTRIBUTE!

Name: _____

Address: _____

City: _____

State: _____ Zip: _____

Tel: _____ E-mail: _____

Occupation: _____

I have enclosed my tax-deductible donation in the amount of: _____

My gift is made:

in honor/memory of: _____

on the special occasion of: _____

Send LRF Acknowledgement Card of Gift to:

My employer will match my gift; employer form enclosed.

Contact me, I can provide services, resources and/or skills.

Make checks payable to:
Lymphatic Research Foundation, Inc.
39 Pool Drive, Roslyn, NY 11576

THANK YOU SO MUCH FOR YOUR SUPPORT!

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*“One person can have a dream;
 when joined by others it becomes
 a vision; when put into action it
 becomes a movement.
 Movements change history.”*

AWARENESS MATTERS

PR Internship Program for LRF

Professor **Richard Ziff**, a volunteer communications consultant for LRF, established a public relations study program to give public relations students at **C.W. Post** campus of **Long Island University** an opportunity to aid in the promotion of the Foundation. **Kimberly Anglin**, a senior at C.W. Post, was the first LRF public relations coordinator for the fall 2002 and spring 2003 semesters. **Nicole Smith**, also a senior, will work with the Foundation throughout the summer and fall semesters. Professor Ziff is a senior adjunct professor of public relations and communications at Long Island University. He is also President of **Richard Ziff Communications**.

Advertising Program Selects LRF As Client for Competition

For 30 years, the **Long Island Advertising Club (LIAC)** has promoted advertising excellence through its annual “Best of Long Island” (**BOLI**) awards competition. The student division of the competition is open to marketing, communications, advertising, and photography majors at colleges and professional schools throughout the region.

LRF, which had requested a publicity-education package be designed for it, was selected as the “client” for the talented and creative students. Students entered individually and in teams up to 4 persons. Fifteen entries were selected as finalists and were featured at a recent BOLI Awards Dinner. This is the first time that a “real client” has been selected as the subject of the student competition. Historically, students would submit advertising campaigns based on fictitious companies and products. Winners included: **Casey Bartholomew, Dina Castro, Michael Kane, Brian Kurkowski, Robert Berk, James Gelles, Francisco Jara, Joelle Perrillo, Deanna Cosme, Amelia Dorrer, Jessica Gorman, Ryan McKinney, and Stacey Karambelas**. LRF looks forward to incorporating the work of the student winners in its promotional programs.

Special thanks to **T. Walker Lloyd** of LIAC for his efforts in creating this unique pro bono advertising opportunity for LRF. Our thanks also to **Americana Manhasset** and **We Care Fund - Nassau County**

Bar Association for helping to underwrite production costs of the print advertising. We are also grateful to radio stations **WALK 97.5 FM, WLVG 96.1 FM, and WRCN 103.9 FM** for donating public service announcement on-air personalities and studio time. Those interested in helping to provide financial or in-kind support to help launch these promotional campaigns, please contact Julie Geller at 516-625-9675 or lrf@lymphaticresearch.org.



First Place Winner



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