Major New Survey Aids in Search for Biological Basis of Stuttering

an interview with Anne Foundas, M.D.

Advances in brain research give us another piece in the puzzle of a biological basis for stuttering, yet a clear picture of the cause of this speech disorder remains elusive. To find out more, Anne Foundas, M.D., Tulane University Health Sciences Center, New Orleans, is conducting a study into the handiness and footedness of people who stutter.

The Stuttering Foundation is helping with the survey portion of the study, and in June sent out more than 17,000 copies of a survey on hand and foot preference. The survey is being completed by people who stutter and by a control group of others who do not stutter. The scope and depth of this study into the causes of stuttering have generated great interest in the community.

"I think the exciting thing about this study is that people have been speculating about the correlation between hand preference in relationship to brain organization and stuttering for years, yet I believe this is the only questionnaire of this magnitude with real, definitive survey information," said Jane Fraser, Stuttering Foundation president.

Following is an interview with Dr. Foundas regarding this important research into the causes of stuttering.

Q: How do hand and foot preference correlate to stuttering?

A: There has not been much research into the relationship of handedness to stuttering, so there are more questions than answers at this point. To my knowledge, there are no studies about footedness in stuttering.

Hand preference is often considered an indirect measure of brain organization. In most right-handers, speech and language functions are processed in the left side of the brain. Although many left-handers also have speech-language functions processed in the left side of the brain, left-handers are more likely to have atypical representations of speech and language functions compared to right-handers. Most studies of people who stutter have not included left-handers, so we

Richard Curlee Receives the 2002 Malcolm Fraser Award of Excellence

In honor of his life’s work as clinician, researcher, educator, editor, author, advocate, and mentor, Dr. Richard F. Curlee was awarded the 2002 Malcolm Fraser Award for Excellence in the Field of Stuttering.

The titles recognize the broad range of interest and expertise Dick Curlee has demonstrated for 40 years across the field of speech pathology, yet they cannot begin to convey the deep respect and honor accorded Dick by his colleagues.

"Throughout, he has been recognized for his professional integrity, and a wonderful model for clients, for students, and for colleagues," writes Hugo Gregory, Ph.D., professor emeritus at Northwestern University.

"I have never felt more honored than when I received the Malcolm Fraser Award and am especially flattered that colleagues whom I greatly admire thought that my work has deserved it," Curlee said on receiving the award. "I also feel somewhat embarrassed to have received an award for my obsessive interest in stuttering and working with children and adults who stutter and their families, which have enriched my life more than any other endeavor I have pursued. How could anyone be so lucky?"

Dick Curlee has had a profound influence on the study of stuttering and on the training of clinicians. Hallmark research includes the first clinical trials of delayed auditory feedback and prolonged speech procedures, with William Perkins, which were prototypes for the fluency training treatment programs used with adolescents and adults who stutter. Later research focused on the responsible and effective management of early childhood stuttering.

Academic achievements include appointments at the University of Southern California and the University of Arizona, where he was also the Associate Dean of the Graduate College and Interim Head of the

Straight Talk Answers Teachers’ Questions

If you’re a classroom teacher with a student who stutters, a speech-language pathologist working with classroom teachers or a worried parent, Stuttering: Straight Talk for Teachers is for you.

In this new 20-minute videotape, students who stutter talk to teachers about their experiences, and experts in the field of speech pathology answer questions about what works and what doesn’t in the classroom.

The perfect length for an after-school inservice, the video and accompanying booklet answer common questions:

- how to respond to the child who stutters in the classroom
- what happens in speech therapy
- how to handle teasing
- how to deal with oral presentations

The fresh, forthright perspectives of the students and the depth of information from professionals provide a powerful resource for teachers working with children who stutter.

The free booklet includes resources and

Continued on page 4

Continued on page 2
Stuttering Organization in Africa Highlights Genetic Research

Those who stutter in the West African nation of Cameroon have an active new organization to help their cause. The Speak Clear Association of Cameroon (SCAC), founded only two years ago, is a member of the International Stuttering Association.

The driving force behind SCAC is Joseph Lukong, a member of a remarkable family affected with stuttering. This family is now the subject of a research program at the National Institute on Deafness and Other Communication Disorders at the National Institutes of Health in Bethesda, MD. The research project is being led by Dennis Drayna, Ph.D., a geneticist who has been studying inherited forms of stuttering.

Dr. Drayna became involved with Joseph and his family through the 2001 On-line Stuttering Conference, organized by Judy Kuster of Mankato State University in Mankato, MN, when Joseph submitted a question from Cameroon inquiring about the role of inheritance in stuttering. Drayna responded on line, and then introduced himself to Joseph by e-mail. From this initial contact, the research project has grown over the course of the past year.

So far, Drayna has made two trips to Cameroon, and is working to bring Joseph to the United States in the coming year.

Joseph has been very active in stuttering support in Cameroon. He obtained Charitable Organization status for SCAC from the government of Cameroon, and has sponsored therapy sessions, provided by a group of therapists from England.

In Joseph’s family tree spanning four generations there are more than 100 individuals, of which 42 are affected with stuttering. Joseph’s late father was a highly respected leader in his village in the north of Cameroon, who had three wives and a total of 22 children, most of whom stutter.

The members of the Lukong family traveled for two days from their various villages to participate in the research, where they were evaluated at SCAC headquarters in Douala, the largest city in Cameroon. The problems faced by people who stutter in Cameroon are remarkably similar to those in the United States, says Joseph, including misunderstanding, prejudice, and difficulties in obtaining good treatment.

While there have been many reports of family clustering of stuttering, this may be the largest such cluster ever found, and provides exciting new opportunities for genetics research in stuttering.

Revised Books on Child Stuttering Offer More Help

If Your Child Stutters: A Guide for Parents, and Stuttering and Your Child: Questions and Answers are two of SFA’s most popular publications for parents concerned that their child may be stuttering. Newly updated, these classics now offer even more information.

Your Child Stutters now includes an easy-to-use chart of high-risk factors to help parents determine whether they should be concerned about their child’s speech. A new section on what to expect from an evaluation helps allay fears and answer questions before parents seek professional help and detailed information answers questions on how to get insurance reimbursement for private therapy, if parents choose this treatment method.

Stuttering and Your Child is written in a question and answer format preferred by some readers. It answers the questions that parents have asked most often over the years. One of the chapters, for example, covers how to find a therapist, what to look for in choosing a therapist, and what therapy will cost. The book also includes the section on insurance reimbursement. Written by seven experts in the field, the book was updated this year by Edward G. Couture, Ph.D., Vanderbilt University.

For more information, call 1-800-992-9392 or visit www.stutteringhelp.org.
The Foundation is pleased to announce the seven winners of the 2002 Media Awards for Excellence.

Now in its 11th year, the media awards recognize quality news reporting in print and electronic media that has significantly enhanced public understanding of stuttering.

**Ann Landers, Syndicated Columnist.** Ann Landers' column appeared in newspapers in May for National Stuttering Awareness Week and again on July 24 of this year—one of her last syndicated columns. Both included facts and helpful information for her 90,000,000 readers, whom The Foundation joins in mourning the passing of this unparalleled source of guidance, wisdom and advice.

**Dick Amaral, Producer, Chronicle, Channel 5, Boston.** This 5 1/2 minute segment on the prime time nightly show focused on the importance of early intervention for stuttering. Footage from SFA's video, Stuttering and the Preschool Child was used in the broadcast, and Foundation president Jane Fraser was interviewed on Dr. Foundas' research.

**Tran Bu, Producer, Channel 24 in Memphis.** This segment focused on Memphian George Rutschman and his struggles with stuttering. Speech-language pathologist Lisa Scott Trautman, Ph.D., Florida State University, and Fraser offered information about help available.

**Brad Jenkins, Features Editor, Daily News-Record (Harrisonburg, Va.).** The two-part series, When the Words Won't Come and Getting the Words Out, tackles stuttering through the stories of three people of different backgrounds who share the frustration of this complex disorder, and find common ground in their hope for improved speech. Jenkins writes clearly and simply about stuttering therapy, including contact information and tips on responding to someone who stutters.

**Toni Owen, Assistant Editor, Benicia Herald (Benicia, Cal.).** In Living Well is the Best Revenge, Owen weaves the story of a successful entrepreneur's drive to build a small business despite the challenges he faces with stuttering. This touching story dispels some common myths about those who stutter, and encourages others with speech impairments.

SFA's video, Stuttering and the Preschool Child was used in the broadcast, and Foundation president Jane Fraser was interviewed on Dr. Foundas’ research.

**Peggy Middendorf and Vicki McCash Brennan, Managing Editor, South Florida Parenting Magazine.** Stuttering Through Life packs a voluminous amount of useful information, particularly for parents with children who stutter, and the clear message that early intervention is key to successful treatment. A fine layout complements the resources, helpful tips and insights into the mystery of stuttering in this story written and edited by Brennan, above right, based on notes by Middendorf, above left.

**Steve Synan, Contributing Writer, The Toastmaster.** This first-hand account by someone who stutters recommends the well-known public speaking group to others with the speech disorder. In Overcoming Stuttering, Synan, also a speech-language pathologist, shares his thoughts on stuttering and confronting fears about speaking in front of an audience. He offers advice for both speakers and listeners.

**One Last Column:**

**Ann Landers Helps Those Who Stutter**

Ann Landers' column on July 24, one of the last to run as such following her death, featured The Stuttering Foundation as a source of information and help for people of all ages.

Although a column highlighting stuttering run in May 2001 for National Stuttering Awareness Week, the staff for the most widely syndicated columnist in the world decided to again dedicate the headline letter in one of the last columns to The Foundation's mission of prevention and treatment of stuttering.

No one could ask for a better voice. Ann Landers' column appeared in more than 1,200 newspapers worldwide, with an estimated 90 million readers. For a week following, it resulted in more than 1,200 hits a day on the Foundation Web site, www.stutteringhelp.org, and the constant ringing of the toll-free helpline.

On behalf of all those who stutter and their families, thanks, Ann.

**PSAs Up 30 Percent**

Thanks also go to a host of other media, large and small. It's been a banner year for public service advertisements, up about 30 percent. The Foundation is grateful for those magazines, radio and television stations whose support helps us spread the message of hope and help to the three million Americans affected by this speech disorder.
A+ on Report Card for Schools Conference
High Marks for Attendance, Presentations and Participation

School clinicians gave a straight A report card to The Stuttering Foundation annual conference, Stuttering Therapy: Practical Ideas for the School Clinician, co-sponsored with Texas Christian University.

In Dallas, 106 people gathered from such work settings as schools, university clinics, and private practice to improve their skills at evaluating and treating children who stutter, according to conference organizer Lisa Scott Trautman.

Presenters Bill Murphy, Patricia Zebrowski, Charles Healey, and Peter Ramig offered practical strategies for therapy, counseling parents, working with adolescents, measuring progress, and dealing effectively with emotions and attitudes. New ideas were shared for incorporating teachers into the therapy process, leading inservices, and writing meaningful goals and objectives for the classroom setting. Then it was time to practice, as small group leaders Ann McKeeman, Barbara Moore-Brown, Joe Donaher, Trish Krauss-Lehrman, Jennifer Watson, Linda Leeper, and Susan Cochrane guided participants through speech modification skills.

The workshop earned consistently high marks. “This was wonderful! Finally, presenters who can present gave practical and useful material,” wrote one. “SFA knows how put on a great conference; lots of extras at a very inexpensive cost. I really liked the variety of speakers,” said another. “I feel more prepared to handle therapy more effectively after this conference,” noted a third.

SFA Booth Is “Magnet” at ASHA Conference: New Straight Talk for Teachers Video a Draw

The ASHA Schools Conference drew 640 school-based SLPs to Nashville, and the SFA booth proved a huge draw itself.

“I think you’re the best on the planet,” said Deborah Lozo, M.Ed., SLP.

“We were extremely busy, especially the first day,” said Deborah Squires, of SFA. “Stuttering: Straight Talk for Teachers was just out and very popular with this group. Of course, Dr. Conture and his Talking Tips magnet were quite an ‘attraction’ too! In all, it’s very gratifying to have so many people remark on the affordability and quality of all the Foundation’s materials. A number of them placed orders for items I didn’t have in the booth, or ran out of.”

“I’m looking forward to receiving my items,” wrote Laura Young-Campbell, from Alaska. “I saw your new books and tapes at the school conference in Nashville and know everyone here in Alaska will be anxious to see them as well.”

Thanks to Carol Ecke, Dr. Conture and doctoral student Courtney Zackheim for their invaluable help!

Stuttering Survey
Continued from page 1

Q: Is research into this area new?
A: Only a few scientific studies have looked at hand preference in people who stutter, and the results have been conflicting. Some studies have found that there are more left-handers among people who stutter, whereas others have found no difference. To our knowledge, none of the past studies used such a detailed questionnaire to measure handedness, and none studied foot preference.

Q: How detailed is this study?
A: In addition to basic background and medical information, the survey asks 47 questions about handedness, and another 10 questions about footedness, so it’s quite comprehensive. Additionally, the size of the survey group is very significant. We’re collecting data from a very large sampling, and already have gotten an excellent response.

Q: The findings of the recent study implicate an abnormality in tissue structure in the left half of the brain as a cause of stuttering. The study, published in the Lancet medical journal (August 3, 2002) indicates that a disconnection of speech-related areas in the brain are the cause of developmental stuttering. Specifically, Dr. Martin Sommer and colleagues from the universities of Hamburg and Gottingen in Germany found that the tissue structure of a region in the left hemisphere of the brain in people who stutter was significantly different to that of the control group. As I understand it, their theory is that fibers in this area are related to the parts of the brain used for articulation and speech, and the abnormality disrupts speech by disturbing the transmission of signals, causing stuttering to occur as the right side of the brain overcompensates. What is your opinion of this study?
A: Sommer and colleagues examined white matter pathways in subjects who stutter by using diffusion tensor imaging MRI methods. A region of reduced fractional anisotropy, which is associated with decreased fibre coherence or myelination defects (white matter lesions), was found in adults who stutter. This region was limited to the white matter below the Rolandic opercular cortex in the left cerebral hemisphere. Based on their results, Sommer and his colleagues suggested that this white matter abnormality disconnects portions of speech-relevant brain areas in adults with persistent developmental stuttering. There is no evidence, however, that people with developmental stuttering have a white matter disease that could induce a disconnection. There may be an alternative interpretation of their results.

Continued on page 8
Malcolm Fraser Award

Continued from page 1

Department of Speech and Hearing Sciences. Curlee’s units in undergraduate courses and his own graduate courses have made huge contributions to stuttering therapy. His research courses are pertinent to measurement and experimental design—topics fundamental to the investigation of the nature and treatment of stuttering and other communication disorders.

“Dick’s gifts as a stuttering clinician, supervisor, and teacher are partly the result of his careful and caring methodology that emerged from the clinical laboratory. But his clinical acumen and empathy also come from the fact that his father stuttered and Dick himself stuttered as a child,” says Barry Guitar, Ph.D., University of Vermont. “Dick has not only emphasized carefully planned and data-based approaches to the management of stuttering behaviors, but has also been a leading proponent to helping clients deal with feelings and attitudes about stuttering.”

A consistent contributor to professional publications and conferences for 30 years, Curlee has had a strong influence through editing the major journals in the field and in working directly with many authors. He has been associate editor of the Journal of Speech and Hearing Disorders, Journal of Speech and Hearing Research, editor-in-chief of Seminars in Speech and Language, and the editor of Journal of Fluency Disorders.

Although recently retired, Dr. Curlee’s participation on behalf of children and adults who stutter, his research, and scholarly publications continue.

“Dr. Curlee’s work paves the way for future advancements in understanding and treating stuttering.”

Ray Shelton, Ph.D.
professor emeritus, University of Arizona

In 1999, Curlee was chosen by ASHA Special Interest Division Four to chair the Specialty Commission on Fluency Disorders. He has played a key role in promoting and enhancing clinical services, and has won confidence in his leadership and wise guidance during this initial process.

He served on the 2001 ASHA Convention and was the keynote speaker at the Northwestern University Stuttering Foundation Workshop for Specialists. He is currently working with Dr. Ehdad Yairi on a book to make Yairi’s findings accessible to students, clinicians and researchers.

The focus and depth of Dr. Curlee’s activities depict the commitment of a career to advancing scientific understanding of the nature of stuttering and to the responsible, effective clinical management of children and adults who stutter.

New Book Translations

Eleco de Geus’ popular book for children, Sometimes I Just Stutter, is now available in Czech and Finnish. Stuttering and Your Child: Questions and Answers has been translated into Slovakian.

Queen Mum’s Passing

Recalls King George’s Advocacy for Stuttering

When England lost her Queen Mother this past spring, advocates for those who stutter also lost a friend. Many will recall that her husband, King George VI, had a severe stutter, which didn’t stop him from addressing his nation in moving radio broadcasts during WW II.

Saint Xavier NSSLHA Chapter Donates to SFA

This time, the check really was in the mail—a generous gift from Saint Xavier’s National Student Speech, Language, and Hearing Association.

Both undergraduate and graduate students at the Chicago university helped raise money for the donation. “Our wish is to support the wonderful work you do in supporting persons who stutter and their families,” wrote Karen Czarnik, Ph.D., chapter moderator. Thanks, we will!

Intern Spends “Hands-On” Summer with SFA

Casey Engbrechten, 19, learned a lot about her future career while interning in our Memphis office this summer. She’s now back at Harding University, having gained valuable “hands-on” experience to go with the extensive studies required of a speech-language pathology major.

Casey called The Foundation after seeing one of our public service advertisements in People magazine. Most rewarding was “talking to people to hear how people feel when they have a speech problem,” said Casey. “It’s opened my eyes, how panicked people are. It’s different—just learning about the problem and actually dealing with people who do have the problem.”

The college sophomore knew early on she wanted to become an SLP. “There was a student in my high school class who stuttered and it really affected me,” she explained. “I like to help people.”

She was a big help this summer, affirmed co-workers. And after college? A master’s program, then a year of supervision to earn her CCC-SLP accreditation.

With a young woman as talented and dedicated as Casey, it’s a path to helping others you can count on happening.

For Combined Federal Campaign donors, please note that our code number for the 2001-2002 CFC campaign is CFC #2539.

We are proud that over 95 cents of every dollar goes directly into helping those who stutter.
The Stuttering Foundation two-week Workshop for Specialists will be held at the University of Iowa, Iowa City, Iowa June 23-July 3, 2003, directed by Patricia Zebrowski, Ph.D., and Toni Clink, M.A. For more information, contact The Stuttering Foundation at 1-800-992-9392, or write Dr. Zebrowski, c/o SFA, 3100 Walnut Grove Road, Suite 603, Memphis, TN 38111-0749. This unique workshop brings together speech-language pathologists from all over the world.

The Stuttering Foundation Eastern Week Workshop, "Diagnosis and Treatment of Children Who Stutter: Practical Strategies," directed by Susan Hamilton, M.A., Jennifer Watson, Ph.D., and with David Prins, Ph.D., will be held at the University of Washington, Seattle, June 2003. Call 1-800-992-9392 for an application.


The 4thWorld Congress on Fluency Disorders will be held August 11-15, 2003, in Montreal, Quebec, Canada. For more information, contact Dr. Rosalie Shenker at mirs@music.mcgill.ca or Lisa Avery atavery1@interchange.ubc.ca.

The 5th annual Stuttering Online Conference opens October 22, International Stuttering Awareness Day. Conference presentations are designed for a general audience and invite feedback and discussion.

From Joe Donaher: I have created a LIST-SERV for doctoral students specializing in stuttering. The list serves as an open forum for doctoral students; limited to doctoral students only. To subscribe, send the following to listserv@listserve.temple.edu: subscribe stuttersdoc firstname.lastname and contact Joe Donaher at turtleface@aol.com.

For those interested in joining Toastmasters International as a way to improve fluency, communication or public speaking skills, their address is: Toastmasters International, Inc., Attention: Membership Department, P.O. Box 9052, Mission Viejo, CA 92690. Telephone: (714) 858-8255; Fax: (714) 858-1207.

For those wanting to obtain a copy of Self-Therapy for the Stutterer in Japanese, write to Dr. Shokichi Nakajima, 2-21-1 Ogawa Machida-shi, Tokyo 194, Japan; telephone/fax: 0427 (66) 5092.

For those looking to obtain a copy of Self-Therapy for the Stutterer in French, write to the Association des Bégues du Canada, 7801 Rue徘reaul, Chine, Montreal, Quebec, Canada, H1L 1V8. Please enclose $15.00 Canadian to cover printing, postage, and handling costs.

Books on Stuttering or Related Topics Available from Bookstores:

- Making a Difference for America's Children: SPEs in the Public Schools, by Barbara Moore-Brown and Judy Montgomery. Available from Thinking Publications, 8801 Main, Columbia, MD 21044.
- The Street: A Collaborative Journey to Fluency Freedom by David Allen Shapiro, published by ProEd, Austin, Texas.
- Tongue Wars by William H. Perkins, Ph.D., Athens Press, Los Angeles, CA (800) 264-1677.
- The Bob Love Story: It's Gonna Be, It's Up to Me by Bob Love with M.C. Watkins, available through bookstores or call NTC Contemporary Publishing Group, 1-800-323-9010.
- Clinical Decision Making in the Diagnosis and Treatment of Fluency Disorders by Walter H. Manning, Ph.D., published by Singular/Thomson Learning.
- Nature and Treatment of Stuttering: New Directions by Richard F. Carlee, Ph.D. and Gerald M. Siegel, Ph.D., published by Allyn and Bacon, Needham Heights, MA.
- Special Children, Challenged Parents, by Robert A. Ness, Ph.D., published by Carol Publishing Group, Secaucus, New Jersey, 1-800-447-2665.
- The Stuttering Foundation: A Life Beyond Words by Stuart S. Jackson. Published by Natural World, Inc., 1-800-992-9392.

Barbecue in the Board Room?

SFA board member Jean Gruss, second from far right, of Washington, D.C., joined the SFA office staff in Memphis recently for a working lunch—usually barbecue for out-of-town guests. From left, Laura Beauchamp, Lisa Scott Trautman, Ph.D., Florida State University, Lisa Hinton, Pat Hamme, Anne Edwards, Gruss and Jane Fraser, SFA president.

Stuttering Survey

Continued from page 3.

In our study, published last year, we found that a brain region important in auditory language processing was larger in the left and right hemispheres and more symmetric (equal in size) in individuals with developmental stuttering. The structures that we measured are gray matter regions that are comprised of neurons (nerve cells) whose axonal projections constitute white matter pathways. The gray matter structures that we measured together with these white matter interconnections (measured in the Sommer study) are part of the "neural network" that mediates speech and language functions.

The white matter pathway found to be abnormal in the Sommer and coworker's study interconnect the gray matter regions that were measured in our study with portions of motor cortex. An alternative explanation for Sommer and colleague's study is that the white matter anomaly they reported is related to the aberrant cortical architecture of the cortical neural systems that we found in our study. The results reported by Sommer and colleagues are very important and offer further support for a structural abnormality within speech-language areas in individuals who stutter.

EDITOR'S NOTE: If you did not receive a copy of the survey and wish to participate in this exciting research, please contact The Stuttering Foundation at 1-800-992-9392 or stutteringhelp.org.