The two primary features of the Internet are discussion forums, including mailing lists, and websites. In this article we provide an overview of mailing lists and websites that hold many treasures for professionals interested in fluency and fluency disorders. We broach some important considerations for professionals, in terms of their own Internet use, and in terms of the guidance they might provide to consumers of speech therapy services when helping them to understand the problems and potential of Internet information about stuttering.

Mailing lists
Mailing lists about stuttering were developed before the world wide web was opened. The first list (stutt-l@listserv.temple.edu) was created by C. Woodruff Starkweather. Originally started in 1989 to facilitate the exchange of information among researchers working on the problem of stuttering, stutt-l is still active. The list has evolved to become an “electronic self-help group” which welcomes professionals, students, and consumers. It can be joined through either web-based subscription (http://listserv.temple.edu/archives/stutt-l.html) or by email (send the message <subscribe stutt-l yourfirstname yourlastname> to listserv@listserv.temple.edu).

The early mailing lists about stuttering were formed and hosted by the academic community who had access to the technology necessary for creating them. Now, anyone can create free mailing lists using services such as yahoogroups.com, and there are many currently available. A good selection of them can be found at (www.stutteringhomepage.com) under the heading “Discussion Forums”. More information about stuttering mailing lists, newsgroups (unmoderated discussion forums) and chatrooms (which allow real-time conversations) are available in a more detailed version of this article here: (http://members.tripod.com/Caroline_Bowen/jmk-cb.htm)

The world wide web
There are literally hundreds of Internet websites about stuttering, several of which are professionally enriching and important to know about. Because Internet information about stuttering proliferates rapidly, relevant (and accurate) material is often difficult to sift out from the inevitable dross. The most common technique for finding information on a particular topic is using an automated search engine (e.g., Google.com, AllTheWeb.com) or Internet directory (e.g., Yahoo). Typically, these search methods return numerous websites that may be relevant to the search request, based either on the presence of certain key words on the web page or on detailed indexes of web pages maintained by the company that provides the directory. On the day this was written, the search engine Google uncovered 124 000 “hits” with the key word ‘stuttering’. AllTheWeb found 57 420, while Yahoo brought back 58. Because of the vast number of websites available for consideration, these search methods are highly automated. As a result, anyone can put something on the Internet and have it appear using these search strategies.

Websites
The quality of material on websites varies dramatically in most topic areas, and this is particularly true with regard to information about stuttering. For this reason, using good judgement is imperative not only for speech-language pathologists, but also for our consumers. We must help consumers learn to be cautious about some of the information they discover on the Internet.

Although the ability to incorporate information from a wide variety of sources is one of the strengths of the Internet, it is also a major area of concern. Unlike refereed journals, there is no peer-review process on the Internet, so the information obtained by anyone performing searches may or may not be relevant, accurate, or appropriate, and hence confusing and misleading, not only to discerning professionals, but to the general public too.

Four key areas
To make the best use of Internet resources about stuttering, the professional needs to be aware of how to evaluate whether the information is appropriate. Four primary points to consider when accessing information on the Internet suggested by Laura Cohen, Network Services Librarian, University at Albany Libraries, (http://library.albany.edu/internet/evaluate.html) are worth reviewing.

Determine the purpose of the site
It should be clear to the reader who the target audience is. Try to determine why the author is trying to reach this particular audience. Is the site designed to provide broad-based or specialised information? Some Internet resources about stuttering are aimed at consumers. Many are basically trying to sell a program or a product. Other sites are designed for professionals. Still other sites target researchers.

Determine the authority of the author(s)
Who is the source and what are this person’s qualifications related to sharing information about stuttering? Is there a mail-to-link where you can find out more about the author?

Evaluate the site’s content
Websites are rarely “reviewed” or “refereed” like journals and books, so the reader has to be especially careful in evaluating content. Is the information accurate according to what you read in journals and learned in your educational program? Are there typographical errors in the text that can produce inaccuracies? For example, the statement, “The aetiology of stuttering is now fully understood” is not the same message as “The aetiology of stuttering is not fully understood.” Sources of factual information should be clearly provided. Look for evidence of bias. Does the information provided on the
website in anyway compromise the ethical standards under which certified clinicians deliver services? For example, is it offering treatment solely by correspondence, promising unrealistic results, or guaranteeing a “cure” for stuttering? Is the site complete or continuously updated? Either of these alternatives may be appropriate, but the visitor should be told this information. Is it current?

**Evaluate the site’s style and functionality**

Finally, evaluate the style and functionality of the website. Is it clearly and logically organised and easy to navigate? Are external links functional? Is there a search engine on the site? Does the site load quickly? Is it functional for people with disabilities?

The reader is challenged to use the evaluation criteria to evaluate the appropriateness of each of the websites listed throughout this article, and to help their clients do likewise.

**Research**

Many researchers interested in stuttering have developed websites that are designed to connect them with research subjects and/or to report their findings. These include:

- The Australian Stuttering Research Centre, The University of Sydney (http://www.cchs.usyd.edu.au/ascr)
- University College London Psychology Speech Group (http://www.speech.psychol.ucl.ac.uk/index.html)
- Research Imaging Center, University of Texas (http://ric.uthscsa.edu/projects/test)
- Drayna, NIH (http://www.nihgri.nih.gov/DIR/GB/STUTTER/)
- du Nil, University of Toronto (http://www.library.utoronto.ca/speech-language-communication/lmndep/lab/clab/lab%20front%20page.htm)
- Kalinowski, East Carolina University (http://www.ecu.edu/csd/stutt.html)
- Rosenfield/Viswanath, Baylor (http://www.bcm.tmc.edu/neural/research/speech/speech1.html)
- Webster, Brock University (http://www.BrockU.CA/stutter/)
- Yairi/Ambrose, University of Illinois (http://www.shs.uiuc.edu/research/stuttering)

**Journal services and electronic journals (e-publications)**

Full-text journal articles are also available online. Some are available only to association members or by subscription. Others provide only a table of contents and article abstracts. Yet other resources, such as the search engine Northernlights.com, provide some journal articles for a fee.

- ASHA Journals (http://professional.asha.org/resources/journals/index.cfm)
- Journal of Fluency Disorders (http://www.elsevier.nl/80/inca/publications/store/50/5/7/7/1/)
- Student Research Papers in Communicative Sciences and Disorders California State University, Hayward (http://isis.csuhayward.edu/alsc/csd/abstres.htm)
- Online Student Journal (http://www.mnsu.edu/dept/comdis/kuster/journal/journal.html)

**Online bibliographies**

There are several extensive bibliographies of stuttering-related research available. Some contain just the citation while others are briefly annotated with information about the article.

- Fourth Annual International Fluency Association bibliography (http://www.ruhr-uni-bochum.de/ifa/bibliography.html)
- Individual professional bibliographies:
  - Charles Van Riper (http://www.mnsu.edu/dept/comdis/kuster/vanriper/vrbib.html)
  - Wendall Johnson (http://www.uiowa.edu/-cyberlaw/wj/wjbib.html)
- Topical bibliographies:
  - Clustering bibliography (http://www.mnsu.edu/dept/comdis/kuster/clustering/clutterbib.html)
  - Neurogenic stuttering (http://www.mnsu.edu/dept/comdis/kuster/related/neurobib.html)
- Kuster’s graduate seminar project, annotated bibliography (over 70 pages long) (http://www.mnsu.edu/dept/comdis/kuster/Bibliography/Bibliography.html)

**Online conferences and conference papers**

The Internet has become a repository for conference papers delivered by professionals around the world, although they are sometimes difficult to find. A few examples are provided below.

- CAPS Ottawa ’93 Conference (http://www.webcon.net/~caps/caps93.html)
- Several PowerPoint conference presentations by J. Scott Yaruss (http://www.shrs.upmc.edu/Super/lectures.html)
- Additional examples are linked at http://www.mnsu.edu/dept/comdis/kuster/research.html

Since 1998 the Internet has also provided freely available virtual conferences about stuttering which take place from 1–21 October each year. The online conferences are associated with International Stuttering Awareness Day, designated for professionals and consumers to learn with and from each other about stuttering (see Kuster, 2002, this issue). A fifth conference is planned for 2002 and will be online starting 1 October 2002, at http://www.mnsu.edu/dept/comdis/isads/isadconf5.html

**Informational websites**

Many of the Internet resources about stuttering are designed primarily to provide information. Although the people who have developed these sites may have a program or a product available, the primary focus of the site is to provide information about stuttering.

**Certified speech-language pathologists providing information**

- Caroline Bowen (http://members.tripod.com/caroline_bowen/stuttering.htm)
- Darrell Dodge (http://telosnet.com/dmdodge/veils/)
- Judith Kuster (http://www.stutteringhomepage.com)
- Bob Quesal (http://www.wiu.edu/users/mfqs/webpage.html)
- Scott Yaruss (http://www.pitt.edu/~commsci/stuttering_center/scwp_home.htm)
- Tony Wray (http://www.prevent-stuttering.com/)

**Consumers providing information**

- Eric Bourland (http://hwaet.com/stutter/)
- Martin Casey (http://www.dmc.dit.ie/martin)
Organisations providing information
- ASHA (http://asha.org/speech/disabilities/stuttering.cfm)
- British Stammering Association (http://www.stammering.org)
- Canada’s Speak Easy (http://www.speakeasycanada.com/)
- Canadian Association of People Who Stutter (http://webcon.net/~caps/)
- International Stuttering Association (http://www.stutterISA.org/)
- MSNBC (http://www.msnbc.com/onair/nbc/datetime/stutter/default.asp)
- National Stuttering Association (http://www.nsastutter.org/)
- NIDCD (http://www.nih.gov/nidcd/health/pubs_vsl/stutter.htm)
- Stuttering Foundation of America (http://www.stutteringsupport.org/)

Websites that advertise a program or sell a product
Finally, there are more and more websites going online that are designed primarily to advertise a specific program or sell a product. There is nothing wrong with advertising on the Internet. However, it is in this area especially that the four criteria for evaluating websites need to be applied carefully.

Programs using certified staff to deliver services
- Hollins (http://www.stuttering.org)
- ISTAR (http://www.ualberta.ca/~istar/)
- Sheehan Stuttering Center (http://www.stutterssc.org/)
- Successful Stuttering Management Program (www.ssmpmanual.com/)

Others selling a product or a program
Although good information and legitimate products are offered on some of the following websites, these types of websites may deserve even more careful scrutiny.
- Ted Emery’s correspondence course (http://www.STUTTER.COM/)
- Dr. Fluency (http://www.dfluency.com/)
- Fluency Master (http://www.stutteringcontrol.com/index.html)
- Harkness’s Neuropatterning for Stutterers (http://members.aol.com/rharkn/)
- Janus Development group fluency aids (http://www.janusdevelopment.com/Products/Fluency_Aids/fluency_aids_0.html)
- Marty Jezer (http://www.sover.net/~mjez/)
- Thomas David Kehoe’s Casa Futura (http://www.casafuturatech.com)
- Ben Loewy (http://www.stutter.net/stutter_news.htm)
- David McGuire’s Freedom’s Road (http://www.mcguire-freedomroad.com/)
- William Parry’s Valsalva Hypothesis (http://hometown.aol.com/wdparry/index.htm)
- Martin Schwartz’s National Stuttering Center (http://www.stutteringcenter.com/)

Judith Maginnis Kuster of Minnesota State University, Mankato is well known in speech-language pathology Internet circles for her websites, The Stuttering Home Page and the encyclopaedic Net Connections, and her Internet column in the ASHA Leader. An extended version of this article, written in collaboration with Dr Caroline Bowen (of http://www.slp-site.com), can be found in electronic form at http://members.tripod.com/Caroline_Bowen/jmk-cb-stuttering.htm.

Correspondence to:
Judith M. Kuster
Department of Speech, Hearing, and Rehabilitation Services
Minnesota State University, Mankato
103 Armstrong
Mankato, MN 56002, USA
phone: +1 (507) 389 5840
fax: +1 (507) 389 2821
e-mail: judith.kuster@mnsu.edu

Dr Caroline Bowen
Honorary Research Associate in Linguistics
Department of Linguistics
Division of Linguistics and Psychology
Macquarie University, NSW 2109
email: cbowen@ihug.com.au

Ireland Calling:
The experience of a lifetime.

We are currently recruiting Speech and Language Therapists on behalf of two of our best clients in Dublin.

One of our clients is a non residential national centre for the care and treatment and development of children and adults with physical and multiple disabilities.

Positions are available for:
Senior Speech and Language Therapists.
Administer therapy services in a multi disciplinary setting, for those with communication and feeding disorders. Covering assessment, diagnosis, case management and consultation.

Basic Speech and Language Therapist.
Deliver a multi disciplinary service to children and adults with physical Disabilities.

This client is a non denominational voluntary organisation which provides facilities and services to people with learning disabilities in Dublin City.

Positions available for:
Basic grade Speech and Language Therapists.
Would suit new graduates and therapists looking to develop their skills in the area of Learning disability.

Senior Therapists should have a minimum of three years post qualification experience, some of which should be in the field of Learning disability.

The above positions offer first class development programmes in a friendly and rewarding working environment. Full meet and greet services are offered with flight assistance, accommodation assistance, and total management of the Irish accreditation of qualifications process.

For further information about the above positions, please contact graham.lambert@opg-europe.com, or telephone 00353 1 6779716.