One of the most frequent questions I receive as President of the Austin Area Translators and Interpreters Association is, “How do I get started as a translator or interpreter?” While this may seem like a simple question, the answer is not simple. It depends on the individual’s skills, interests, and experiences and whether he or she is interested in written translation or oral interpreting. Here is the multiple part answer I often provide for those interested in becoming interpreters, specifically in the medical field.

**You must be fluent in at least two languages.**

Where did you learn your languages? Have you had formal education in these languages? Learning and speaking a language at home doesn’t necessarily include terminology used in a medical setting. Have you used both languages in the workplace? To what extent? In which setting? Many prospective employers require some form of language assessment.

**You must have training.**

Before you begin interpreting in a medical setting, you should learn about the code of ethics, the role of the interpreter, appropriate ways to manage the session, and become proficient in medical terminology as well as consecutive interpreting and sight translation.

**Where can you get this training?**

Beginners can find training in a number of places. The best known of all trainings is Bridging the Gap: A Basic Training for Medical Interpreters by the Cross Cultural Health Care Program and available nationwide. Many other training workshops are available throughout the country. The best way to find them is to contact a healthcare interpreter association in your area. The website of the National Council on Interpreting in Health Care (www.ncihc.org) has a list of such associations throughout the country.

Some colleges and universities offer undergraduate and graduate programs in interpreting, and some of these have medical specialty courses. To find these, see the website of the American Translators Association (www.atanet.org) and look under certification eligibility. You can also find this information from a local association.

Interpreters with experience in other fields can begin by reading the NCIHC’s Working Papers Series (www.ncihc.org). These scholarly papers include, among others, A National Code of Ethics for Health Care Interpreters, The Role of the Healthcare Interpreter, a Glossary of Terms, A Guide to Interpreter Positioning, and National Standards of Practice for Health Care Interpreters. Experienced interpreters may also be interested in learning about the laws related to medical interpreting. These can be found on the website of Let Everyone Participate (www.lep.gov) and the National Health Law Program (www.healthlaw.org).

**Where can you find work?**

The most obvious place to find work is a hospital or clinic. Some hospitals have a Language Services Department that employs full- or part-time interpreters in the languages of their patient population. Others provide interpreting services through their Volunteer or Patient Services Departments. Many more hospitals do not have a specific department; instead, they have employees who are hired to perform other duties and are expected to interpret as part of their job. These are known as “dual role interpreters.” These positions are spread throughout the hospital or clinic; some are clinical (e.g., doctors, nurses, therapists), and others are non-clinical (e.g., social workers, admissions office staff, receptionists). When hiring such positions, they are often advertised under the...
title of the primary duty, with bilingual skills preferred. = Some not-so-obvious places to find work include doctor’s offices, home health care services, radiology or MRI offices. Again, such positions will be advertised under the title of the primary duty, with bilingual skills preferred.

Another opportunity for work is an interpreting agency. Some agencies offer both translation and interpreting; others specialize in interpreting. They find hospitals, clinics, and other clients who need interpreters and dispatch interpreters to them. Such agencies will usually contract interpreters, instead of hiring them as employees. They usually require a language assessment prior to contracting and some provide training for their interpreters. The best way to find these agencies is through the local interpreter associations.

Yet another opportunity for work is over-the-phone interpreting. Agencies providing over-the-phone interpreting have sprung up all over the country. However, you need not find such an agency in your local area, as all work is done over the phone. This means that you could live in Texas and work for an agency in California, Illinois, or Oregon. Some agencies even contract interpreters outside the U.S. to meet their language needs. The result is that these agencies can offer a much larger number of languages than an agency that provide face-to-face interpreters. Some of these agencies provide training over the phone for their interpreters. The best way to find these agencies is through the Internet.

A recent development in interpreting is distance or tele-interpreting. This employs the same technology that is used for telemedicine and consists of having a patient and provider communicate through an interpreter who is seen on a screen. There is special equipment at each end of the interpreted encounter, which can be stationary or portable. The advantage over telephone interpreting is that everyone in the interpreting encounter can see each other. The advantage over interpreting in person is that interpreters for rare languages can be found as easily as those for common languages. The best way to find these agencies is also through the Internet.

From an interpreter’s perspective, the advantage of working with an agency, for either face-to-face, over-the-phone, or tele-interpreting, is that the agency finds the clients and deals with billing and collection issues. You simply report to work at a designated time and place, and submit an invoice for your services.

What credentials are required?
Currently, there is no national certification for medical interpreters. Only three states have certification for medical interpreters: California (for worker’s compensation interpreters), Massachusetts (for emergency room interpreters), and Washington State (for interpreters who serve the health and human services agency). Therefore, no credential is required in most states.

Many interpreters and organizations have asked why the National Council on Interpreting in Health Care has not developed national certification. The reason is that there are several steps involved in this undertaking. In order to determine what should be required for certification, the first step is to determine what a professional interpreter should and should not do. This has been done through the National Code of Ethics for Health Care Interpreters. The next step is to determine how a professional interpreter should perform his or her work. This has been done through the National Standards of Practice for Health Care Interpreters. The final step is to design a certification test that will evaluate these behaviors. However, before someone takes a test, they usually want to prepare for it by taking some kind of training. So, another step is to determine what that training will include and who is qualified to provide the training before launching the actual testing. This has yet to be done. The NCIIHC is laying the foundation for certification, but it is not an easy process. It is the intent of the NCIIHC to consider the experience of certification programs for similar professions, such as court interpreters and sign language interpreters to learn from their experiences and make better informed decisions. In the meantime, the NCIIHC welcomes input from all concerned parties.

As you can see, the answer to the question, “How do I get started as a medical interpreter?” is anything but simple. I hope this information will help local associations throughout the country to answer such questions from their members. For further information about medical interpreting, contact me at mediaz@austin.rr.com.
**Case Manager - CM** case managers in the fields of medicine are professionals, usually a nurse, that provides guidance through the complex system of healthcare, coordinating the patient’s care through diagnosis, treatment and recovery. There are a variety of settings where case managers can be deployed to use their skills. General hospitals use them to ensure that no time is lost moving the patient from one department to the other in a multiple testing situation to complete the proposed goals of the day. In a prevention, client-centered case management setting they would be useful in an HIV risk-reduction program. In general, case managers are problem solvers that keep the efficiency of the hospital at the highest levels.

**Physician’s Assistant - PA** a formally trained individual who provides diagnostic, therapeutic and preventive health care services, as delegated by the physician under whose supervision he / she works. He must attend a specialized medical training program associated with a medical school that includes classroom studies and clinical experience. An academic degree or a certificate is awarded upon graduation. A PA is licensed by the State and works with a physician. He is not a nurse. The duties may seem similar because medical work is often similar.

The American Academy of Physician’s Assistants has chosen the term *asociado médico* as the Spanish equivalent of Physician’s Assistant.
WebCorp as a translation resource. Identifying candidate terminology from concordance and collocate data: a practical example. (Part I)

ABSTRACT

Although search engines are extremely useful research tools, they have a number of limitations in terms of presenting information in a way that is of practical use to translators. WebCorp http://www.webcorp.org.uk/ is a relatively new kind of search engine based on a perception of the entire WWW as a corpus that can be linguistically mined using specific corpus analysis-style online tools. WebCorp concordance and collocate output can greatly assist a translator with background reading and/or with the task of systematically identifying terminology. This article demonstrates a WebCorp application for the term ‘bolus’.

KEY WORDS: Translation, corpus analysis, terminology, concordances, collocates.

INTRODUCTION

Corpus analysis is based fundamentally on the principle of assessing meaning from context, i.e. the focus is on both meaning AND use. For example, the Concise Oxford English Dictionary medical definition of ‘bolus’ is “a single dose of a drug given all at once”. For translators, however, this is inadequate, as we frequently need context in order to be able to understand further shades of meaning and to understand how a term is used.

Most translators are more likely to use a search engine rather than a dictionary to assess both meaning and use of a keyword. The problem with a search engine, however, is that the pages containing the search term have to be manually analysed, requiring assessments of the extent to which each link corresponds to the translation context and gist-reading or reading of the corresponding text(s).

Entering the term ‘bolus’ in Google Scholar calls up 166,000 hits, with the first page of output displaying potentially relevant sites. But where do we begin with an analysis of 166,000 hits? One approach is to rapidly scroll through, open, and close selected links and pages in order to obtain relevant reading material for subsequent terminological analysis, then create what is known as an ad hoc or ‘dirty’ corpus - which is, essentially, a collection of texts - probably by copying and pasting into a Word document. We then read through our corpus and manually highlight what might be considered candidate terms of relevance to the translation task.

However, this is a time-consuming process. What a translator really needs is some systematic and rapid way of both analysing relevant context and detecting possibly relevant terminology.

Corpus analysis developed in the area of general language processing (i.e. for linguistic purposes), but has more recently come to be seen as a potentially useful tool for translators. The main drawback to corpus analysis to date has been the need to create a representative corpus (which can be very time-consuming) and the need for specific tools (for example, Wordsmith or similar corpus analysis software) to be able to mine it systematically.

1. http://www.webcorp.org.uk/
WebCorp to a large extent overcomes these obstacles, firstly by using the WWW as a corpus, and secondly, by providing an online tool to mine the WWW linguistically. From a translation perspective, WebCorp can assist in analysing contexts and locating relevant terms in a more efficient way than using standard search engines.

WebCorp’s main advantages over a Google Scholar (or similar) search are as follows:

a. Concordance lines are displayed in a user-friendly KWIC display
b. Collocation/collocate data are provided
c. Concordance and collocate data can be analysed
d. Frequency data are provided for collocates.

Before I present some examples of how this WebCorp output can assist a translator, definitions of ‘concordance’, ‘KWIC’ and ‘collocation/collocate’ are in order:

Concordance:
A word/phrase and its surrounding context. Usually printed as a KWIC display.
www.essex.ac.uk/linguistics/clmt/w3c/corpus_ling/content/gl ossary.html

KWIC (Key-Word In Context):
A form of concordance where the hit is shown with a certain amount of context, often presented with the hit in the centre of the page.
www.essex.ac.uk/linguistics/clmt/w3c/corpus_ling/content/gl ossary.html

Collocation/collocate:
Patterns of words appearing together/to appear together, or words that appear together. (In the collocations 'apple tree', 'apple pie', and 'Adam's apple', 'apple' collocates with 'tree', 'pie', and 'Adam'. They are collocates.)
www.essex.ac.uk/linguistics/clmt/w3c/corpus_ling/content/gl ossary.html

The WebCorp advanced search option, which provides potentially useful concordance and collocate information, is described in the sections below.

THE WEBCORP ADVANCED SEARCH OPTION

The WebCorp advanced search option permits a number of parameters to be defined that produce a more translator-friendly representation of the information on ‘bolus’.

Apart from the fact that the whole WWW (rather than just single texts) can be analysed, there are 3 key outputs of immediate relevance to translators in this search option - concordances, sorted concordances, and collocate summaries.

CONCORDANCES

Concordance lines can be presented in a visually useful HTML-KWIC display, as in Table 2 (only a random selection of the total of 742 concordance lines for ‘bolus’ are reproduced).

Already we have access to meaningful information, such as the fact that ‘carbohydrate’ (and ‘carb’), ‘dual-wave’, ‘ratio’, etc., frequently collocate with ‘bolus’. Compared to the typical Google display, a KWIC display presents information in a visually more useful way (without clutter), displaying all relevant hits (i.e. concordances) on single lines on a single page, and with the highlighted keyword centred so that left and right collocates can be more easily viewed and compared.
Table 2. WebCorp (advanced search) concordance output for search term “bolus” URL data is excluded from the KWIC display (making it visually less cluttered) but can be obtained online by clicking on the keyword in each concordance line.

| differ from a carbohydrate bolus? | bolus | bolus ratio. How does a carbohydrate bolus differ from a |
| and record keeping, 6. Setting and checking carbohydrate insulin to carbohydrates. This will be your Insulin Pumpers Website which aid you in determining aid you in determining bolus ratios. If you set your activity, illness, hormones etc. 8. Your insulin: carb allows you to use your insulin:carb ratio and correctly to cover it. 10. You would determine the amount of much insulin is still in the system from a previous determine how much insulin is still active from a previous We attempted to identify an optimal insulin pump meal postprandial glucose values following three meal Medtronic MiniMed, Northridge, CA): (a) single-wave of insulin given immediately; (b) 4-h dual-wave 50% given over a 4-h period); and (c) 8-h dual-wave and 50% given over a 8-h period). Total insulin regimens was greatest at 8-12 h. The 8-h dual-wave and lowest mean glucose values (singlewave URL data is excluded from the KWIC display (making it visually less cluttered) but can be obtained online by clicking on the keyword in each concordance line. |

SORTED CONCORDANCES

The complete concordance list of 742 lines can be organised even more usefully, however. An alphabetical sort This sort feature is available below the collocates option on the output page (not in the advanced search settings page). can be performed, which arranges collocates on either the right (R) or the left (L) of the keyword in alphabetical order. In the examples in Tables 3 and 4 below, the sorts were performed for the L1 and R1 positions (only a selection of lines are shown in the interest of brevity).

The first and most obvious comment in relation to this presentation is the user-friendly visual presentation of the (centred) keyword in red and the left or right alignment of collocates highlighted in blue. Note the recurrence of collocates such as ‘carb’, ‘carbohydrate’ and ‘chlorpheniramine’ in the L1 position (Table 3), or of ‘impaction’, ‘infusion’, and the useful revelation of an acronym ‘IGB’, in the R1 position (Table 4).

Table 3. L1 sort results for ‘bolus’ (selected collocates commencing with ‘C’)

| for the long action time of rapid insulins can activity, illness, hormones etc. 8. Your insulin: carb and to (b) lower high blood sugars. a) Your carb make you suspicious that it is time for a carb bolus? 3. Describe a bolus ratio. How does a carbohydrate record keeping. 6. Setting and checking carbohydrate bolus? for clinical evaluation of the effects of changing posture or utilizing certain maneuvers. By changing (Group A), hydrocortisone with chlorpheniramine Parallel infusion of hydrocortisone \pm chlorpheniramine hydrocortisone with or without chlorpheniramine | bolus | bolus stacking and hypoglycemia be avoided. Determining BOB ratio may need change if you find that blood sugars will match the amount of insulin required to the amount ratio change? 9. Do you understand Carbohydrate differ from a basal dose? 4. What is a Fasting ratios for boluses will be much more accurate after bolus volume, bolus properties, and/or forces without consistency, volume, and/or altering forces applied to (Group B) or placebo (Group C) during the injection to prevent acute adverse reactions to against early adverse reactions to polyspecific |

Note: blank rows indicate lines for similar collocates removed.
Table 4. R1 sort results for 'bolus' (selected collocates commencing with ‘I’)

<table>
<thead>
<tr>
<th>Collocate</th>
<th>Example 1</th>
<th>Example 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>bolus</td>
<td>(IGB) in VLBW infants, METHODS TOP (IGB) in small very low birth weight (VLBW) infants.</td>
<td></td>
</tr>
</tbody>
</table>
| bolus     | part question In [a patient with food]                                    | impaction | are [effervescent agents effective] at [inducing impaction] is [buscopan effective] at [inducing resolution]
| bolus     | was appropriate for the position of the NOT eating. It differs from a carbohydrate | in | the pharynx but was slow to achieve completion. Elderly in that it covers the body's BACKGROUND insulin |
| bolus     | rate: 25-75 µg/kg/min slow injection/intermittent until onset) 100-200 µg/kg/min intermittent as your smallest finger. Step five: Wrap each every 10 sec until onset; avoid rapid Regis Philbin | : incremental bolus doses of 10-20 mg. Elderly, : increments of 20-50 mg as needed 50-100 µg/kg/min individually (in wax paper) and put in the refrigerator. I induction Primary DIPRIVAN injection w/secondary infusion [also called bolus] (BOH-lus in-FYOO-zhen) |
| bolus     | RESULTS: Twenty percent of patients on the same dose of colistin was administered by Punzalan FER. Continuous infusion versus | injection | arm experienced objective responses (three c injection of loop diuretics in congestive heart failure injection three times a day over five minutes after injection of loop diuretics in congestive heart failure. |
| bolus     | it would still have paid to use the or correction bolus. This shift of basal to of an elevated blood sugar to normal. Exchanging basal and | instead of the pour-on. Consequently, with the added insulin creates a larger bolus that can have more insulin is not a totally new concept. Some |
| bolus     | Research Articles Safety and tolerability of                                | intravenous colistin in acute respiratory |

Note: blank rows indicate lines for similar collocates removed.

Sorts can also be performed for the L2-Ln and R2-Rn positions (depending on the span specified for each side of the keyword, to a maximum of 50 words), but for the purpose of detecting candidate terms, near-collocate sorts are obviously the most useful.

Reviewing full lists of concordances with right or left collocates batched alphabetically provides very useful information on the typical collocates for our keyword. This kind of output is a highly effective, terminology-focused, condensed ‘reading’ of a corpus of relevant texts, with keywords and terms that consistently co-occur with ‘bolus’ highlighted for analysis as term candidates of potential relevance to our translation task. This presentation of information can substantially reduce the work associated with the text selection/reading and term searching/marking tasks that are usually necessary when carrying out background translation research.

Part II of this article (forthcoming) will describe WebCorp collocate summary feature in detail.
Recently, Zarita trained a group of medical interpreters who appeared resistant to the idea of using the consecutive mode in their role-play practice. All of these interpreters were trained in a college-level interpreting program, and they were instructed by their teacher that it does not matter whether an interpreter uses the simultaneous or consecutive mode. Some of these interpreters felt strongly that the simultaneous mode is best, largely due to its speed.

Indeed, it is not easy for an interpreter to use the consecutive mode in the triadic medical encounter. There are so many potential distractions, or “blockers”. Some are caused by the interpersonal dynamics of the patient-provider relationship; others are caused by the interpreter’s own emotional responses to the messages being conveyed. Then there are the environmental work “hazards”: sudden or sustained noise, foul smells, interruption by third parties, and challenges to the flow of communication posed by multiple speakers. Consecutive interpretation requires a special level of concentration and a developed skill.

And yet, with each role play performed by the group of trained interpreters mentioned above, there were marked flaws in the interpreters’ simultaneous interpreting performances. In each case, sizable units of meaning were completely missing in the converted message. Afterward, whenever the interpreters were asked what they remembered from the interpretation in question, they would hesitate, struggling to find the meaning of the messages interpreted. Why is this so?

Take the example of a parent reading a story book to his child for the hundredth time. The parent can do it well, even imitating the tones of voice of the different characters. But after some time, the reading becomes rote. Afterwards, does the parent even know what he read? Probably not. The scientific explanation for this phenomenon involves the differences between immediate and short-term memory. When a reader (or an interpreter) works primarily with immediate memory (as occurs in simultaneous interpretation), there is little time to process and sort information. Any meaningful retention of the source message is improbable.

While simultaneous interpreters will remember very little of a message post-session, the interpreter who uses the consecutive mode, which exercises short-term memory, is more likely to recall the general topic and main points of the message conveyed. The consecutive mode allows the interpreter to listen to complete units of meaning (generally consisting of up to five to seven items) before conveying the message in a target language. Danica Seleskovitch, in her book *Interpreting for International Conferences*, comments, “In consecutive interpretation the interpreter has the advantage of knowing the line of argument before he interprets.” This is beneficial, not only for the interpreter, but also for the patient.
How does the patient benefit from consecutive interpretation? Claudia Angelelli, in her book *Medical Interpreting and Cross-Cultural Communication*, explores the essence of the provider-patient relationship. She quotes experts who assert that in terms of outcomes, the provider’s relationship with the patient is more important than the actual delivery of medical care. This is because patients who are comfortable in their relationships with providers are more likely to follow through with treatment and to stick with the same provider throughout the course of their treatment, while less likely to worry about their illness. Yes, healthy provider-patient relationships, characterized by the patient’s sense that a provider is caring, respectful and compassionate, are natural stress-relievers.

All patients, even those who speak the same language as their providers, at times experience feelings of powerlessness and anxiety. For the LEP patient, there is the added anxiety of not being able to communicate with the provider, and the stress of having a third person—the interpreter—in the room. As a result of these emotions, a patient’s ability to make sense of meaning is often somewhat impaired. In sessions where simultaneous interpreting technique is used, there is the compounding factor of two persons speaking at the same time. The patient is left a bit confused, half listening to the provider and half to the interpretation, with trouble making sense of the rapid ping-pong of words exchanged in the session.

Does this mean that interpreters should never use the simultaneous mode in the medical encounter? Of course not! The simultaneous method is recommended for commands and directions in the medical encounter. “Follow my finger with your eyes”; “Grab my arm and do not let it go”, “Push up when I press down”—with these commands, the provider needs to be able to judge the patient’s reaction and timing. Furthermore, the simultaneous mode is recommended when the parties to a session are unable to slow their speech or take turns speaking. It is also best when the speaker is not making sense, as often occurs with patients who are distraught or who suffer from certain mental disorders. Another time the simultaneous mode might be implemented is when an interpreter gets distracted or blocked and needs to temporarily shift modes until he or she can concentrate more fully.

Simultaneous interpreting may be love at first sight for some interpreters and trainers. But upon closer inspection, we find flaws. If the medical encounter were only about words and speed and making providers happy, then simultaneous interpreting would be the first choice for all interpreting. But the reality is that the medical encounter is all about trust, understanding, and a healthy provider-patient relationship. These are feelings best conveyed in the consecutive mode.

**Bibliography:**

Seleskovitch, Danica; *Interpreting for International Conferences*, 1994. Penn and Booth, Washington, DC.

ACROSS
1. The treatment of disease or disorder by various methods.
4. A crust formed by coagulation of blood, pus, serum or a combination these, on the surface of an ulcer, erosion, or other type of wound.
7. Preposition
8. Very small but not microscopic, having a diameter of less than 1 mm.
10. The head of a faculty in a university or college (plural).
12. Geneticist and Nobel Laureate
14. Preposition
17. The optical ability to distinguish detail such as the separation of closely adjacent objects.
19. The sound made by air passing out through the larynx, and upper respiratory tract.
22. Form of the possessive case.
23. A portion of a DNA that codes for a section of the mature messenger RNA from that DNA and is therefore expressed at the ribosome.
25. Symbol of nickel.
27. Abbreviation for operation.
28. Prefix used in the SI and metric systems to signify one-trillionth ($10^{-12}$)
29. Symbol of iron.
30. The course taken by an electric current or by nervous impulses.
32. Symbol of calcium.
33. The quality, production, expression, or realm of what is beautiful or of more than ordinary significance.
35. Part of a Latin expression meaning *and others.*
37. Graphic recording by an electroencephalograph (Abbreviation).
38. An organic radical derived from an aromatic compound by removing a hydrogen atom.
40. Abbreviation for extra-ocular muscle.
41. Symbol of carbon monoxide.
42. Symbol of carbon monoxide.
43. Abbreviation for gray.
44. Albumin from blood serum.

DOWN
1. Intestinal parasitic worm, adults of which are found in the intestine of vertebrates.
2. Paul, German pathologist, 1859-1937.
3. Proteinaceous infectious particle that are now believed responsible for several transmissible neurodegenerative diseases.
4. A genus of non-motile (with few exceptions) non-sporeforming, aerobic to facultatively anaerobic bacteria containing Gram-positive, spherical or ovoid cells.
5. A state of profound unconsciousness from which one cannot be aroused.
6. The cavity in the blastula of a developing embryo.
7. Abbreviation for right eye in Latin.
8. Meridid dread of being stared at.
9. The branch of medical science concerned with the study, diagnosis, and treatment of diseases of the ear and related structures.
10. Denoting electromagnetic rays at higher frequency than the violet end of the visible spectrum.
11. Acronym for National Environmental Policy.
13. A subspecies of RNA polymerase II described in calf thymus.
15. A portion of a DNA that codes for a section of the mature messenger RNA from that DNA and is therefore expressed at the ribosome.
17. The optical ability to distinguish detail such as the separation of closely adjacent objects.
18. The chief end product of nitrogen metabolism in mammals.
19. A large flaccid vesicle.
21. Preposition
22. Form of the possessive case.
23. A portion of a DNA that codes for a section of the mature messenger RNA from that DNA and is therefore expressed at the ribosome.
25. Symbol of nickel.
27. Abbreviation for operation.
28. Prefix used in the SI and metric systems to signify one-trillionth ($10^{-12}$)
29. Symbol of iron.
30. The course taken by an electric current or by nervous impulses.
32. Symbol of calcium.
33. The quality, production, expression, or realm of what is beautiful or of more than ordinary significance.
35. Part of a Latin expression meaning *and others.*
37. Graphic recording by an electroencephalograph (Abbreviation).
38. An organic radical derived from an aromatic compound by removing a hydrogen atom.
39. Prefix signifying two or twice.
40. Abbreviation for extra-ocular muscle.
42. Symbol of copper.
Toolbox for the medical translator

Alain Côté recently published its “Tool box for the medical translator”, a collection of resources for translators working in the medical and pharmaceutical fields.

http://www.groupetraduction.ca/index_e.htm (click on the Resources link; bottom, right)

The tool box is available as PDF version. It is a 44 page brochure mainly focusing on the English and French languages. Its main chapters are:

Manuals and guides: a list of books about medicine and Pharmacology, as well as some fundamental textbook (Merck Manual, Grey’s Anatomy, PDR, etc.)

Medical dictionaries (English and French, mono- and bilingual)

Online dictionaries: medical translators, among well know websites, may find some interesting pearls (e.g. Peter’s Translation Links http://home8.inet.tele.dk/p-spitz/index.html with thousands of online dictionaries and lexicons, including the fields of anatomy, chemistry, medicine, etc., in various languages).

Specialized books (with few examples of medical books published both in English and French).

Periodicals: online medical journals (in English, French and bilingual).

Articles on medical translation

Websites of associations (translators, industry, medical, governmental and international organizations), laws and regulations, pharmaceutical companies, periodicals on translation.

Study programs

Bookstores and publishers

Pharmaterm - Pharmacology industry terminology bulletin

Since 1990 the goup Rx&D (Groupe Traduction) publishes a quarterly terminology bulletin, Pharmaterm. In each four-page issue the reader finds the analysis of a single term or terminology problem by an expert. The articles are peer reviewed. Every two years a cumulative index is published.

On the Rx&D webpage http://www.groupetraduction.ca/pharmaterm.htm all issues are freely downloadable without subscription. N. 1/2006 is about the abbreviations in cell biology.
HTTP Error 404 (File or directory not found) is one of the most annoying errors while searching for web pages. You are sure you have typed the right URL, but the page is no longer there: it could have been deleted or moved to another directory or address.

If the page you are looking for is from a Google list of results, you may try to click on the Google “Cached” link: many times the page is still in the Google cache. If this does not work, your next option is the Wayback machine, at http://www.archive.org/web/web.php

This huge Internet archive contains more than 55 billion web pages archived from 1996. It is sufficient to type the web address you are looking for in the query box and press enter: the web page may be present in different versions, depending on the date it was archived. An advanced search page is also available (dates, aliases, file types, duplicates, comparison and PDF conversion).

Example: in my article about Toxicology and Chemical Resources (see Caduceus, Summer 2004, pg. 23-26) I listed several glossaries available on the web. One “glossary of terms used in toxicology” is no longer available on the web http://www.epa.gov/iriswebp/iris/gloss8.htm

Of this glossary, you can find six versions (2002 to 2004) on the Wayback machine. Original language search on PubMed

PubMed is a very useful online resource for medical translators working with the English language. As I already wrote on this column (see Caduceus, Spring 2004, pg. 24-27), it contains more than 13 million bibliographic citations and abstracts in the fields of medicine, nursing, dentistry, veterinary medicine, health care systems, and preclinical sciences. Citations are from approximately 4,800 worldwide journals, currently in 30 languages. About 85% of the citations have been published in English, but this also means that almost 2 million citations have been published in a different language and then translated to be inserted in PubMed.

Would it be possible to retrieve the original languages? Yes, but only the terms in the titles, not the ones in the abstract.

Within PubMed a single abstract may be displayed in 4 different formats:

<table>
<thead>
<tr>
<th>Format</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summary</td>
<td>(default): it includes author, title, journal source, language if the article is not in English (title in square brackets).</td>
</tr>
<tr>
<td>Abstract</td>
<td>journal source, title, language if article is not in English, author, author affiliation, publication types, abstract (if present).</td>
</tr>
<tr>
<td>Citation</td>
<td>it includes journal source, title, language if article is not in English, author, author affiliation, abstract (if present), publication types, MeSH terms, chemical substances.</td>
</tr>
<tr>
<td>MEDLINE</td>
<td>two-character tagged field format in alphabetical order. A table with the description of all tags may be found at <a href="http://tinyurl.com/h8ewy">http://tinyurl.com/h8ewy</a></td>
</tr>
</tbody>
</table>

You may change the display format by selecting one with the "Display" drop down menu (second toolbar under the query box, first item on the left).

The following is a sample article in MEDLINE display format (some tags have been removed):

```
PMID- 16478704
…
IP - 4
DP - 2005 Dec 1
TI - [Multinodular diving goiters: 100 cases in Morocco.]
PG - 247-252
AB - Objective: To assess 100 cases of multinodular diving goiters, the authors review the literature to compare the epidemiology, clinical pictures, additional required work-up, treatments, complications, and sequelae. […]
AD - Service de chirurgie generale, Hopital militaire
```
The texts of the tags TI (Title) and TT (Transliterated Title) are in bold: with this display format the original title is visible. The TT field is available in articles published after 1966.

To search the translation of an English term in another language you may use two approaches:

1. Use of the “Limits” drop down menus:

a. Click on the “Limits” button (top left, under the query box)
b. Choose Title from the “All Fields” drop down menu
c. Choose the target language from the “Languages” drop down menu (French, German, Italian, Japanese, Russian and Spanish)
d. You may want to insert 1966 in the From field, to exclude previously published articles that do not have a translated title
e. Insert a search term or expression in the query box and run the query
f. If the search retrieves an article, click on the author(s) to open the abstract and choose MEDLINE from the “Display” drop down menu
g. The TT field contains the original title, while the TI field contains its translation

2. Keyword queries:

a. This is useful when the language you need is not present in the drop down menu
b. The term or expression searched should be followed by the tag [ti] (search into the title field)

Examples:

b.1- dyspnoea[ti]
b.2- “cardiac failure”[ti]
b.3- “End-stage renal failure”[ti]
b.4- nephrotic[ti] AND syndrome[ti]

c. The language should be indicated by the first 3 letters followed by the tag [la]

Examples:
c.1- Turkish _ tur[la]
c.2- Portuguese _ por[la]
c.3- Dutch _ dut[la]
c.4- Exception: Japanese _ jpn[la]

d. Run the query and follow the same passages as with the previous method

A useful option allows to fine tune a search for terms used in different contexts. One of the “Limits” drop down menu is the one called “Subsets”. This option allows to better define the subject of the medical journal to be searched from a predefined list: AIDS, bioethics, cancer, complementary medicine, dentistry, history of medicine, nursing, toxicology, etc.

Example: the term casting has different meanings whether it is used in orthopedics or dentistry. If we are searching articles in Spanish in this latter field we could select Dental Journals from the “Subset” drop down menu or run a search with this query:

\[
\text{casting[ti]} \text{ AND sp[la]} \text{ AND jsubsetd[text]} 
\]

On the contrary, if we would like to exclude all the confusing results from dental journals, the search would be:

\[
\text{casting[ti]} \text{ AND sp[la]} \text{ NOT jsubsetd[text]} 
\]

has a list of currently available subset search strings.

**TT field search**

While writing this article, I tried again a search that was not supported some months ago: the search of the TT fields. Currently, to my surprise, it works: if you search the target language term(s) within this field you retrieve the corresponding articles in English.
Examples:
tromboflebite[tt]
rhythmusstörung[tt]
pneumonies[tt]
gusano[tt]

With a TT field search one should be careful not to search quoted sentences: while this search may work on the TI field because PubMed has an index of the most common sentences, it does not work on the TT field.
For example, the search of "community-acquired pneumonia"[ti] retrieves more than 1700 citations (with more than 50 in French), whereas the search of "pneumonies acquises à domicile"[tt] gives an error message. Instead, it may be useful to use single words: pneumonies[tt] AND domicile[tt] retrieves some citations, and many more may be found with pneumonies[tt] AND communautaires[tt].
By Dr. Maria Rosdolski.

Teaching Medical Translation German to English Online at New York University

The Department of Foreign Languages, Translation and Interpreting of the School of Continuing and Professional Studies (SCPS) of the New York University (NYU) offers translation certificates in six language pairs. Students must pass a test to be accepted to the program. For each certificate, six courses are required – an introductory course, four Core Courses, and one Elective Course. (Elective courses are not available for the Arabic-English Certificate.) Medical Translation is one of the core courses for the French-to-English, German-to-English, Spanish-to-English and English-to-Spanish certificates. I am presently teaching Medical Translation German to English for the fourth time. The number of students for this course was/is approximately 10. The native languages of most students are English or German but I also had students with other native languages in my course such as Finnish and Slovenian. Although some students have translation experience, most had/have little or no experience with medical translation, and little or no medical background. Therefore, I consider the course an introduction into medical translation German-English.

The courses are taught in the so-called Virtual College, a software program for posting and accessing materials for the courses. Students and teacher receive a user name and password to access the program. The software improved significantly over the years and is now simple and easy to use. Each course lasts 10 weeks, and is divided into 10 sessions. For each session, the students receive a “lecture”, a homework assignment, and materials for their homework. Students have one week to complete each assignment, and teachers have one week to correct it. Interactions between students and teacher occur via e-mail, and functions of the software program (Forum, Chat, and Real Time Lecture).

On the main screen for the course (called My Courses), the name and number of the course, and the titles of the sessions (lectures) can be viewed. Several icons appear next to the name of course and next to each session title. These icons include:

- Syllabus
- Announcements: for posting (teacher) and reading (students)
- Content: for accessing the content of a specific “lecture” (students)
- Assignments: for uploading (teacher) and downloading (students) homework assignments
- Readings: for uploading (teacher) and downloading (students) lists of recommended reading material
- Shared Files: for uploading (teacher) and downloading (students) reading material
- Forum: for written unscheduled communication (teacher, students)
- Real Time Lecture: for scheduling (teacher) and attending (teacher, students) live (oral) sessions
- Chat: for scheduling (teacher) and attending (teacher, students) written communication sessions
- Contacts: faculty e-mail addresses
- Class Roster: students’ e-mail addresses
- Gradebook: for the teacher to enter grades
The syllabus of my course contains a list of required dictionaries and a list of recommended dictionaries and reference materials including websites, the description of the course structure including guidelines for delivery of homework assignments, course objective, grading principles, and a list of the sessions. Announcements may be used for announcing the availability of homework assignments and/or the scheduled day and time of Real Time Lectures. In the lectures (accessible through the icons “Content”), I described the principles of medical translation and medical terminology (English and German), guidelines for using dictionaries and the Internet, methods for creating glossaries, as well as introductory information in selected areas of anatomy, physiology, medicine, pharmacology, and medical technology, related to the homework assignments. For each session, students can download required/recommended Readings (reading material) and the weekly Homework Assignment. In Readings, I recommend articles, websites and chapters from the Merck Manual. I encourage students, however, to develop their own strategies for searching and reading documents relevant to the translations, and choose material they think is best for completing their homework assignments. Each of the Homework Assignments consists of a translation of approximately 700 to 900 words, a log with a description of problems and their solutions, and the reference materials used. For the first three sessions, I provide German-English glossaries. For sessions 4 through 6, I provide German glossary terms only, and students have to find the English terms. For sessions 7 through 10, students have to create their own glossaries. In Shared Files, I upload articles relevant to specific sessions or to the course in general. The citations of these articles appear in the Readings list. In the Forum, students post their biographies as well as questions and answers related to homework assignments, reference material, and other issues related to the course. Once a week, we have a Real Time Session (live session). The students and I have headsets and we are able to communicate orally. My name and the students’ names appear on the screen and are highlighted when the respective person speaks. There are several icons we can use such as icons for “yes”, “no”, raising a hand, applause, and laughter. The sessions are recorded, and students who are not able to participate can listen to the recordings. At the beginning, I answer questions regarding homework assignments and reading material, and we discuss problems related to homework assignments or live sessions, as well as other issues related to the course. Thereafter, students translate a medical text sentence by sentence and we discuss alternative translations and problems, and how to solve these problems. I provide the text for translation in Shared Files. Students can look at the text on the screen or on a printout. These live sessions are a useful substitute for classroom sessions.

When I first agreed to teach the medical translation course, I was somewhat skeptical, and wondered whether I could be successful despite the lack of classroom communication. Through experience with this relatively new teaching method, I became confident and now believe that online teaching is a very useful method and has many advantages compared to traditional classroom teaching. Students and teachers can follow their own schedules, and can write or correct homework assignments when convenient. They can even take the course with them (for example, “in a laptop”) when they travel. Most of my students were very enthusiastic and adhered to the scheduled sessions. I sometimes miss direct communication with the students, and their facial expressions and gestures. I believe this will soon become a problem of the past, and, in the future, it may be possible to see the lecture participants on the screen.

Are you a member of the Medical Division listserv?

The listserv is an online conversational activity of the Medical Division (MD) dedicated to serve as a means of communication between MD members who wish to participate. Most often members ask questions relating to terminology difficulties in their work and other members offer their opinions and experiences in the matter. The listserv can also serve as means of communication about general medical division issues and the dissemination of information. To join send a message to Mary David at mary@atanet.org.
The Medical Division has almost tripled its enrollment during the past year. We are very proud of our growth and are looking for ways to serve your needs as best we can. One of the most common questions I get is: How do I get work? - plain and simple.

Disappointingly for many new members, ATA does not serve as a repository of possible work opportunities for interested members. It does not directly find and distribute work among members. That is to be done by each one of us personally.

There is a monograph titled *Getting Started - A Newcomer’s Guide to Translation and Interpretation* published by the ATA that offers general guidance, tips and hints for beginners in the business world of Translation and Interpretation, but no actual hot leads of any kind. The ATA does provide opportunities to network with others at their Annual Conference and Professional Development Conferences. Divisions have their own mid year conferences where the work environment and experiences of members is shared, including possible opportunities. All meetings have networking sessions with agencies and vendors who share their viewpoints and their business cards.

The local chapters and organizations of translators and interpreters hold the maps that lead to the local treasures. As expected, they are quite knowledgeable of the environment in which they work and can be very informative to the new members. Members own initiative in searching out local agencies and sources in yellow pages and community schools can actually prove quite useful.

Preparations are on the way

MARK YOUR CALENDAR

MEDICAL DIVISION CONFERENCE

MAY 31 - JUNE 3, 2007
Intercontinental Hotel
Cleveland, Ohio
(NEXT TO THE CLEVELAND CLINIC)

You don’t want to miss this one of a kind first Medical Division Conference.

The planning includes interactions at various levels with the world famous Cleveland Clinic. Highly regarded speakers and activities are planned. The Clinic’s satellite link facilities will allow us to view cardiovascular surgery from our meeting rooms at the hotel.

We will keep you informed as planning evolves. For now, just mark your calendar.


Did you know that Medicine ranks first among the top 10 areas of specialization most queried for in the ATA Membership Directory?