FROM THE EDITOR

Caduceus moves on.

Besides our regular features this issue brings us a sensitive piece by medical interpreter Roberto Anson in which we are reminded of the medical symbolism behind the time honored stethoscope - listening skills, human contact, communication conduit. Our cover provides a historical landscape to the subject.

Dr. Leon McNorrow’s contribution calls attention to the often found lack of uniformity or correspondence in the meaning of medical cognates as they are translated into the descendant languages of Greco-Roman lineage. He reminds us in his article that Caduceus, as the newsletter of our Medical Division represented by the languages in question, can well serve as the appropriate repository for these discussions.

Around the corner lies our Annual Conference. We will be well represented with a wide variety of professional activities including not only translation and interpreting presentations but also coverage of medical topics we need to be familiar with in our daily work. A preview of all what lies ahead in Toronto is presented.

Once again, I remind you to come forth with contributions to Caduceus, large or small.

Stay well,

Rafael

Instructions to Authors
Submissions for publications must be sent electronically in Word format. The deadline for submissions for the Fall-Winter issue, a combined issue, of Caduceus is 15 November 2004.

Caduceus carefully reviews its content in order to eliminate any textual errors. Nevertheless, we apologize for any errors in grammar, punctuation, typography and the like which may inadvertently appear on our pages.

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ABOUT OUR COVER

The cover is a collage designed by Dr. Rafael Rivera, Editor of Caduceus, and computer expert Dana Haynes, to complement Roberto Anson's article about the stethoscope.

The center of the collage is the 1819 famous painting by Theobald Chartran wherein Dr. René Laennec, inventor of the stethoscope in 1816, is portrayed at the bedside as he listens to the sounds produced in the patient's lungs in the only way possible at the time. Auscultation of the chest consisted of the direct placement of the physician's ear to the patient's bare chest wall, in this case a man with tuberculosis. Notice that Laennec is holding in his left hand a cylindrical wooden structure - a "cylinder", as he called it - one of the earlier versions of his stethoscope. On the basis of his knowledge of normal and abnormal breath sounds, Laennec was able to diagnose bronchitis, pneumonia and, most importantly, tuberculosis - known then as phthisis (see Glossarium, page 17) or consumption - a prevalent disease that claimed many lives at the time. Ironically, Laennec himself died of tuberculosis in 1826, only 10 years after his invention.

The collage depicts a progression of stethoscopes from the first cylinders of Laennec, the first binaural by Camman circa 1852 and various modern varieties. Also in the collage is a Norman Rockwell favorite of pediatricians.

A brief historical perspective. Notice that the attendants in the room of a tuberculosis patient are not wearing a mask. TB was not identified as a unified human disease until 1820 and, in fact, not named tuberculosis until 1839 by J.L. Schoenlein. Prior to that it was simply known as phthisis or consumption, the latter an apt description of the progressively consuming course of the disease until death. The discovery of the causative organism Mycobacterium tuberculosis by the German physician Robert Koch did not occur until 1882. For this he received the Nobel prize in Medicine in 1905.
FROM THE ADMINISTRATOR

Dear Friends and Colleagues:

I am happy to send you this message to inform you of the upcoming ATA Annual Conference. Attending the Annual Conference is a worthwhile investment for translators and interpreters at every level of experience. The conference provides an opportunity for you to meet face to face with fellow translators and interpreters and participate in the many things this network has to offer.

Throughout the year, the Division Planning Committee has been hard at work, striving to insure we gather the very best and most up-to-date medical, pharmaceutical and health care industry translation and interpretation information, including presentations on diabetes, coronary heart disease and sexually transmitted diseases.

Two not-to-be-missed gatherings are the Division's Annual Meeting on Thursday from 3:00 to 5:00 p.m. and the Annual Division Reception scheduled for the following evening. The Division's annual meeting is an important forum to discuss old and new issues, help shape plans for the future, share your opinions, get involved, and volunteer in some capacity.

The Division Reception will be held in the hotel and will be a joint event with the Interpreter's Division (ID). The reception will be a memorable occasion, a time for food, fun, reconnecting with old acquaintances and making new friends.

It is not too late. If you have not already done so, go ahead and register.

If you are interested in sharing a hotel room, please send me your name, telephone number and e-mail address at creole_md@yahoo.com and I will put you in contact with other prospective roommates.

Mark your calendar for a fun and informative trip to beautiful Toronto. I certainly look forward to meeting you there.

Ak tout kè mwen,
Martine Dougé

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Why attend ATA’s 45th Annual Conference?

- OVER 150 EDUCATIONAL SESSIONS that cover topics in a variety of languages and specialties
- EMPLOYMENT OPPORTUNITIES in the Job Marketplace, where freelance translators and interpreters market their services and meet potential employers
- EXHIBITS, EXHIBITS, EXHIBITS featuring the latest publications, software, and services available in the industry
- NETWORKING receptions, division special events, an After Hours Café for literary translators, and the wildly popular Translation Support Tools Forum!

American Translators Association

Details on the web at www.atanet.org/conf2004 or go to pages 32-36 for more info.
What prompted the invention of one of the most widely used and recognized medical instruments in medicine? A French physician's need to examine an adult female patient led this Parisian healer to a radical invention that would change the way medicine was practiced. The patient's culturally reinforced feminine modesty resulted in this woman refusing to allow the physician to use the "standard" practice of placing his ear on the chest of the patient to listen to the organs. Cardiology, pulmonary medicine and health diagnostics were all elevated to a new level of progress.

This encounter shows a health practitioner's sensitivity and creativity in response to a cultural issue within the medical encounter. Language was not a barrier but cultural and gender issues presented unique challenges. Likewise, as medical interpreters, we are lifelong students of medicine, human behavior, cultural and individual differences. As such we are called upon to exercise our basic linguistic abilities with great skill and adaptability.

No medical instrument is more closely associated with the health professions than the stethoscope. The power of the stethoscope as a diagnostic tool demonstrates the body's ability to speak without words!

Likewise, medical language interpreters are associated with words, language, culture and bridging gaps in communication. Why should the stethoscope be meaningful to us as medical language interpreters? Because it has so much to teach us on practical and symbolic levels. The practitioner's focus is on careful listening to specific organs internally while the interpreter is scanning the environment for verbal and non-verbal cues for a quick assessment. As I see the stethoscope being used skillfully, I'm reminded that equipment without training is like a plane without a pilot.

The stethoscope requires physical contact between the central two characters in the drama: practitioner and patient. This is a high tech, touch and careful listening encounter. Qualities that technology cannot replace - communication, empathy, listening and humanity. The interpreter helps reinforce, as appropriate, these qualities in a professional and ethical manner.

Listening is at the center of good health care. Communication is the heartbeat of the patient and practitioner relationship. Medical language interpreters contribute to this most essential and complex task within this triadic relationship: clear communication leading to fuller understanding by all involved. The stethoscope is one symbol for how well and on what levels comprehension is occurring.

The stethoscope was originally called a 'plectorilic.' It is an instrument for monitoring the activity of various organs, especially the lungs, heart and bowel sounds. Internal noises are detected by the bell shaped flat end of this tool while the tubular rubber hoses amplify and make them understandable to the trained ear. Likewise, the medical interpreter serves as a linguistic and cultural conduit in this three way encounter.

History teaches us that listening to the noises of internal organs began with Hippocrates circa the 5th century B.C. The invention of an instrument to amplify it dates only from the 19th Century. It was in 1816 that the Frenchman Rene Theophile Hyacinthe Laennec invented a wooden tube that could only be used with one ear. When Lannec authored a book describing his instrument and its use in 1819, the publisher gave a stethoscope to each purchaser of the book. A major improvement in the design of this tool was made when the Austrian doctor Joseph Skoda introduced pliable tubing in 1850. The American doctor George P. Cammann developed a binaural stethoscope in 1852 providing a diagnostic instrument that is 150 years old in the form that is still most familiar today. Thus the Austrian and the U.S. physicians, improvements upon the French doctor's invention give us the instrument that is today universally recognized. Technology continues to advance. In 1980 the electronic stethoscope was introduced followed later by the disposable stethoscope. The disposable stethoscope reminds me to "discard" any pre-conceived "mind-sets" and/or stereotypes I may bring to the interpreting encounter and to start each session...
carefully "tuned" to the two critical airwave stations: patient and practitioner.

Some stethoscopes, I've observed, have a small square plastic name clip identifying the clinician. The absence or presence of this tag is a reminder to me as a Spanish medical interpreter that this triadic encounter is heavily coated with multiple layers of identity - all affecting our communications and interactions. A cold stethoscope can also be a reminder that as interpreters our tone of voice may influence the content of the message.

The clinical, practical and symbolic value of this diagnostic acoustical instrument unfolded like a spring flower in full view when I overheard an oncology/hematology nurse ask a colleague, "where are my ears?" When I saw the familiar instrument handed to her, I realized the simplicity and accuracy of the informally descriptive term used -- ears. Is anyone listening?

An electronic stethoscopes’ superior ability to amplify sounds is a great aid when working in a high noise environment like an emergency room, special procedures unit or ambulance setting. Likewise, an interpreter's effective functioning under noisy circumstances requires the combined skills of: hyper-focusing, highly adaptive behavioral and cognitive abilities, acute concentration and rapid note-taking.

The symbolic importance of this diagnostic tool is further seen in that the stethoscope is graphically featured on the covers of a great many health and medical publications.

From a biased perspective, I find that medical interpreters need to have a mind for language and culture and a heart for people.

Effective listening is a core skill set for both health practitioners and medical language interpreters alike. The stethoscope is an important tool and symbol in listening and communication.

**Author:** Roberto Anson serves as a Spanish language medical interpreter consultant at various hospitals in Baltimore City. Previously he served as a Spanish interpreter at a major clinical research hospital in the Maryland suburbs close to Washington, D.C. He spent 23 years with the U.S. Public Health Service including several years at the National Cancer Institute in Bethesda. He was born and raised in Costa Rica.

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**More About The Statins**

Besides its already established medical benefits via their primary cholesterol lowering mechanism, the statins continue to surprise the medical establishment with yet other possible therapeutic possibilities. The latest data finds that people who took statins for at least five years appeared to cut their risk of colon cancer in half. Earlier work had shown reductions in breast and prostate cancer as well as across-the-board cancer risk.

It had also previously been established that statin users had an overall lower incidence of age related macular degeneration, the most common cause of blindness in our society.

The most recent addition to the statins family is Crestor (Rosuvastatin) which has shown on early testing to reduce serum cholesterol levels by approximately 52%, a significant increase from the 20-40% plus range of reductions for the existing statins.

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**Death With Dignity Act Upheld**

On October 27, 1997 physician-assisted suicide became a legal medical option for terminally ill residents of the State of Oregon. The Oregon Death With Dignity (DWD) Act allows terminally ill patients to obtain from their physicians and use prescriptions for lethal medications, said medications to be self administered. This precedent setting law was passed after considerable discussion and study with support of organizations and end-of-life care groups and families that deal directly with care of terminally ill persons. It specifically prohibits euthanasia, where a physician or other person directly administers a medication to end another's life. The Act states that ending one's life in accordance with the law does not constitute suicide. Implementation was delayed by a legal injunction. A petition was denied by the US Supreme Court following which the Ninth Circuit Court lifted the injunction. On a general vote asking voters to repeal the Act, Oregonians chose to maintain it by a margin of 60% to 40%. The experience after enacting said legislation has been well received by all supporters. Careful medical and legal follow up has demonstrated that there has been no attempt to overuse or misuse medication. Finally, US Attorney General John Ashcroft has tried to block the law, however the Death With Dignity Act has been recently upheld, once more by the Ninth Circuit Court of Appeals.
Part II - Medical Nomenclatures And Classification Systems

Medical nomenclatures and classification systems have many different purposes but all have one purpose in common: the uniform use of terms. According to the definition of the Random House Dictionary of the English Language, “Nomenclature is a set or system of names or terms, as those used in a particular science or art”. Classification systems consist of terms systematically grouped into categories. Classification goes back to Aristotle who classified concepts by describing their attributes. During the last century, hand in hand with the rapidly growing technology, the increasing desire to classify and categorize medical concepts and systems has led to a steady growth and improvement of nomenclatures and classification systems.

1. Nomenclatures
I will describe, as an example, the development of the anatomical nomenclature, the oldest and best known medical nomenclature. The anatomical nomenclature presented by Andreas Vesalius (1514-1564) was full of extremely long names, synonyms, and ambiguities. Despite efforts of scientists in the early Modern Age, there was no generally used, uniform anatomical nomenclature until 1880 when the Austrian anatomist Josef Hyrtl (1810-1894) suggested and initiated a review and subsequent improvement of the anatomical language. This led to the Basle Nomina Anatomica (BNA), which was issued in 1895. The rules for the BNA were: 1. all terms are in Latin, but countries can translate them for teaching purposes; 2. each structure has one term; 3. terms should be descriptive. A revised form of the Nomina Anatomica was issued in 1935 in Jena [Jena Nomina Anatomica (JNA)]. Since there were still many ambiguities and inaccuracies, the JNA was not recognized internationally. The next revision was the Paris Nomina Anatomica (RNA) in 1955. The rules for the PNA were: 1. each organ has one term; 2. the terms should derive from the Latin; 3. the terms should be as short as possible; 4. organs with topographical relations should have similar names; 5. differentiating attributes should have opposite meanings, 6. eponyms should be avoided. In 1960, modifications in New York, at the seventh International Congress of Anatomists, included, among other rules, the elimination of double vowels, i.e., "ae" and "oe" (hematology, esophagus), and the elimination of hyphens between two words. In 1975, the Nomina Histologica (NH) and Nomina Embryologica (NE) were added. The last version of the Nomina anatomica was published in 1998 under the name Terminologia anatomica or International Nomina Anatomica (INA). There are approximately 6000 terms based on about 600 word stems (400 Latin and 200 Greek). Reasons for continuous use of Latin and Greek terms include no changes in these languages (dead languages), precision, possibility of compound terms, tradition, and international comprehension. [1,2,3]

2. Classification Systems
The creation of medical classification systems goes back to the mid 1600s when the so-called "London Bills Of Mortality" were introduced. John Graunt (1620-1674) revised this document and introduced, among others, epidemiology and nosology. His work remained unnoticed, however, until the first International Classification of Diseases (ICD-1), which included a classification of the causes of death, was adopted, in 1900, by the International Statistical Institute. In 1948, the World Health Organization (WHO) published a list of diseases that could be used to track both morbidity and mortality (ICD-6). [1,2,4]

<table>
<thead>
<tr>
<th>Chapter 10 (J00-J99)</th>
<th>Acute Respiratory Infections (J00-J06)</th>
</tr>
</thead>
<tbody>
<tr>
<td>J00</td>
<td>Acute nasopharyngitis (common cold)</td>
</tr>
<tr>
<td>J01</td>
<td>Acute sinusitis</td>
</tr>
<tr>
<td>J02</td>
<td>Acute pharyngitis</td>
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<tr>
<td>J03</td>
<td>Acute tonsillitis</td>
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<tr>
<td>J04</td>
<td>Acute laryngitis and tracheitis</td>
</tr>
<tr>
<td>J05</td>
<td>Acute obstructive laryngitis (croup) and epiglottitis</td>
</tr>
<tr>
<td>J06</td>
<td>Acute upper respiratory infections of multiple and unspecified sites</td>
</tr>
</tbody>
</table>

Classification systems can be divided into Coding Systems and Thesauri. Coding is the translation of a set of words describing a medical concept into a single numeric or alpha-numeric code. The system must include terms for each disease and any reasonable synonyms. One code is
assigned to all synonyms. The most important coding system is the ICD, which is used for coding diseases in hospitals and practices. It has been translated into more than 30 languages. A thesaurus is an alphabetical list of terms with cross-references for synonyms, and codes for all terms. The best known medical thesaurus is MeSH which stands for Medical Subject Headings, prepared and published by the National Library of Medicine. [1,4]

To organize the large number of medical terms, a classification hierarchy is used. The hierarchy is a grouping according to the concepts. Here is a simple example: hepatitis - viral hepatitis - hepatitis C. The highest level (most general term) is "hepatitis"; viral hepatitis is a hepatitis; hepatitis C (most specific term) is a specific viral hepatitis. Thus, the hierarchy provides information about the relationships of concepts. There are three types of hierarchies: 1. a part-whole hierarchy, which describes, for example, an anatomical structure. Example: Body - leg - foot - toe; 2. a kind-of (or is-a) hierarchy, which describes elements with specific similarities belonging to a group named with a general term. Example: drug - antibiotic - cephalosporin - cephalexin. 3. a causal hierarchy, which includes elements that may lead to a chain of events. Example: Plaque - thrombus - infarction - death. The terms at one level should be as uniform as possible. For example, only cephalosporins should be listed at the same level as cephalexin. Since many terms can be organized in more than one class, complex classification systems allow terms to be included in more than one classification hierarchy. This enhances the conceptual power of the system but may also lead to confusion. For synonym terms a preferred term should be determined, and all other synonym terms should be cross-referenced. Classification systems are characterized by the number of axes. The criterion chosen for classification (e.g., organ system, etiology, group of diseases [infections, neoplasms etc.]) is called the axis. Uniaxial classification systems have one root from which hierarchies arise. Multiaxial classification systems have more than one root. Most currently used classification systems are multiaxial systems. [1,4]

I will describe two coding systems (ICD and SNOMED) and one thesaurus (MeSH) in more detail. The ICD is a multiaxial classification system in which diseases are grouped for epidemiological purposes. The use of the ICD is now no longer restricted to mortality and morbidity statistics. It is used for coding medical records and medical case reviews for research purposes (e.g., retrieving data for retrospective clinical studies), basic health statistics and payment schedules for health care services and health insurances. The last edition, the ICD-10, includes changes made by the World Health Organization (WHO), and is comprised of three volumes: Volume 1 contains the classification at three- and four-character levels, the classification of the morphology of neoplasms, special tabulation lists for mortality and morbidity, definitions, and nomenclature regulations. Volume 2 contains instructions and guidelines for users and a review of the history of classification. Volume 3 contains an alphabetical list of diagnoses with numeric codes and synonyms for the terms accepted for classification. The ICD-10-CM contains changes made by the National Center for Health Statistics (NCHS) for use in the United States. Among these modifications are an increase of the five-character structure to six characters, incorporation of 4th and 5th digit subclassifications, addition of information relevant to ambulatory and managed care encounters, and the creation of combination diagnosis/symptom codes to reduce the number of codes needed to fully describe a condition. The tabulated list of volume 1 contains alphanumeric codes from A00 to Z99 assigned to diseases classified in 21 disease chapters. The first character is a letter and is associated with a chapter. The first digit is associated with a group of diseases (e.g., Acute Upper Respiratory Infections), the second digit is associated with a disease (e.g., nasopharyngitis). Anatomy is the axis of classification in most chapters. Therefore, they are called "Diseases of" followed by an organ system. Table 1 shows an example of this list. The structure of the hierarchy of the alphabetical list in volume 3 is such that for each level of specificity one digit is added. Short instructions are given, and related terms that do not belong in this category are also mentioned. Table 2 shows an example of this list. ICD-10-CM is not yet available online. [5,6,7]

SNOMED (Systematized Nomenclature of Medicine) is derived from the Standardized Nomenclature of Diseases (SND), introduced in 1929 at a symposium of the New York Academy of Medicine. With the two axes of SND (topology and etiology), multi-axial coding was introduced. A few years later, an axis for operations was added, and the system was called SNOD. In 1965, the Systematized Nomenclature of Pathology (SNOP) was published. This was followed by SNOMED, SNOMED II, SNOMED International, SNOMED RT (RT = reference
Finally, SNOMED III, Systematized Nomenclature of Human and Veterinary Medicine, was published in 1993. SNOMED III is a multiaxial classification system, used to index all events found in medical records. The axes include:

- morphology (M)
- topography (T)
- etiology (E)
- function (F)
- occupation of the patient (O)
- disease (D)
- procedure (P)

The morphological alterations (M) at the location (T) have been induced by specific factors (E) and have led to disturbance of functions (F). A connection with the patient's occupation (O) is possible. The symptoms are categorized into a disease (D), and treated with a procedure (P). In this system, the different hierarchies are not separated. For example under "blood", "blood plasma" and "fetal blood" are found. "Blood" - "blood plasma" is a part-whole hierarchy, and "blood" - "fetal blood" is a kind-of hierarchy. [1,2,4,6]

There are many other classification systems. Most of them try to be compatible with ICD, which is a reference system for many medical terminologies. These systems include, for example, the Standard Diagnostic and Statistical Manual of Mental Disorders (DSM), the International Classification of Injuries, Disabilities, and Handicaps (ICIDH), and the Current Procedural Terminology (CPT).

Many standard terminologies are redundant. Standard organizations were established to avoid redundancies and change competitive systems to complementary systems. Recently, the ISO TC (ISO = International Organization for Standardization; TC = Technical Committee) established, among other principles, standards about standards [2].

The MeSH (Medical Subject Headings) is a thesaurus produced by the National Library of Medicine (NLM). The first issue was published in 1960, based on the Subject Heading Authority List, published in 1954, and a list of citations maintained as a card file. In 1963, the second edition of the Medical Subject headings contained 5,700 descriptors; the 2004 edition of MeSH contains more than 22,000 descriptors. MeSH is used for indexing, retrieving, and cataloging medical documents. Articles from most of the world's medical journals and books are indexed by the National Library of Medicine and stored in the MEDLINE database. The MEDLINE database includes over 10 million citations of articles written in 41 languages from about 4500 journals published in the US and more than 70 other countries. This is the largest existing literature documentation system. Each citation consists of the article title, the authors' names, affiliation of the first author, indexing, language, and publication type. The majority of citations also include an abstract of the article. MEDLINE can be used for online searches to retrieve articles on specific topics, by specific authors, in specific journals, and published in specific periods of time. Articles have been indexed since 1966, and MEDLINE has been available for online searches since 1971. OLDMEDLINE contains
Indexing means selecting terms from a thesaurus that describe a document. For indexing with the use of the MeSH, headings (also called descriptors) and subheadings (also called qualifiers) are used. Subheadings specify headings. For example, HYPOTHYROIDISM/ET/DT/CO means that, in the indexed article, the etiology (ET) of hypothyroidism was discussed, hypothyroidism was treated with drugs [drug therapy] (DT), and one or more patients had complications (CO) of the disease.

MeSH consisted, until 2003, of three volumes, called the MeSH tools: 1. the Annotated Alphabetical List, a list of headings with cross-references for synonyms (e.g., Vitamin C - see Ascorbic acid), and references to permitted subheadings; 2. the Tree Structure, a hierarchical list of the MeSH vocabulary; and 3. the Permutated MeSH consisting of a list of each word or root in any MeSH heading or cross-reference. The Annotated Alphabetical List and the Tree Structure are also known as the Black and White MeSH. Since sales of these three tools have declined in recent years, and the use of the MeSH Browser (see below) and the MeSH Database has increased, the printed publication of these MeSH tools was discontinued. NLM indexers and catalogers now use, instead of the printed publication, the electronic MeSH version. Publications of the Black and White MeSH will be continued as an annual supplement to the Index Medicus. MeSH 2004 is available for download on the Internet. While the printed version was updated annually, the electronic version is updated weekly. [9]

Access to MeSH is provided by several online systems such as the MeSH Browser, and the Unified Medical Language System (UMLS) Metathesaurus. Each Mesh Browser item contains the MeSH heading, tree number(s), annotation for indexers and searchers, scope note, entry (= synonym) terms, allowable qualifiers, previous indexing, history note, and a unique ID. For each term, its place in the tree structure is shown. MeSH has been translated into many languages to make the vocabulary available for non-English speakers. The translations into German, French, Spanish, Portuguese, Italian, Finnish, and Russian were included in the Unified Medical Language System (UMLS) in 2000. Problems for MeSH translators include, among others, identification of terms moved to different categories, and the non-existence of an exact equivalent of certain terms in the target language. The UMLS, developed by the NLM, consists of three parts, the Metathesaurus, Semantic Network, and SPECIALIST lexicon. The Metathesaurus is a very large multi-purpose, multi-lingual concept-centered vocabulary data base. It was created from several thesauri, classification systems, lists of controlled terms in patient care, health services billing, and other vocabularies. The structure is based on descriptors and concepts. Alternative names of the same concept are linked together. For each Descriptor Class, there are a preferred concept and subordinate concepts (narrower and related concepts), and for each concept (preferred and subordinate), there are a preferred term, and synonym terms (see table 3). The Semantic Network contains 135 semantic types and provides consistent categorization of the concepts in the Metathesaurus. The SPECIALIST Lexicon contains syntactic, morphological, and orthographic information for each term. [9,10]

| Table 3. Example of Descriptor Class in the Metathesaurus (Adopted from [10]) |
|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|
| AIDS DEMENTIA COMPLEX [Descriptor Class] | Concept Class I - Preferred Concept | Terms: AIDS Dementia Complex | (Preferred Term) | HIV Dementia | HIV-Associated Cognitive Motor Complex | Dementia Complex, AIDS-Related Concept Class II - Subordinate Concept | Terms: HIV Encephalopathy (Preferred Term) | AIDS Encephalopathy | Concept Class III - Subordinate Concept (related) Terms: HIV-1-Associated Cognitive Motor Complex (Preferred Term) |

MeSH is part of PubMed, which includes links to articles related to each of the articles included in MEDLINE, citations from general science and chemistry journals, citations that precede the date journals were selected for MEDLINE indexing, and full-text articles from life science journals. [9]

Conclusion: This overview of nomenclatures and classification systems can only give an idea of the development and enormity of medical systems available

today. It is subjective and based on my selections. Others may believe that other systems or other information on the described systems are more important. Classifications of medical materials and documents are constantly growing and are becoming more and more complex. Each addition of a classification system, and each revision of an existing system or thesaurus has the purpose of making the usage of medical reference material and other medical documents, such as patient charts, easier and more efficient. Without a doubt, classifications and literature retrieval systems are needed to understand diseases, their etiology and pathogenesis as well as their treatment, and to support research. On the other hand, they also contribute to the growing alienation from the patient (who receives a code) as a unique person with his unique disease and his unique reactions to the disease.

Information on classification systems and MeSH can be found on the Internet.

REFERENCES


Electrical treatments for depression - the old and the new

Electroshock therapy for severe depression has been in use for many years. All the way from the gruesome representation as shown in the movie The Cuckoo's Nest to modern inductions of controlled seizures, modern psychiatry advocates the correct use of electroconvulsive therapy (ECT) for depression. Some psychiatrists favor this kind of therapy rather than the many choices of antidepressant medications we now have. ECT seems faster and safer than medications and can be used prophylactically in selected cases.

The most recent development in the use of electrical shock treatments for depression has been the use of a pacemaker - like device already in use since 1997 for the treatment of epilepsy. Wires implanted along the vagus nerve en route to the brain deliver tiny imperceptible jolts that affect certain critical areas known to be involved in the altered physiology of depression. Controlled studies have shown promise. A Food and Drug Administration Advisory Committee has voted to approve the treatment with certain conditions for labeling and patient education.
What is normal body weight? Traditionally we have used height - weight scales provided by insurance companies who, by simple statistical experience, are the experts in life expectancy as it relates to body weight, personal habits (use of tobacco, flying airplanes) and medical history. Since 1959 the Metropolitan Life Insurance Company has issued such desirable height-weight charts that are widely used. More recently the measurement of body mass, **body mass index (BMI)** - weight in kilograms divided by the square of height in meters - has gained widespread acceptance among scientists and researchers who adopt measurement tools that permit greater accuracy when drawing comparisons across studies. A normal BMI is between 18.5 and 24.9 kg/m². For practical purposes weight for height measurements serve us well.

What does body weight consists of? The body is made up primarily of bones, muscle and fat. Muscles and bones are called **lean body mass**; these tissues weigh more than fat. Two types of fat exist in our bodies: **essential fat and storage fat**. Essential fat is required for normal physiologic functioning and is stored throughout all our major tissues and organs. Storage fat lies beneath the skin and serves as insulation and nutritional reserve; it also protects internal organs from trauma. Due to hormones and the ability to bear children, women typically have up to four times more essential fat than men (12-15 vs 3-5%). Men and women, however, tend to have similar levels of storage fat.

Overweight vs obesity: "Overweight" is an excess amount of body weight. Obesity is an excess amount of body fat. For practical purposes excess weight is due to excess fat.

Location of excess fat: (See Spring Caduceus). Excess fat that accumulates around the stomach ("apple-shaped" person) poses a greater health risk than fat stored in the lower half of the body ("pear shaped" person). Technically, these shapes are known as the waist-hip ratio. Waist circumference and increased body weight are interrelated but increased waist measurement alone is associated with an increased risk of the medical conditions mentioned later. As a rough guide, your waist is the narrowest part of your trunk, located approximately one inch above your belly button. Waist circumference measurements of greater than 40 inches for men or 35 inches for women are considered "high risk".

Causes of obesity: Basically, the cause of obesity is simple - expending less energy than is consumed is an adequate explanation for the vast majority of cases. Other contributing factors are known or suspected to exist:

a. **genetics** - studies on mice have identified genetic mutations that led to the discovery of the hormone leptin, also present in humans, which is produced in fat tissue cells and acts to control body fat. Leptin seems to serve as a signal between adipose tissue and areas in the brain that control energy metabolism - our basal metabolic rate (BMR) sometimes referred to a metabolic set point.

In studies of twins the heritability of body weight was
estimated at about 80%, and this value is frequently cited. The results of adoption and family studies, however, agree on a heritability at around 33% which is generally viewed as more reasonable.

b. parental influences - Children tend to mimic their parents eating habits. Some authors believe that parental unfitness is the main predictor of childhood weight problems. If both parents are obese, their child has an 80 to 90% chance of becoming overweight or unfit. [see Spring Caduceus, From Fat to Fit (to Fault?)]

c. socioeconomic status - a lower socioeconomic status is particularly associated with obesity in women.

d. sedentary lifestyle - a major environmental influence on obesity. Animal studies suggest a paradoxical effect of reduced physical activity and food intake.

e. pregnancy - although most women weigh only a bit more a year after delivery, about 15% weigh 20 lb more with each pregnancy.

f. brain damage - tumors (especially a craniopharyngioma) or infections (particularly affecting the hypothalamus) lead to obesity in a small number of persons.

g. drugs - steroid hormones and psychoactive drugs, traditional antidepressants, benzodiazepines, lithium and antipsychotic drugs are known to cause weight gain.

h. endocrine factors - Multiple hormones are involved in the normal interactions between fatty tissue, the response to food intake and the brain - all of which is beyond our scope. Excess insulin from insulin producing pancreatic tumors, excess cortisol production in hypercorticism (Cushing’s syndrome), polycystic ovaries and hypothyroidism are all associated with weight gain, but endocrine determinants affect only a very small number of obese persons.

i. psychological factors - binge eating disorder and night eating syndrome are examples of episodic consumption of large amounts of food associated with "unexplained" weight gain.

j. sociocultural influences - certain societies favor a heavy habitus. Studies about the influence of ethnicity and body size show that black and Hispanic are more accepting of overweight figures. Vegetarian societies as a whole - Japan, China, India - have no problems with obesity even among the affluent.

k. advertising - the food industry claims that obesity is a matter of personal responsibility. Most experts believe that incessant advertising and the ever enlarging food portion sizes are dominant factors in the obesity epidemic.

Health consequences of obesity: Just about all the well known medical causes of increased morbidity and mortality in our society are related to obesity. Excess fat has been well established as a factor in the onset and severity of many diseases such as: non-insulin dependent diabetes (NIDDM, adult - onset diabetes mellitus), hypertension, coronary heart disease and certain cancers. Other diseases related in varying degrees to obesity are: sleep apnea, gallbladder disease, infertility, degenerative arthritis, leg ulcers, venous thrombosis, hernias, gastroesophageal reflux, urinary incontinence, accident proneness as well as psychosocial and economic problems. Obesity has become our leading contributor to illness and premature death.

Treatment and prognosis:

- medical - The prognosis for obesity is poor. Weight can be lost with most forms of medical treatment, but most persons return to pretreatment levels within 5 years. Traditional dieting is rarely prescribed; long-term habit change is emphasized instead. Increased physical activity is a must of most successful programs or personal experiences. Group support and the sharing of experiences has proven successful in other areas of maladaptive human behavior. Most appetite suppressants have turned out to have serious side effects including valvular heart disease. Several new drugs are in the pharmaceutical pipelines,
most of them designed to fool the appetite-brain-gut interactions. OTC drugs are generally harmless, questionably effective, and best avoided. Some maladaptive behaviors and self-defeating attitudes can be corrected with cognitive-behavioral therapy. Carbohydrate restrictive dieting a la Atkins is unquestionably successful for most over the short run, including reductions in serum cholesterol and triglycerides; long term consequences of large consumption of fats and proteins is against the strong stance of the medical profession. A middle of the road approach such as the South Beach Diet formulations seems to have an increasing number of followers.

- **surgical** - for persons with very severe obesity or for those with less severe obesity but with associated life threatening medical problems, bariatric (obesity) surgery is the treatment of choice. Most successes are obtained with the creation of a small gastric pouch and a bypass of the rest of the stomach into the distal small intestine. Weight loss is rapid and medical complications, if present, improve, as well as mood, self-esteem, body image and activity levels. Pre-surgical education and group support are integral elements of all successful surgical programs. After most weight is lost cosmetic surgical removal of excess skin and body reshaping are necessary. Medicare is currently establishing its rules to cover obesity surgery.

Surgical removal of excess fat stores by liposuction or surgical lipectomy is successful in most instances, well publicized problems notwithstanding. Remember, a fat cell once physically removed does not come back.

In the meantime corporate America is paying an extra $12 million a year in healthcare costs because of overweight workers.

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### FRASES MÉDICAS DE LA CALLE

A ver que se cuece en los pasillos ...

1. **quebranto de salud**: or simply **quebranto**, literally means "a break in health;" from the verb "quebrar".. break or crack.. "to come down with something"; used both as noun and verb - "Me quebranté", "tuve un quebranto".. I got sick, usually in a non-specific way.

2. **desarreglo**: a break or alteration in usual health habits or norms, such as drinking too much or eating too much. "Hacer un desarreglo".. which may lead to a **quebranto de salud** (see 1 above)

3. **ajito**: a popular name for dyspepsia, upset stomach, "tener un ajito".

4. **carreritas**: the runs .. urgent diarrhea .."estoy de carreritas". "I've got the runs."

5. **patatús**: a fainting spell, usually the result of a strong emotional impression, attended by hyperventilation, loud cries, body movements with eyes closed; also known as **an ataque**, a hysterical type of attack; not to be confused with an epileptic seizure.

6. **achaque**: a non-specific term for a health problem, usually of a recurrent nature. Usually heard from older individuals who claim to be "llena de achaques", "full of aches and pains."

7. **dolamas**: multiple vague aches, usually of an arthritic nature. **Dolor** is pain, dolamas are minor pains.

8. **alentado**: recovered from an illness or symptoms, to feel better.

9. **ajilado**: adjective. Thin, frail, gaunt, sick looking; the general appearance after a prolonged serious illness.

10. **gamba**: bow-leggedness; the parenthesis-like configuration of the bow legged person who is called **gambao** (masc) or **gambá** (fem).

11. **resollar**: to reappear or recur.. "el dolor me resolló".. the pain reappeared / recurred, came back.
Although all the Western European languages draw heavily from the Greco-Roman medical tradition for their professional terminology (unlike the popular terminology), there is no uniformity of borrowing among these languages. While there are English cognates for nearly all Italian medical terms based on Greco-Roman borrowing, occasionally one finds the rare case where Italian authors use a Greco-Roman term that did not succeed in being accepted into the English medical lexicon. At these times some of these authors feel a need to attach the English term in parentheses (and sometimes gradually substitute it in the body of the work).

An example (from genetic medicine) is "diaginico." The only current English term to translate this (as far as my research extends) is "X-linked." The Italian term will normally be found in the phrase: "trasmissione diaginica" and is best researched in that combination. You may find it in the medical context of cardiomyopathy, metabolic diseases, or hematologic diseases such as hemophilia, von Willebrand's disease, or leukodystrophy. X-linked or "diagenetic" transmission is contrasted with "autosomal" transmission, depending on whether an inherited condition crosses the sexes or not in generational transmission. X-linked indicates that the condition is predominantly passed through the mother (with 2 X chromosomes; fathers never pass an X chromosome to their sons). Note: the English word "diagenetic" exists but is confined to geology, with a quite different meaning. On the Italian side, I have not been able to trace the lexicographical or usage history of this term, and I would welcome information in this area.

Another example from the very different field of vascular diseases and surgery is "crossectomia." A few years ago I translated La Chirurgia Conservativa del Sistema Venoso Superficiale, a surgical manual authored by Dr. Paolo Zamboni (Edizioni C.E.L.I., 1996) and I met this term there frequently. Dr. Zamboni's purpose was to promote the use of less aggressive alternatives to "vein stripping" as a surgical therapy for varicose veins (Italian authors generally use the word "stripping" also). One of these new therapies was called "crossectomia," a loan word from French (crossectomie, lit. junction excision) which Zamboni defines as follows: "La crossectomia rappresenta un antico ed efficace intervento chirurgico per la cura delle varici che tuttora conserva la sua validità. La crossectomia ha lo scopo di deconnettere la grande safena e le sue tributarie a livello della giunzione S-F [safeno-femorale] eliminando il refluxo." This elegant definition says it all; it remains only to know what the equivalent English term is. Here, English falls on its face. Technical American English especially prides itself on creativity, brevity, and focus and this is apparent in many high tech fields, including modern medical terms with no Greco-Roman ancestry. But in this case it resorted to a definition instead of a term: "high ligation of the saphenofemoral junction." Why English-speaking authors failed to accept the term "crossectomy" is hard to understand. The only people using it in English (see a Google search of "crossectomy") are Germans, Russians, French, and Italians writing in English, who may have assumed - as they often do - that there is such a cognate in English. Well, there is if they are urging it upon us, I suppose.

The dynamics and mechanisms of medical loan word acceptance or rejection are a very gray area; we know the process only in retrospect - in our rear view mirror. Who gets to decide if a new medical term (novel or borrowed) will be accepted? Does it depend on the number of individual authors and editors who like it? - on popularity, similar to "hits" at a Web site; we could call this the democratic method. Or does it depend on some individual using it, such as a famous clinician or a surgeon like Dr. DeBakey in Houston, or on a particular group deciding for it, such as the NIH or the Mayo Clinic? - the aristocratic method. When the FDA uses a term of course, it becomes sacral to those within its jurisdiction. I met a case of an Italian clinical trial where a great fuss was made over whether the term "serio" related to an adverse event had to be translated as "serious" and not "severe" because that is what the FDA would be looking for, and their bureaucratic classification of severity had be observed at all costs by the trial sponsor - even in Italy! A search of the Italian clinical trial literature (by me) found that the Italian trial researchers over the years have been classifying adverse events at will or randomly (not sticking to the same term consistently) as serio, severo, grave with identical meaning. There was no linguistic or clinical support for this FDA form of "word control." Such is the angst of terminological precision - whom do you follow?
The only personal experience I have of medical terminology in its birth pangs was an occasion when I was engaged in a failed effort to get the German medical establishment to start using a different word for "pacing lead" than their all-embracing elektrode. In reality, the electrode is only one part of the cardiac lead, but that did not seem to worry the usually hyper-precise German medical engineers and doctors; only a few felt a need to resort to the French word sonde.

This new journal of medical translation Caduceus could be a useful avenue for opening up "clinical" or research notes for translators and interpreters to help them over practical difficulties. So often today, the translation work week is too tense for proper research of medical language and its variations across cultural and linguistic boundaries. The much-hyped "quality" of translation presupposes knowledge, but knowledge generation is a slow and gradual process; it supersedes deadlines. Perhaps academics and students doing MA studies in Translation could contribute research findings and have their work published here. The possible areas of research in medical translation are immense and largely untouched; this journal may help fill the void.

Leon McMorrow, Ph.D. is a career medical translator who brings together the fields of language and medicine. He holds a M.A. in linguistics and a Ph.D in medical anthropology. Currently freelancing, he has previously practiced in language environments as a translation professor, an applied linguist developing educational scripts, and as an agency manager; in medicine he has held a variety of titles in hospitals and medical companies for many years. He may be reached at leon@medtranslator.com

How much can personal beliefs interfere with your profession?

A pharmacist in Wisconsin refused to refill a prescription for contraceptive medication owing to his personal opposition to birth control. He also refused to transfer the prescription to another pharmacy and maintained his stance when the lady returned accompanied by a policeman. The prescription was finally filled by a managing pharmacist. The pharmacist has been accused of unprofessional conduct and will face administrative hearings in the near future. Two other similar cases are recorded in Texas.

As expected, the issue has those in favor and those opposed. The American Pharmacists Association says pharmacists should be allowed to refuse to fill a prescription. However, they should transfer it to a colleague or some other pharmacy. State laws are apparently controversial. South Dakota and Arkansas explicitly protect pharmacists who refuse to fill prescriptions based on moral or religious grounds, similar laws have been introduced in 13 states. Pro choice groups such as Planned Parenthood strongly believe this refusal interferes with a woman's fundamental right to choosing when to have a child.

Can physicians dispense medications? Yes, they can but most often they don't. It would add another layer of accountability and paper work. Can Nurse Practitioners and Physician Assistants dispense medications? Yes, they can - and such a possibility fills a real need when they practice in isolated areas where no pharmacist is available.

Ref. TIME magazine, June 7,2004

Caduceus is delighted to hear from and publish Dr McMorrow's article. His invitation to use Caduceus as a forum for the search, discussion and publication of medical cognates of unknown or uncertain origin in various languages represented in our membership fits perfectly with our previously expressed wishes and is thus welcome

- The Editor

Corkscrew clot remover - as you have seen in the news, we now have a miniature corkscrew-shaped device that can be threaded into the major arteries of the brain in order to physically remove a blood clot and restore blood flow in cases of stroke. How would you translate "corkscrew clot remover" into Spanish, French, German, Chinese, Italian, any language? Let us know at Caduceus - bukrak@bellsouth.net
impairments, disabilities and handicaps: in 1980 the World Health Organization published an International Classification of Impairments, Disabilities and Handicaps (ICIDH). It provides a conceptual framework for disability in three dimensions as follows: impairment - in the context of health experience an impairment is any loss or abnormality of psychological, physiological or anatomical structure or function. A disability is any restriction or lack or ability (resulting from an impairment) to perform an activity in the manner or within the range considered normal for a human being. A handicap is a disadvantage for a given individual, resulting from impairment or disability, that limits or prevents the fulfillment of a role that is normal for a human being. The Spanish translation of impairment, disability and handicap given by the OMS (Organización Mundial de la Salud) is deficiencia, discapacidad y minusvalía. www.geocities.com/deflox

Needless to say, this is very soft translational quicksand due to the usual interchangeability with which these terms are used in our daily colloquium, both in English and Spanish, plus the several other terms that are used synonymically. Yet, it does provide a cause and effect relationship between the terms e.g., the basic impairment and its possible related consequences, the disability and / or the corresponding handicap.

grave / gravely ill: the meaning of these words in medical English is clear. The patient's medical condition is such that there is a clear possibility of death; it is not an absolute certainty, as when we say moribund, but a distinct possibility. The Spanish translation of grave or gravely ill among the Spanish-speaking medical community in North America is the homograph grave. The problem then arises frequently because the word grave is also used as the Peninsular Spanish translation of another English medical word: severe. The clinical condition scale: light, moderate and severe is usually translated by the Spanish speaking medical community in the US as leve, moderado y severo. That is usually the case in South America and even in Spain. However, in accepted Peninsular Spanish it would be leve, moderado y grave. Thus the translational problem. Understandably, it would be a considerable clinical miscalculation if somebody with a severe /severo medical problem would be rendered as grave which would, in our midst, mean a far worse, life threatening situation. The reverse would also be a problem if gravely ill or grave in our clinical jargon would be rendered as just severe or any of the other common colloquial alternatives for severe such as serio, intenso, fuerte, de cuidado. Severo as a translation of severe is also what international health organizations such as the World Health Organization (WHO) uses in its writings. Witness the example: SARS, Severe Acute Respiratory Syndrome translated by WHO as Síndrome respiratorio agudo severo.

medical clearance: is most often given by a consulting physician or service on a patient who is usually about to undergo surgery or any form of hazardous treatment. The requesting physician wishes to have a patient evaluated as to his ability to withstand the intervention contemplated. It represents a consent, an agreement by the consulting physician that the benefits of the proposed surgery or hazardous treatment outweigh the risks. In another sense, a medical clearance could also be requested by employers who wish their employees "cleared" by their physicians who wish their employees "cleared" by their physicians e.g., found free of apparent contraindications for participation in a work sponsored physical fitness program.

medical waiver: a waiver is the voluntary relinquishment, expressly or by implication of some claim or right. A medical waiver is not so much a medical certificate (as it is often misused or misunderstood) but a legal document understood best through examples, for instance: the employees in the example above sign a medical waiver relinquishing their right to claim for any problems of a medical nature that may come about during the job-sponsored physical fitness program in which they are about to participate. Likewise, a school requires a medical waiver signed by the parents of children attending a summer camp releasing the school of any responsibility for illness or injury incurred while attending said summer camp. The signatory of the waiver, would be relinquishing his right to claim for adverse consequences of a medical nature incurred during camp. Conversely, children with some form of illness or impediment who participate in said camp may be asked to obtain a medical clearance from their physicians indicating whether they are able to participate fully or with specified restrictions.
medical certificate: a statement of factual information of a medical nature issued by a physician about a patient. Such information usually refers to illnesses, medications, restrictions and any other information pertinent to the need for the certificate.

"little stroke": a stroke, medically known as a cerebrovascular accident (CVA) is the clinical picture that results from the sudden loss of circulation to a part of the brain. A "little stroke", "mini-stroke" or TIA (transient ischemic attack) presents a similar clinical picture but in a very minor and transitory way - momentary trouble in speaking, seeing, hearing, moving or thinking. It is considered a premonitory indicator of a possible full-blown stroke. The basis for both the "mini" or full stroke is the same: ischemia or restricted flow of blood. The difference is time. A TIA is over in a few minutes or mostly within 24 hours, the body manages to overcome the transient blockage by breaking away or sweeping or somehow forcing flow through a narrowed blood vessel. Not so in a full-blown stroke.

phthisis: Gr,- wasting, pronounced TIE-sis, syllabification as phthi-sis. Along with "consumption", phthisis was the original name given to the human disease we now as tuberculosis. Patients simply wasted away. Because the pulmonary lesions of TB are whitish in color the name "white plague" was later added. Conversely, the black pulmonary lesions of coal miners led to the name of "black phthisis" for the pneumoconiosis or pulmonary anthracosis produced by years of coal dust inhalation (which often coexisted with TB). In ophthalmology phthisis bulbi refers to the involutionary atrophy and degeneration of an eye due to ocular disease, inflammation or injury. Phthisis appears in works of art and the life of artists. Mimi, the heroine in Puccini’s opera La Boheme was so afflicted and Frederick Chopin died of it in 1849. The medical approach to consumption has likewise left an enduring mark in our landscape. Not having ways to contend with such life-long expectations of progressive wasting for phthisic patients, they were sent to farms, ranches and sanatoria (some still present in distant places) where exposure to harsh weather, humidity, environmental stress and animosity were lessened and where nutrition, clean air and rest were the primary therapeutic components. In December 1901 a JAMA article recounts the difficulties now faced by phthisic patients under the jurisdiction of the Denver Medical Society and the need to establish additional “Tent Colonies”. Tent life in suitable places was considered a good therapeutic experience. "Very few drugs have been used. Cod-liver oil, creosote and guiacol have not been administered."

more about bile and bilious connections: on a previous occasion we mentioned that "having too much bile" / tener mucha bilis is a common expression among Latin American LEPs to describe an individual prone to anger. Looking a bit deeper into the origins of this connection, we find it can be traced to Hippocrates (and Galen) who defined the four humors or body fluids and their connection to temperament as follows: a) blood (sangre) would relate to sanguine sanguinis / sanguíneo - a passionate, goal directed individual b) phlegm (flema) and other mucosal secretions, would relate to phlegmatic / flemático - the thoughtful, unperturbed individual c) yellow bile (bilis ) 'Gr-khole / choleric / colérico would relate to those high strung, prone to anger and d) black bile or 'melan khole' / melancholic / melancólico would relate to those prone to deep thoughtfulness and sadness. It is said that this view of temperament survived until the beginnings of western medicine.

Since the early 1940s the most commonly used personality inventory test, the Myer-Briggs Type Indicator, MBTI®, breaks down the above categorizations into combinations of S=sensory, N= Intuitive, T= thinking, F= feeling, J= judging and P= piercing. Personality testing in general has diversified according to what purpose is the information to be used for - from actual personality disorder recognition to employee selection, match-making and others.

Other bilious connections are a) the disease "Cholera" whose original descriptions by Hippocrates and other describe cases of massive vomiting and diarrhea of a thin bilious fluid of yellowish color and bitter taste, and b) the disease "Yellow Fever", a viral illness of varying severity whose predominant sign is jaundice - a yellowish discoloration of the skin and eyes. A yellow flag has become the international symbol in quarantined ships. By the way, gallstones are concretions usually made of bile salts and cholesterol which is yellow in color. And where does "gall" fit in? Nowhere. Brazenness, chutzpah, impudence, effrontery, impertinence - maybe you need a bit of bad blood and bile to show these features.
Recall Bias: Our Tendency to Lean on to the Familiar

Medical terms are highly coded. Rendering a word or phrase with a non-coded term, which happens to be more easily recalled and is thus misrecognized as the proper term, may jeopardize the meaning of an entire paragraph. The examples presented in this article represent true instances of online questions and answers by medical translators.

Epidemiologists and statisticians know that when people are asked to estimate "off the top of their heads" the frequency of certain events, most will incur in biases. People's responses are skewed toward either the most recent occurrence of the event, or the occurrence most emotionally charged for them. In other words, we estimate the frequency of an event by how easy it is to bring instances of it into mind. This kind of selective memory is also operative in clinical studies when participants are asked about past diseases, diagnostic tests, or medications. Study participants often respond quite inaccurately according to what they, for different reasons, remember best - not according to what has been objectively consigned in their medical records. The phenomenon is so prevalent that it has its own name: "recall bias" (or "recollection bias.")

Recall bias may also lead to wrong judgments regarding the best translation for certain terms. A term in a source language may trigger our recollection of a related term in the target language which certainly "rings a bell" - but it is not necessarily the best translation.

For example, do the phrases women of childbearing age and outpatient care sound familiar? These expressions are so prevalent in medical documents that they come to mind easily -perhaps too easily. Indeed both phrases were each confused with a related concept this year. In an online forum, a translator requested help to render into Spanish the phrase childbearing women. The adjective childbearing is defined by the dictionary as "relating to or suitable for childbirth." Childbearing women, thus, refers to women who are either ending their pregnancy term, in labor, giving birth, or in the post-partum period.

A translator and native Spanish speaker proposed to render childbearing women as "mujeres en la edad reproductiva" (translating in fact “women of childbearing age,” not childbearing women). Her proposal received several endorsements. A certified translator with many years of experience said "Tu respuesta es la única acertada." ("Your answer is the only one correct." Another translator added "This is what I, as a native English speaker, understand by the phrase childbearing women").

Yet childbearing women is a concept from which many women of childbearing age are excluded (i.e., all menstruating, non-pregnant girls and women). Childbearing women in Spanish is "mujeres embarazadas, parturientas y puérperas".

The fact that a linguist will confuse childbearing women with “women of childbearing age” is difficult to explain. Recall bias at work? Possibly: at the time the request for help was posted, the number of Google hits for "women of childbearing age" was 76,500; for childbearing women it was only 16,500.

Another phrase posted in an online list was hospital de día, which needed to be translated into English. The asker added, for context "[es donde están] los pacientes que realizan tratamiento ambulatorio y no están internados, sólo pasan parte del día en el hospital" (it's where patients undergo only outpatient treatment and don't remain hospitalized"). The translation for hospital de día is "day hospital." At a day hospital, there is no overnight or weekend stay but patients spend a good part of the day receiving regular, intensive hospital services. This is different than the standard outpatient care / treatment. Yet a translator proposed to render hospital de día as "outpatient care (or treatment)," adding "así se dice, por lo menos en los Estados Unidos" (this is how it's said, at least in the US). The translator then offered also "outpatient clinic." This answer received several endorsements; one with the inquiry "How about outpatient clinic?", and another with the suggestion "Or Outpatient Care Facility."
Outpatient care does compare to day hospital in that patients receive an array of medical services while spending nights and weekends at home, but outpatient care does not include many of the intensive, complex, and long-term services that hospitals or day hospitals provide. In other words, all day hospitals provide outpatient care or act as outpatient clinics, but most outpatient clinics do not provide day hospital services.

At the time of the online consultation, the number of Google hits for outpatient care was 138,000; for day hospital was only 10,100.

In summary, it seems that we occasionally suffer from recall bias. This happens when a term in a source language triggers our recollection of a related term in the target language. Such a target term is more widely used than the term that typifies the translation for the source term -which eludes us. Or, a term in a source language may sound so similar to another term encountered more often, that this "look-alike" term is the one for which we mistakenly provide a translation. Reassured by how often we have run into one of the terms of the source-target pair, we decide they are a match -a match that is, however, spurious.

This pitfall -as many others in translation- can be countered with one caveat: that of always double-checking one's assumptions.

Note. The specific URL for each example is available by request to esgarbossa@myacc.net.

What is an ocularist?

An ocularist is a maker of artificial eyes, a technician specialized in the fabricating and fitting of custom-made ocular prostheses, of which there only about 200 in the USA. Artificial eye-making has been practiced since ancient times, the very first eye makers were Roman and Egyptian priests as early as the 5th century BC. Initially, artificial eyes were made of painted clay attached to cloth and worn outside the socket. It took centuries for the first in-socket artificial eyes to be developed, these were made of gold and colored enamel. The Venetians started making glass prostheses and kept their methods secret until the 18th century when the trade shifted to Paris. By the mid 19th century German glass blowers had developed superior techniques and their technique entered the US where Americans later on first popularized the use of acrylics. The vast majority of patients today wear artificial eyes made of acrylic plastic. Stock ocular prostheses are available but only a custom one made to fit you by an ocularist will do so perfectly.

There are no schools to teach ocularistry. A person learns through an apprenticeship arranged through the American Society of Ocularists. Most ocularists inherit the family business or need the service themselves. There is a National Board of Ocularists.

The cost of an ocular prosthesis lies between $1,000 and $2,500. A scleral shell prosthesis ranges from $1600 to $2800. Ocular prostheses require maintenance, an ocularist visit should be at least once a year, more often for pediatric patients.

About the Author:
Dr. Elena Sgarbossa is a cardiologist, medical writer, translator and assistant editor of Caduceus.
Most providers and trained interpreters generally receive great feedback from their patients. However, as more institutions hire professional interpreters, a growing number of family members are feeling left "out of the loop". Family members who previously assumed the role of interpreter may now experience a feeling of loss resulting from no longer being the only one to take charge of their loved one's care. In medical interpreting classes and in social conversations, both providers and interpreters have approached me about this new dilemma: What should an interpreter do when a family member refuses interpreter services? The following three scenarios will exemplify some commonly shared concerns:

Case #1
A college-educated student in a medical interpreter-training program has parents who immigrated from Cambodia. They have not had very good experiences with interpreters at a local hospital. The parents are concerned that the interpreters break confidentiality, and that other people will know about their personal business. They only want their daughter as an interpreter. On the other hand, the hospital where the family receives care promotes their interpreter services program and discourages family members from interpreting. This student interpreter feels she has found a compromise between her family and the institution: by becoming a professional interpreter, she will continue to interpret for her family.

Case #2
A coalition of health centers has developed an interpreter services department and spent many hours training its medical providers on how to work with professional interpreters. Now some patients and family members who are not happy with the changes are challenging providers and demanding to continue to use their family members as interpreters. These individuals feel that the hospital's insistence on providing professional interpreter services is a violation of their personal rights.

Case #3
A professionally trained interpreter is called to interpret for a patient who speaks the same target language but is of a different nationality. The patient and interpreter have different accents and sometimes use slightly different vocabulary, but the issue is not so great as to disqualify the interpreter. With a little clarification, the interpreter is able to perform accurately.

As the session starts, a family member who used to be the primary interpreter for that patient nastily tells the provider that the patient is not able to understand the interpreter because of the interpreter's accent. The family member takes it on her own to answer to the provider's questions without waiting for the patient's answers. The provider lets the family member dominate the conversation and the patient is left unaware of most of the dialogue. Both the patient and the interpreter are completely left out of the session.

So what should an interpreter do when a family member refuses interpreter services?

The above cases are reminders that in general, individuals do not do well with changes, even if these changes are implemented with good reason! People are often even more resistant to change when they feel that they were not consulted during the decision-making process.

In fact, health institutions that now provide professional interpreter services often do not take the time to market this new service to the community, thus burdening the interpreter with the job of introducing the service to the patients, family members and providers. The interpreter, the new kid on the block, the stranger, is the one assigned to the cutting of the "umbilical cord" between patients and their family members. This is an extremely difficult task and unfair to the interpreter. This interpreter becomes the one responsible for changing the
dynamic of a possibly "sick" triadic encounter, and can come to be viewed as an intruder.

**So what should an interpreter do when a family member refuses his or her services?**
Interpret the patient and family members' spoken dilemma to the provider, as you would with all other communication. By passing the ball to the provider, you reframe from being the one with the scissors ready to cut the umbilical cord to being a neutral language liaison.

Health care institutions and providers should have strict policies and guidelines that address these types of issues. Some hospitals have implemented a type of AMA (against medical advice) form for patients who refuse the assistance of a professional interpreter. If the provider asks for your help or mediation, use this opportunity to be the culture broker (culture of the institution and culture of the patient).

**Here are some recommendations that have worked for me in the past:**

**Coach** the provider by bringing him/her in as the party responsible for the decision, and do not try to resolve the situation by yourself.

**Echo** to the provider the possibility that both the patient and the family members may be feeling a sense of loss.

**Acknowledge** this sense of loss by suggesting that the provider thank the family members for all the services they have provided up to now.

**Refer** to OCR (Office of Civil Rights) requirements for qualified interpreters and to the policies and guidelines of the health care institution in question.

**Compromise!** A provider may invite the family member into the session as the patient's companion, but with the agreement that the interpreter will do the interpreting and the family member will have his/her chance to participate in the session at an appropriate time. If the patient insists on having the family member act as interpreter, the professional interpreter might sit in the room, listening to the interaction and interjecting if the message is not accurately conveyed. The provider must agree that there is no room in the session for debates over word usage.

**Ultimately,** the decision regarding the presence or absence of a professional interpreter should rest with the provider and not with the interpreter. Providers who do not work with qualified interpreters may be at a risk of lawsuits; especially in cases where a family member did interpretation with no professional backup. Before making a decision, providers may want to consult the guidelines and policies of the institution in which they practice medicine and with their malpractice insurance companies.

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**What is a "powwow"?**

The Cambridge dictionary defines "powwow" (3rd item) as "any assembly characterized by noise and confusion; a noisy frolic or gathering, any meeting assembled to discuss an issue; a parley". The word "powwow" was coined by the Native North Americans, who were apparently the first to use it to describe a conjuration characterized by great noise and confusion, often with feasting and dancing which had (or have) the goal to attain the cure of diseases or to procure success in hunting. "Powwow" was also the word for a priest or conjurer in the tribe or community.

Today, language professionals have borrowed the word "powwow" to name informal gatherings. Powwows vary from conventions in that scientific or work-related discussions - if they are planned at all- are secondary to the social aspect of the gathering.
In 1967 the National Library of Medicine (NLM) created an information resource, known today as the Toxicology and Environmental Health Information Program (TEHIP), whose mission was to provide selected core toxicology and environmental health information resources and services, to facilitate access to national and international toxicology and environmental health information resources and to strengthen the information infrastructure of toxicology and environmental health.

Today is available a free web-based system of databases, called TOXNET, on toxicology, environmental health, hazardous chemicals, toxic releases, chemical nomenclature, and specialty areas such as occupational health and consumer products. Many additional resources are also available, such as toxicology tutorials and glossaries of terms used in toxicology and special topic guides (arsenic, biological & chemical warfare agents, etc.) (Tables 1 and 2).

**TOXNET - Search Screen Options**

A single query box with the "Search all Databases" option represents the default TOXNET homepage (http://toxnet.nlm.nih.gov). Alternatively, by clicking on the database name, the user can choose a single database search or the "Multi-Databases" option. However, I do not recommend the single or multi-database search: as a result of a global search a box is displayed with the list of databases and the number of records containing the query words or phrases, so that the user may quickly decide what would be the best resource to check.

The search interface allows both direct searching and browsing the index (useful in case of incorrect or unknown spelling). With the "Limits" function, the search may be limited to a specific field, exact words, singular and plural forms, word variants, date of publication or a specific original language. Chemicals are searchable by name or CAS Registry Number. The user may let the system add synonyms (default) or decide to perform an exact search. The same boolean search syntax discussed in the previous article about PubMed (see Caduceus, Spring 2004) is available on TOXNET:

- Upper case boolean operators (AND, OR, NOT)
- Fields in brackets and post-qualified (e.g. benzene [na])
- Nested parenthesis searches (e.g. alcohol AND (pregnancy OR breastfeeding))
- Phrase searching with quotation marks (e.g. "methanol intoxication")
- Asterisk (*) for truncation (e.g. carcinogen*)

**TOXLINE** (TOXicology literature onLINE) and **DART** (Developmental And Reproductive Toxicology) are two bibliographic databases. Both databases have bibliographic references grouped in two parts: a core component available in PubMed by selecting "toxicology" as subset Limit (Tox[sb]) and a special component on TOXNET. If the user chooses to search both components (default option), the core component is searched directly in PubMed and a second browser window opens.

TOXLINE covers pharmacological, biochemical, physiological, environmental, and toxicological effects of chemicals and other agents on living systems, while DART is focused on developmental and reproductive toxicology. The records contain citations, abstracts, keywords and/or MeSH (Medical Subject Headings) and CAS Registry Numbers of the related chemicals. After the search of a word or phrase, these are evidenced (in red) in the article title or abstract (try e.g. ethynylcobalamin).

Some search features (MeSH searching, limit by field, publication type, language, etc., related articles, save and download) are the same as PubMed (see Caduceus, Spring 2004).

**ChemIDplus** is the chemical dictionary/directory file for chemicals cited in the NLM databases and external resources. It contains over 368,000 chemical records and structural data for over 206,000 records. The single records have direct links/searches to other resources such as MEDLINE or TOXNET.
The database record contains much information about chemical substances:

**Name of Substance**: usually the most commonly used name (e.g. Acetylsalicylic acid).

**MeSH Heading**: NLM Medical Subject Heading (e.g. Aspirin).

**Systematic Name**: chemical name describing the molecular structure (e.g. Benzoic acid, 2-(acetyloxy)-O-Acetylsalicylic acid).

**Synonyms**: all other names found for the substance. Many records also contain names in other languages (e.g. Acetylsalicylsaure, Acido acetilsalicilico, Acidum acetylsalicylicum) and often several trade names of many drugs sold worldwide (e.g. Aspro, Bufferin, Cemirit).

**Mixture Name**: name of multi-component substances, one of which is the retrieved substance (e.g. Norgesic, Vanquish).

**CAS Registry Number**: unique number of up to 9 digits (hyphenated format) used to index chemicals and assigned by the Chemical Abstracts Service (e.g. 50-78-2).

**Molecular Structure Formulas**: the molecular formula in a hyphenated format (e.g. C9-H8-O4).

**Classification Codes**: the general category assigned by a given source to a chemical based on toxicity, use and application, pharmacologic and/or therapeutic category, and status on certain chemical lists (e.g. Analgesic, Antipyretic, Antirheumatic).

**Notes**: textual description of a compound's use and utility, often from the MeSH controlled vocabulary.

**Locators**: NLM databases and other major resources that have information about a given compound, usually hyperlinked.

On the TOXNET web site ChemIDplus is searchable through its **Lite version** (the best and quickest interface for the translator needs): it allows neither structure nor hyphenated formula searching, thus needing no plug-in (chemical structures are displayed as GIF images). Right truncation (the same as the "starts with" option on the full version) is available using the asterisk (*) at the end of the search term. A spell checker is integrated into this version, and in case of incorrect spelling a list of possible substances is suggested (try e.g. methonol).

The translator searching quick and authoritative information about a chemical may well benefit from this great resource (Table 3).

The **Hazardous Substances Data Bank** (HSDB) is a big full text factual databank about potentially toxic substances (chemicals, poisons, drugs, etc.). The single record is very exhaustive and arranged in many chapters (health effects, metabolism, pharmacology, chemistry, occupational exposure, laboratory methods, synonyms and identifiers, etc.). The searched terms are evidenced in red. By clicking the "Other Files" button, a list of other databases with information about the chemical is displayed.

**HazMap** is an occupational health database that links jobs and hazardous tasks with occupational diseases and their symptoms. Chemicals and biologic agents are linked to industrial processes and other activities. The entire database can be searched with the internal search engine or browsed by jobs, diseases or agents. An occupational hazard glossary is also available on the site.

**The Household Products Database** is a databank, based on the Consumer Product Information Database, that links over 4000 consumer brands to health effects from Material Safety Data Sheets provided by the manufacturers and allows to search products based on chemical ingredients. The information is linked to other toxicology-related databases. A specific medical term glossary is available on the site.

The resources described above are the most important chemical and toxicology resources freely offered by the NLM, a highly reliable institution. A search in the mare magnum of the Internet could retrieve many other chemistry and toxicology sites: in Table 4 is presented a short list of other non-NLM authoritative resources. Readers are invited to submit other useful sites.
### Table 1 - Available NLM free toxicology databases, tutorials and glossaries

<table>
<thead>
<tr>
<th>Resource</th>
<th>URL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factual and Bibliographic Databases</td>
<td><a href="http://toxnet.nlm.nih.gov/">http://toxnet.nlm.nih.gov/</a></td>
</tr>
<tr>
<td>Toxicology Tutorials (basic principles, toxokinetics, cellular toxicology)</td>
<td><a href="http://sis.nlm.nih.gov/Tox/ToxTutor.html">http://sis.nlm.nih.gov/Tox/ToxTutor.html</a></td>
</tr>
</tbody>
</table>

### Table 2 - Types of information available in the TEHIP databases

<table>
<thead>
<tr>
<th>Databases</th>
<th>Records</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemical Carcinogenesis Research Information System (CCRIS)</td>
<td>8800+</td>
<td><strong>Factual</strong>: carcinogenicity studies, tumor promotion studies, tumor inhibition studies, mutagenicity/carcinogenicity studies</td>
</tr>
<tr>
<td>ChemIDplus</td>
<td>368,000+</td>
<td><strong>Factual</strong>: web based chemical identification and structure search database</td>
</tr>
<tr>
<td>GENE-TOX</td>
<td>3200+</td>
<td><strong>Factual</strong>: mutagenicity studies</td>
</tr>
<tr>
<td>Hazardous Substances Data Bank (HSDB)</td>
<td>4700+</td>
<td><strong>Factual</strong>: human/animal health effects, chemical/physical properties, emergency medical treatment, chemical safety &amp; handling, occupational exposure standards, pharmacology, synonyms and identifiers</td>
</tr>
<tr>
<td>Integrated Risk Information System (IRIS)</td>
<td>500+</td>
<td><strong>Factual</strong>: hazard identification and dose-response assessment (EPA carcinogen classifications, unit risks, slope factors, oral reference doses, and inhalation reference concentrations)</td>
</tr>
<tr>
<td>International Toxicity Estimates for Risk (ITER)</td>
<td>600+</td>
<td><strong>Factual</strong>: human health risk values from major organizations worldwide</td>
</tr>
<tr>
<td>Developmental And Reproductive Toxicology (DART)</td>
<td>100,000+</td>
<td><strong>Bibliographic</strong>: developmental and reproductive toxicology</td>
</tr>
<tr>
<td>TOXLINE</td>
<td>&gt;3 million</td>
<td><strong>Bibliographic</strong>: biochemical, pharmacological, physiological, and toxicological effects of drugs and other chemicals</td>
</tr>
</tbody>
</table>
### Table 3 - Examples of possible uses of ChemIDplus

<table>
<thead>
<tr>
<th>Term</th>
<th>Question</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>H3-N.H-N-O2</td>
<td>We have only the molecular formula of these substances: what is their chemical name?</td>
<td>1. Ammonium nitrite</td>
</tr>
<tr>
<td>H3-N.H-N-O3</td>
<td></td>
<td>2. Ammonium nitrate</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(Only ChemIDplus full version)</td>
</tr>
<tr>
<td>Nitrato amonico</td>
<td>What is the English name?</td>
<td>Names &amp; Synonyms:</td>
</tr>
<tr>
<td>(Spanish)</td>
<td></td>
<td>1. Ammonium nitrate</td>
</tr>
<tr>
<td>L-Rot 3 (German)</td>
<td></td>
<td>2. Amaranth</td>
</tr>
<tr>
<td>Chlorure de methylrosanilinum (French)</td>
<td>What is the active substance and what is it used for?</td>
<td>3. Gentian violet</td>
</tr>
<tr>
<td>Euchessina (Italian drug)</td>
<td></td>
<td>Names &amp; Synonyms: Phenolphthalein Notes: &quot;It is used medicinally as a cathartic.&quot;</td>
</tr>
<tr>
<td>Bichlorendo</td>
<td>What is it?</td>
<td>Notes: &quot;An organochlorine insecticide that is carcinogenic.&quot;</td>
</tr>
<tr>
<td>Vanquish</td>
<td>This is an aspirin containing analgesic drug (many hits on Google); why is it quoted in an article about chlorine intoxication?</td>
<td>Because it is also the trade name of Dicamba, a chlorinated organic herbicide (Notes).</td>
</tr>
</tbody>
</table>

### Table 4 - Chemical and toxicology glossaries and databases (non-NLM resources)

#### Toxicology
- Agency for Toxic Substances and Disease Registry (ATSDR)  
  http://www.atsdr.cdc.gov/glossary.html  
- Glossary of terms used in toxicology  
  http://www.kcsnet.or.kr/IUPAC/reports/1993/6509duffus/a.html
- Glossary of IRIS Terms  
  http://www.epa.gov/iriswebp/iris/gloss8.htm
- Glossary of terms relating to pesticides (IUPAC)  
- Glossary of Pesticide Chemicals (PDF file) US FDA  
  http://vm.cfsan.fda.gov/~acrobat/pestglos.pdf

#### Chemistry
- General Chemistry Glossary  
  http://antoine.frostburg.edu/chem/senese/101/glossary.shtml
- CAS Standard Abbreviations and Acronyms  
  http://info.cas.org/ONLINE/standards.html
- Chemical Synonyms database  
  http://www.etcentre.org:8080/cgi-win/ChemSynSpill_e.exe?Path=/Website/rivet/
- Chemical Acronym database  
  http://www.oscar.chem.indiana.edu/cfdocs/libchem/acronyms/titleu.cfm
- Chemical Safety Glossary  
  http://ptcl.chem.ox.ac.uk/MSDS/glossary/GLOSSARY.html
- Glossary of terms used in medicinal chemistry  
  http://www.chem.qmw.ac.uk/iupac/medchem/

#### Environmental Health
- Environmental Protection Agency (EPA) - Glossary and Acronyms  
  http://www.epa.gov/OCEPAterms/
- National Center for Environmental Health (CDC)  
  http://www.cdc.gov/ncenh/dls/report/glossary.htm
- Scorecard (Environmental Defense)  
  http://www.scorecard.org/about/glossary.tcl

#### Material Safety Data Sheets
- MSDSs terms and abbreviations  
- Material Safety Data Sheets glossary  
  http://www.ilpi.com/msds/ref/index.html
- International Chemical Safety Cards (CDC) - Very useful multilingual site: safety cards are available in the most widespread languages  
  http://www.cdc.gov/niosh/ipcs/icstart.html
Following our last book review, *Stiff: The Curious Life of Cadavers* by Mary Roach, we have experienced a surge in interest for books of this kind. Indeed, the dead are making the news far better than the living. And so it is with this best seller by Dr. Bill Bass, a forensic anthropologist at the University of Tennessee who has developed a two-and-half-acre patch of land in university grounds where human cadavers are allowed to decompose in the open air while under careful scientific observation. From humble beginnings and the opposition and misunderstanding of groups who believed that bodies were sacred to the present, where over half of the practicing forensic anthropologists practicing in the US are graduates of Dr. Bass, the Body Farm is considered a one-of-a-kind respected scientific treasure, the world’s leader in death investigation.

Why this seemingly gruesome endeavor? Simple. The state of the art in forensic anthropology - the application of physical anthropology to the medico-legal process - during the 1960s and 70s was mostly anecdotal. Nobody really knew what the long-term process of human decomposition looked like to properly be of any help in determining the time since death of a recently discovered and otherwise unknown body. Such an instance came to Dr. Bass in the late 70s when he was asked to estimate the age of a skeleton dug up on a property that belonged to the family of William Shy, a colonel in the Confederate Army. Whereas he got the race, gender and approximate age right he was way off on the time of death. The corpse was that of Colonel Shy himself who had been dead and buried since 1864, some 113 years earlier! That did it.

From the University of Tennessee Dr. Bass acquired a plot of land and the unclaimed cadavers of several homeless men who were simply tagged and observed through time. Before then nobody had established a time line. Medical examiners and crime scene investigators are on the mark for the immediate post mortem days. Up until 2-3 weeks one of the best ways to tell how long a body has been dead is by looking at the insect activity. The laying of eggs, the hatching of maggots and the fairly predictable way the maggots eat the decaying tissue along with climactic variables such as temperature and humidity. Establishing this basic entomological time line, heretofore not established under observation, gave a significant impulse to the Body Farm. Since then, the farm accepts unclaimed bodies and, listen to this, there is even a waiting list of people who want to donate their bodies to the Farm as their final destination.

The long term close observation of the disintegrating process has provided numerous conclusions with practical applications. For example: an electronic nose with numerous sensors record changes in odors which are fed into gas chromatographs to separate and analyze the distinct parts of a mixture. The hope is to develop sprays that can be used to train cadaver dogs. Analysis of soil samples where products of decomposition seep into make it possible to determine how long a body has remained in a particular spot. The concept of degree-days: measuring the temperature and rate of decomposition over the course of a specific number of days, such that said calculations will apply to comparable areas in the world, be it be it the Saharan desert, the Andean mountains or the Florida Everglades, came out of the Farm. Bass has accumulated more than 400 20th century skeletons - the largest collection in the US - a database that helps in the analysis of skeletal dimensions. Results of tests with ground penetrating radar on bodies placed under different thickness of concrete and buried at different depths permits an immediate assessment of bodies found via this mean. Forensic anthropologists have been called to help find remains in places like Bosnia, Croatia, Panama where victims have been killed during violent political conditions. Mass graves search is aided this way by determining before the start of digging the specific area where the greatest yield will be found. What happens to flesh and bone during a fire - a

**BOOK REVIEW**

**Death's Acre:**

**Inside the Legendary Forensics Lab - The Body Farm**

(An audio book)

By Dr. Bill Bass and Jon Jefferson

“The long term close observation of the disintegrating process has provided numerous conclusions with practical applications.”
normal house fire or an accelerant-based arson is also a significant piece of research conducted during controlled building bonfires at the Farm. Did the person die as a result of the fire or was he dead before the fire started? The "boxer's stance" or "pugilistic posture" has been proven to be a consistent feature of a person alive during a fire, not found in controlled, after-death burnings. These are only a few of the surprising advances derived from the Farm.

A National Geographic Society two-part documentary film about the Farm, called Death's Acre, was initially written and produced by veteran journalist Jon Jefferson. Part I is entitled Biography of a Corpse and Part II Anatomy of a Corpse. It was after these documentaries were in motion that Bill Bass invited Jon Jefferson to turn some of the material into a book. In the acknowledgment of the book, Jon Jefferson writes: "As Goethe once said, 'the instant you burn bridges and fling yourself at something, magic happens.' Providence moves, doors open, coincidences add to destiny." That has been my experience since meeting Bill Bass.

Medical Scrabble

Across

1. low red blood cell count
2. arterial plaque formation
10. Lou Gehrig’s Disease
11. neck muscles

Vertical

1. surgical vaporization of tissue
2. intravascular implant
3. sinus or artery
4. loss of vision
5. pertaining to the large intestine
6. chromosomal anomaly, cause of Down’s Syndrome
7. state of unconsciousness
8. eyeglasses in Spanish
9. cervical smear cancer check

Do your best, then look up the answers on page 37.
What do the small bowel, breakfast, dinner, and being jejune all have in common?

By Elena Sgarbossa, M.D.

Have you ever encountered the expression "jejune diet" - and thought it might refer to special meals for a person awaiting jejunal surgery (i.e., surgery of the small bowel)? Or... what else could it mean?

The adjective jejune is a rather old and uncommon word, but it provides an interesting example of semantic evolution. The newest sense of jejune found in dictionaries is that of "immature", "puerile", "childish" and "naive". "Surprised by their jejune responses to our problems" is the pertinent example of usage offered by The American Heritage® Dictionary.

A previous -yet still current- sense of jejune is "dull, flat, insipid, bald, dry, uninteresting." This meaning, in turn, was an expansion of its earlier sense of "unsatisfying", "meager", or -when referred to land-, "barren".

The earliest recorded meaning of jejune, however, was "fasting." That sense derived from the Latin noun jejunos, which meant both "empty stomach" and "fasting". Centuries later, we are seeing the word jejune used as a descriptor of feeding habits. In the expression "a jejune diet," (found in texts related to malnutrition or eating disorders), jejune means "lacking in nutrition or without proper nourishment."

But while nowadays jejune does not allude to the jejunum (i.e., small intestine), jejune did stem from the word jejunos, and jejunos apparently was also the parent term to the noun jejunum. Around the time the term jejunum was coined, the small intestine must have been either found empty at autopsies or believed to be void at death - hence its assigned name, synonymous with "empty".

Later on, an interesting semantic spin came about. The word jejunos and the negative prefix dis- came together to create the verb disjejunare or disjunare. Disjunare referred to having a meal to break one's fast, or breakfast. Breakfast in Spanish is desayuno and in French, petit déjeuner (or just déjeuner in Québec). Déjeuner for most of the French-speaking world is the mid-day meal or lunch. From déjeuner evolved (perhaps by being quickly pronounced!) the word di(s)ner, and from it, dîner, used nowadays in French to mean dinner.

So dinner etymologically means breakfast, and both terms are ironically related to jejunum - i.e., the GI portion assumed to be empty. Isn't that a language oddity?


---

Match

1. lues
2. black death
3. ascites
4. consumption
5. nosebleed
6. coroner
7. trismus
8. apothecary
9. comedo
10. coma

a. pharmacy
b. deep sleep
c. blackhead
d. lockjaw
e. epistaxis
f. bubonic plague
g. old name for syphilis
h. old name for tuberculosis
i. accumulation of fluid in abdomen
j. medical examiner

Do your best, then look up the answers on page 37.
CCCS, Inc. is proud to promote its Cross Cultural Communication Institute. The institute provides a safe, fun and supportive learning environment for interpreters, translators and health care providers. As one of the few institutes in Massachusetts to train in multiple languages, we offer introductory, intensive and comprehensive training for:

- Medical and Mental Health Interpreters
- Legal Interpreters
- Health Care Providers and Support Staff
  - Interpreter Trainers
- Emergency First-Responders
- Translators (written translation)

In a comfortable atmosphere, trainees develop critical skills to ensure accurate communication with the non-English speaking and LEP populations they serve and gain new insight on the issues facing today's interpreters and translators.

**Institute: interpreter training**

The Cross Cultural Communication Institute at CCCS offers a variety of programs for legal, medical and mental health interpreters. Training programs are held each spring and fall semester at our training facilities in Winchester, MA. Additionally, the CCCI team of qualified instructors travels nationwide, and each CCCI training program can be easily adapted to the needs of your organization and taught at your site. Here is a sampling of courses currently available at the Institute:

**The Art of Medical Interpretation: 54-hour certificate program**

This program targets interpreters at all levels and fosters an environment that gives each individual a measure of control over the learning process. Training sessions focus on interpreting technique, cultural competency and ethics, mastering medical terminology through the Samurai! method, developing specialized glossaries and increasing memory power. Learning is measured through role-play and interpreter evaluation tools. Language coaches and target language glossaries provided to groups of 3 or more students working in the same language pairs.

**Introduction to The Art of Medical Interpretation:**

24-hour training for bilingual health care support staff

Basic medical interpreting techniques are explained and commonly faced ethical issues are presented in role-plays and case studies. The manual's body system summaries and illustrations expand the reader's understanding of common illnesses, and vocabulary-enriching exercises assist bilingual health care workers to build upon their existing knowledge of English and target language medical terminology. This program is offered as part of a custom training package for health care institutions.

**The Fundamentals of Legal Interpretation 60-hour certificate program**

This program will clarify the legal interpreter's role through the discussion of state and federal guidelines. Students will concentrate on mastering the techniques of legal interpretation and will participate in a series of interpreting-related activities designed to stimulate short-term memory development. Students will also develop English and target language proficiency with concentration on terminology specific to legal matters. Language coaches and target language glossaries provided to groups of 3 or more students working in the same language pairs.

**Advanced Skills for Mental Health Interpreters - 12-hour workshop series**

This 12-hour workshop series features advanced interpreting and culture brokering techniques for mental health settings. Role-plays and lectures will focus on mental status examinations, emergency mental health care and group therapy. Non-language specific workbook and supplementary materials provided. Guest speakers may include clinical psychologists, licensed social workers, and other mental health professionals.

**Institute: training for high school teachers**

A fundamental part of the CCCS mission is to implement
cultural-linguistic services in educational institutions. In
harmony with this purpose, CCCS has developed Teaching
Interpretation: A Training Program for Bilingual Educators,
a three-tier program for training bilingual educators to
teach basic interpretation skills at a high school level.
CCCS works with the educators to develop the backbone of
an interpreter-training curriculum tailored to meet the
needs of their respective student bodies. CCCS recently
contributed to the development of The Health Care
Professional Interpreting Program at Cambridge Rindge
and Latin High School in Cambridge, MA.

Institute: translator training

Coming Soon! New course offerings:
Portuguese <> English Translation: Eliminating the
Barriers
Spanish <> English Translation: Eliminating the Barriers
Three semester certificate programs in written translation.
First semester features an introduction to the basics of
translation. Second semester highlights the fundamentals
of medical translation. Third semester is an introduction to
legal translation. A computer lab is available for group
translation practice.

Institute: provider training

CCCS provides custom training to medical and mental
health providers and health care support staff. CCCS
workshops and half-day or full day seminars can be taken
to your hospital, managed care organization, health center
or clinic, residential treatment program or long-term care
facility. CCCS provider trainings have been held across
Massachusetts and New Hampshire. A sampling of topics
includes:

- Cultural Competency and Medical Interpretation
- Conflict Resolution: A Cross-Cultural Perspective
- Integrating Cultural Understanding in the Medical
  Interview
- Thinking Prevention: A Challenge For Health Care

For more information on interpreter, translator and provider
training, please contact Vanessa Phillips, CCCI Director, at
(781) 729-3736 x.110 or vphillips@cccsorg.com. Visit our
website at www.cccsorg.com!

Minimally Invasive Therapy (MIT)

A consult was recently raised regarding the meaning of
"minimally invasive therapy". It would be simpler to
understand if it was stated more often as "minimally
invasive surgical therapy". It refers to the use of modern
technology to minimize the "invasiveness" of known
and established surgical interventions. "Invasiveness"
means everything the surgical team does that is required
to gain access and ready the area of interest for the
intended surgery. The example most people are
nowadays familiar with is the difference between the
traditional cholecystectomy (removal of the gallbladder)
and the current minimally invasive laparoscopic
cholecystectomy. In the traditional fashion a sizable
incision is made along the right costal margin, all the
intervening muscles of the abdominal are sectioned as
well as the peritoneum, the lining of the abdominal
cavity. Then, surgical retractors are installed to maintain
the surgical field in view. On the way out the surgeons
have to saw up all the layers previously incised and
finally close the primary skin incision. Post op
nasogastric tubes, nothing by mouth and plenty of
narcotic medication is necessary. Back home in 7-10
days if all goes well.

In the minimally invasive laparoscopic fashion the
stomach is insufflated and distended via a needle puncture
with a non-absorbable gas, after which three 1 cm cuts
are made in the abdominal wall through which
endoscopic TV cameras and the surgical instruments
required in the resection of the gallbladder are passed
into the abdominal cavity via air tight cannulas, so that
the insufflated gas does not escape. The panoramic
magnified TV screen view is excellent, much better to
operate on than in an open procedure.

Once the gallbladder is removed or before or both,
cholangiography of the biliary ducts is performed on the
operating table to insure that small stones are not present
or left behind. The abdomen is deflated and 1-2 small
stitches used on the small cuts over which band-aids are
placed. A day later you go home with a video of the
procedure narrated by the surgeon.
ATA 45th Annual Conference
Sheraton Centre Hotel
Toronto, Canada

October 13-16, 2004

Why attend ATA’s 45th Annual Conference?

- OVER 150 EDUCATIONAL SESSIONS that cover topics in a variety of languages and specialties
- EMPLOYMENT OPPORTUNITIES in the Job Marketplace, where freelance translators and interpreters market their services and meet potential employers
- EXHIBITS, EXHIBITS, EXHIBITS featuring the latest publications, software, and services available in the industry
- NETWORKING receptions, division special events, an After Hours Café for literary translators, and the wildly popular Translation Support Tools Forum!

Look for the Registration Form and Preliminary Program with the July issue of The ATA Chronicle

<table>
<thead>
<tr>
<th>Registration Fees</th>
<th>ATA Member</th>
<th>Non Member</th>
<th>Student Member</th>
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Special Hotel Rate for ATA Conference Attendees Available until September 23

<table>
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<tr>
<th>Sheraton Centre Hotel</th>
<th>Single Room:</th>
<th>$165 USD*</th>
<th>$226 CAD</th>
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<tr>
<td>123 Queen Street West</td>
<td>Double Room:</td>
<td>$180 USD*</td>
<td>$246 CAD</td>
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<tr>
<td>Toronto, ON M5H 2M9</td>
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<tr>
<td>Phone: (416) 361-1000</td>
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<td>Fax: (416) 947-4854</td>
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<td><a href="http://www.sheratontoronto.com">www.sheratontoronto.com</a></td>
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* U.S. room rate is based on the exchange rate at time of payment.

Make your reservations before September 23 to take advantage of this special rate. Call (800) 325-3535 and tell them you’re attending the ATA Conference!

American Translators Association
Details on the web at www.atanet.org/conf2004
We will be well represented in Toronto. Here is a breakdown of the annual meeting, medical presentations and a planned reception in conjunction with our colleagues in the Interpreting Division..

Medical Division Annual Meeting Toronto

The Medical Division Annual Meeting during the Toronto Annual Conference will take place as follows:

Thursday October 14, 2004
3:30 pm - 5:00 pm (90 minutes)
(The room has not been assigned as of yet.)

Medical Sessions (Dates and times have not been decided as of yet)

MED-1
Sexually Transmitted Diseases: Know Your Enemies, Olga Lucía Mutis de Serna
Sexually transmitted diseases (STDs) have been around since the dawn of time. Archeologists have found proof of their existence in almost every site they have excavated and in almost every culture they have studied. STDs caused by bacteria or protozoa have been easy to diagnose since the invention of the microscope, and fairly well controlled since the appearance of antibiotics. However, in recent years these diseases have become resistant to certain forms of antibiotics, which makes them more difficult to treat. STDs caused by viruses are more difficult to diagnose, and myths and misconceptions create obstacles to their prevention.

MED-2
Translating for Canada's Research-Based Pharmaceutical Companies: The Translation Group Rx&D, Alain Cote
In Canada, Rx&D (Canada's Research-Based Pharmaceutical Companies) is made up of close to 60 brand-name pharmaceutical companies. About 20 of these companies, with head offices in Toronto or Montreal, have a linguistic services department. For over 20 years, the translators working for those companies have striven, within the Translation Group - Rx&D, to improve French communications in their industry as well as relations among professional translators. They publish a bulletin, meet regularly to exchange information on various topics, and formulate recommendations to standardize terminology. This is an update on their progress and the challenges they face.

MED-3
Medical Division Annual Meeting, Martine Dougé

MED-4
The Role of the Medical Interpreter: Visible or Invisible, Claudia V. Angelelli
The role of the medical interpreter is a highly contested construct. The presenter will report on a quantitative and qualitative study of the interpersonal role of interpreters in a hospital setting. This study describes the perceptions interpreters have about their behaviors in terms of: 1) alignment with the parties involved; 2) establishing trust by
facilitating mutual respect between the parties; 3) communicating affect as well as message; 4) explaining cultural
gaps/interpreting culture as well as language; and 5) establishing communication rules during the conversation. The
study also discusses interpreters' perceptions of their actual behaviors during practice through discourse analysis of
transcripts and interviews.

MED-5
If You Know Diabetes, You Know Medicine, Richard S. Lane
This presentation will introduce the facts of Diabetes Mellitus to non-medical personnel who may work as medical
translators or medical interpreters. While there will be a glossary of pertinent, diabetes-related medical terms, the
session's emphasis will be on teaching aspects of diabetes using both didactic and experiential techniques. Topics will
include: the current epidemiology of diabetes (How common is it and who is at risk for getting it?); the sequelae of
diabetes, including metabolic problems (diabetic keto-acidosis), circulation problems (hardening of the arteries), and
nervous function problems; and a review of current treatment plans, including new rapid acting insulins, basal insulins,
the use of oral agents, diet control, recognition and treatment of hypoglycemia, and the future of both medical treatment
diagnostic technology.

MED-6
Coronary Heart Disease: Death American Style, Rafael A. Rivera MD, FACP
Coronary Heart Disease (CHD) is the most common form of heart disease and the leading cause of death for Americans.
About 12-13 million Americans suffer from CHD, which results in over one million heart attacks a year, half of which
are fatal. The underlying process of atherosclerosis (the build up of plaque and fatty substances) that ultimately blocks
coronary vessels is already silently present early in life. What are the risk factors for overt disease? How early can the
disease be detected? What are the symptoms and how do they differ in men and women? What is the rationale for
treatment and, most importantly, how effective is it in preventing future problems? Surgical interventions of various
kinds will be discussed. Curious instances of a higher or lower incidence of CHD will be discussed, as well as the most
recent attempts at reducing already established plaque.

MED-7
California Healthcare Interpreting Association Organizational Language Access Assessment Tool: Helping
Healthcare Facilities Improve Their Services to Limited English Proficiency Populations, Katharine Allen
The California Healthcare Interpreting Association and Molina Healthcare, Inc. developed an Organizational Assessment
Tool for Linguistic Access, a "how-to" guide for assessing a healthcare facility's current linguistic access services and
creating recommendations for their improvement. The tool includes a four-phase assessment process for: 1) improving
compliance with legislation governing language access in healthcare; 2) reducing the cost of Limited English Proficiency
patient services through improved service delivery and patient outcomes; 3) improving access to healthcare services; and
4) reducing risk in service provision. This session details the tool and pilot program, and identifies elements to improve
language access services in distinct healthcare settings.

MED-8
Culture Crash: Understanding the Experiences of New Immigrant Communities in the U.S. Biomedical System,
Amy J. Wade
Political unrest has forced many peoples from the Nuer tribe of Sudan to immigrate to the U.S. This presentation
discusses some of the historical and cultural factors that shape the healthcare beliefs and practices of the Nuer, how these
beliefs and practices directly conflict with those of the U.S. biomedical system, and how a skilled interpreter plays a
crucial role in finding common ground. The audience will be encouraged to share their own experiences working with
different immigrant communities in healthcare settings, the challenges they have encountered, and the strategies they
have used to overcome these barriers.
MED-9
Beneath the Tip of the Interpreting Iceberg: Cultural Competence, Janet M. Erickson-Johnson
The all-too-widespread belief that any bilingual individual can interpret has led to an overemphasis on linguistic skills as the most important tool for healthcare interpreters. Without diminishing the importance of ensuring accuracy and completeness through linguistic proficiency and interpreting skill, this presentation will debunk that notion and elaborate on why cultural competency is the essential basis for effective healthcare interpreting and how entry-level interpreters can learn the crucial skills of culture brokering. The presentation will also provide attendees with information about how training, such as Language Line University's Advanced Medical Training, can help interpreters become more culturally competent.

MED-10
Medical and Pharmaceutical Industry in Canada: A French Translator's Perspective, Jacques Roland
This presentation will review the medical and pharmaceutical translation industry in Canada, including professional resources and client expectations.

MED-11
Translating Psychiatric Texts, Maria Rosdolsky
This presentation will summarize the history of psychiatry and psychiatric terminology, as well as changes in psychiatric terminology with an emphasis on recent years. Topics will include a brief description of the structure and content of the Diagnostic and Statistical Manual of Mental Disorders, the types of psychiatric texts with which a translator may be confronted, and the problems the translator will encounter when translating poorly written psychiatric material. Cultural differences in the symptomatology and terminology of psychiatric diseases and treatments, as well as their impact on translation, will also be discussed.

Day of Medicine 2004
The Day of Medicine this year will not be, as it was last year, a full day of Medical Division presentations followed by an evening session sponsored by ATA. It will consist of three lectures in succession - Med 4, Med 5 and Med 6 - which correspond to the wishes expressed by the membership in previous planning conversations in our listserv.

Impressions From Toronto

All members of the Medical Division who are attending the Annual Conference are invited to write down their impressions and commentaries - short or long - of the various activities during the Conference, be they presentations, receptions, meetings or simply personal impressions or interactions with other members. Send them in for publication in our next newsletter under Impressions From Toronto.
American Translators Association

ANNUAL CONFERENCE

Division Reception

Co-hosted by ATA's Medical and Interpreters Divisions

Medical and Interpreters Divisions Reception
Friday, October 15, Friday, 6-7:30 pm
Conference Hotel

Network with your fellow division members over hors d'oeuvres, including:
- Imported and domestic cheese selection with French bread
- Fresh fruit and vegetable crudité
- Whole wheat pitas filled with crab salad
- Enoki mushrooms and zucchini in seaweed roll-ups
- Vegetarian spring rolls with a plum dipping sauce
- Chili lime marinated chicken skewers

Ticket required. See the Conference Registration Form to attend.
The Doctor is InSide

Implantable sensors of all kinds are slowly finding their way into the human body. We are already familiar with the cardiac pacemakers and defibrillators which patients "carry with them everywhere they go". In the works are: implantable insulin pumps with glucose monitors attached; brain monitors that can warn of oncoming seizures and even heart monitors that can detect when a coronary plaque is becoming unstable and could cause a heart attack. In order to be of further value automated data transmission devices built into the pacemakers and defibrillators can send the data to a secure website for doctors who can review the data even after the implanted devices have responded to the emergency, verify accuracy and take further action as appropriate.

Support your Division!

FOR SALE

Attractive polo shirts embroidered with the Medical Division logo in the front and the ATA logo on the sleeve. Get one along with a Medical Division bookmark

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Send check or money order to:
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Alexandria, VA 22314

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Answers

Scrabble

Across
1. anemia
2. atheromatosis
10. ALS
11. strap

Vertical
1. ablation
2. stent
3. coronary
4. amaurosis
5. colonic
6. trisomy
7. coma
8. gafas
9. Pap

Match
1. g
2. f
3. i
4. h
5. e
6. j
7. d
8. a
9. c
10. b

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