MERCURY
FLORIDA PASSES BILL
ALTERNATIVE/COMPLIMENTARY
HEALTH CARE ALLOWED

On 30 May 2001, Florida Governor Jeb Bush signed into law a “Patients’ Freedom of Choice” bill, in spite of strong opposition from the Florida Dental Association. The Florida House and Senate passed their respective bills almost unanimously. Some key points of the law are:

“SB1324 is an act relating to health care; creating s. 456.41, F.S.; authorizing provision of and access to complementary or alternative health-care treatments; requiring patients to be provided with certain information regarding such treatments; requiring the keeping of certain records; providing effect on the practice acts; amending s. 381.026, F.S.; revising the Florida Patient’s Bill of Rights and Responsibilities to include the right to access any mode of treatment the patient or the patient’s health-care practitioner believes is in the patient’s best interests; and providing an effective date.”

(1) Legislative Intent - It is the intent of the Legislature that citizens be able to make informed choices for any type of health care they deem to be an effective option for treating human disease, pain, injury, deformity or other physical or mental condition. It is the intent of the Legislature that citizens be able to choose from all health-care options, including the prevailing or conventional treatment methods, as well as other treatments designed to complement or substitute for the prevailing conventional treatment methods. It is the intent of the Legislature that health-care practitioners be able to offer complementary or alternative health-care treatments with the same requirements, provisions and liabilities as those
associated with the prevailing or conventional treatment methods."

**BP Comment:** This is obviously a bill of huge importance. The intent is to clearly open the doors for non-mainstream health care, providing patients with options under the law! However, as we shall soon see, this does not provide carte blanche to anything you wish and place non-mainstream practitioners above the law.

In dentistry, support for the use of mercury fillings and water fluoridation have been the "prevailing or conventional" positions of the main stream. Now, Florida Law permits providing patients with alternative approaches to dental treatment. Again, providing patients with valid documentation to support the dental treatment recommended is crucial.

"(3) Communication of Treatment Alternatives - A health-care practitioner who offers to provide a patient with a complementary or alternative health-care treatment must inform the patient of the nature of the treatment and must explain the benefits and risks associated with the treatment to the extent necessary for the patient to make an informed and prudent decision regarding such treatment."

**BP Comment:** Here, the Legislature attempts to protect the patient from ill-advised treatment. The patient would do well to remember the IAOMT motto: "Show me your science (documentation)." Of particular concern, might be the need to provide some documentation on the safety of the non-mainstream treatment for use in humans. The practitioner must still consider the implications of potential need to defend the treatment legally.

"(3a) The health-care practitioner must inform the patient of the practitioner’s education, experience and credentials in relation to the complementary or alternative health-care treatment option."

**BP Comment:** Here is where members of the IAOMT, and especially those who have gone through the Accreditation Program, have an advantage. IAOMT has worked hard and long to achieve credibility and, increasingly, patients are aware of this.

"(3c) The health-care practitioner may, in his or her discretion and without restriction, recommend any mode of treatment that is, in his or her judgement, in the best interests of the patient, including complementary or alternative health-care treatments, in accordance with the provisions of his or her license."

**BP Comment:** This is a key provision of the new law. It clearly establishes the practitioners right to recommend procedures not in the dental main stream.

For example, after providing the patient with the valid documentation demonstrating transfer of mercury from amalgam fillings into body tissues, the doctor should be able to recommend elimination of this chronic exposure to a very toxic element. This is contrary to the position of the dental main stream, enforced through the dental boards, that the dentist cannot recommend removal of amalgam fillings for the sole purpose of eliminating exposure to a toxic material. Still, in the absence of strong published documentation, the practitioner should not claim that removal of the amalgam fillings will cure any particular disease condition.

"(4) Records - every health-care practitioner providing a patient with a complementary or alternative health-care treatment must indicate in the patient’s care record the method by which the requirements of subsection (3) were met."

**BP Comment:** Here again, in these sections the Legislature tries to ensure protection of the patient from unscrupulous practitioners.

"(5) Effect - This section does not modify or change the scope of practice of any licensees of the department, nor does it alter in any way the provisions of the individual practice acts for those licensees, which require licensees to
practice within their respective standards of care and which prohibit fraud and exploitation of patients."

BP Comment: The use of the phrase “standards of care” is very interesting, and provides some food for thought. The standard of care in mainstream dentistry is to support the use of mercury fillings and fluoridated water. Most non-mainstream dentists oppose these two items.

In the judging of non-mainstream dentists, whose standard of care will be used? In effect, SB1324 allows dentists to depart from the mainstream standard of care. At some point, there will be the need to depend on a reliable, defensible standard of care representing the alternatives to mainstream dentistry. Establishing these reliable standards has long been the goal of the International Academy of Oral Medicine and Toxicology (IAOMT).

“Rights of Patients - Each health care facility or provider shall observe the following standards: 3. A patient has the right to access any mode of treatment that is, in his or her judgment and the judgment of his or her health care practitioner, in the best interests of the patient, including complementary or alternative health care treatments, in accordance with the provisions of s. 456.41.”

BP Comment: Finally! A state legislature has provided patients, and health care providers, with true “Freedom of Choice.” Many thanks to “Citizens for Health Freedom” and its Executive Director Bob Napoli. Your efforts, and success, are greatly appreciated.

[For more details, visit the web site: www.healthlobby.com/news2.html#Florida]

Florida Dental Association: In a letter dated 25 May 2001, the President of the Florida Dental Association, Richard Chichetti, DMD, sent the following excerpt comments to Florida Governor Jeb Bush [From “Today’s FDA, July 2001]:

“RE: Opposition to SB1324. Dear Gov. Bush:

On behalf of the Florida Dental Association and its membership of more than 6,500 Florida-licensed dentists, I respectfully request that you veto SB1324 by Sen. Durell Peaden. SB1324 creates Section 456.41, F.S., which authorizes licensed health-care practitioners, in their discretion and without restriction, to recommend any mode of treatment that is, in their judgment, in the best interest of the patient.

The FDA has serious concerns about the negative public safety implications with the enactment of this legislation. We have concerns this will cloud the patient-doctor relationship and create a false sense of security that the patient is being informed on safe health-care practices. The potential for serious patient harm is implicit and will confound the regulatory process in enforcing existing standards.

The FDA encourages developing and using new methods for treating oral diseases and conditions. However, the effect of such new options should be based on valid, scientific evidence before being introduced to the public as a legitimate treatment alternative.... The use of alternative or complementary treatments that have no scientific basis exposes Florida’s patients to potential fraud and exploitation.”

BP Comment: Here is the announcement that any continued attack by the main stream dental establishment will be based on Florida laws covering false, fraudulent or misleading information to encourage treatment. This is why we recommend providing the patient, in advance, with sound documentation of at least the safety of the treatment.

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California Dental Board

As an addendum to the last newsletter (Vol. 17, #4, July 2001), we reported on California SB26 which, among other things, called for immediate dissolving of the California Dental Board. The
bill cited that the Board failed to administer and implement provisions of the California Dental Practice Act in an effective, efficient, and timely manner, and set an "urgency" date of 1 July 2001 for enactment. The bill had passed the California Senate (27-10), the Assembly Health Committee (11-0), the Assembly Appropriations Committee (20-1), and the Assembly itself. However, as of 10 September 2001, California Governor Gray Davis has NOT signed the bill! At the present time, the current California Dental Board is still functioning. The existing date for replacement of Board members with expiring terms is 1 July 2002. There is another bill (SB 134) in progress that would accelerate that process and create a new Board on 1 January 2002. As of 10 September 2001, the bill was still in Senate Committee.

We can only hope that wisdom and concern will prevail, allowing the appointment of biological dentists to the Board either in January or July of 2002. It might be noted that last year, two members of the IAOMT had applied for seats on the California Board. Neither was accepted by Governor Gray Davis.

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SCIENCE

A Multicenter Study of Patch Test Reactions With Dental Screening Series.

Lanerva, I; Rantanen, T; Aalto-Korte, K; Estander, T; Hannuksela, M; Harvima, R; Hasan, T; Harsmanheimo; M; Jalanki, R; Kalimo, K; Lahti, A; Lammintausta, K; Lauerma, A; Niimimaki, A; Turjannaa, K; Vuorela, A-M.


ABSTRACT: Background: Dental products contain many allergens, and may cause problems both for patients undergoing dental treatment and for dental personnel because of occupational exposure. Individual patch test clinics may not study sufficient numbers of patients to collect reliable data on uncommon allergens.

Objective: To collect information on dental allergens based on a multicenter study.

Materials and Methods: The Finnish Contact Dermatitis Group tested more than 4,000 patients (for most allergens, 2,300 to 2,600 patients) with dental screening series. Conventional patch testing was performed. The total number and percentage of irritant (scored as irritant [IR] or doubtful [?]) and allergic (scored as +, ++, or ++++) patch test reactions, respectively, were calculated, as well as the highest and lowest percentage of allergic patch test reactions recorded by the different patch test clinics. A reaction index [RI] was calculated, giving information on the irritancy of the patch test substance.

Results: The most frequent allergic patch test reactions were caused by nickel (14.6%), ammoniated mercury (13%), mercury (10.3%), gold (7.7%), benzoic acid (4.3%), palladium (4.2%) and cobalt (4.1%). 2-hydroxyethyl methacrylate (2.8%) provoked most of the reactions caused by (meth)acrylates. Menthol, peppermint oil, ammonium tetrachloroplatinate, and amalgam alloying metals provoked no (neither allergic nor irritant) patch test reactions.

Conclusion: Patch testing with allergens in the dental screening series, including methacrylates and mercury, needs to be performed to detect contact allergy to dental products.

BP Comment: The study also found allergic reaction percentages for: Mercury chloride (8.9%), Thiomersal (4.8%), and amalgam itself (1.1%). Further the Reaction Index (RI) as irritants for the various materials were: Mercury (137), mercury chloride (53), ammoniated mercury (31), Thiomersal (25), and amalgam (10).

This is yet another study contradicting the claim of organized dentistry that "hypersensitivity (allergy)" to dental mercury is "very rare" or even "one in a million."

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Use of Inductively Coupled Plasma-Emission Spectroscopy and Mercury Vapor Analyses to Evaluate Elemental Release From a High-Copper Dental Amalgam: A Pilot Study.

Cohen, BI; Penugonda, B.

ABSTRACT: **Statement of Problem:** The use of dental amalgam as a direct restorative material has been a subject of controversy for many years. The potential safety of amalgam has been questioned because of leakage of elements such as mercury, copper, tin, and silver.

**Purpose:** This study evaluated the elemental leaching from Tytin dental amalgam placed in deionized water for 2 months. Both mercury vapor and elemental (silver, copper, tin, and mercury) analyses were performed.

**Materials and Methods:** Two capsules of Tytin amalgam were triturated (one for the precipitate and liquid analysis, and the other for the mercury vapor analysis) and stored in a polypropylene tube with 10mL deionized water for 60 days at room temperature. The amalgam pellet then was removed and rinsed with deionized water. The resulting liquid was separated from a precipitate, and 2 separate analyses were run; one on the liquid without any precipitate and another on the precipitate. Elemental analyses for copper (Cu), tin (Sn), mercury (Hg), and silver (Ag) were determined by inductively coupled plasma-emission spectroscopy with a Perkin-Elmer P2000 spectrometer. Mercury vapor analyses were performed daily for 60 days with a Jerome 431-X vapor analyzer.

**Results:** The maximum amount of copper (80 microg), silver (2.6 microg), mercury (15 microg), and tin (550 microg) was found in the precipitate. The maximum amount of mercury vapor released was 67 microg/m(3)/d.

**Conclusion:** Under the conditions of this in vitro study, there was a significant amount of elemental leaching and mercury vapor release from the Tytin amalgam over a 60-day period.

**BP Comment:** Many dentists are still telling patients that dental amalgam is a stable material that does not release mercury. Currently, even the ADA web site states: "It (dental amalgam) contains a mixture of metals such as silver, copper and tin, in addition to mercury, which chemically binds these components into a hard, stable and safe substance."

[www.ada.org/prof/prac/issues/statements/amalgam.html]

In view of the tremendous number of published studies demonstrating a high release of mercury, these dentists and the ADA are taking a big risk with their statements.

Further, the amount of mercury vapor alone released in this study far exceeds even government established occupational (40 hours per week for healthy adult males) standards, let alone standards for the general population.

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**Dental Amalgam Fillings and the Amount of Organic Mercury in Human Saliva.**

Leistevuo, J; Leistevuo, T; Helenius, H; Pyy, L; Osterblad, M; Huovinen, P; Tenovuo, J.


**ABSTRACT:** We studied differences in the amounts of organic and inorganic mercury in saliva samples between amalgam and non-amalgam human study groups. The amount of organic and inorganic mercury in whole saliva was measured in 187 adult study subjects. The mercury contents were determined by cold-vapor atomic absorption spectrometry.

The amount of organic and inorganic mercury in paraffin-stimulated saliva was significantly higher (p<0.001) in subjects with dental amalgam fillings (n=88) compared to the non-amalgam study groups (n= 43 and n= 56); log (e) (organic mercury) was linearly related to log (e) (inorganic mercury, r (2)= 0.52). Spearman correlation coefficients of inorganic and organic mercury concentrations with the number of amalgam-filled tooth surfaces were 0.46 and 0.27, respectively.

Our results are compatible with the hypothesis that amalgam fillings may be a continuous source of organic mercury, which is more toxic than inorganic mercury, and almost completely absorbed by the human intestine.

**BP Comment:** This is a very important study, as the contribution of dental amalgam to human exposure to organic mercury has been very controversial.

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**Association of Silicofluoride Treated Water With Elevated Blood Lead.**

Masters, RD; Coplan, MJ; Hone, BT; Dykes, J


**ABSTRACT:** Previous epidemiological studies have associated silicofluoride-treated community water
with enhanced child blood lead parameters. Chronic, low-level dosage of silico-fluoride (SiF) has never been adequately tested for health effects in humans. We report here on a statistical study of 151,225 venous blood lead (VBL) tests taken from children ages 0-6 inclusive, living in 105 communities of populations from 15,000 to 75,000. The tests are part of a sample collected by the New York State Department of Children’s Health, mostly from 1994-1998. Community fluoridation status was determined from the CDC 1992 Fluoridation Census. Covariates were assigned to each community using the 1990 U.S. Census. Blood lead measures were divided into groups based on race and age. Logistic regressions were carried out for each race/age group, as well as above and below the median of 7 covariates to test the relationship between known risk factors for lead uptake, exposure to SiF-treated water, and VBL > 10 microg/dl.

Results: For every age/race group, there was a consistently significant association of SiF treated community water and elevated blood lead. Logistic regressions above and below the median value of seven covariates show an effect of silicofluoride on blood lead independent of these covariates. The highest likelihood of children having VBL > 10 microg/dl occurs when they are both exposed to SiF treated water and likely to be subject to another risk factor known to be associated with high blood lead (e.g., old housing). Results are consistent with prior analyses of surveys of children’s blood lead in Massachusetts and NHANES III. These data contradict the null hypothesis that there is no difference between the toxic effects of SiF and sodium fluoride, pointing to the need for chemical studies and comprehensive animal testing of water treated with commercial grade silicofluorides.

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Fluoride Deposition in the Aged Human Pineal Gland.

Luke, J.
ABSTRACT: The purpose was to discover whether fluoride (F) accumulates in the aged human pineal gland. The aims were to determine (a) F-concentrations of the pineal gland (wet), corresponding muscle (wet) and bone (ash); (b) calcium-concentration of the pineal.

Pineal, muscle and bone were dissected from 11 aged cadavers and assayed for F using HMDS- facilitated diffusion, F-ion-specific electrode method. Pineal calcium was determined using atomic absorption spectroscopy.

Pineal and muscle contained 297 +/- 257 and 0.5 +/- 0.4 mg F/kg wet weight, respectively; bone contained 2,037 +/- 1,095 mg F/kg ash weight. The pineal contained 16,000 +/- 11,070 mg Ca/kg wet weight. There was a positive correlation between pineal F and pineal Ca (r = 0.73, p < 0.02) but no correlation between pineal F and bone F. By old age, the pineal gland has readily accumulated F and its F/Ca ratio is higher than bone.

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Mortality from Cardiovascular Diseases and Exposure to Inorganic Mercury.

Boffetta, P; Sallsten, G; Garcia-Bornes, M; Pompe-Kirm, V; Zardze, D; Bulbalyan, M; Cabellero, J; Ceccarelli, F; Kobal, A; Merler, E. Occup Environ Med., 58(7):461-6, Jul 2001.
ABSTRACT: Objective: To study the mortality from cardiovascular and other chronic non-neoplastic disease after long term exposure to inorganic mercury. Limited information is available on the effect of chronic exposure to mercury on the cardiovascular system.

Methods: The mortality was studied among 6784 male and 265 female workers from four mercury mines and mills in Spain, Slovenia, Italy, and the Ukraine. Workers were employed between 1900 and 1990; the follow up period lasted from the 1950s to the 1990s. The mortality of the workers was compared with national reference rates.

Results: Among men, there was a slight increase in overall mortality (standardized mortality ration [SMR] 1.08, 95% confidence interval [95% CI] 1.04 to 1.12). An increased mortality was found from hypertension (SMR 1.46, 95% CI 1.08 to 1.93), heart disease other than ischaemic (SMR 1.36, 95% CI 1.20 to 1.53), pneumoconiosis (SMR 27.1, 95% CI 23.1 to 31.6), and nephritis and nephrosis (SMR 1.55, 95% CI 1/13 to 2.06).
The increase in mortality from cardiovascular diseases was not consistent among countries. Mortality from hypertension and other heart diseases increased with estimated cumulative exposure to mercury; mortality from ischaemic heart disease and cerebrovascular diseases increased with duration of employment, but not with estimated exposure to mercury. Results among women were hampered by few deaths.

Conclusion: Despite limited quantitative data on exposure, possible confounding, and likely misclassification of disease, the study suggests a possible association between employment in mercury mining and refining and risk in some groups of cardiovascular diseases.

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Trace element Distribution In Heart Tissue Sections Studied by Nuclear Microscopy Is Changed on Coxsackie Virus B3 Myocarditis in Methyl Mercury-Exposed Mice.

Ilback, NG; Lindh, U; Wesslen, L; Fohlman, J; Friman, G.


ABSTRACT: Methyl mercury (MeHg) has been shown to change Coxsackie virus type B3 (CB3) myocarditis in a direction compatible with the development of chronic disease. Murine models of CB3 myocarditis closely mimic the pathogenesis in humans. There are also indications that metals, such as mercury, and trace elements may interact and adversely affect viral replication and development of inflammatory lesions.

The effects of low-dose MeHg exposure on myocardial trace element distribution, as determined by means of nuclear microscopy, was studied in CB3 myocarditis. Balb/c mice were fed a MeHg-containing diet (3.9 mg/kg diet) for 12 wk prior to infection. Areas of inflammatory lesions in the myocardium were identified by traditional histologic examination, and serial tissue sections in these selected areas were used for immune histology (macrophages), in situ hybridization of virus genomes, and nuclear microscopy of tissue trace element distribution. Areas with no inflammation or virus were compared with areas of ongoing inflammation and viral replication.

In the inflammatory lesions of MeHg-exposed mice as compared to nonexposed mice, the myocardial content of calcium (Ca), manganese (Mn), and iron (Fe) were significantly increased, whereas the zinc (Zn) content was decreased. The increased Ca and decreased Zn contents in the inflamed heart may partly explain a more severe disease in Me-Hg-exposed individuals.

Although not significant in the present study, with a limited number of mice, the inflammatory and necrotic lesions in the ventricular myocardium on day 7 of infection was increased by 50% (from 2.2% to 3.3% of the tissue section area) in MeHg-exposed mice and, also, there was a tendency of increased persistence of virus with MeHg exposure. No increased MeHg uptake, either in the inflammatory lesions or in the areas of noninflamed heart tissue in infected mice, could be detected.

The present results indicate that a "competition" exists between potentially toxic heavy metals from the environment/diet and important trace elements in the body and that a disturbed trace element balance adversely influences the development of pathophysiologic changes in inflammatory heart disease.

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FORUM

IAOMT 2002 MID-YEAR MEETING

Date: Friday-Saturday, 5-6 April 2002.

Site: Orlando, Florida.


Meeting Registration: IAOMT, P.O. Box 608531, Orlando, FL. 32860-8531. T: 407-298-2450; F: 407-298-3075. Registration (U.S.): Members: $445, non-members: $545; spouses/staff with registrant: $175 each. Includes continental breakfast and lunch on Friday and Saturday. Cancellation fee after 1 September: 10%.

Welcome Reception (Cash bar): Thursday, 4 April 2002, 7:30-10:00 pm.

Program: Stephanie F. Cave, MD: "Clinical Aspects of Mercury Toxicity in All Ages." Richard Chanin,

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IAOMT 2002 ANNUAL MEETING

Date: Thurs.-Sat., 26-28 September 2002.
Site: Calgary, Alberta, Canada.
Hotel: Hyatt Regency Calgary, 700 Centre Street South, Calgary, Alberta, T2G 5P6, Canada. T: 403-717-1234; F: 403-262-3490. Specify IAOMT. Room rate/night (Canadian): $205-275; Suites: $400-$1000. Deadline for IAOMT block: 26 August 2002!
Meeting Registration: IAOMT, P.O. Box 608531, Orlando, FL 32860-8531. T: 407-298-4375; F: 407-298-3075. Registration (U.S.) to be announced.
Program: To be announced.

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Biocompatible Periodontal Therapy Seminar
Sponsored by IAOMT

Date: Friday (8 am-5 pm)-Saturday (8 am - noon), 5-6 October 2001.
Site: Seattle, Washington.
Hotel: Radisson Hotel, Seattle Airport, 17001 Pacific Highway, South, Seattle, WA 98188. 206-244-6000. Book early, limited room block; $109/s, $119/d.
Meeting Registration: Send to: BPT c/o IAOMT, PO Box 608531, Orlando, FL 32860-8531. One attendee: $325, Additional attendee from same office: $125. Includes continental breakfast both days and lunch on Friday.
Program: This day and a half seminar with Dr. Thomas Baldwin, DDS, MAGD, Chair of the Periodontal Committee, IAOMT and Editor of Non-Surgical Periodontics Newsletter (NSP) takes a hands-on approach to learning with specific emphasis on Step-by-Step case presentations;

Microbial Assessment Techniques; Natural Herbal & Essential Oil alternatives; Nutrition, Prevention & Patient Management. Learn how to diagnose and treat the actual infections that cause periodontal disease instead of just treating the symptoms while your patients continue to lose attachment.

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Institute of Integrated Medicine
2002 Caribbean Medical Cruise
For Complimentary/Alternative Therapies

Date: 3-10 February 2002.
Site: Ft. Lauderdale, FL to Princess Cays, Grand Cayman, Costa Maya, Cozumel.
Hotel: Princess Cruise Lines Flagship.
Program: Russell Blaylock, MD; Eugene Charles, DC; Carolyn Dean, MD; Ward Dean, MD, Pam Floener, PT, RMA, CNC, CT; Mitchell Ghen, MD; Garry Gordon, MD; Boyd Haley, PhD; Rochelle Herdman, MD; Gunnar Heuser, MD; Russel Jaffe, MD; G. Blair Lamb, MD; James LaValle, BscPhm; Alan Miller, ND; Margaret Mullins, MD; Richard Huemer, MD; Steven Sinatra, MD; Bern Worsclager, MD; JoAnne Whitaker, MD; Tony McRedmond, DDS; plus many Elective Program presenters. [Contact Pam Floener (above) for detailed program.]

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National Dental Seminar in Homeopathy

Date: 12-14 October 2001.
Site: Schaumburg, IL.
Meeting Registration: NDS in Homeopathy, P.O. Box 123, Marengo, IL 60152-0123. T: 815-568-5222; F: 815-568-742. Rates for Basic Course, Advanced Course, and for Accompanying Spouses, Auxiliaries.
Faculty: Craig Zunka, DDS; Phil Parsons, DDS; Daniel Dieska, DDS; Jack Beltiz, DDS; Charles Martinez, DDS; Harris Kimbrough, DDS.