#### **Background:**

Born – August 16, 1924 – Madison, Wisconsin Married – 9 Children Nationality – Scotch, English, German Religion – Christian – 1963

#### **Civic Activities:**

Councilman – Maple Bluff, Wisconsin – 1955-1959 Senior Warden – Grace Episcopal Church – 1963-1965 Commodore – Mendota Yacht Club – 1965-1967 Founder and President – Christ the King Home for Boys and Girls – 1967-1974 President – Wisconsin Ballet Company – 1968-1973 Commissioner – Madison Civic Center – 1975-1978

#### **Education:**

Madison Public Schools University of Wisconsin, BSMD – 1945 Northwestern University, MD – 1946 Northwestern University, 16 credits M.S. – Pathology

#### Training:

Internship – Cook County Hospital, January 1947 – December 1947 Surgical Residency – Jackson Clinic – Wisconsin, January 1948 – July 1948 Surgical Residence – Cook County Hospital, 1948-1951

#### Practice:

Surgical Group, 1951-1976 Breast Cancer Detection Center, 1971 – Present

#### **Military Service:**

U.S.N.R – Ensign, 1943 – 1948 – Honorable Discharge U.S. Army – Captain, 1952 – 1954 – Honorable Discharge Assistant Chief Thoracic Surgery, U.S.A.H., Fort Carson, Colorado

#### **Teaching Position:**

Assistant Clinical Professor, University of Wisconsin, 1957 – 1968

#### **Hospital Appointment:**

Staff – Surgical, Madison General Hospital – 1951-1969 Staff – Surgical, Methodist Hospital – 1965-1975

#### **Consulting Surgeon:**

Watertown General Hospital	1958-1976
Beaver Dam Hospital	1955-1976
Ft. Atkinson Memorial Hospital	1958-1980
Darlington Memorial Hospital	1964-1976

#### **Board Certification:**

Diplomat, American Board of Surgery – 1954

#### Medical Societies:

Founder of Junior Member International College of Surgeons - 1951 Fellow of American College of Surgeons – 1953-1980 Fellow of International College of Surgeons – 1953 Cook County Hospital Alumni Association – 1961 Member – Wisconsin Chapter of American College of Surgeons – 1969 Founder, Karl Meyer Surgical Society – 1971 Christian Medical Society – 1972 American Thermographic Society - 1972 European Thermographic Society - 1972 International Health Evaluation Association – 1974 Club Francais De Telethermographie Clinique - 1976 International Society of Senology - 1976 Canadian Thermographic Society - 1976 International Thermology Society - 1979 New York Academy of Science - 1979 International Society for the Study of Pain - 1981 Liquid Crystal Contact Thermography Society of the Breast, Inc. – 1982 American Pain Society - 1982 Midwest Pain Society - 1982 Elected as alternate delegate – Christian Medical Society – 1982 Liquid Crystal Contact Thermography Society of the Spine & Extremities - 1983 Chilean Mastology Society - 1984 Latin America Thermography Society - 1984 Elected Honorary Fellow – American Academy of Thermology – 1984 Elected Honorary Member – Japanese Thermographic Society – 1985 Member – Academy of Neuro-Muscular Thermography – 1985 Member – American Back Society – 1986 Member – The American Society of Regional Anesthesia – 1987

Member-at-Large – American Academy of Thermology - 1988 President – American Herschel Society Member – American Academy of Pain Medicine

#### Medical Organizations:

President – Dana County Chapter of American Cancer Society – 1962-1965 Chairman – Dane County Chapter of American Cancer Society – 1965-1968 Founder – Madison General Hospital, Medical-Surgical Foundation Secretary – 1959-1969 President – Madison Breast Cancer Detection Center – 1973 Founder & President – Wisconsin Breast Cancer Detection Foundation – 1976 Secretary/Treasurer – Karl A. Meyer Surgical Society – 1976 Director – Thermal Image Analysis, Inc. – 1979 Director – Madison Pain Diagnostic Clinic – 1980 Director – Liquid Crystal Contact Thermography Society of the Breast – 1982 Technical Consultant – California Thermographic Society – 1986 Board of Directors – American College of Thermography – 1989

#### **Medical Publications:**

W.B. Hobbins, L. Aires, "Incarcerated Diaphramatic Hernia," <u>Journal of International College of Surgeons</u>, April, 1952.

A. Vaughn, W.B. Hobbins, "Spontaneous Pancreatic Abdominal Wall Fistula," <u>Illinois Medical Journal</u>, June, 1953.

W.B. Hobbins, "Thermography in General Surgery Practice," Proceedings, American Thermographic Society, AGA, 1973.

W.B. Hobbins, "What Is a Day of Life Worth?" RN Magazine, April, 1975.

W.B. Hobbins, "Mass Breast: Cancer Screening with Thermography," <u>Applied Radiology</u>, November-December, 1986.

W.B. Hobbins, "Experiences with Thermographic Breast Cancer Screening in the State of Wisconsin," Proceedings, Breast Disease in Gynecological and Medical Primary Care Practice, pp. 267-281, April, 1977.

W.B. Hobbins, "Thermography, Highest Risk Marker in Breast Cancer," Proceedings, Gynecological Society for the Study of Breast Disease, pp. 267-282; 59, 1977.

W.B. Hobbins, "Who Has Breast Cancer? Let's Find Out," Clinical Medical, December, 1977.

W.B. Hobbins, "Mobile Mass Breast Cancer Screening; Thermography: Highest Risk Marker," <u>Medical</u> <u>Thermography</u>, European Press, Ghent, Belgium, pp. 61-67, 1978.

W.B. Hobbins, "Thermography and Pain," <u>Medical Thermography</u>, European Press, Ghent, Belgium, pp. 273-274, 1978.

# Curriculum Vitae – William B. Hobbins, M.D.

W.B. Hobbins, "Thermography and Assessment of Breast Cancer," (letter), JAMA, 242:2761, 1979.

W.B. Hobbins, B.J. King, "Report of Thermographic Breast Biopsy Correlation," <u>ACTA Thermographica</u>, Vol. 5, No. 1, pp. 43-45, 1980.

W.B. Hobbins, "Comparison of Telethermography and Contact Thermography in Breast Thermal Examinations," <u>ACTA Thermographica</u>, Vol. 5, No. 1, pp. 51-53, 1980.

W.B. Hobbins, "Significance of an 'Isolated' Abnormal Colorgram," <u>La Nouvelle Presse Medicale</u>, Vol. 10, No. 38, pp. 3153-3155, 1981.

W.B. Hobbins, "The Physiology of the Breast by Cholesteric Plate Analysis," in Gordon F. Schwartz and Douglas Marchant (eds), <u>Breast Disease Diagnosis and Treatment</u>, Elsevier/North-Holland, New York, pp. 87-98, 1981.

W.B. Hobbins, "A New Beginning for Thermography," <u>RNM Images</u>, pp. 43-45, October 1982.

W.B. Hobbins, "Thermography and Pain," in Michel Gautherie and Ernest Albert (eds), Biomedical Thermology, Alan R. Liss, Inc., New York, pp. 361-375, 1982.

W.B. Hobbins, "New Horizons in Thermography," <u>Far East Health</u>, January, 1983.

W.B. Hobbins, "Thermography of the Breast Revisited – 1982," Modern Medicine of Canada, March, 1983.

W.B. Hobbins, "Thermography" (letter), <u>CA</u>, 372-376; 33, 1983.

W.B. Hobbins, "The Combined Use of Thermography & Ultrasonography," in Jack Jellins and Toshiji Kobayashi (eds), <u>Ultrasonic Examinations of the Breast</u>, pp. 335-339, June, 1983.

W.B. Hobbins, "Thermography of the Breast – A Skin Organ," in Harry Rein (ed), <u>The Primer on Thermography</u>, pp. 37-48, July 1983.

W.B. Hobbins, "Thermography of the Breast – A Skin Organ," in Gautherie, et al., <u>Thermal Assessment of Breast</u> <u>Health</u>, MTP Press, Ltd. Lancaster, England, pp. 37-48, July, 1984.

#### **Medical Presentations:**

International College of Surgeons Meeting – Cleveland, Ohio – 1951 Incarcerated Diaphramatic Hernia Wisconsin Surgical Society – Milwaukee, Wisconsin – 1955 Fibrosarcoma of Duodenum Wisconsin Surgical Society – Land of Lake, Wisconsin – 1958 Total Gastric Resection for Carcinoma Wisconsin Surgical Society – Milwaukee, Wisconsin – 1969 Five Years Practical Experience with Mammography Wisconsin Surgical Society – Door County, Wisconsin – 1971 Seven Years Mammography for Early Breast Cancer Detection 11<sup>th</sup> Annual Early Breast Cancer Detection – San Diego, California – 1971 Severn Years Mammography for Early Breast Cancer Detection Non-Mutilating Treatment for Breast Cancer – Strasbourg, France – 1972 Seven Years Mammography for Early Breast Cancer Detection American College of Surgeons Meeting – Chicago, Illinois – 1973 Why Take A Spiritual History? American Thermographic Society – New York, New York – 1973 Thermography in General Surgical Practice First European Thermographic Society Meeting – Amsterdam, Netherlands – 1974 1100 Women in 52 Hours Breast Screening Thermography in General Surgical Practice American Thermographic Society – Chicago, Illinois – 1974 1100 Women in 52 Hours Breast Screening American College of Surgeons – Miami, Florida – 1975 What is a Day of Life Worth Wisconsin Surgical Society – Milwaukee, Wisconsin – 1975 JeJunal Illeal By-Pass for Massive Obesity American Thermographic Society – Atlanta, Georgia – 1975 Mass Breast Cancer Screening with Thermography - 25,000 Cases Wisconsin Surgical Society – Telemark, Wisconsin – 1975 Mass Breast Cancer Screening with Thermography – 25,000 Cases American College of Surgeons – San Francisco, California – 1975 Caring for Patient and Incidentally His Disease 3<sup>rd</sup> International Symposium on Detection of Prevention of Cancer – New York, New York – 1976 Mass Mobile Breast Cancer Screening with Thermography American Thermographic Society - Washington, D.C. - 1976 **Thermography and Pain** Thermography: Highest Risk Marker in Breast Cancer The Third International Congress for Prevention and Detection of Cancer – New York, New York – May, 1976 Thermography: Highest Risk Marker in Breast Cancer The Canadian Thermographic Society Annual Meeting – Montreal, Quebec, Canada – 1976 Thermography: Highest Risk Marker The Second Annual Mid-American Breast Cancer Symposium – Madison, Wisconsin – 1976 Thermography: Highest Risk Marker American Thermographic Society – Boston, Massachusetts – 1977 Thermal Signal in Breast Disease – Sympathetic Nervous Influence Gynecological Society for Study of Breast Diseases – Washington, D.C. – 1977 Thermography: Highest Risk Marker American Thermographic Society – Boston, Massachusetts – 1978 Thermography: Highest Risk Marker European Thermographic Society – Barcelona, Spain – 1978 Comparison of Telethermography and Cholesteric Plate Thermography in Breast Thermal Examinations American Thermographic Society – Toronto, Ontario, Canada – 1979 Comparison of Telethermography and Cholesteric Plate Thermography in Breast Thermal Examinations Canadian Thermographic Society – Toronto, Ontario, Canada – 1979 Thermography and Pain Society for Study of Breast Disease – Boston, Massachusetts – 1979 Comparison of Telethermography and Cholesteric Plate Thermography in Breast Thermal Examinations Society for Study of Breast Disease – Philadelphia, Pennsylvania – 1980

The Physiology of the Breast by Cholesteric Plate Analysis

# Curriculum Vitae – William B. Hobbins, M.D.

Association for the Advancement of Medical Instrumentation – San Francisco, California – 1980
<u>The Physiology of the Breast by Cholesteric Plate Analysis</u>
French Thermographic Society – Lyon, France – 1980 – Guest Lecturer
<u>Thermography: Highest Risk Marker for Breast Cancer</u>
4 <sup>th</sup> International Symposium in Detection and Prevention of Cancer – London, England – 1980
<u>The Physiology of the Breast by Cholesteric Plate Analysis</u>
International Symposium Biomedical Thermology – Strasbourg, France – June, 1981 – Invited Lecturer
Thermography and Pain
Hungarian Medical Society – Sarasota, Florida – October, 1981
Significance of an "Isolated" Abnormal Colorgram
American College of Radiology – New Orleans, Louisiana – March, 1982 – Participant
20 <sup>th</sup> National Conference on Breast Cancer Third International Conference of Thermole and Dath, England Marsh, 1992
Third International Congress of Thermology – Bath, England – March, 1982
Differential Diagnosis of Pain From Thermography
Christian Medical Society – Dallas, Texas – May, 1982
Participant in the House of Delegates Meeting
American Thermographic Society – Washington, D.C. – May, 1982
Significance of an "Isolated" Abnormal Cologram Thermography and Pain
Alternatives to Mastectomy: 1982 – Cambridge, Massachusetts – May, 1982 – Participant
Thermography in Neuromusculoskeletal Disorders – Glen Cove, New York – October, 1982
Trauma and Pain: Evaluation of Thermogram
Hungarian Medical Association of America – Sarasota, Florida – October, 1982
Thermography of Pain and Trauma
American Pain Society – Miami, Florida – October, 1982 – Workshop Participant
Anatomy and Physiology of Thermography
Symposium on Benign Disorders of the Breast – Rochester, New York – November, 1982
Thermographic Screening in the Gynecologist's Office
Thermography in Neuromusculoskeletal Disorders – Glen Cove, New York – January, 1983
Trauma and Pain: Evaluation of Thermogram
Fourth Symposium on Thermogrammatry – Budapest, Hungary – March, 1983
Significance of an "Isolated" Abnormal Colorgram
Differential Diagnosis of Pain From Thermography
Thermography in Neuromusculoskeletal Disorders – Glen Cove, New York – May, 1983
Trauma and Pain: Evaluation of the Thermogram
Third International Congress on the Ultrasonic Examination of the Breast – Tokyo, Japan – June, 1983
Thermography & Ultrasonography
International Conference on Thermal Assessment of Breast Health – Washington, D.C. – July, 1983
Analysis of Thermal Class Th V Examinations in 37,050 Thermograms
Breast Physiopathological Conditions by Thermography
Thermography & Ultrasonography
4 <sup>th</sup> International Symposium on Bioengineering and The Skin – Besancon, France – August – September, 1983
Breast Thermography – Skin Microcirculation
Thermography in Neuromusculoskeletal Disorders – Glen Cove, New York – October, 1983
Trauma and Pain: Evaluation of Thermogram
American Academy of Thermology – The Johns Hopkins School of Medicine – October, 1983
Thermography and Pain Update 1983
Analysis of Thermal Class Th V Examinations in 37,050 Thermograms
Sympathetics & Galvanic Resistance as a Gateway to Thermography – Salutory Address to Curt P. Richter,
<u>Ph.D.</u>

Thermography in Neuromusculoskeletal Disorders – Vero Beach, Florida – January, 1984
Trauma and Pain: Evaluation of Thermogram
Thermography: An Untapped Trial Tool – Pennsylvania Trial Lawyers Association; Trial Advocacy of Pennsylvania
– Philadelphia, Pennsylvania – January, 1984
Basic Anatomy & Physiology
American Chiropractic Thermographic Society, Inc. – New Orleans, Louisiana – February, 1984
Anatomy of the Nervous Control of the Microcirculation Classification of Pain
Thermography in Neuromusculoskeletal Disorders – Baylor College – Houston, Texas – March 31 – April 1, 1984
Trauma and Pain: Evaluation of Thermogram
Argentinean Society of Mastology – Buenos Aires, Argentina – April, 1984
Thermography of the Breast 1984
Chilean Thermography Society – Santiago, Chile – April, 1984
Thermography of the Breast 1984
International Thermographic Society – Atlanta, Georgia – May, 1984
Anatomy of the Nervous Control of Microcirculation
Classification of Pain
Japanese Thermographic Society – Tokyo, Japan – June, 1984 – Invited Speaker – President address
Thermography and Pain Update 1984
Korean Scientific Trade Meeting – U.S. Embassy, Seoul, Korea – June, 1984 – Invited Speaker
Thermography in Chiropractic Evaluation and Practice – Northwestern College of Chiropractic, Bloomington,
Minnesota – June 23-24, 1984
<u>Neuromusculoskeletal Thermography</u>
Thermography in Neuromusculoskeletal Disorders – Glen Cove, New York – September 15-16, 1984
Trauma and Pain: Evaluation of Thermograms
Brooklyn Bar Association, "Handling Auto Accidents" – Brooklyn, New York – March 4, 1985
<u>Thermography – Demonstrating Pain</u>
Texas Society of Radiologic Technologists Annual Meeting – Dallas, Texas – March 21, 1985
Thermography in Neuromusculoskeletal Problems
American Academy of Thermology 14 <sup>th</sup> Annual Meeting – Crystal City, Virginia – May 29–June 2, 1985
Analysis of Thermal Class Th 5 Examinations in 37,050 Thermograms; Part II: Significance of Factors
Neuromusculoskeletal Examinations: Indications, Results, Significance in 3150 Examinations
Flexi-Therm Training Program – London, England – June 17-19, 1985
<u>Neuromusculoskeletal System</u>
Breast Thermography
Japanese Thermographic Society – Tokyo, Japan – June, 1985 – Invited Speaker – Liquid Crystal Thermography
Orientation
Nippon Medical School Daiichi Hospital – Tokyo, Japan – June, 1985
Differential Diagnosis of Pain
Breast Cancer and Thermography
Catholic Medical College and Center – Seoul, Korea – June, 1985
Differential Diagnosis of Pain
Breast Cancer and Thermography
Head and Neck Challenge '85 – Milwaukee, Wisconsin – October 10, 1985
Does Thermography Review Additional Information in Head and Neck Disease?
Breast Diseases IVth International Congress on Senology – Paris, France – September 1-4, 1986
Double-Blind Study of Effectiveness Transcutaneous Progesterone in Fibrocystic Breast Conditions
Monitored by Thermography
Second Annual Meeting of Academy of Neuro-Muscular Thermography – Orlando, Florida – September 26-28,
1986

<u>Common Technical and Interpretive Problems with Tele-electronic and Liquid Crystal Contact</u> <u>Thermography</u> American Pain Society Sixth General Meeting – Washington, D.C. – November, 1986 <u>Thermographic Significance in a Pain Center (</u>Poster Presentation) American Academy of Thermology 16<sup>th</sup> Annual Meeting – Minneapolis, Minnesota – June 26-28, 1987 <u>Thermographic Recording of Cutaneous Blood Flow During Exercise and Cool Down</u> (Poster Presentation) Fifth World Congress on Pain (International Association for the Study of Pain), Congress Centrum – Hamburg, Germany – August 2-7, 1987 – Chairman of the luncheon session <u>Thermography in Peripheral Neuropathy</u> <u>Differential Diagnosis of Somatic Pain by Thermography</u> <u>Thermographic Neuromusculoskeletal Examinations: Significance in 600 Consecutive Exams</u>

## Medical Exhibits:

## Symposiums and Seminars:

<u>Organizer and Program Chairman</u> – First Annual Mid-American Breast Cancer Symposium – Madison, Wisconsin – 1975

<u>Organizer and Program Chairman</u> – Second Annual Mid-American Breast Cancer Symposium – Madison, Wisconsin – 1976

Program Chairman – American Thermographic Society, Toronto, Canada March, 1979

Workshop Participant – Macro – and Microscopic Modeling of Health and Mass Transfer in Biological Systems – University of Illinois at Urbana-Champaign – April, 1983

Invited Participant – Early Breast Cancer Detection Seminar – Houston, Texas – May, 1983

Invited Participant – NCI – Breast Cancer Task Force Meeting – Bethesda, Maryland – September, 1983

Invited Participant – Hospital Program – Breast Thermography 1983 - San Angelo, Texas – November, 1983

<u>Invited Participant</u> – Comprehensive Symposium on Breast Disease – Bowman Gray School of Medicine, Wake Forest University, Winston-Salem, North Carolina - December, 1983

<u>Invited Participant</u> – 21<sup>st</sup> National Conference on Breast Cancer sponsored by the American College of Radiology – Honolulu, Hawaii – March, 1984

<u>Participant</u> – International Thermographic Society, Second Annual Symposium – Chicago, Illinois – July 28-29, 1984

Participant – IVth World Congress on Pain – Seattle, Washington – August 31 – September 5, 1984

<u>Invited Participant</u> – Third Comprehensive Symposium on Breast Diseases – Bowman Gray School of Medicine, Wake Forest University, Winston-Salem, North Carolina – December 6-8, 1984

<u>Participant</u> – First Annual Meeting of Academy of Neuro-Muscular Thermography – Dallas, Texas – May 5-7, 1985 <u>Seminar Chairman</u> – "Breast Anatomy and Physiology by Thermography" Dallas, TX – October, 1979; Chicago, IL – November, 1979; Madison, WI – January, 1980; Chicago, IL – March, 1980; Washington, D.C. – May, 1980; Boston, MA – June, 1980; San Diego, CA – August, 1980; Tampa, FL – October, 1980

<u>Invited Speaker</u> – 11<sup>th</sup> Scientific Meeting of the Midwest Pain Society; "Controversies in Contemporary Pain Management"; Milwaukee, Wisconsin – May 8-9, 1987; "Thermography – An Effective Tool in Diagnosis of Pain" <u>Participant</u> – 3rd Annual Academy of Neuro-Muscular Thermography Meeting – San Francisco, California – September 18-20, 1987 for Dr. Wexler.

Participant – 19<sup>th</sup> Annual Hungarian Medical Association of America Meeting – Sarasota, Florida – October 25-30, 1987

<u>Participant</u> – The 2<sup>nd</sup> Annual International Conference of Neuropathic and Musculoskeletal Pain – November 4-6, 1987 – Valley Stream, New York

Speaker – Scientific and Technical Conference – Tampa, Florida – May 6-7, 1989 – Dr. Rockley

<u>Participant</u> – First International Symposium on Myofascial Pain and Fibromyalgia – Minneapolis, Minnesota – May 8-10, 1989

<u>Speaker</u> – 18<sup>th</sup> Annual American Academy of Thermology, "United for Progress" – Washington, D.C. – May 18-21, 1989

<u>Participant</u> – Sixth Annual Pain Symposium – Lubbock, Texas – June 3-4, 1989 – Texas Tech University Health Sciences Center

<u>Speaker</u> – Thermography Series Seminar – Plano, Texas – August 4-5, 1989 – Physicians Academy <u>Invited Speaker</u> – American Chiropractic Thermographic Society "Basic Neurophysiology of Thermography" – Orlando, Florida – August 11-13, 1989

Speaker – Scientific and Technical Conference – Tampa, Florida – August 13, 1989 – Dr. Graham Rockley

Speaker – RSDS Informational Meeting – Madison, Wisconsin – September 13, 1989

<u>Participant</u> – American Academy of Neuromusculoskeletal Thermography – Orlando, Florida – September 20-24, 1989

Participant – American Pain Meeting – Phoenix, Arizona – October 25-28, 1989

Seminar Chairman – American Herschel Society – Phoenix, Arizona – October 27, 1989

<u>Participant</u> – Hungarian Medical Association of America Meeting – Sarasota, Florida – October 29 – November 3, 1989

Co-Chairman – Inter Pacific Ventures, Ltd. – Los Angeles, California – November 26, 1989

<u>Co-Chairman</u> – Inter Pacific Ventures, Ltd. – Los Angeles, California – January 21, 1990

Participant – International Pain Control Conference – Cancun, Mexico – February 13-17, 1990

Speaker – Southeastern Neurosciences Conference – "Pain: It's Autonomic Correlates – The Role of

Thermography" – San Francisco, California – March 2-4, 1990

Invited Speaker – American Chiropractic Thermographic Society & International Academy of Clinical

Thermography Joint meeting – Orlando, Florida – March 10-11, 1990

Speaker – 6<sup>th</sup> World Congress of Pain – Adelaide, Australia – April 1-6, 1990

Participant – American Academy of Thermology Annual Meeting – New York, New York – May 11-13, 1990

<u>Speaker</u> – 7<sup>th</sup> Annual Pain Symposium – Lubbock, Texas – June 2-3, 1990 – Texas Tech University Health Sciences Center
<u>Speaker</u> – Cleveland Chiropractic Clinic – Los Angeles, California – June 9-10, 1990
<u>Co-Chairman</u> – Inter Pacific Ventures, Ltd. – Los Angeles, California – July 1, 1990
<u>Speaker</u> – Thermography Series Seminar – Plano, Texas – August 10-12, 1990 – Physicians Academy
<u>Speaker</u> – Southeastern Neurosciences Seminar "Thermography for Healthcare Professionals" – Jacksonville, Florida – August 17-19, 1990
<u>Co-Chairman</u> – Inter Pacific Ventures, Ltd. – Los Angeles, California – August 20, 1990
<u>Invited Speaker</u> – International Thermographic Society – Orlando, Florida – October 13-14, 1990
<u>Invited Speaker</u> – International Academy of Clinical Thermography – Las Vegas, NV – October 19-21, 1990
<u>Participant</u> – American Pain Society – St. Louis, Missouri – October 25-28, 1990
<u>Speaker</u> – Hungarian Medical Association of America Meeting – Sarasota, Florida – October 28 – November 2, 1990

#### **Customized Thermography Seminars:**

Advanced Breast Thermography – Madison, Wisconsin - January 17, 1984 – Dr. Martin Baer Thermography and the Breast – Shreveport, Louisiana, CDP Foundation – February 6, 1984 – Dr. James Phillips Flexi-Therm Equipment In-Service – Mayfield Heights, Ohio – February 23, 1984 – Dr. Ronald Ross Advanced Breast Thermography – Madison, Wisconsin – February 28, 1984 – Dr. Hugh Mullin and Dr. Thomas Sanford Advanced Neuromusculoskeletal Thermography – Madison, Wisconsin – May 1, 1984 – Don Olsen and Luther Klotch Advanced Neuromusculoskeletal Thermography – Madison, Wisconsin – May 29, 1984 – Mark Leszczyneki, R.T. Neuromusculoskeletal Thermography Workshop – Tampa, Florida – July 7, 1984 – Dr. Arthur Pasach, et al. Advanced Neuromusculoskeletal Thermography – Fresno, California – July 25, 1984 – Thermal Diagnostic Laboratories Advanced Breast Thermography – Las Vegas, Nevada – July 26, 1984 Advanced Neuromusculoskeletal Thermography – Madison, Wisconsin – August 28, 1984 – Dr. Richard Esenberg and Dr. Toby Watkinson Basic Neuromusculoskeletal Thermography – Dallas, Texas - July 18-19, 1986 – Physician's Academy (Dr. William Kelly) Technician Training – Madison, Wisconsin – July 24, 1986 – Henry Press, D.C. Advanced Neuromusculoskeletal Thermography – Madison, Wisconsin – July 25, 1986 – Henry Press, D.C. Advanced Breast Thermography – Madison, Wisconsin – August 1, 1986 – Dr. Jay Appurao Neuromusculoskeletal Thermography Seminar – Sundance, Wyoming – August 14, 1986 – Dr. David McAfee Group California Thermographic Society – Los Angeles, California – November 15-16, 1986 – Annual Symposium Neuromusculoskeletal Thermography – Miami, Florida – November 22-23, 1986 – Ramon de Guzman, Flexi-Therm Rep. Technician Training – Madison, Wisconsin – December 4, 1986 – Joyce Hertel Advanced Neuromusculoskeletal Thermography – Madison, Wisconsin – December 5, 1986 – Dr. Harold Farris and Dr. David Conger Advanced Nefuromusculoskeletal Thermography – Madison, Wisconsin – January 16, 1987 – Dr. Michael Courtney and Dr. Reza Azar Technician Training – Madison, Wisconsin – January 29, 1987 – Yvonne Klatt-Barsano Advanced Neuromusculoskeletal Thermography – Madison, Wisconsin – April 10, 1987 – Dr. Yongil Kim Technician Training – Madison, Wisconsin – April 16, 1987 – Donald Bagnall

Basic Neuromusculoskeletal Thermography – Los Angeles, California – April 25-26, 1987 – Dr. Stephen Robert's Group Neuromusculoskeletal Thermography Interpretation – Macon, Georgia – May 16-17, 1987 – Pain Evaluation Center (Dr. Sam Mandel's Group) Breast Thermography Seminar – Madison, Wisconsin – May 22, 1987 – Dr. Ross Stockwell Technician Training – Madison, Wisconsin – July 2, 1987 – Med/Law Labs: Patricia McMahon and Karen Palm Basic Neuromusculoskeletal Thermography – Dallas, Texas – July 10-11, 1987 – Physician's Academy (Dr. William Kelley) Basic Neuromusculoskeletal Thermography – Chicago, Illinois – July 14, 1987 – Med/Law Labs Advanced Neuromusculoskeletal Thermography – Madison, Wisconsin – July 17, 1987 – Zeynep Karasu, M.D. Advanced Neuromusculoskeletal Thermography – Madison, Wisconsin – August 28, 1987 – Deepika Bajaj, M.D. Basic Neuromusculoskeletal Thermography – Mt. Pleasant, Pennsylvania – September 16, 1987 – Frick Community Health Center Group Advanced Neuromusculoskeletal Thermography – Madison, Wisconsin – September 25, 1987 – Dr. Patrick M. Casey Technician Training – Madison, Wisconsin – October 22, 1987 – Ms. Angelita B. Nepomuceno Basic Neuromusculoskeletal Thermography – Houston, Texas – December 17-18, 1987 – Dr. P. Prithvi Raj Technician Training – Madison, Wisconsin – September 13, 1984 – Donna Dunlap Advanced Neuromusculoskeletal Thermography – Madison, Wisconsin – September 25, 1984 – Dr. Richard Huff and Dr. Steven Goff Differential Diagnosis of the Causes of Neuromasculoskeletal Thermography – San Francisco, California – September 29, 1984 – Pate Wahl and Associates <u>Medical/Legal Thermography</u> – Detroit Michigan – December 13, 1984 – Ford Motor Company Legal Counselor Staff Advanced Neuromusculoskeletal Thermography – Madison, Wisconsin – January 29, 1985 – Dr. Michael Grefer, Dr. Marvin Kidd, and Dr. Russ Johnson Basic Neuromusculoskeletal Thermography – Fort Myers, Florida – February 9, 1985 – Neurology Associates of Lee County Technician Training – Madison, Wisconsin – February 21, 1985 – Mary Gunn and Mary Dennis Technician Training – Madison, Wisconsin – April 18, 1985 – Darla Fletcher, Donald Dyle, M. Luther Kloth Technician Training – Madison, Wisconsin – May 2, 1985 – Donna Bachman Advanced Neuromusculoskeletal Thermography – May 21, 1985 – Dr. John Rupolo Advanced Neuromusculoskeletal Thermography – Madison, Wisconsin – July 16, 1985 – Dr. Tal J. Park Technician Training – Madison, Wisconsin – July 18, 1985 – Jody CoBabe <u>Technician Training</u> – Madison, Wisconsin – December 12, 1985 – Sara Cser Advanced Neuromusculoskeletal Thermography – Madison, Wisconsin – December 6, 1985 – Dr. David Knapp, Dr. A. Robert Massam, Dr. Richard Gorski, Dr. Paul Flaggman, Dr. Fred J. Quatro Technician Training – Madison, Wisconsin – March 21, 1986 – Two technicians from Dr. William Bauer's Office <u>Neuromusculoskeletal Thermography Seminar</u> – Newark, New Jersey – April 5-6, 1986 – Thermographic Services of New Jersey (Dr. Schneider) Advanced Neuromusculoskeletal Thermography – Madison, Wisconsin – April 18, 1986 – Dr. Bruce Miller and Dr. **Robert Friedman** Technician Training – Madison, Wisconsin – April 18, 1986 – Two technicians from Dr. Friedman's Office Neuromusculoskeletal Thermography Interpretation – Los Angeles, California – April 25-26, 1986 – Eleventh Avenue Medical Group (Elizabeth Moon) Basic Concepts and Indications for Neuromusculoskeletal Thermography – Farmington, Connecticut – May 9, 1986 - Orthopedic Surgery Department, University of Connecticut Health Center Technician Training – Madison, Wisconsin – June 26, 1986 – Lynn Stewart (Dr. Sam Mandel's Office)

Basic Neuromusculoskeletal Thermography – New Stanton, Pennsylvania – February 13, 1988 – Requested by Robert Bodnar, Flexi-Therm Representative Advanced Neuromusculoskeletal Thermography – Madison, Wisconsin – May 27, 1988 – Dr. John Hague Basic Neuromusculoskeletal Thermography – Lubbock, Texas – July 8-10, 1988 – Physician's Academy (Dr. William Kelly) Technician Training – Madison, Wisconsin – November 15, 1988 – Kelly M. Brady Technician Training – Madison, Wisconsin – November 29, 1988 – Debra Shipe and Brenda Webster Technician Training – Madison, Wisconsin – December 2, 1988 – Alice Samuel and Brenda Linsey Technician Training – Madison, Wisconsin – January 19, 1989 – Connie Shackleford Advanced Neuromusculoskeletal Thermography – Madison, Wisconsin – January 20, 1989 – Dr. Randy Moelter and Dr. Rachna Mehra Technician Training – Madison, Wisconsin – May 11, 1989 – Margaret Dieck Technician Training – Madison, Wisconsin – July 12, 1990 – Joan McDonough and Kain Ang Advanced Neuromusculoskeletal Thermography – Madison, Wisconsin – July 13, 1990 – Dr. Ying-Yang Tsai Specialized Training Seminar – Cleveland, Ohio – August 21-22, 1990 – Dr. Michael Stanton-Hicks and Staff – **Cleveland Clinic** Specialized Training Seminar – Cleveland, Ohio – August 23, 1990 – Dr. Patel and Staff Technician Training – Madison, Wisconsin – September 20, 1990 – Lynnette Roberston, Pamela Sockel and Robert Tomas Advanced Neuromusculoskeletal Thermography – Madison, Wisconsin – September 21, 1990 – Dr. John Ortolani, Dr. R. Arian, Dr. J.M. Baron and Robert Thomas

#### Medical Consultant:

Columbian National Cancer Institute – ongoing consultant for establishment of Mass Breast Cancer Screening Program, South America – 1978

Spectotherm – San Jose, California – 1972 – 1974

General Electric – Waukesha, Wisconsin – 1974 – 1974

Vectra Corporation – Dayton, Ohio – 1976 – 1982

Dorex Corporation – Orange, California – 1978 – 1984

American Thermal Instruments, Inc. - Dayton, Ohio - 1982 - present

Flexi-Therm, Inc. - Westbury, New York - 1982 - present

#### Seminar Chairman – "Breast Anatomy and Physiology of Thermography:

#### (Continued)

Washington, D.C. – January, 1981; Denver, CO – March, 1981; New York, NY – May, 1981; San Francisco, CA – July, 1981; Atlanta, GA – September, 1981; Dallas, TX – November, 1981; Los Angeles, CA – February, 1982; Washington, D.C. – April, 1982; Madison, WI – June, 1982; Washington, D.C. – October, 1982; Santa Monica, CA – November, 1982; Madison, WI – January, 1983; Madison, WI – April 1983; Madison, WI – September, 1983; Madison, WI – January, 1984; Madison, WI – March, 1984; Madison, WI – May, 1984; Madison, WI – July, 1984; Chicago, IL – November, 1984; Houston, TX – January, 1985; New York, NY – June, 1985; Atlanta, GA – September, 1985

Seminar Chairman – TIA Neuromusculoskeletal, Medical/Legal and Technician Training Thermography Seminars:
Chicago, IL – November 16-17, 1984; Houston, TX – February 1-2, 1985; San Francisco, CA – March 29-30, 1985; New York, NY – June 14-15, 1985; Atlanta, GA – September 20-21, 1985; Chicago, IL – November 22-23, 1985; Lake Buena Vista, FL – January 31 – February 1, 1986; Acapulco, Mexico – March 10-13, 1986; San Francisco, CA – June 7-8, 1986; Chicago, IL – October 11-12, 1986; Washington, D.C. – January 24-25, 1987; New Orleans, LA – March 14-15, 1987; San Diego, CA – June 6-7, 1987; Boston, MA – September 12-13, 1987; Fort Lauderdale, FL – November 14-15, 1987; San Francisco, CA – February 19-20, 1988; Dallas, TX – April 23-24, 1988; Chicago, IL – June 18-19, 1988; Chicago, IL – November 4-5, 1988; Houston, TX – January 28-29, 1989; Chicago, IL – April 8-9, 1989; Lubbock, TX – June 3, 1989; Madison, WI – August 26-27, 1989; Madison, WI – November 11-12, 1990; Atlanta, GA – January 27-28, 1990; Madison, WI – February 24-25, 1990; Tampa, FL – May 19-20, 1990; Lubbock TX – June 1, 1990

Participant – International Society for Bioengineering and the Skin – San Francisco, California – August 29 – September 2, 1985

<u>Participant</u> – False Positives and False Negatives in Diagnosis Through Images, Third Congress on Mastology – Buenos Aires, Argentina, September 22-26, 1985

<u>Participant</u> – Fifth General Scientific Meeting of the American Pain Society, Dallas, Texas – October 18-20, 1985 Participant – 15<sup>th</sup> Annual Meeting of the American Academy of Thermology, Johns Hopkins University School of Medicine, Baltimore, Maryland – June 12-15, 1986

<u>Co-Chairman</u> – Thermomedica '86, Fourth International Congress of the European Association of Thermology – Graz, Austria – September 10-13-86

Speaker – "Thermal Measurement and Radiometry", September 11, 1986

<u>Speaker</u> – Second Albert Memorial Symposium – Greater Southeast Community Hospital, Washington, D.C. – September 17, 1986

<u>Speaker</u> – Thermography: A Core Course, for Thomas Ravin, M.D., Denver, Colorado – April 23-25, 1987; "How Thermography Works"; Thermography in a Thermographer's Practice"