

Lisa Ganora

CV

Education

1997 - 2001 University of North Carolina - Asheville
Bachelor's in Biology with studies in botany and chemistry. *Summa cum laude*, with *Distinction as a University Scholar*, and *Distinction in Biology*. Coursework includes general botany, plant identification, analytical chemistry, organic chemistry, biochemistry and independent study: historical and phytochemical monograph on *Phytolacca americana*.

1991 - Present Herbal conferences, symposia, seminars
Regularly attend herbal medicine conferences such as the Medicines from the Earth conference and the American Herbalists Guild's Annual Symposium; studied and worked with wildcrafters including Doug Elliot.

1988 - 1991 Blazing Star Herbal School - Shelburne Falls, MA
Studied traditional herbal medicine with Gail Ulrich, Pam Montgomery, and others; helped organize the first annual Women's Herbal Conference.

Awards Received

1998 – 1999 *UNCA Organic Chemistry Student of the Year* award for outstanding work in academic and laboratory organic chemistry.

1999 American Chemical Society, Division of Polymer Chemistry *Award for Outstanding Performance in Organic Chemistry*.

2000 – 2001 Recipient of the *Harry Henry Johnston Award for Excellence in Biology*.

Interests and Activities

Integrating scientific with traditional herbal medicine; the phytochemistry of herbs; analytical exploration of botanicals; antioxidants; Native American medicine; ethical wildcrafting and plant identification; teaching, writing, editing, and interpreting scientific information for practitioners and the public.

Research at UNCA focused on two subjects: the history, phytochemistry, toxicology, and clinical applications of *Phytolacca americana*; and the influence of light on ascorbate levels in developing tomatoes.

Work Experience

Currently

Director of the [Colorado School of Clinical Herbalism](#), a school of Vitalist herbalism and nutrition located in Boulder, CO (formerly NAIMH). CSCH offers certificate courses in Fundamentals of Medical Herbalism, Advanced Herbalism, Clinical Herbalism, Nutrition, and Bach Flower Essences.

Author of [Herbal Constituents: Foundations of Phytochemistry](#) - a fully illustrated textbook that covers all of the major classes and subclasses of phytochemicals important to botanical medicine. Includes material on the basics of phytochemistry, solubility and extraction, synergistic interactions between phytochemicals, and an extensive glossary.

Author of "[Medicinal Plant Constituents](#) - Supportive Science for Traditional Herbal Medicine," a series of CD sets with PowerPoint presentations including molecular models, botanical photographs and illustrations and an extensive phytochemical outline. These materials have been presented at or used in courses for the North American

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College of Botanical Medicine, the Rocky Mountain Center for Botanical Studies, the North American Institute of Medical Herbalism, the Southwest School of Botanical Medicine, the Masters program in Botanical Healing at Tai Sophia Institute, the University of Arizona College of Pharmacy, the University of Florida College of Pharmacy, the University of Milan, Yonsei University (South Korea), the City University of New York, and at herbal education conferences (American Herbalists Guild, Medicines From the Earth, Green Arts Herbal Conference, etc.) and for online courses (Veterinary Information Network CE; Australasian College of Health Sciences). These materials are also used by teachers, practitioners, schools, and organizations worldwide including those in Australia, Canada, England, France, India, Indonesia, Israel, Italy, Korea, Lithuania, Mexico, New Zealand, and the U.S.

Consulting in medicinal plant chemistry, synergy, and formulation for the herbal and natural products industries.

Educational materials and advanced course curricula on medicinal plants, phytochemistry, toxicology, botany, and general, organic, and biochemistry.

Editor / Science Editor for the Proceedings: Medicines from the Earth Symposium and the Southwest Conference on Botanical Medicine.

Adjunct Faculty: Pharmacognosy and Medicinal Plant Chemistry, [Southwest College of Naturopathic Medicine](#).
 Guest Lecturer, [North American Institute for Medical Herbalism](#).

2007
 The Colors of Vitality slide show, Vitamin Cottage (Lafayette & Lakewood, Colorado)
 Phytochemistry of Medicinal Plants Intensive, Southwest College of Naturopathic Medicine, Tempe, AZ
 Introduction to Herbal Constituents, Southwest Institute of Healing Arts, Tempe, AZ

2006
 Introduction to Herbal Medicine 10-week course with field trips, Louisville, CO
[Southwest Conference on Botanical Medicine](#), Tempe, AZ
 Herbal Constituents and Toxicology at the North American Institute for Medical Herbalism, Boulder, CO

2005
 Lecturing at the [Medicines from the Earth Conference](#), Black Mountain, NC
 Herbal Constituents at the [Chestnut School of Herbal Medicine](#), Leicester, NC
 Herbal Constituents at the [Appalachia School of Holistic Herbalism](#) in Asheville, NC
 Herbal Constituents at the [Blue Ridge School of Herbal Medicine](#), Asheville, NC

2004
 Advanced Herbal Constituents for Practitioners workshop at the North Carolina School of Holistic Herbalism in Asheville, NC
[Montana Herb Gathering](#), Bozeman, MT
 Phytochemistry and Pharmacognosy Intensive, Southwest College of Naturopathic Medicine, Tempe, AZ.
 Distinguished Lecturer (Phytochemistry and Toxicology), [Tai Sophia Institute](#).
 Herbal Constituents and Toxicology at the North American Institute for Medical Herbalism, May 1, 2, & 3, 2006.
 Keynote Speaker, Green Arts Herbal Conference, Eugene, OR May 6 - 7, 2006.

Phytochemistry of Medicinal Plants, July 21 - 23, 2006 at The Herbal Bear School of Botanical Medicine, in the Catskills.
 Herbal Constituents at the Northeast School of Botanical Medicine, Ithaca, NY, July 24 - 25.
 Distinguished Lecturer (Phytochemistry and Toxicology), Tai Sophia Institute, July 28, 2006.
 North Carolina School of Holistic Herbalism herbal constituents courses, August 3 - 5, 2006.
 Asheville, NC: August 6, Herbal Constituents for Practitioners workshop.

Herbal Constituents Intensive, Boulder, CO Sept. 22 - 24, 2006.
Lead Practitioner, Pharmaca Integrative Pharmacy, Denver, CO
Herbal Constituents and the Chemistry of Essential Oils at the
North American Institute for Medical Herbalism, May 9, 10, & 11,
2005.

Herbal Constituents at the North Carolina School of Holistic
Herbalism, June 1 & 8, 2005.

Attending Medicines From the Earth Conference, Black Mountain,
North Carolina, June 3 - 6, 2005.

Herbal Constituents at the Blue Ridge School of Herbal Medicine,
June 2 & 9, 2005.

Presenting "Advanced Herbal Constituents for Practitioners" at
the North Carolina School of Holistic Herbalism in Asheville, North
Carolina, June 12, 2005.

Colors of Vitality Presentation, Crested Butte Wildflower Festival,
Crested Butte, CO, July 15, 2005.

Herbal Constituents Intensive at the Prairie Wise Herbal School,
Kansas City, MO, October 8 - 10, 2005.

Plant Constituents and the Chemistry of Essential Oils at the
North American Institute for Medical Herbalism, May 10, 11, &
12, 2004.

Plant Constituents for Herbalists module at the Southwest School
of Botanical Medicine, May 24 - 27, 2004.

Advanced Herbal Chemistry course for botanical practitioners,
NACBM, Albuquerque, New Mexico, May - July, 2004 (45 hour
program).

Herbal Constituents presentation at the American Botanical
Council in Austin, Texas, June 2, 2004.

PowerPoint presentation for Robert Rountree's lecture on
Phytoestrogens at the Medicines From the Earth Conference,
Black Mountain, North Carolina, June 4 - 7, 2004.

Plant Constituents course at the North Carolina School of Holistic
Herbalism, June 9 - 16, 2004.

The Colors of Vitality: Phytonutrients and Antioxidants in Foods
and Herbs at Earth Fare, Asheville, North Carolina, June 10,
2004.

Advanced Herbal Constituents for Practitioners in Asheville, North
Carolina, June 12, 2004.

Herbal Constituents at the Blue Ridge School of Herbal Medicine,
June 15, 2004.

Provided visual curriculum materials for the pharmacognosy
program at the School of Pharmacy, University of Milan, Italy.

Advanced Herbal Constituents for Practitioners in Seattle, Sept
23 - October 17 (40 hour intensive in two four-day sessions)

	Herbal Chemistry intensive at the American Herbalists Guild Conference, October 7, 2004.
	Taught "Plant Constituents" for the advanced course at the Rocky Mountain Center for Botanical Studies in Boulder, CO, May 2003.
1990 - 2003	Taught pharmacognosy/plant constituents module of online course in advanced botanical medicine for the Veterinary Information Network (www.vin.com), August, 2003. Self-employed as lecturer, workshop leader, researcher and writer in the fields of: herbal phytochemistry, traditional Western herbal medicine and Native American herbal medicine.
2002 - 2003	Herbalist/consultant at Pharmaca, an integrative pharmacy in Denver, CO.
1997 - 1998	North Carolina Ginseng & Goldenseal Company - Marshall, NC Herbalist and consultant. Worked on natural-bed cultivation of Native American medicinal plants; preparation of herbal extracts; educational services.
1996 - 1998	Southeastern School of Herbal Studies - Walterboro, SC Taught workshops on wildcrafting, herbal pharmacy, and popular herbal medicine; led plant identification walks.
1996	Gaia Herbal Research Institute - Black Mountain, NC Led plant identification/traditional usage herb walks at the Spring Symposium.
1996	Natural Apothecary Shop - Asheville, NC Staff herbalist and educator.
1995 - 1996	Earth Fare - Asheville, NC Staff herbalist and educator in the HBC department of a natural foods supermarket. Wrote materials and taught workshops and classes in herbal medicine for staff and public.
1992 - 1998	Manufactured and distributed "Boo-Boo Goo," a popular herbal skin-healing salve. Sold the business to a homeopathic M.D. in 1998.