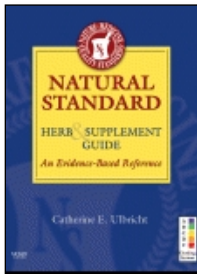


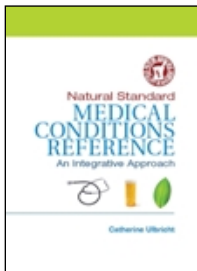
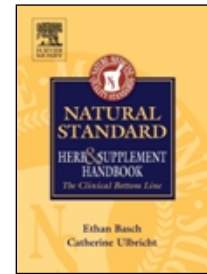


Natural Standard

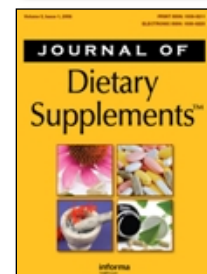
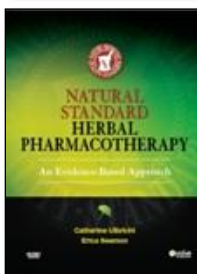
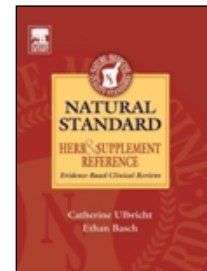
One Davis Square Somerville, MA 02144 | T: 617.591.3301 | F: 617.591.3399 | www.naturalstandard.com



Academic Rotations in Medical Publishing/ Integrative Medicine Research



Exploring medical writing on conventional + complementary and alternative therapies in a drug/herb/supplement information corporate office setting. Contributing to on-line, handheld and print publications for healthcare providers and consumers. This rotation appeals to students who enjoy reading, writing, journal club, statistics, focused independent academic, tenure perpetuating work. Participants enter an immersion program similar to a co-op experience. Students are given attribution on their publications and they may add them to their curriculum vitae (CV).



Preceptor team includes Catherine Ulbricht, PharmD; Dawn Costa, BA, BS; Samantha Culwell, PharmD; Kelly Flanagan, BA; Mary McCarthy, PhD; Regina Windsor, MPH; Sara Zhou, PharmD; site visit practitioners for shadowing; and virtual communications via email, phone and webinar with multiple other members of Natural Standard staff and students at local and international institutions.

Objectives:

1. To introduce the student to medical publishing with a focus on integrative medicine information resources and practices.
2. To learn and/or implement evidence-based research methodology and to be able to apply a rigorous scientific approach to analyzing scientific literature and other medical data.
3. To apply prior newly acquired academic knowledge to the therapeutic management of patients so that students can:
 - a. Communicate with health care professionals and patients concerning herbal therapies, dietary supplements, vitamins, minerals, modalities (such as yoga, acupuncture), special diets, nutrition, preventive medicine, genetic testing, and other integrative treatment options.
 - b. Evaluate efficacy of integrative therapies through in-depth analyses of clinical trials, meta-analyses, scientific reviews, and other scientific literature.
 - c. Identify unique methodological issues in integrative medical research.
 - d. Understand interaction and safety concerns.
 - e. Gain exposure to current regulatory affairs and policy issues.
 - f. Interact with social media, discern key points of current health issues portrayed by the popular media including newsletters, RSS feeds, webinars, audio/podcast, blogs.
4. To practice aggregating, analyzing, and disseminating information for print and on-line publications of multiple reading levels and languages.
5. To encourage multidisciplinary collaboration between conventional and alternative practitioners and patients, perpetuating the integrative healthcare model by contributing to consensus based peer reviewed decision support tools.

Goals:

At the end of this rotation, the student should be able to:

1. Recognize and utilize pertinent data to identify and resolve integrative medicine-related health problems such as:
 - a. Therapies lacking adequate scientific support for purported indications.
 - b. Inappropriate therapy choice, dose, or route of administration for a particular condition.
 - c. Therapeutic duplication.
 - d. Safety issues including adverse event risk, allergy, cross-sensitivity, use pregnancy and lactation.
 - e. Presence or potential for herb/supplement/drug/food/lab or nutrient depletion interactions.
2. Critique and discuss integrative medicine literature/evidence for various therapies with other health care professionals and patients via written and oral communications.
3. Perform appropriate statistical analyses of randomized controlled trials (i.e., calculate ARR, NNT, determine statistical significance and effect sizes).
4. Use appropriate integrative medicine information resources to solve therapy-related problems.
5. Identify and report adverse reactions related to integrative medicine therapies (learn post-market surveillance techniques).
6. Be proficient at procuring international literature (foreign language skills a plus), article retrieval and translations.

7. Function as a productive Research Team contributor of a unique medical publishing company.
8. Understand the blinded peer review process used in journal publication. Students will serve as peer reviewers for the Journal of Dietary Supplements.
9. Medical copyediting/authoring/review opportunities under guidance and QA of a licensed practitioner working in the office or virtually (at another location). Virtual work relies on communication via email or phone. Recorded training webinars are also available resources for students.

Requirements:

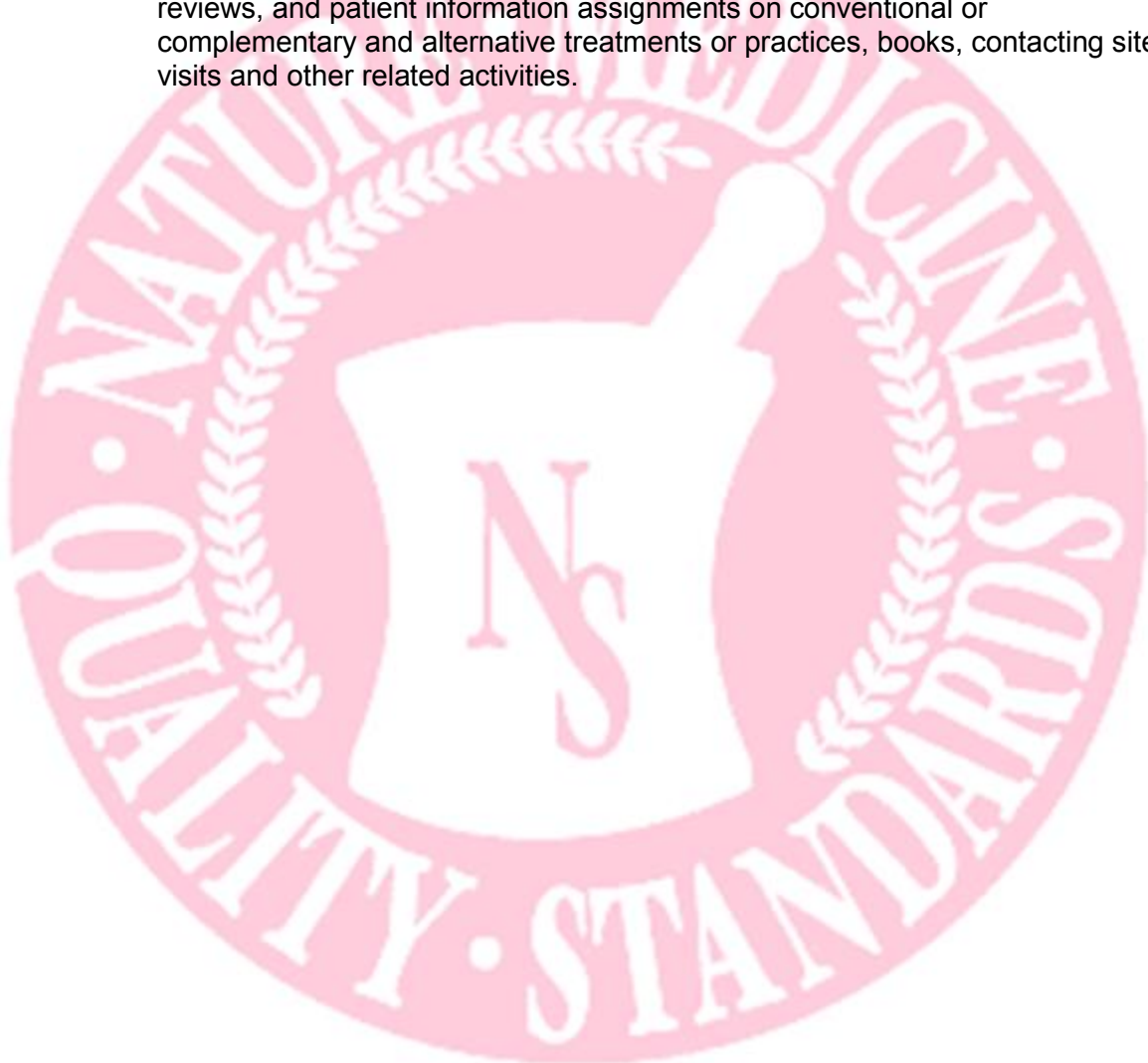
The university/college must be active members/subscribers of www.naturalstandard.com for students to participate in this program. Familiarity with **Natural Standard's** online databases and understanding of the posted training webinar (available through the **Natural Standard** Lab on the **Natural Standard** website) are necessary before applying to this rotation. Students can practice navigating multiple on-line resources, conducting literature searches as well as efficient article retrieval from local medical libraries research staff are available to the students at all times. Available resources will be discussed during meetings with the preceptor team throughout the clerkship. Additionally students must:

1. Refer to weekly schedule and preceptor emails for daily requirements and be flexible to any changes.
2. Standard office hours are M-F 9am-5:30pm. We can be flexible with your schedules as long as requested in advance and time is made up in the research office before the end of academic rotation. Virtual rotations may be available with prior approval or hybrid of virtual and local if you cannot reside in the Boston area for the full length of your rotation- this needs to be determined and pre-approved by the university and **Natural Standard** prior to initiating the rotation.
3. Regular meetings with members from the preceptor team to discuss progress and activities. Midpoint and final evaluations are conducted in a blinded peer review fashion. Preceptors, **Natural Standard** staff and other students give constructive feedback which are compiled and presented to the student being evaluated.
4. Site visits: Students are encouraged to attend as many as they would like related to integrative medicine. See example list below. Students are also welcome to contact additional site visit opportunities with prior approval from research team members.
5. Assignments may include:
 - Contributions to professional or consumer level monographs for herbs, supplements, modalities, genetics, environmental, public/global health, medical conditions, nutrition, exercise, interactions checkers, nutrient depletions checkers, etc. during any stage of development or update. The student will be fully integrated in the production of data collection, analysis, monograph authoring and editing with oversight and QA of more experienced staff. Projects may include collecting full text articles, accumulating data from literature searches and secondary sources, peer-reviewing monographs, and/or updating/contributing to sections of other monographs, data entry, fact checking, proofreading, copyediting, scanning, faxing, emailing or other assignments as deemed necessary by preceptors.
 - Contributions to academic discussions (blogs). News and events listings, social media forums.

- Oral presentations: The student may give an oral PowerPoint presentation to preceptors and other students on an herbal/dietary/alternative modality topic. These can be recorded and archived as webinars. Meetings will be arranged throughout the rotation for students to share what they are learning with other students and staff.

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- Please note that a different assignment may be substituted based on the needs of **Natural Standard**. Examples of projects in the past include: grant related research assignments, custom research reports, PowerPoint presentations, co-representing the research collaboration at conferences/expos/career fairs, Reference Manager data entry, newsletter reviews, and patient information assignments on conventional or complementary and alternative treatments or practices, books, contacting site visits and other related activities.



Participating Schools:

- Albany College of Pharmacy, Albany, NY, www.acp.edu
- Appalachian College of Pharmacy, Oakwood, VA, www.acpharm.org
- Auburn University, Auburn, AL, www.auburn.edu
- Drake University, Des Moines, Iowa, www.drake.edu
- East Tennessee State University, Johnson City, TN, www.etsu.edu
- Massachusetts College of Pharmacy and Health Sciences, Boston & Worcester, MA, and Manchester, NH, www.mcphs.edu
- Northeastern University, Boston, MA, www.northeastern.edu
- Nova Southeastern University, Fort Lauderdale-Davie, FL, www.nova.edu
- Ohio Northern University, Ada, OH, www-new.onu.edu
- Oregon State University, Corvallis, OR, www.oregonstate.edu
- St. John Fisher College, Rochester, NY, www.sjfc.edu
- State University of New York at Buffalo, Buffalo, NY, www.buffalo.edu
- University of Connecticut, Storrs, CT, www.uconn.edu
- University of Iowa, Iowa City, IA, www.uiowa.edu
- University of Michigan, Ann Arbor, MI, www.umich.edu
- University of Minnesota, Minneapolis-St. Paul, MN, www.umn.edu
- University of Missouri–Kansas City, Kansas City, MO, www.umkc.edu
- University of New England, Biddeford and Portland, ME, www.une.edu
- University of North Carolina, Chapel Hill, NC, www.unc.edu
- University of Rhode Island, Kingston, RI, www.uri.edu
- University of South Carolina, Columbia, SC, www.sc.edu
- University of Wyoming, Laramie, WY, uwyo.edu

Housing:

- www.craigslist.org
- <http://www.ymca.net/maps>
- <http://www.hostels.com/us.ma.ot.html>
- Local Colleges and Universities Dorms
 - Emerson College – 617-824-8500, www.emerson.edu
 - Boston University – 617-353-4636, www.bu.edu
 - Harvard University – 617-495-1000, www.harvard.edu
 - Lesley College - 617-491-2394, www.lesley.edu
 - Simmons College – 617-521-2000, www.simmons.edu
 - Tufts University- 617-628-5000, www.tufts.edu
 - Northeastern University – 617-373-3768, www.northeastern.edu
- More than 300 area hotels- www.hotels.com. Long term facilities- Homewood Suites – Cambridge – 781-643-7258 www.homewoodsuites1.hilton.com and Residence Inn, 6 Cambridge Center, Cambridge, MA 02142, 617-349-0700, www.marriott.com

Transportation:

- Subway/train/bus: www.mbta.com, Red Line – Davis Square stop
- Parking: <http://www.somervillema.gov/Department.cfm?dept=TRAFFIC>, <http://www.cambridgema.gov/traffic>