

CONSORTIUM OF ACADEMIC & RESEARCH LIBRARIES IN ILLINOIS

PROPOSAL COVER SHEET

FY 2009

PROJECT: Impact of the Environment on Health & Wellness Collection Partnership Project

This project is a:

 x Collection Partnership / Collaborative Digitization Award Proposal

AMOUNT OF MONEY REQUESTED: \$19,000

HOST LIBRARY: Illinois Wesleyan University, Ames Library

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Impact of the Environment on Health & Wellness Collection Partnership Project

Thematic Connections and Benefits

When one hears the phrase “green living” or “going green,” the focus is usually on the “three R’s:” reduce, reuse, recycle. The libraries of this partnership seek to add a vital dimension to the “living green” discussion and aim to create a strong, multi-faceted collection of monographs on the broad topic of the environment’s impact on health and wellness. This topic is intentionally broad and can encompass both the World Health Organization’s definition of environmental health (“Environmental health addresses all the physical, chemical, and biological factors external to a person, and all the related factors impacting behaviours.” World Health Organization, Environmental Health) as well as the topic of conservation psychology, which seeks to study the human behaviors that have an impact on the environment. Our collection will aid others in examining topics from diverse disciplinary perspectives: biology, ethnobotany, medicine, public health, psychology, sociology, internationalism and environmentalism. Several of the institutions listed below have invested money and key resources in studying the environment; this proposal seeks not only to support those efforts, but also to aid developing researchers and scholars within the state of Illinois.

Our partnership is in itself made up of a group that reflects the diversity of the Consortium of Academic & Research Libraries in Illinois (CARLI). The institutions we represent are dedicated to not only educating our students, but also in developing their critical thinking capacities and raising their awareness of the individual’s impact on the quality of our global community. The factor that unites our effort, besides our collective focus on health and wellness, is the commitment we have to collecting materials from abroad as well as at home, therefore providing as much breadth and depth to our collections as possible. A significant benefit to all is our intent to develop a collection with international perspectives – this will benefit not only environmental studies students and health sciences students, but also students in political science, international studies or interdisciplinary programs focused on specific geographical areas (Asia, South America, Mexico, etc).

The monographs purchased with this grant will be accessible to all libraries and library users in the state and nation through I-Share Request and Interlibrary Loan. We anticipate that our selections will be educational and informative for students in several disciplines at the undergraduate and graduate levels, and anticipate also the usefulness to faculty and researchers.

Cost and Funding Plan

Institution	Subject	Amount
Chicago State University	Environmental Racism	\$3000
Columbia College Chicago	Investigating Environmental Impacts on Public Health	\$6000
Illinois Wesleyan University	Conservation Psychology	\$4000
Northern Illinois University	Herbal Medicine: Supporting Health Professionals and Students	\$3000
University of Illinois at Urbana-Champaign	Medicinal Plants and Indigenous Medicinal Plant Knowledge: Implications for Human Health	\$3000

Our total request is \$19,000. Following the introductory section of this proposal is each contact bibliographer’s narrative providing details about their chosen topic, its importance, and a brief analysis of current holdings.

Plan of Operation

Each librarian will be responsible for selecting appropriate, current titles, which will build on existing collections in their proposed area, and each library agrees to cover costs of acquiring, cataloging, processing, storing and otherwise maintaining the monographs purchased with grant funds. Titles purchased will add to, rather than duplicate, items at I-Share libraries. Each library will catalog items purchased with this grant within two months of acquisition, and each library will share items purchased with other CARLI/I-Share members via Request and other libraries nationwide via Interlibrary Loan. In addition, each library agrees to accept responsibility for last

copy of items purchased with CARLI funds, either retaining the item in their collection or negotiating with other CARLI members to permanently retain the item.

The Ames Library at Illinois Wesleyan University will be responsible for coordinating communication with participants on a regular basis via email and will require participants to post lists of potential purchases on a group wiki to prevent duplication of spending. The Ames Library will also gather data about the collection after purchase and report on usage (see Evaluation, below). If other institutions require any public relations materials, The Ames Library will be responsible for providing details about the grant and a list of titles purchased, provided the individual participating library has made that information available.

Expandability & Adaptability

The interest in the overall topic of the proposal and the individual topics selected by participating libraries is likely to grow; therefore we expect that the availability of materials will increase as researchers and scholars continue their work and as interest in environmentalism continues to grow among policy makers, politicians and civic leaders. There will be ample opportunity for participating libraries to continue to build their collections further on the topics they selected and in emerging new areas. Another testament to the continued interest in the “Green, Global and Sustainable” theme is the successful past efforts to collect in the area of sustainability and environmentalism in the state using both Illinois Cooperative Collection Management Program (ICCMP) and CARLI funds. This topic will continue to engage users as more is learned about human behavior and the environment.

Evaluation of Project and Plan for Reporting Progress

To report on the project, all participants will send a list of purchased titles and costs to The Ames Library. Participants will also be strongly encouraged to communicate with their institutions about the additions to the collection and to forward this information for inclusion in the final report. Examples might include library newsletters, library or campus blogs, websites, student newspaper articles, emails to constituents, etc. This information will be included in the final report to be coordinated by librarians at The Ames Library and sent to CARLI by August 31, 2009, as specified by grant guidelines. In addition, The Ames Library librarians will follow up with participating libraries to gather circulation and interlibrary loan data after the first year to evaluate use of the materials purchased with CARLI funds. This information will be presented to CARLI by June 30, 2010 as per grant guidelines.

Explanations of Requests for Expenditures

Chicago State University, Library

Subject: Environmental Racism

Contact Bibliographers: Fatemeh Asadi, Ph.D. & Azungwe Kwembe

Amount requested: \$3,000

Environmental racism refers to intentional or unintentional racial discrimination in the enforcement of environmental rules and regulations. Studies show that race and socioeconomic conditions are the two major factors that play a role in environmental discrimination, and as a result, there is a significant relationship between a high concentration of minority and/or low incomes populations, exposed to an unhealthy environment. One such environment that has a great amount of hazardous waste sites is the South Side of Chicago which is predominantly African-American and Hispanic (Weintraub, Irwin. *Fighting Environmental Racism: A Selected Annotated Bibliography* at: <http://www.mapcruzin.com/EI/ejgc.html>).

In recent decades, growing attention has been given to the impact of environmental programs and activities on the health issues of minority and/or low income populations. “Concern that these populations bear a disproportionate amount of adverse health and environmental effect led President Clinton to sign in 1994, the Executive Order 12898 “Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations”, focusing Federal agency attention on these issues.” Since minorities were generally seen as less informed, less aware and less concerned with environmental issues, the President also intended the Order to provide minority and low-income communities with access to public information and opportunities for public

participation in matters relating to human health or the environment (Environmental Justice FAQ. U.S. Environmental Protection Agency). The most important step toward addressing the problem of environmental racism is to ensure minority and low income population are adequately informed about the hazards in order to remedy the injustice, to promote fairness in local, national, and international environmental initiatives and to involve them in environmental policymaking.

For the CARLI Cooperative Collection Development Grant, Chicago State University (CSU) is the best choice to collect materials on environmental racism, in that it is an urban, minority-serving institution whose students are predominantly African-American, and a majority of them belong generally to low-income families residing in the immediate Southside Chicago area. We propose to collect the works that cover and interpret environmental racism and its policies worldwide, including environmental injustice, environmental inequity, environmental discrimination, hazardous waste management, polluting industries, polluted environment, ecotoxicology, contaminated environment, environmental activism, sustainable community, and environmental health risk. We strongly believe that providing access to environmental injustice materials will educate and assist our students, who are typically the first generation of a low-income family to attend college, to understand the environmental movement, and to address the problem of environment racism and the inequities that result from human settlement and industrial development. It will also their taking charge of their lives, their community and surroundings and to create a Climate Justice, Clean Air, and Healthy Life for the future. In addition the collection will support our various disciplines' faculty such as Health Sciences, Pharmacy, Criminal Justice, Law, Sociology, Business, Economy, Public Policies etc. in their teaching and research, as well as all policymakers and researchers in the State of Illinois.

To verify CSU and I-Share current holdings that provide information on the topic, a subject search for "environmental racism" and "environmental justice" yielded a total of 378 hits in I-share, compared to 41 items at CSU and 1596 items in WorldCat. In addition, searching new and forthcoming titles from publishers showed that out of 10 titles related to the environmental studies, (Blackwell Recommended Environmental Studies brochure, November 2007), 6 titles are not owned in I-Share. This demonstrates that no I-Share library has systematically collected materials in this area, and shows our need to expand the library collection in this important topic of interest in the State of Illinois. Following are some examples of what CSU will add to the library collection:

Sustainable design: the art and science of green, Daniel A. Vallerio, 2008.

The AGC contractors guides to green building construction: management, project delivery, documentation, and risk reduction, Thomas E. Glavinich, 2008.

Access to environmental justice: a comparative study, Andrew Harding, 2007.

Ecotoxicology: a comprehensive treatment, Michael C. Newman, 2007.

Fundamental of air pollution. Daniel Vallerio, 2007.

Handbook for cleaning/decontamination of surfaces, Ingegars Johansson, P. Somasundaran, 2007.

Building sustainable communities: environmental justice & global citizenship, 2006.

Access to environmental justice for the urban poor, Joyce Wangui Onstad, 1997.

In the process of collecting materials, all precaution will be taken to avoid duplications in CSU Library or I-Share libraries. We pledged to have the materials ordered and cataloged within two months and we commit to last copy responsibilities. We are committed to inform our patrons of material availability, share them without restriction locally and via CARLI's remote borrowing program throughout the State of Illinois. Sustainability for maintaining this subject area will be continued in additional years beyond the grant, by emphasizing environmental racism and its related areas such as Green Life, Environmental Protection, and Climate Justice.

Columbia College Chicago Library

Contact: Paula Epstein

Title: Investigating Environmental Impacts on Public Health

Amount Requested: \$6,000

With the need to better understand the impact the role the environment plays in illness and well being, Columbia College Chicago (CCC) aims to strengthen its collection across a broad spectrum of health issues and

environmental impacts. Our institution is known for its arts programs; however, we have a vibrant science faculty who are keenly interested in developing student access to materials in this area.

Our curriculum reflects the breadth and depth of coverage of health issues. Our Liberal Education department strives to expose our students to interdisciplinary modes of thought as well as developing their critical thinking skills. Courses in this area that will be supported by our proposal include “Death and Dying;” a class where discussions on psychosocial, physical and palliative care of chronic diseases is thoroughly explored. Another course, “Social problems in American Society,” specifically mentions physical health as one of its area of discussion, and issues of public health also are part of the discussions. The Cultural Studies major, which “promotes the study of culture in all its varied forms,” will also benefit from our proposal due to their focus on studying diverse societies. This is an excellent opportunity for us to deepen our collection with materials on how other cultures view the connection between the environment, health and illness. These courses require students to approach and engage with issues of how the environment impacts all aspects of our lives, health, culture and ultimately, our societies with the end product of in-depth research projects.

In addition to the Liberal Education program and the Cultural Studies major, the Department of Science and Mathematics offers a minor in Environmental Science that incorporates courses on several different aspects of health and environment. Examples include “Biology of the Living World;” “Biology of the Human Immune System” with an emphasis on health, disease and environmental issues; “Science, Technology and Society;” “Personal Wellness;” and “Global Change: Past, Present & Future.” Lastly, Columbia College Chicago’s Science Institute received a National Science Foundation grant to “...develop a biological laboratory for art and communication students at Columbia College Chicago to perform research on cancer.” This CARLI grant will help the Library build a stronger research collection that will assist our students and faculty delve into why cancer is becoming so prevalent (it is now the third leading cause of women’s death). The potential areas of focus are numerous: the connection between environmental quality and human health, quality of life issues, toxicology, nutrition, and modes of treatment. Clearly, our grant could have a broad impact across both undergraduate and faculty researchers. The unifying element across all the programs and courses mentioned above is the need to provide access quality, authoritative, research.

There are several recent studies, programs and publications that have started the process of connecting the dots between our environment and our health, including The Pew Environmental Health Tracking Project, Centers for Disease Control and Prevention’s National Environmental Public Health Tracking Program (2004) the U. S. Environmental Protection Agency’s Envirofacts Data Warehouse. On the global front, the World Health Organization’s reports on the Top 10 causes of Death (2007) and Global Cancer Rates Could Increase by 50% to 15 million by 2020 (2003) demonstrate the level of global concern and need for action. These are just a few of the useful sources in identifying and prioritizing local public health issues, and with these systems, we can now track chronic diseases such as asthma, neurological and respiratory illnesses, developmental, reproductive and metabolic disorders and additional health concerns that suggest the possible implications of the part that our environment may play on those diseases and on increased diagnosis of multiple sclerosis, birth defects and cancer. The College hopes to extend efforts to research health support or alternative medical assistance, and the Library could support the College in attaining their goal by providing access to materials that presents different perspectives on the environmental impact on public health and possible solutions for the future well being of all.

Below are a few titles that will form the core of our collection with I-Share holding in parentheses:

Occupation and Environmental Health: recognizing and preventing disease and injury (5)

An introduction to community health, James F. McKenzie, Robert R. Pinger, Jerome E. Kotecki, 6th ed. (1)

Poverty and the environment: understanding linkages at the household level, World Bank (0)

Essentials of environmental health, Robert H. Friis. (1)

An analysis of private colleges in the South Loop area within walking distance of one another found that Columbia College Chicago may not have had the largest collection in these subject areas, but certainly has many unique titles.

	Columbia College Chicago	Roosevelt University	DePaul University	School of Art Institute	Robert Morris	I-Share
Environmental health and public health	9	12	38	0	6	361
Environmentally induced disease	10	9	24	1	2	173
Health risk assessment	21	25	83	1	16	331

A CARLI grant award of \$6,000 will go a long way in developing a viable and timely collection on environmental health and well-being and make it accessible to the community at large.

Illinois Wesleyan University

Subject: Conservation and Environmental Psychology

Contact Bibliographer: Stephanie Davis-Kahl

Amount Requested: \$4,000

Illinois Wesleyan University is a small, private, liberal arts university with four professional schools in Central Illinois. Illinois Wesleyan has a keen interest in sustainability and environmentalism, evidenced by a unanimous faculty vote approving an Environmental Studies major in 2005; our recently updated Mission Statement and new University Strategic Plan specifically naming environmental sustainability as a goal; our President’s signature on the Talloires Declaration in early 2007 to enact “a ten-point action plan for incorporating environmental sustainability into higher education,” and lastly, our recent participation in “Focus the Nation,” an effort to coordinate a nation-wide teach-in about a variety of issues surrounding the environment, sustainability and advocacy. Our students are highly aware of their environmental impact and our campus has a vocal and active groups comprised of students, faculty and staff who coordinate education and informational programs and events to highlight efforts across campus and to encourage others to reduce, reuse and recycle when possible.

This interest in environmentalism is beginning to trickle into other programs besides Environmental Studies, a fact that is encouraged and supported by the interdisciplinary nature of the major. The School of Nursing, which has a number of Public Health courses of interest to both Nursing and Biology students, and the department of Psychology have a keen interest in building our collections to reflect student and faculty interest in the impact of the environment on human development, and how human behavior positively or negative impacts our environment. A new field called Conservation Psychology (CP) is emerging within psychology. CP is defined as “the scientific study of the reciprocal relationships between humans and the rest of nature, with a particular focus on how to encourage conservation of the natural world. Conservation psychology is an applied field that uses psychological principles, theories, or methods to understand and solve issues related to human aspects of conservation.” (ConservationPsychology.org) Articles in peer-reviewed journals using the terminology and discussing the future of CP were published in 2001 and 2003, and the American Psychological Association established the Population and Environment Division in 2005 to bring together psychologists from different specialties to move toward a deeper understanding of studying human behavior and the environment.

An intriguing aspect of this particular area is its multifaceted and interdisciplinary nature. Works in this area could come from several areas in psychology, including social psychology, neuropsychology, cognitive psychology and consumer psychology. While our collections in each area in The Ames Library are of high quality for an institution our size, this is a gap in our collecting in both environmental studies and psychology. This proposal will build on our current collection in response to the student interest reported to us by faculty and from anecdotal evidence consisting of reference interviews with students and questions posed to the psychology liaison from interested students.

As a relatively new area, no subject heading “Conservation Psychology” yet exists in either Library of Congress Subject Headings or the *Thesaurus of Psychological Index Terms*. There is the LC subject heading “Conservation (Psychology),” but this refers to part of Jean Piaget’s theory of cognitive development related to children’s ability to think logically. The closest LC subject heading is Environmental Psychology, which is the term used below in the collection analysis. Using the OCLC Collection Analysis Tool and I-Share, I compared our holdings with small, private, liberal arts-focused, baccalaureate degree granting schools in the state. Based on the numbers below, there is very strong evidence that this collection could be highly useful and fill a gap in not only our collection at Illinois Wesleyan, but state-wide as well.

Subject	Illinois Wesleyan (ICO)	Augustana (ICY)	Elmhurst (ICV)	Knox (IBK)	I-Share Holdings
Environmental Psychology	23 titles 6 Unique	18 titles total	22 titles total	53 titles total	368 titles total
Mental Health – Environmental Aspects	0 titles	0 titles	0 titles	0 titles	7 titles total
Sustainable development -- Psychological aspects	0 titles	0 titles	0 titles	0 titles	1 title

Every effort will be made to purchase titles unique to I-Share libraries, however, there may be key titles owned by other schools that IWU faculty or students will want to make regular use of for courses or reserves. Titles will be selected from recommendations from interested faculty and students including the department of Psychology, the Environmental Studies program; online and print bibliographies created by librarians and researchers (such as ConservationPsychology.org and TeachGreenPsych.com); and core publishers in the mental health and environmental studies fields, including those in the areas of autism spectrum disorders and attention-deficit disorders. Titles identified useful for our collection, with I-Share holdings information in parentheses, include:

- Psychology of sustainable development*, edited by Peter Schmuck, Wesley P. Schultz (4)
- Environmental problems and human behavior*, 2nd ed., Gerald T. Gardner (2)
- The psychology of environmental problems*, 2nd ed., Deborah DuNann Winter (3)
- Directions in person-environment research and practice*, edited by J. Nasar (1)
- Environment across Cultures*, E. Ehlers, C.F. Gethmann (eds.) (1)

The Ames Library will commit to all CARLI grant guidelines, including sharing of the items purchased with CARLI and I-Share libraries, making items available for interlibrary loan to other institutions outside the state, and last copy responsibilities. We also commit to acquiring items in a timely manner with the input of faculty and students, and cataloging items within two months of receiving items purchased with CARLI grant funds.

Northern Illinois University, Founders Memorial Library

Subject: Herbal Medicine: Supporting Health Professionals and Students

Contact Bibliographer: Jitka Hurych

Amount Requested: \$3,000

“The complementary and alternative medicine of today will be the conventional medicine of tomorrow,” proclaimed Stephen E. Straus, M.D., Director of the National Center for Complementary and Alternative Medicine, of the National Institute of Health (*The Complimentary and Alternative Medicine Information Source Book*, 2001). The Center was established in 1992 and defines complementary and alternative medicine as a group of diverse and health care systems, practices and products that are not presently considered to be part of conventional medicine. The definition is typically un-conclusive, saying what complementary and alternative medicine is not, rather than what it is. Sometimes the term Integrative Medicine is used to refer to treatment modalities that are most effective, without preference to any one system.

In recent years, we have seen a dramatic increase of interest in alternative and complementary medicine, as well as an increased need on the part of consumers for credible information in this area. There are several reasons for this growth of interest. Although the Western medicine has been very successful in the management of medical emergencies, some bacterial infections, trauma care and complex surgical techniques, it sometimes falls short in the areas of prevention and management of some chronic diseases. There has been heightened emphasis on patient education and patient responsibility for their own health and self-care. The appeal of alternative health practices has also been growing because of the skyrocketing costs of mainstream health care and prescription drugs. Additionally, there is a belief that alternative medical practices take into consideration the whole person, including physical, mental, emotional and spiritual aspects, rather than treating only the symptoms of an illness. Some physicians are fairly open-minded about alternative medicine, especially when dealing with chronic illness. Their main criticism is that many alternative practices have not been subjected to rigorous critical evaluation.

One of the most frequently used therapies in alternative health practices is, according to recent surveys, herbal medicine. Humans have used herbal medicine, defined as the use of any plant part -- leaf, stem, flowers, root, and bark for the relief of certain complaints, conditions or ailments -- since ancient times. The father of modern medicine, Hippocrates, mentioned healing plants in 400 BC, as well as by the second century physician Galen. Herbal medicine is essential to healing in Indian Ayurvedic Medicine, Chinese Traditional Medicine, and Native American medicine. There has always been an interest in self-healing power of plants and herbs because they are intimately tied to the natural environment in which we all live. Increasing knowledge of the effects of plants on human physiology has enlarged the range of application of medicinal plants. Much research is still needed on botanical remedies and their interactions with other medications, as well as on potential adverse effects. The public's keen interest and need for information has driven research on effectiveness and safety of biologically based practices. Research in this area is growing as evidenced by publication of *The Journal of Alternative and Complementary Medicine: Research On Paradigm, Practice and Policy*, which is now fully indexed on Medline and in Index Medicus. To have achieved this level of acceptance is a testament to the quality of the work published in the Journal. Its inclusion in the ISI's Web of Knowledge database is also an indication of its quality. One example of exciting research being done on herbal medicine is a study of the potential contribution of an Ayurvedic herbal remedy to treat Alzheimer's disease. Some scientists have examined the efficacy of Ayurvedic preparation *Trasina* in restoring the damaged learning and memory function and in treating early stages of dementia as reported in *The Journal of Alternative and Complementary Medicine*.

Libraries have a responsibility to build consumer health and patient education collections. Health care professionals, including students of health sciences, need authoritative information on alternative medicine so they can respond to inquiries of patients/consumers and to make good choices in diagnosis and treatment.

Northern Illinois University is a logical place for the collection of books on herbal health practices because of its strong research program dealing with the biology of plants by the Plant Molecular Biology Center within the Department of Biological Sciences. Established in 1985, the Center provides a locus for the promotion, coordination and facilitation of research and interaction activities relevant to plant molecular biology and plant biotechnology. The center is dedicated to disseminating the research results of faculty to the professional community and to the public. In addition, there are several research programs at NIU with emphasis on health education, especially in the College of Health and Human Sciences with two major units: School of Nursing and Health Studies and School of Family, Consumer and Nutrition Sciences.

The interest in natural remedies and medicinal plants is worldwide as my recent experience at the Guadalajara Book Fair confirms. There were numerous books on medicinal plants and herbs at the Fair, published by respectable publishers and even university presses in Spain, Mexico and Latin America. Publishers of books on herbal medicine in the US include but are not limited to: CRC Press, Humana Press, Basic Health Publications, Elsevier-Health Science Division, Lippincott, Williams and Wilkins, WHO, Marcel Dekker, Inc., McGraw-Hill, Duke University Press, and numerous others. The prices of books range from under \$10 to \$150. Also reviews of books on herbal medicine in Choice and Book Review Index demonstrate serious interest in this area of study and research. Among these books, many are guides for medical practitioners and students of medicine, nursing and pharmacology.

The Library of Congress Subject Heading for Herbal Medicine is “Herbs, Therapeutic Use.” Currently, there are 480 items with this subject heading in the I-Share Catalog. NIU has almost 10% of the titles (45 titles). I-Share Catalog libraries own only 40% of what is available in Books in Print with 1,937 titles. To give a general idea of the number of titles available, a search of Amazon yields 1,153 book titles and OCLC WorldCat produced 7,216 titles (including electronic books). I also used OCLC First Search Collection Analysis to find out the strength of NIU collection. The subject of Herbal Medicine (LC Herbs—Therapeutic Use) is classified mostly in RM 666 (Therapeutics, Pharmacology). NIU Library’s collection was measured against a group of Illinois academic libraries that have comparable collections (University of Illinois, University of Illinois at Chicago, Southern Illinois University, and Illinois State University). While the group owned 361 book titles in that category, NIU owned 209. These results demonstrate that NIU already has a strong collection in this area. The grant will further enhance this collection that will serve all libraries within the State and beyond.

The interest in this topic seems to be universal and a strong collection available to all Illinois academic libraries will definitely enhance information in this relatively new area of research. The books will be ordered by a Subject Specialist for Health Sciences (who is responsible for providing specialized reference, offering bibliographic instruction and developing and maintaining subject specific collections), with the input of interested faculty catalogued in a timely manner and will be readily accessible to all participating libraries. With CARLI funds, we could strengthen and deepen holdings of books in this important area of research in Illinois.

University of Illinois at Urbana-Champaign

Subject: Medicinal Plants and Indigenous Medicinal Plant Knowledge: Implications for Human Health

Selector: Melody Allison

Amount requested: \$3,000

The environmental impacts of pollution, climate change, ozone depletion, habitat destruction, over-harvest, and other effects of human activity are threatening plant species around the globe with extinction. In the U.S. over 200 plant species have become extinct, and more than 730 species have been identified as endangered. A World Conservation Union report estimates that by 2050 over 29% of species of plants currently present in this country could be lost as well as over 34,000 species globally. Some scientists project that by 2100 two-thirds of plant species could be extinct. Adding to the urgency is the fact that less than 2% of known 250,000 plant species have been assessed for medicinal potential. The accumulated wealth of knowledge over the millennia by indigenous peoples around the world about medicinal plant uses is enormous. In one study of 122 plant compounds (from 94 plant species), fully 80% had identical or related ethnomedicinal uses. The value of this knowledge is compounded many times over when considering the high costs in time and money for pharmaceutical researchers to discover and bring medicines to market (use).

The study of how plants are used as medicine by indigenous cultures (ethnopharmacology) is important to provide knowledge for new drug therapies. It is also essential to record this knowledge before it is lost, as indigenous populations also face enormous pressures that threaten their existence, such as ecosystem devastation and assimilation into the modern world. For instance, in Argentina the Mbya Guaraní are in danger of extinction mainly contributed to the effects of deforestation on their way of living. Numbering over 100,000 in the 15th century, they now count near 4,000. Of the over 240 plants are used by the Mbya, 150 are used for medicines. Along with the plants, this knowledge will be lost forever if logging of the rainforest there continues unabated.

A number of related courses are taught at the University of Illinois at Urbana-Champaign, such as: Plants, People, & Environment; Plants and Their Uses, Plant Secondary Metabolism (natural products); Chemical Ecology (plant-interactions); and Latin American Ethnobotany. Investigation of plants and their bioactive compounds for use in medicines involves multiple disciplines, such as botany, chemistry, biochemistry, pharmacology, anthropology, archaeology, history, and linguistics.

Significant research into identifying and isolating bioactive plant compounds from Egypt, Kazakhstan, Uzbekistan, Kyrgystan, Tajikistan, Australia, New Zealand, Jordan, and South America as well as flavonoids of food crops and food crop cell cultures for effects on human health is being done at the University of Illinois at Urbana-Champaign, for instance:

- Antioxidant activity of several types of berries as cancer preventatives and cardioprotective agents
- Bioactive properties of highly pigmented fruits, other native pigments, and medicinal herbs and metabolic fate of phytochemicals
- Regulation of detoxification enzymes by dietary factors from plants such as soy, broccoli, and other cruciferous vegetables specifically as related to cancer prevention
- Effect of phytochemicals on chronic disease

International leadership is also being advanced by a UIUC natural resources and environmental sciences professor as co-founder of a new Global Institute for Bio-Exploration. This initiative is a sustainable, non-exploitive model for plant prospecting. Intellectual property rights are retained by the locals, who receive licensing fees/royalties for research and ecosystem protection.

Education and research in related areas are also carried out in the Department of Medicinal Chemistry and Pharmacognosy at University of Illinois at Chicago, the Tang Center for Herbal Medicine Research at the University of Chicago, and the Department of Plant Biology at Southern Illinois University.

The University of Illinois at Urbana-Champaign Library requests \$3,000 to support education and research with materials about medicinal plants, ethnobotanic medicine, and related areas, from South America, Central Asia, and Africa in English and non-English languages. Selected titles for purchase will give botanical details about plants and describe medicinal purpose as described by indigenous peoples or noted from research. Selected titles will also relate to environmental issues that have potential for or are detrimental to plant ecosystems-- ecosystems that have or have yet to be identified as sources of medicinal plants. The topics for this proposal can be very multi-interdisciplinary. The focus of selections will be related to basic science rather than applied/clinical health/Complementary and Alternative Medicine focus of Northern Illinois University's proposal "Herbal Medicine: Supporting Health Professionals and Students." As there may be gray areas between our proposals, I will work very closely with NIU Bibliographer Jitka Hurych to make sure there is no overlap.

A cursory exploration of WorldCat finds that for kw:medicin* plants, su: South America for yr:2000-2008 there are 24 titles, 5 of which are owned by UIUC and 15 that are not found in Illinois. Limiting this search to UIUC without limiting to any specific time reveals that UIUC holds 31 titles for this area—8 of which UIUC is the only holder and 8 where it is one of two holders; 19 are non-English language and 20 are non-U.S. publishers. Prices of books are expected to cost \$50-\$100 plus above average shipping and handling costs for non-U.S. publishers several affiliated with academic presses. Acquisition details for related topics from other geographic regions are expected to be similar. Not only will these materials support education and research needs of interested Illinois residents, the knowledge gained from related scholarly activities that advance plant protection and medicinal plant knowledge will benefit the health and well-being of Illinoisans and that of our plant ecosystems.

UIUC agrees: to maintain a last copy for items purchases or arrange with another CARLI member to do so; to circulate titles to CARLI libraries as requested via interlibrary loan; and to catalog titles within two months of arrival.