OSU Extension – 2006 Innovative Grant RFP

1. PROJECT TITLE:  Mold in Homes and Buildings: Prevention, Assessment and Resolution

DESCRIPTION
Most people spend about 90% of their time indoors. Oregon’s damp, temperate climate creates the ideal environment for mold growth in homes and other buildings. Mold is dangerous to health and destructive to possessions and structural integrity of buildings. Oregon has an immediate need for high quality education and outreach regarding mold prevention, assessment and resolution. Currently, there is a notable absence of educational programs for Oregonians addressing this topic.

OSU Extension Service will collaborate with several mold experts and public agencies to coordinate an all-day streaming video conference geared for professionals in the housing, building and health trades, and a series of evening workshops for homeowners, renters and facility managers. A staff in-service training will be provided via poly com and will include a resource notebook for staff responding to consumer questions.

2. PROJECT TEAM

Program coordinators:
- Susan Busler, Family and Community Development, Lane County Extension
  Regularly teaches classes on home maintenance and healthy homes with the local Housing Authority and public agencies. Responds to hundreds of mold-related calls and inquiries annually.

- Jeanne Brandt,  Family and Community Development, Washington County Extension

Collaborators:
Workshop presenters/instructors:
- Naomi Hirsch, E.d.M., Program Coordinator, Environmental Health Sciences Center Community Outreach and Education Program (COEP), OSU
- George Tsongas, Ph.D., P.E. Consulting Engineer and Professor Emeritus, Portland State University
- Mike O’Brien, City of Portland, Office of Sustainable Development

Technology support: (Streaming video broadcast, program archive and access, polycom/teleconference arrangements, marketing materials design and review)
- Extension and Experiment Station Communications, OSU Information Services, Extension Computer Unit, Network Services

Educational materials for distribution, program marketing:
- United States Environmental Protection Agency (EPA)
- American Lung Association of Oregon, Sue Fratt, CEO

3. PROJECT PLAN

Target audience:
The all-day conference will target professionals in the housing and building trades including contractors, realtors, home inspectors, facility managers and maintenance staff.
Two evening workshops will be provided for homeowners, renters and those who work with or live with the susceptible older populations and children, such as allergy and asthma professionals, childcare providers, and parent groups.

Extension faculty and support staff will participate in a staff in-service training via poly com and will receive a resource notebook to aid them when responding to consumer questions about mold.

**Justification:**
Mold is often in the news. People are concerned about its potential health and economic impacts. Mold is quickly becoming a “high profile” issue throughout the country. We regularly see in the local and national news where businesses have been disrupted and residents displaced because of mold contamination. While there are several agencies attempting to regulate the quality of outdoor air and workplace air, the air in homes is left to the individual. Indoor air pollutants, including mold, trigger asthma and allergies. In children, asthma is an increasingly common chronic condition, particularly in inner city and minority populations.

Since there is currently no extension housing specialist or extension energy program, creating a partnership to provide current information and a network to address this issue will be a worthwhile endeavor. This educational focus fits into the State and Federal Plans of Work and was identified as an area of significant gap in services at the Portland Initiative needs assessment breakfast hosted by Lyla Houglum in February, 2006. Beth Emshoff, Metro Extension Staff has indicated during her initial assessment of needs in Portland, this emerges as an important topic.

Using innovative technology to make this information available to rural and urban audiences in a timely and convenient format, is cost efficient and effective. Creating partnerships with other agencies and charging downlink sites and participants a small fee will assist with creating a credible, sustainable, ongoing program.

Oregonians spend a great deal of their time indoors, and the climate makes mold a challenge in many homes, apartments and businesses. Currently Extension agents receive hundreds of mold-related consumer questions each year. One county Extension office has assisted three consumers, where toxic mold was discovered in their residence, and whose homes had to be destroyed.

Professionals in the housing and building trades find it challenging to locate appropriate educational opportunities to meet their CEU (continuing education unit) requirements and have a particular need for programming in the area of mold assessment and remediation. Homeowners and property managers are seeking credible information on how to clean and control mold in their homes and apartments. Most of the information available is inaccurate and mold control scams are prolific. Seniors and low income audiences are particularly vulnerable to misinformation and scams.

**Project goals and objectives:**
1. Enable extension faculty and staff to answer questions relating to indoor air, moisture and mold.
2. Provide current, unbiased, research based information for professionals and consumers related to the health effects of exposure to mold and how to prevent, identify and address mold issues.
3. Identify resources and references for professionals and consumers.

**Anticipated outcomes:**
1. Strong capacity of Extension faculty and staff to respond to mold related inquiries.
2. Partnerships developed providing opportunities for future collaborative projects and grants.
3. Awareness by general public of Extension as a reliable resource for answers to mold questions.
4. Increased competency of professionals in the building and maintenance fields through participation in educational programs.
5. Ability of homeowners and other consumers to change behaviors and take actions to address mold in their homes and businesses.
6. Availability of resource packet of educational materials, resources and references.

**Proposed project activities:**
1. Development of a one hour poly com in-service training for Extension Staff.
2. Development of a one hour poly com program in conjunction with in-service training for sites willing to host a streaming video training.
3. Development of an all day (9 to 3) streaming video conference (for professionals).
4. Development of two two-hour streaming video conferences for home owners and general public.
   * Household Molds: Fact vs Fiction
   * Healthy Air/Healthy Homes
5. Creation of a mold resource toolkit for Extension Staff.
6. Development of conference proceedings for distribution to participants.
7. Creation of a mold toolkit folder and resources for workshop participants.

**Evaluation Plan:**
1. On-line evaluation for Extension Staff participating in the In-Service Training.
2. Conference evaluation
   - Day of conference evaluation - document knowledge change and satisfaction.
   - 90 day follow-up evaluation to determine actions taken.
3. Workshop evaluation
   - Pre and post workshop surveys to assess knowledge gained.
   - 90 day follow-up survey to identify changes in behavior, actions taken in the home and information shared with others.

4. BACKGROUND INFORMATION –
Adverse health effects of exposure to mold are substantiated by current research. “Exposure to certain fungi (molds) can cause human illness. Molds cause adverse human health effects through 3 specific mechanisms: generation of a harmful immune response (e.g., allergy or hypersensitivity pneumonitis [HP]), direct infection by the organism, and toxic-irritant effects from mold byproducts. For each of these defined pathophysiologic mechanisms, there are scientifically documented mold-related human diseases that present with objective clinical evidence of disease.” The medical effects of mold exposure. *The Journal of Allergy and Clinical Immunology* February 2006

In the state of Oregon, asthma is costly. The population of adults with asthma is at 8.7% compared to the national rate of 7.5%. In Oregon, asthma is impacting approximately 325,000 adults and 64,000 children. Asthma results in 2,500 hospitalizations each year. Approximately 16% of adults missed one or more days of work, school or other activities due to asthma. Asthma is creating an economic burden contributing to direct and indirect costs estimated at $152 million annually. Addressing indoor air issues, such as mold will result in significant economic savings to the state of Oregon.

Educational outreach on indoor air hazards has proven to be successful in decreasing asthma symptoms and reducing the need for urgent health care in emergency rooms. One example is the Seattle Healthy Homes Project. The Washington program trains community health workers how to perform healthy home interventions and educate residents about asthma and allergy triggers and the control resources available to them.

The most important aspect of this project is the opportunity for OSU Extension to take the lead for the state of Oregon in bringing awareness and education to the public on this important topic and to empower individuals to take the steps necessary to reduce and minimize exposure to mold and other indoor air hazards. The partnerships created with these collaborators will sustain this project and create a strong foundation for future innovative projects in mold education for Extension.
### OSU Extension Service - 2006 Innovative Grant RFP

#### Budget - Mold in Homes & Buildings

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<thead>
<tr>
<th>Grant funded Expenses</th>
<th>Amount</th>
<th>Grant Matched Funds/Income/In-kind Contributions</th>
<th>Amount</th>
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<td><strong>Poly-com Fee</strong></td>
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<td><strong>Resource Materials/Marketing Assistance</strong></td>
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**Plan to charge fees with the intention of establishing sustainability for this program.**