

## **Collaborations in Microbial Ecology Between University of Montana, Montana State University, and Montana Tech**

Faculty at the University of Montana and Montana State have a strong history of interaction. Recently, faculty at Montana Tech have also come in to the collaboration. Perhaps the most direct way to demonstrate the interaction between these faculty is to cite seminars given, grants and projects involving the groups, co-authored publications, and PhD dissertation committees. Finally, we hope that further development of the emphasis in microbial ecology will foster greater relations within the three academic units.

### **Seminars Given:**

In the last two years the following microbial ecology faculty at MSU have presented seminars at University of Montana.

- 1) William Costerton, Director, Center for Biofilm Engineering,
- 2) Gill Geesey, Department of Microbiology.
- 3) David Ward, Department of Microbiology
- 4) Joan Henson, Department of Microbiology

The following UM faculty gave seminars at MSU:

- 1) Bill Holben, Division of Biological Sciences
- 2) Matthias Rillig, Division of Biological Sciences

Dr. Gammons from Montana Tech will present a seminar at UM next week.

**Peer Reviewed Publications Co-Authored** –The following publications are co-authored between faculty in microbiology/ecology at UM and MSU.

- Marler, M. J., C. Zabinski, T. Wojtowicz, and R. Callaway. 1999. Mycorrhizae and fine root dynamics of *Centaurea maculosa* and native bunch grasses in western Montana. *Northwest Science*. In press.
- Marler, M. J., C. Zabinski, and R. Callaway. 1999. Mycorrhizae indirectly enhance competitive effects of an invasive forb on a native bunchgrass. *Ecology*. 80:1180-1186.
- Zabinski, C., and J. E. Gannon. 1997. The effects of recreational impacts on soil-microbial communities. *Environmental Management* 21:233-238.
- Moynahan, O.S., C.A. Zabinski, and J.E. Gannon. (2001) Microbial community structure and carbon-utilization diversity in a mine tailings revegetation project. *Restoration Ecology*. In Press.

**Grants and Projects Co-PI's** –The following grants have been co-authored by faculty in microbial ecology at MSU, UM, and Montana Tech.

**Strategic Improvement Plan (SIP) for Montana EPA/EPSCOR** to Establish the Center for Environmental Remediation and Assessment U.S.E.P.A. 999,964. 10/01/99-09/30/01. (In collaboration with Montana Tech and Montana State University)-current funding

**Strategic Improvement Plan (SIP) for Montana EPA/EPSCOR** to Establish Research in the Biogeochemistry and Biological Effects of Toxic Metals from Historic Mining. U.S.E.P.A.1,008,782. 07/01/01-06/30/03. (In collaboration with Montana Tech and Montana State University).- submitted

**Mycorrhizal ecology of thermal sites in Yellowstone.** Thermal Biology Institute, MSU, Bozeman. 3/1/00 to 3/1/01. Contract # GC135-00-Z0599. Funded

**Carbon exchange through common mycelial networks:** a fungal perspective. USDA NRICGP (collaborative with Dr. Zabinski, MSU). 7/1/00 6/30/03. \$235, 977. not funded

**Life in the Pit: Unique Biogeochemical Cycling in Highly Stratified, Metal Rich, Aquatic Environment:** SGER Biocomplexity Grant (UM and Montana Tech): Submitted March 28, 2001.

## **Ph.D. Committee Member**

(B. Holben, UM) for Eric Kern, Ph.D. Candidate, Department of Microbiology and Center for Biofilm Engineering.

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