

# Air Sampling and Analysis for Mold in Hills Building UMass

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## Room 252 Hills South

### Introduction

Upon request, room 252 of Hills South was sampled for airborne mold on November 17, 2011.

### Methods

Air samples were collected for mold analysis using a BioPump Plus sampler that operated at a verified flow rate of 15 L/min and a 5-minute sample (0.075 m<sup>3</sup> total volume) was collected in an Air-O-Cell cassette. One sample was taken outdoors for comparison with indoor air samples. Collection media in the cassettes were analyzed microscopically by PAACB certified spore analysts at 400X magnification. The whole trace was enumerated and counts were converted to concentration and expressed as the number of spores per cubic meter of air (spores/m<sup>3</sup>). The lower limit of detection was 13.3 spores/m<sup>3</sup> of air

### Results

#### Outdoors

Basidiospores	1,666
<i>Cladosporium</i>	347
Ascospores	80
<i>Penicillium/Aspergillus</i> -like	53.3
Smut	53.3
Unknown	66.6
<u>Hyphal Fragments</u>	60.0 * not included in total
Total	2,266.2 spores/m <sup>3</sup>

Moderate amount of airborne particles

#### Room 252

Basidiospores	133
<i>Cladosporium</i>	26.6
<i>Pithomyces chartarum</i>	13.3
Unknown	13.3
Pollen	13.3 * not included in total
<u>Hyphal fragments</u>	26.6 * not included in total
Total	186.2 spores/m <sup>3</sup>

Moderate amount of airborne particles

## Interpretation

Total spore concentrations are below outdoor levels. In addition, individual taxa do not exceed outdoor levels or are in very low concentrations.

## Recommendation

No action recommended.