

Research and Scholarly Activity Fund Award Final Report

Name: Sustainable Paint Practices

Department: Fine Arts

Faculty: Helena Wadsley

In no less than 350 words, please reflect on the status of the project for which you received an RSAF award. You *may* wish to address: potential new avenues for the project enabled by the award; how the funded project builds on previous projects and/or collaborations; any publications, conferences, talks, classroom modules, etc., coming out of the funded project; the outcomes of collaboration facilitated by the award; the potential for future research and scholarly activity projects made possible by the award; or the funded project's impact on your activities in general at the College. As this report will be posted on the <u>Scholarly Activity website</u>, please submit an electronic copy.

The RSAF award final reports may also be published in the Research and Scholarly Activity annual report. You will be notified of this and given final approval of content before publication.

You may also be asked to participate in events promoting research and scholarly activity at the College.

Please write in the space below or attach an additional PDF page.

The research into sustainable paint and sustainable painting practices gave us valuable information regarding paint disposal, which has been implemented since the beginning of the fall semester. Whereas painting students were dumping dissolved acrylic paint, or polymer, down the drain, we have drastically reduced the amount of these micro-plastic particles from entering the water system. Additionally, as there has always been some concern regarding the health and safety of paint in the studio which has limited the type of paint used, the research project allowed us to test other types of paint besides acrylic. Tests were done to determine suitability for the course curricula, testing alternative paint types to see if they could allow students to fulfill the learning objectives for the painting courses offered at Langara. While testing, we noted whether the paint had strong odours or any other characteristics that would imply they could affect the health of students. Research was also done on pigments, different binding media, such as casein, walnut oil and an emulsified linseed oil by consulting MSDS sheets. In conclusion, the most versatile paint alternative to acrylic is a walnut-oil based paint. It is made without solvent and has the ability to be worked with in the diversity of ways demanded by the curricula. The other paints we experimented with, which were chosen for their less toxic qualities, were not versatile enough to meet our needs or off-gassed in ways that would have been difficult to tolerate. Thanks to Andrew Mosi from the Chemistry Department, we successfully tested a process for separating paint waste from water so that we could pour clean water back into the water system and take the paint waste to a recycling station off-campus.