Publications: We have one publication in review at Matrix Biology on the role of the ECM in liver metastasis and with the data generated, we aim to submit a second publication in the fall

Presentations: Prof. Oudin has been able to present some of the work at 6 invited seminars and PhD student Justinne Guarin presented this work twice, although some of the meetings we planned to go to have been cancelled and/or postponed

We found that even after 4 weeks on a high fat diet, the composition of the structural ECM proteins in the liver changes and can promote tumor properties that support metastatic outgrowth. This identifies a novel mechanism by which obesity may promote metastasis to secondary organs such as the liver.

We found that treatment with chemotherapy also induces changes in the composition of the ECM, some of which overlap with those induced by obesity.

Our future plans involve determining whether reversal from a high fat to a low fat diet, which would stall weight gain, can reverse the effects on the ECM. Overweight breast cancer patients, which have higher rates of metastasis, are often advised to lose weight to prevent or minimize recurrence. These studies will help provide a rationale and scientific explanation for why this might indeed help reduce metastasis.