

Project Title	Investigating if bone cancer cells, that are resistant to anti-cancer drugs are also capable of spreading more rapidly
Recipient	Ms Fathima Mufaidha Mohamed Raju
Institution	Harry Perkins Institute of Medical Research
Research description	<p>Death from cancer occurs mainly when it spreads to different parts of the body. Bone cancer (sarcoma), is more common in adolescents and young adults, with 1200 new cases per year in Australia.</p> <p>Patients with bone cancers that are found to be spreading have a bad diagnosis, with only ~20% surviving more than 5 years. Some evidence suggests that cancer cells that are resistant to anti-cancer drugs are also able to spread faster.</p> <p>The team has made drug-resistant bone cancer cells in the laboratory from drug-sensitive parental cells, and will test their ability to proliferate, migrate and invade, compared to when these same cells are sensitive to drugs. The drug-sensitive and resistant cells will be tested for their ability to proliferate, migrate and invade using an instrument called the IncuCyte ZOOM. If the drug-resistant cells are more proliferative/migratory/invasive, the team will then look at what molecules have been altered in these cells that cause this, which might identify new molecules/drugs that can stop the drug-resistant cells from spreading.</p>
Funding from CCWA	\$3000
Fully supported	In the name of the Abbie Basson Sarcoma Foundation