



**CALIFORNIA STATE SCIENCE FAIR
2016 PROJECT SUMMARY**

Name(s) Hadrien P. Lackner	Project Number J0316
Project Title Childsplay: Using Playgrounds to Benefit Mankind	
Abstract Objectives/Goals My aim is to demonstrate the feasibility of supplying power and water to small, isolated communities by the use of simple mechanical playground devices powered by children at play. Methods/Materials Playground devices such as swings, sea-saws, carousels and treadmills, using small mechanical models. Results These devices can be adapted to generate power and to pump water, as well as to mill grain. Conclusions/Discussion By using simple, durable mechanical devices, I will demonstrate that off-the-grid communities can generate cheap, reliable power and can also pump water for agriculture, sanitation and consumption. These devices can also be used for milling grain.	
Summary Statement I will demonstrate that off-the-grid communities can generate power, pump water and mill grain using simple, mechanical, human-powered devices.	
Help Received	