



**CALIFORNIA STATE SCIENCE FAIR
2016 PROJECT SUMMARY**

Name(s) Hadrien P. Lackner	Project Number 36416
Project Title Childsplay: Using Playgrounds to Benefit Mankind	
<p style="text-align: center;">Abstract</p> <p>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.</p> <p>Methods/Materials Playground devices such as swings, sea-saws, carousels and treadmills, using small mechanical models.</p> <p>Results These devices can be adapted to generate power and to pump water, as well as to mill grain.</p> <p>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.</p>	
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	