



## **Ski Spectacular Instructor Academy**

**Hosted by The Hartford Ski Spectacular  
December 4-7, 2023**

### **Clinic Summary Notes**

#### **Clinic Topic: Prosthetics in snowboarding – Brent Kuemmerle**

Understand the different kinds and causes of amputations and how they relate to body movements and board performance

1. Congenital vs traumatic
2. If traumatic how did it happen? How long ago?
3. If congenital: why and other symptoms
4. Secondary concern with both
5. How can upper body amputations affect body movements and board performance?

Reflect on our discussion of different types of amputations and how they relate to snowboarding fundamentals

Explore different ways of attachment/suspension for prosthetics and advantages/disadvantages of each

1. Pin lock systems
2. Vacuum seal systems
3. Additional suspension solutions ala sleeve, belt etc.

What are some tips and tricks to get a prosthetic in a snowboard boot?

1. Plastic bag over foot
2. Socks
3. Foam or filler to fill in dead spots around pylon
4. High back adjustment
5. Shim for boot or binding

What are some other options?

1. Golf shoe
2. Other shoes
3. Direct clip into step on binding

Where is the prosthetic industry currently in relations to snowsports and sports more generally?

1. What is the difference between a sport prosthetic and an everyday prosthetic?
2. How many companies focus on sport in prosthetics?
3. Upstarts including link below

Here is a link to the foot/knee that most Paralympians are wearing: <https://biodaptinc.com/>

Understanding how different prosthetics will enhance/hinder body movement while sliding on snow

1. What is the prosthetic designed to do and how does this affect board performance?
2. How can we alter the prosthetic to do what we want to see?
3. How can we alter the body movements to make the prosthetic do what we want?

AK vs BK, AE vs BE