[Music begins]

[Video: IU Banner appears top center]

[Words appear: Indiana University Foundation]

[Words appear: Between 1.8 and 3.6 million sports-related concussions occur in the U.S. each year, ImPACT Applications, Inc.]

[Words appear: From 2001 to 2009, the rate of emergency department visits for sports-related concussions rose 57% among patients age 19 and younger, Centers for Disease Control and Prevention]

[Whistle blows]

[Video: Football player catches a pass on a football field and begins running while opposing team pursues him]

Jeff Grannan: Alex has had a couple concussions.

[Video: Alex smiling and standing next to a high school bus wearing an IU sweatshirt with a gym bag slung over his left shoulder and an earbud in his left ear]

Jeff Grannan: At the end of his freshman year and the end of his sophomore year he smacked his head on the back of the turf pretty hard.

[Video: Alex’s father, Jeff Grannan, and mother, Brittany Grannan, sitting together with football field in the background]

[Words appear: Jeff Grannan, Parent of high school football player]

Jeff Grannan: We could tell that something was wrong. We could tell that he was in a fog. There was a haze. We had to wait to figure out exactly, was it a concussion, was it a severe concussion, was it something that was even concussion related. It was something that’s really scary.

Brittany Grannan: Football was new to us when he started playing.

[Words appear: Brittany Grannan, Parent of high school football player]
Brittany Grannan: It doesn't really hit you until something like a concussion happens.

Nicholas Port: One of the things that’s important to understand is that concussions are a part of life,

Nicholas Port: but what we’ve been learning as people become more aware of it is that, it’s repeated concussions close together where the long term risk factors are increasing. So I feel like if we do a better job of diagnosing concussions we can do a better job of managing concussions. Right now concussions are diagnosed primarily by symptoms. You ask the student athlete how they feel,

Nicholas Port: there’s a 22 item checklist. That requires a student athlete to tell you how they feel.

Nicholas Port: and the thing about competitive athletes is that by definition what they want to do is compete.

Nicholas Port: So definitely the goal is always focusing on building a rapid tool, an objective tool, a tool that can't be sandbagged so people can't fake the baseline. That would be usable to the folks on the sidelines keeping particularly our young youth athletes safe.
Nicholas Port: We’re trying to build a tool that’s akin to the blood pressure cuff. Where it’s just an automatic device that ... Blood pressure cuff, you just put it on your arm and the machine does the work.

[Video: Close-up view of laptop computer screen with image of eye, colored dots on a yellow background]

Nicholas Port: In the case of what we’re trying to do, you just put your eyes up to an eye tracker and

[Video: Female subject wearing viewer machine as female lab worker watches the computer screen]

Nicholas Port: now the subject will be following a calibration dot as it moves from location to location, to 13 predefined locations on the screen.

[Video: Close up of laptop screen with close-up image of an eyeball moving and colored dots on a yellow background]

Nicholas Port: Then most importantly it’s also measuring the peak velocity of her eye.

[Video: Close up view of female lab worker moving to the laptop computer screen with image of eyeball moving and colored dots on a yellow background]

Nicholas Port: Peak velocity is an involuntary aspect of eye movement control. Changes in threshold of your ability to pursue has been a very strong indicator of a concussion.

[Video: Alex’s father, Jeff Grannan, and mother, Brittany Grannan, sitting together with football field in the background]

Jeff Grannan: We like what Dr. Port is doing

[Video: Back of female lab worker’s head with IU Sports Medicine logo over doorway in the background moving to female subject wearing eye viewer machine. View shifts to female subject and female lab worker and open laptop]

Jeff Grannan: with the hardware and software that he’s developing to take a look and try and diagnose concussions on the sideline.

[Video: Alex’s father, Jeff Grannan, and mother, Brittany Grannan, sitting together with football field in the background]

Jeff Grannan: Nothings more important

[Video: Close up of two football players wearing maroon helmets with gold stripe and white jerseys with the numbers 16 and 34]
Jeff Grannan: than trying to figure out what’s going on with your son

[Video: Football player wearing a maroon helmet with gold stripe and maroon football uniform with the words “Cougars” and the number “34” in gold on the front of the jersey talking with a man wearing a white baseball cap on a football field]

Jeff Grannan: and having that immediate ability to diagnose a concussion I think is valuable.

[Video: Alex’s father, Jeff Grannan, and mother, Brittany Grannan, sitting together with football field in the background]

Jeff Grannan: Having something on the field real time that measures your eye movement and takes the variability of the kid self-reporting on answers to test. I think it’s just something that's a game changer.

[Video: Thumbnail headshot image with words “Suggested by Indiana University Foundation, BECAUSE OF YOU”]

[Video: IU logo and FOR All: The Indiana University Bicentennial Campaign logo appear]

[Music ends]

Transcript Ends.