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ALL THINGS PURDUE

Is Woodson coming to Purdue?

MUJTABAA HASAN | SENIOR PHOTOGRAPHER

Alum and All-American returner Rod Woodson shouts to hype the crowd before the fourth quarter against Northwestern on Nov. 12 at Ross-Ade Stadium.

Source says former Purdue great is interested in head coaching position

BY ATREYA VERMA Staff Reporter

According to a source close to Rod Woodson, the star cornerback would be extremely interested in the head coaching position at Purdue.

Woodson was an All American cornerback during his time in West Lafayette and has his named etched into the Purdue football record books. He was drafted by the Pittspick in the 1987 draft and went on to

have an illustrious 17-year career in has the third most interceptions (71) in league history.

He was inducted into the Purdue Intercollegiate Athletes Hall of Fame in 2003, the Pro Football Hall of Fame in 2009 and the College Football Hall of Fame in 2016. Three weeks ago, he was honored during the halftime ceremony against Northwestern for his inducburgh Steelers as the 10th overall tion into the College Football Hall from irrelevancy. of Fame.

the league. The 11-time Pro Bowler spent a couple years as an analyst ing his vision for the football pronetwork. He is currently the defensive backs coach for the 9-2 Oakland Raiders.

Woodson has not directly made any appeals to the athletic department, but when he returned for his induction ceremony, he made the decision that he could be the right person to lead Purdue football back the job, there is no indication that

After he retired from the NFL, he director Mike Bobinski a plan detailfor Big Ten Network and the NFL gram yesterday. There have been no formal communications until now, but, Woodson was part of the search committee that selected the new athletic director.

If the administration considered Woodson, "he'd jump at" the opportunity, the source said.

Even if Woodson is interested in Purdue would consider him as a can-sity, but it takes a heck of a lot more The Hall of Famer sent athletic didate. There has been no recent in- than that."

formation released from the athletic department regarding the coaching search.

However, there are some, like senior BTN.com writer Tom Dienhart, who believe that hiring Woodson would be a big mistake.

"He doesn't have the experience to resurrect a Purdue program that is in the sorry state that it is right now," said Dienhart. "I'm intrigued by the passion and the love for the univer-

Electronic smart bandage opens doors for personalized medicine

BY SARAH ELDER Staff Reporter

A durable skin-like bandage created by a Purdue assistant professor might revolutionize biomedical sensing and improve patient care.

Chi Hwan Lee's lab has developed a product that looks and feels like a bandage, but it's really a thin electronic device that collects biomedical data from the person who wears it. Its electronic properties make it a smart bandage that can monitor and even treat patients suffering from a variety of conditions. Lee, who is an assistant professor of biomedical engineering, sees many exciting applications for this technology in healthcare.

"My goal is to develop wearable biomedical devices that can solve key problems facing our society, with applications in personalized healthcare, advanced health diagnostics and smart rehabilitation," said Lee.

For now, the lab is exploring how the bandage can be used as a platform for smart drug delivery. The envisioned product could detect the severity of disease and autonomously deliver controlled doses of drugs via the skin. This could improve many of the problems associated with drug treatments, including improper dosing and undesirable side effects.

Lee first came up with the idea for the bandage as a post-doctoral researcher at the University of Illinois, Champaign-Urbana. There, he developed biomedical skin patches that could monitor body motion and temperature. He found that this technology, like other thin-film based sensors, was relatively rigid and inflexible. This is a critical problem for skin-mounted devices because the skin stretches and twists with the



PROVIDED BY CHI HWAN LEE Professor Chi Hwan Lee's lab developed the networked nanocomposite elastomer technology for use in an electronic bandage.

motion of the body. When subjected to typical strains, like the bending of the knee, these sensors are likely to crack, become dysfunctional and lose adhesion to the skin.

When he came to Purdue in August of 2015, he wanted to expand upon the skin patch research and make it accessible for his first generation of graduate students. The new project sought to improve skin patch flexibility by incorporating a thin film of conductive nanowires. This addition proved to be very successful.

The structure of Lee's bandage material, called a networked nanocomposite elastomer,



The bandage is made from a mesh of conducting nanowires on a sheet of elastic polymer.

is the source of its flexibility. The nanowires are stacked on top of one another and arranged in a stretchable serpentine lattice, which is then embedded into a patch of elastic polymer. This gives the bandage electronic capabilities, much like conventional thin-film sensors, while maintaining the flexibility it needs to be comfortably worn on the skin.

Lee said, "The key novelty of this product arises from the combination of nanomaterials and skin patch technology. Our investigations revealed that (our bandage) can resist more efficiently against cracking and over-stretching

compared to conventional sensors."

The bandage technology was published in an October issue of Advanced Materials, a scientific journal that reports on discoveries in materials science. This is an accomplishment that Lee says was made possible because of the hard work and collaboration of his students.

"We, as a team, have worked hard to achieve this goal, leading us to create a more stretchy, sticky, and durable skin patch than ever," he said. "This never would have been achievable without that teamwork.'

