**Motorola Is Working On a Password Pill for Once-Daily Authentication — Oh, and a Tattoo, Too**

By [Doug Aamoth](http://techland.time.com/author/daamoth/)May 31, 2013

Let’s get real: [We have a password problem](http://techland.time.com/2012/08/08/online-passwords-are-a-broken-system-here-are-some-ways-to-fix-it/).

People generally don’t use unique passwords for each site they visit. Some people just use [plain awful passwords](http://techland.time.com/2012/10/25/these-are-the-25-worst-passwords-of-2012/). Even if you use strong passwords, [as recommended](http://techland.time.com/2011/06/29/two-minute-video-how-to-create-strong-online-passwords/), sites still get hacked ([over](http://techland.time.com/2012/08/09/hackcraft-blizzard-warns-of-security-intrusion-recommends-users-change-passwords/) and [over](http://techland.time.com/2013/04/26/report-livingsocial-hacked/) and [over](http://techland.time.com/2013/02/19/apple-says-it-was-hacked/) again).

Getting rid of passwords altogether has been heralded as [a possible solution](http://business.time.com/2013/05/16/rejoice-the-end-of-the-user-name-and-password-is-nigh/), whether by fingerprint authentication, eyeball scanning, facial recognition or any number of tactics that use your body as a unique identifier.

Former DARPA head Regina Dugan is now in charge of advanced research at Motorola. In [an interview at the D11 conference this week](http://allthingsd.com/20130529/motorolas-dennis-woodside-and-regina-dugan-talk-moto-x-tattoos-and-taking-big-risks-at-d11-full-video/), Dugan showed off two things her team has been working on: a digital tattoo and a once-daily pill, both of which would be used to authenticate you in some manner or another.



All Things D

She first showed off the tattoo, saying, “This is a developmental system made by MC10. It has an antenna and some sensors embedded in it, and what we plan to do is work with them to advance a tattoo that could be used for authentication.”

It doesn’t appear to be a permanent tattoo — there’s a better look at the tattoos up close [on MC10′s website](http://www.mc10inc.com/) — though Dugan joked that although kids don’t like wearing watches, they’d get electronic tattoos “if only to piss off their parents.”

The basic concept behind this type of tattoo isn’t all that different from the keyfob you might use for work or the tap-to-pay credit card you might have. The main difference is that you’d be less likely to lose your tattoo.

But why not turn your entire body into an authentication device? After demonstrating the authentication tattoo, Dugan continued, “And that’s something that you wear, but you could also imagine including authentication in just your daily habits. So, I take a vitamin every morning. What if I could take vitamin authentication?”



All Things D

“This pill has a small chip inside of it with a switch. It also has what amounts to an inside-out potato battery. When you swallow it, the acids in your stomach serve as the electrolyte and power it up. And the switch goes on and off, and it creates an 18-bit ECG-like signal in your body and essentially your entire body becomes your authentication token.”

“That becomes my first superpower,” Dugan continued. “I really want this superpower. It means that my arms are like wires, my hands are like alligator clips. When I touch my phone, my computer, my door, my car, I’m authenticated in.”

This magical-sounding pill won’t be available in the near future – “This isn’t stuff that’s going to ship anytime soon,” said Motorola’s Dennis Woodside — but it’s already received FDA clearance, which is normally a big hurdle. “You could take 30 of those a day for the rest of your life,” said Dugan. The pill has already been tested to work for authenticating a user with his or her cellphone, too.

It should be noted that Motorola is now part of Google, and Google owns several services that require authentication. Imagine a future where Google is even more a part of your everyday life, to the point that you’re taking a pill each morning so you can open up Gmail without having to type in your password.

“Does Google now know everything I do and everywhere I go?” quipped All Things D’s Walt Mossberg during the interview. “Let’s face it. We like you guys, but you’re from Google!”

“Just give him some water and let him take that pill,” joked Dugan.

Read more: <http://techland.time.com/2013/05/31/motorola-is-working-on-a-password-pill-for-once-daily-authentication-oh-and-a-tattoo-too/#ixzz2VBGkGBF3>