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## Education:

**University of Illinois at Urbana-Champaign**
Postdoctoral Research Associate, July 2012 – Nov. 2014.

**Stanford University**
Ph.D. degree in Electrical Engineering, June 2012.
M.S. degree in Electrical Engineering, June 2008.

**The University of Texas at Austin**
B.S. degree in Electrical Engineering (with Highest Honors), May 2005.

## Appointments:

**University of Colorado Boulder:** Boulder, Colorado.
*January 2015 to present*
Assistant Professor in Electrical, Computer, and Energy Engineering
Affiliate in Materials Science and Engineering Program
– Initiating new programs in soft bio-integrated electronics for wearable, implantable, and endoscopic biomedical systems.
*August 2014 to December 2014*
Visiting Professor of Electrical, Computer, and Energy Engineering.

**University of Illinois at Urbana-Champaign:** Urbana, Illinois.
*July 2012 to November 2014*
Postdoctoral Research Associate – Conducted research in flexible/stretchable electronics and unusual optical and MEMS devices in the laboratory of Prof. J.A. Rogers.

**AG Microsystems:** Santa Clara, California.
*September 2011 to May 2012*
Consultant – Consulted for developing design and fabrication process of MEMS mirrors for applications in optical communications.

## Publications:

1. K. N. Noh+, S. I. Park+, R. Qazi+, Z. Zou, A. D. Mickle, J. G. Grajales-Reyes, K.-I. Jang, R. W. Gereau IV, J. Xiao, J. A. Rogers* and **J.-W. Jeong***, "Miniaturized, battery-free optofluidic systems with potential for wireless pharmacology and optogenetics," ***Small*** 14, 1702479 (2018).
2. J. G. McCall and **J.-W. Jeong***, "Minimally invasive probes for programmed microfluidic delivery of molecules *in vivo*," ***Current Opinion in Pharmacology*** 36, 78-85 (2017).

3. K.-I. Jang, K. Li, H. U. Chung, S. Xu, H. N. Jung, Y. Yang, J. W. Kwak, C. Yang, A. Wang, Z. Liu, J. Y. Lee, B. H. Kim, J.-H. Kim, J. Lee, Y. Yu, B. J. Kim, H. Jang, K. J. Yu, J. Kim, J. W. Lee, **J.-W. Jeong**, Y. M. Song, Y. Huang, Y. Zhang, J. A. Rogers, "Self-assembled, three dimensional designs for soft electronics," ***Nature Communications*** 8, 15894 (2017).
4. J. Y. Sim, M. P. Haney, S. I. Park, J. G. McCall, **J.-W. Jeong***, "Microfluidic neural probes: *In vivo* tools for advancing neuroscience," ***Lab on a Chip***, 17, 1406-1435 (2017).
5. J. G. McCall, R. Qazi, G. Shin, S. Li, M. H. Ikram, K.-I Jang, Y Liu, R. Al-Hasani, M. R. Bruchas*, **J.-W. Jeong***, J. A. Rogers*, "Preparation and implementation of optofluidic neural probes for in vivo wireless pharmacology and optogenetics," ***Nature Protocols***, 12(2), 219-237 (2017).
6. Y. Liu and **J.-W. Jeong**, "Wearable stethoscope that can listen to the body sounds," *Principles of Systems Biology, No. 12*, ***Cell Systems*** 3, 505 (2016).
7. Y. Liu, J. J. S. Norton, R. Qazi, Z. Zou, K. R. Ammann, H. Liu, L. Yan, P. L. Tran, K.-I. Jang, J. Lee, D. Zhang, K. Killian, S. H. Jung, T. Bretl, J. Xiao, M. J. Slepian, Y. Huang*, **J.-W. Jeong***, J. A. Rogers*, "Epidermal mechano-acoustic sensing electronics for cardiovascular diagnostics and human-machine interfaces," ***Science Advances*** 2: e1601185 (2016).
8. K.-I. Jang, H. N. Jung, J. W. Lee, S. Xu, Y. Liu, Y. Ma, **J.-W. Jeong**, Y. M. Song, J. Kim, B. H. Kim, A. Banks, J. W. Kwak, Y. Yang, D. Shi, Z. Wei, X. Feng, U. Paik, Y. Huang, R. Ghaffari, and J. A. Rogers, "Ferromagnetic, folded electrode composite as a soft interface to the skin for long-term electrophysiological recording," ***Advanced Functional Materials*** 26, 7281-7290 (2016).
9. G. Constantinescu*, **J.-W. Jeong***, X. Li, D. Scott, K.I. Jang, H.-J. Chung, J.A. Rogers, J.M. Rieger, "Epidermal electronics for electromyography: an application to swallowing therapy" ***Medical Engineering and Physics*** 38, 807-812 (2016).
10. **J.-W. Jeong***, J. G. McCall*, G. Shin, Y. Zhang, R. Al-Hasani, M. Kim, S. Li, J.Y. Sim, K.-I. Jang, Y. Shi, D.Y. Hong, Y. Liu, G.P. Schmitz, L. Xia, Z. He, P. Gamble, W.Z. Ray, Y. Huang, M.R. Bruchas, J.A. Rogers, "Wireless optofluidic systems for programmable *in vivo* pharmacology and optogenetics," ***Cell*** 162, 1-13 (2015).
11. S.-W. Hwang, C. H. Lee, H. Cheng, **J.-W. Jeong**, S.-K. Kang, J.-H. Kim, J. Shin, J. Yang, Z. Liu, G. A. Ameer, Y. Huang, J. A. Roger**s, "Biodegradable elastomers and silicon nanomembranes/nanoribbons for stretchable, transient electronics and biosensors,**" ***Nano Letters*** 15(5), 2801 - 2808 (2015).
12. **J.-W. Jeong**, G. Shin, S. I. Park, K. J. Yu, L. Xu, and J. A. Rogers, **"Soft materials in neuroengineering for hard problems in neuroscience,"** ***Neuron*** 86(1), 175 - 186 (2015).
13. J. S. Norton, D. S. Lee, J. W. Lee, W. Lee, O. Kwon, P. Won, S.-Y. Jung, H. Cheng, **J.-W. Jeong**, A. Akce, S. Umunna, I. Na, Y. H. Kwon, X. Wang, Y. Huang, T. Bretl, W.-H. Yeo, John A. Rogers, "Soft, curved electrode systems capable of integration on the auricle as a persistent brain-computer interface," ***Proceedings of the National Academy of Sciences USA*** 112(13), 3920 - 3925 (2015).
14. K.-I. Jang, H. U. Chung, S. Xu, C. H. Lee, H. Luan, **J.-W. Jeong**, H. Cheng, G.-T. Kim, S. Y. Han, J. W. Lee, J. Kim, M. Cho, F. Miao, Y. Yang, H. N. Jung, M. Flavin, H. Liu, G. W. Kong, K. J. Yu, S. I. Rhee, J. Chung, B. Kim, M. H. Yun, J. Y. Kim, Y. M. Song, U. Paik, Y. Zhang, Y. Huang, J. A. Rogers, "Soft network composite materials with deterministic, bio-inspired designs," ***Nature Communications*** 6, 6566 (2015).

15. **J.-W. Jeong***, C. H. Lee*, Y. Liu, Y. Zhang, S.-K. Kang, J. Kim, J. S. Kim, N. Y. Lee, L. Yin, K.-I. Jang, M. K. Kim, T. R. Banks, U. Paik, Y. Huang, J. A. Rogers, "Materials and wireless microfluidic systems for electronics capable of chemical dissolution on demand," ***Advanced Functional Materials*** 3(9), 1338 - 1343 (2015).
16. Y. Hattori, L. Folgut, W. Lee, S. Jung, E. Poon, J. Lee, I. Na, A. Geisler, D. Sadhwani, Y. Zhang, Y. Su, X. Wang, Z. Liu, J. Xia, H. Cheng, R. Webb, A. P. Bonifas, P. Won, **J.-W. Jeong**, K.-I. Jang, Y. Song, B. Nardone, M. Nodzenski, Y. Huang, A. S. Paller, M. Alam, W.-H. Yeo, and J. A. Rogers, "Multifunctional skin-like electronics for quantitative, clinical monitoring of cutaneous wound healing," ***Advanced Healthcare Materials*** 3(10), 1597 - 1607 (2014).
17. K.-I. Jang, S. Y. Han, S. Xu, K. Mathewson, Y. Zhang, **J.-W. Jeong**, G.-T. Kim, J. W. Lee, R. Webb, T. Dawidczyk, Y. Song, W.-H. Yeo, S. I. Rhee, J. Chung, B. Kim, H. U. Chung , D. Lee, Y. Yang, R. Carbonari, J. Gaspar, M. Fabiani, G. Gratton, Y. Huang, J. A. Rogers, "Rugged, breathable forms of stretchable electronics with adherent, composite substrates for cutaneous physiological and cognitive state monitoring," ***Nature Communications*** 5, 4779 (2014).
18. K.-I. Jang, S. Y. Han, S. Xu, K. Mathewson, Y. Zhang, **J.-W. Jeong**, G.-T. Kim, R. Webb, J. W. Lee, T. Dawidczyk, Y. Song, W.-H. Yeo, S. Kim, H. Cheng, S. I. Rhee, J. Chung, B. Kim, H. U. Chung , D. Lee, Y. Yang, J. G. Gaspar, R. Carbonari, M. Fabiani, G. Gratton, Y. Huang, J. A. Rogers, "Fabrication Procedure for Rugged and Breathable Forms of Stretchable Electronics with Adherent and Composite Substrates," ***Protocol Exchange*** (2014).
19. **J.-W. Jeong**, M.K. Kim, H. Cheng, W.-H. Yeo, X. Huang, Y. Liu, Y. Zhang, Y. Huang, and J. A. Rogers, "Capacitive epidermal electronics for electrically safe, long-term electrophysiological measurements," ***Advanced Healthcare Materials*** 3(5), 642 - 648 (2014).
20. L. Xu, S. Gutbrod, A. Bonifas, Y. Su, M. Sulkin, N. Lu, H.-J. Chung, K.-I. Jang, Z. Liu, M. Ying, C. Lu, R. Webb, J.-S. Kim, J. Laughner, H. Cheng, Y. Liu, A. Ameen, **J.-W. Jeong**, G.-T. Kim, Y. Huang, I. Efimov, and J. A. Rogers, "3D multifunctional integumentary membranes for spatiotemporal measurement/stimulation across the entire epicardium," ***Nature Communications***, 5, 3329 (2014).
21. **J.-W. Jeong**, W.-H. Yeo, J. Norton, A. Akhtar, Y.-J. Kwack, S. Li, S.-Y. Jung, Y. Su, W. Lee, Y. Huang, W.-S. Choi, T. Bretl, and J. A. Rogers, "Materials and optimized designs for human-machine interface via epidermal electronics," ***Advanced Materials*** 25(47), 6839 - 6846 (2013).
22. S.-W. Hwang, D.-H. Kim, H. Tao, T.-I Kim, S. Kim, K.J. Yu, B. Panilaitis, **J.-W. Jeong**, J.-K. Song, F.G. Omenetto, and J. A. Rogers, "Materials and fabrication processes for transient and bioresorbable high-performance electronics," ***Advanced Functional Materials*** 23(33), 4087 - 4093 (2013).
23. **J.-W. Jeong**, B. Park, H. Keum, S. Kim, J. A. Rogers, and O. Solgaard, "Two-axis MEMS scanner with transfer-printed high-reflectivity, broadband monolithic silicon photonic crystal mirrors," ***Optics Express*** 21(11), 13800 - 13809 (2013).
24. **J.-W. Jeong**, S. Kim, and O. Solgaard, "Split-frame gimbaled 2-D MEMS scanner for miniature dual-axis confocal microendoscopes fabricated by front-side processing," ***Journal of Microelectromechanical Systems***, 21(2), 308 - 315 (2012).
25. **J.-W. Jeong**, J.W. Cho, I.W. Jung, and O. Solgaard, "Amplified spontaneous emission rejection with a multi-functional MEMS tunable filter," ***Electronics Letters*** 46(18) (2010).

26. **J.-W. Jeong**, I. W. Jung, H. J. Jung, D. M. Baney, and O. Solgaard, "Multi-functional tunable optical filter using MEMS spatial light modulator," ***Journal of Microelectromechanical Systems*** 19(3), 610 - 618 (2010).

**Patents:**

1. Provisional patent application filed on 11/14/2017, serial no. 62/585,894, "Epidermal Mechano-Acoustic Sensing Devices and Methods"
2. U.S. Provisional patent filed on 7/2/2015, serial no. 62/188,318, "Wireless optofluidic systems for programmable in vivo pharmacology and optogenetics"
3. PCT international application filed on 2/11/2014, serial no. PCT/US14/15825, "Injectable and implantable cellular-scale electronic devices"
4. U.S. patent (US 20120330157 A1), "Confocal microscope, system and method therefor"