CURRICULUM VITAE

Julius B. Lucks
Assistant Professor of Chemical and Biomolecular Engineering
Cornell University, 214 Olin Hall, Ithaca, NY 14853
jblucks@cornell.edu; tel: 607-255-3601; fax: 607-255-9166; web: luckslab.org

EDUCATION

B.S., Chemistry (Highest Honors) (2001) University of North Carolina, Chapel Hill, NC
M.Phil., Chemistry (2002) University of Cambridge, Cambridge, UK
M.S., Chemical Physics (2004) Harvard University, Cambridge, MA
Ph.D., Chemical Physics (2007) Harvard University, Cambridge, MA
Miller Fellow Postdoctoral Associate (2011) University of California, Berkeley, CA

PROFESSIONAL EXPERIENCE

Assistant Professor, Chemical and Biomolecular Engineering, Cornell University (2011-Present)
Affiliations at Cornell:
Graduate Field Member, Biochemistry, Molecular and Cell Biology (2013-Present)
Graduate Field Member, Biomedical Engineering (2014-Present)
Graduate Field Member, Computational Biology (2014-Present)
Graduate Field Member, Microbiology (2014-Present)
US Chair, EU/US Biotechnology Task Force Synthetic Biology Working Group (2014-Present)
Instructor and Co-Creator, Cold Spring Harbor Course on Synthetic Biology (2013-Present)
James C. and Rebecca Q. Morgan Sesquicentennial Faculty Fellow, Cornell University (2012-Present)
Affiliated Investigator, NSF Synthetic Biology Engineering Research Center, (2011-Present)
Miller Fellow Postdoctoral Associate, Bioengineering, Univ. of California, Berkeley, CA (2008-2011)
Postdoctoral Associate, Information Science, Cornell University, Ithaca, NY (2007)
Visiting Scholar, Theoretical Physics, Institute Marie Curie, Paris, Fr (2005)

HONORS AND AWARDS

2015 NSF CAREER Award
2013 NIH Director's New Innovator Award
2013 Office of Naval Research (ONR) Young Investigator
2013 Alfred P. Sloan Research Fellowship
2012 Defense Advanced Research Projects Agency (DARPA) Young Faculty Award
2012 James C. and Rebecca Q. Morgan Sesquicentennial Faculty Fellow
2008-2011 Miller Research Fellow, University of California, Berkeley
2002-2007 John and Fannie Hertz Foundation Graduate Fellow
2002 Robert Karplus Prize Fellowship in Chemical Physics, Harvard University
2001 Winston Churchill Scholarship, Churchill College, Cambridge University
2001 National Science Foundation Graduate Fellowship (Declined, Duplicate Funding)
2001 Department of Defense Graduate Fellowship (Declined, Duplicate Funding)
2000-2001 Barry M. Goldwater Scholarship, Univ. North Carolina, Chapel Hill
2001 Francis P. Venable Medal, Univ. North Carolina, Chapel Hill
2001 Academic Excellence in Physical Chemistry, Univ. North Carolina, Chapel Hill
2000 Phi Beta Kappa, Univ. North Carolina, Chapel Hill
2000 NSF REU Fellowship, Univ. Colorado, Boulder
1999 American Chemical Society Undergraduate Research Award
Editorial Board, ACS Synthetic Biology (2011-Present)
Affiliate, bioRxiv (2014-Present)

PUBLICATIONS

* = corresponding author; # = student from Lucks group; = † highlight

1. P. W. Ayers, **J. B. Lucks**, R. G. Parr* (2002). Constructing exact density functionals from the moments of the electron density. Acta Univ. Debrecceniensis Series Physica et Chimica, XXXIV-XXXV, 223.
2. **J. B. Lucks**, A. J. Cohen, N. C. Handy* (2002). Constructing a map from the electron density to the exchange-correlation potential. Physical Chemistry Chemical Physics, 4, 4612-4618.
3. J. D. Weeks, **J. B. Lucks**, Y. Kafri, C. Danilowicz, D. R. Nelson, and M. Prentiss* (2005). Pause Point Spectra in DNA Constant-Force Unzipping. Biophysical Journal, 88, 2752-2765.
4. V. Vitelli, **J. B. Lucks**, D. R. Nelson* (2006). Crystallography on Curved Surfaces. Proceedings of the National Academy of Sciences, 103, 12323-12328. †Featured on the cover.
5. **J. B. Lucks**, D. R. Nelson, G. Kudla, J. B. Plotkin* (2008). Genome landscapes and bacteriophage codon usage. PLoS Computational Biology, 4, 10000001. †Highlighted in commentary on Science Daily website.
6. **J. B. Lucks**, L. S. Qi, W. Whitaker, A. P. Arkin* (2008). Toward scalable parts families for predictable design of biological circuits. Current Opinion Microbiology, 11, 567-573.
7. Jeffery M. Skerker, **J. B. Lucks**, A. P. Arkin* (2009). Evolution, ecology and the engineered organism: lessons for synthetic biology. Genome Biology, 10, 114.
8. **J. B. Lucks**, A. P. Arkin (2011). Synthetic Biology's Hunt for the Biological Transistor. IEE Spectrum, 38, March Issue. †Cover story.
9. **J. B. Lucks**, L. S. Qi, V. Mutalik, D. Wang, A. P. Arkin* (2011). Versatile RNA-sensing transcriptional regulators for engineering genetic networks. Proceedings of the National Academy of Sciences, 108, 8617-8622. †Highlighted in commentary on Medical News Today website.
10. S. L. Young, P. W. Sherman, **J. B. Lucks**, G. H. Pelto* (2011). Why On Earth?: Evaluating Hypotheses About The Physiological Functions Of Human Geophagy. Quarterly Review of Biology, 86, 97-120. †Highlighted in commentary on Science Daily website.
11. S. Aviran, C. Trapnell, **J. B. Lucks**, S. A. Mortimer, S. Luo, G. P. Schroth, J. A. Doudna, A. P. Arkin, L. Pachter* (2011). Modeling and automation of sequencing-based characterization of RNA structure. Proceedings of the National Academy of Sciences, 108, 11069-11074. †Featured on the cover.
12. **J. B. Lucks***, S. A. Mortimer, C. Trapnell, S. Luo, S. Aviran, G. P. Schroth, L. Pachter, J. A. Doudna, A. P. Arkin* (2011). Multiplexed RNA structure characterization with selective 2'-hydroxyl acylation analyzed by primer extension sequencing (SHAPE-Seq). Proceedings of the National Academy of Sciences, 108, 11063-11068. †Highlighted in commentary "RNA structure probing dash seq" by Kevin Weeks in PNAS, and "A SHAPE in the Crowd" by M. Eisenstein in Biopolymers.
13. S. Aviran, **J. B. Lucks**, L. Pachter* (2011). RNA structure characterization from chemical mapping experiments. Forty-Ninth Allerton Conference, UIUC Illinois, doi:10.1109/Allerton.2011.6120379.
14. L. Qi, **J. B. Lucks**, C. C. Liu, V. K. Mutalik, A. P. Arkin* (2012). Engineering naturally occurring trans-acting non-coding RNAs to sense cellular signals. Nucleic Acids Research, 40, 5775-5786, doi: 10.1093/nar/gks168.
15. V. K. Mutalik, L. S. Qi, J. Guimaraes, **J. B. Lucks**, A. P. Arkin* (2012). Rationally designed families of orthogonal RNA regulators of translation. Nature Chemical Biology, 8, 447-454. †Highlighted in commentary "Automated Design of RNA Devices" by Farren Isaacs in Nature Chemical Biology.
16. P. Cordero, **J. B. Lucks**, R. Das* (2012). An RNA Mapping Database for curating RNA structure mapping experiments. Bioinformatics, 28, 3006-3008, doi:10.1093/bioinformatics/bts554.
17. C. C. Liu, L. Qi, **J. B. Lucks**, T. H. Segall-Shapiro, D. Wang, V. Mutalik, A. P. Arkin (2012). An adapter from translational to transcriptional control yields composable regulators of gene expression. Nature

Methods, 9, 1088-1094. †Highlighted in commentary "Modular gene-circuit design takes two steps forward" by J. J. Tabor in Nature Methods News and Views (2012), 9, 1061-1063.

18. S. A. Mortimer, C. Trapnell, S. Aviran, L. Pachter, **J. B. Lucks*** (2012). SHAPE-Seq: High Throughput RNA Structure Analysis. Curr Protocols Chem Biol, 4, 275-297, doi:10.1002/9780470559277.ch120019.
19. M. K. Takahashi[#], **J. B. Lucks*** (2013). A modular strategy for engineering orthogonal chimeric RNA transcription regulators. Nucleic Acids Research, 41, 7577-7588, doi:10.1093/nar/gkt452.
20. J. Chappell[#], M. K. Takahashi[#], S. Meyer[#], D. Loughrey[#], K. E. Watters[#], **J. B. Lucks*** (2013). The centrality of RNA for engineering gene expression. Biotechnology Journal, 8, 1379-1395, doi:10.1002/biot.201300018.
21. M. K. Takahashi[#], J. Chappell[#], C. A. Hayes, Z. Z. Sun, J. Kim, V. Singhal, K. J. Spring, S. Al-Khabouri, C. P. Fall, V. Nouireaux, R. M. Murray, **J. B. Lucks*** (2014). Rapidly characterizing the fast dynamics of RNA genetic circuitry with *in vitro* transcription-translation (TX-TL) reactions. ACS Synthetic Biology, doi:10.1021/sb400206c.
22. D. Loughrey[#], K. Watters[#], A. Settle[#], **J. B. Lucks*** (2014). SHAPE-Seq 2.0: Systematic optimization and extension of high-throughput chemical probing of RNA secondary structure with next-generation sequencing. Nucleic Acids Research, 42, 000, doi: 10.1093/nar/gku909.
23. J. Chappell[#], M. K. Takahashi[#], **J. B. Lucks*** (2015). Creating small transcription activating RNAs. Nature Chemical Biology, 11, 214-220, doi:10.1038/nchembio.1737. †Research Highlight in Nature Methods "RNA that activates transcription" by N. Rusk i(2015), 12, 290.
24. J. Chappell[#], K. Watters[#], M. K. Takahashi[#], **J. B. Lucks*** (2015). A renaissance in RNA synthetic biology: new mechanisms, applications and tools for the future. Current Opinion in Chemical Biology. (*Accepted*)
25. M. K. Takahashi[#], C. A. Hayes, J. Chappell[#], Z. Z. Sun, R. M. Murray, V. Nouireaux*, **J. B. Lucks*** (2015). Applications of Cell-Free Transcription-Translation (TX-TL) Systems to Optimizing Regulatory Circuits. Methods, doi:10.1016/j.ymeth.2015.05.020.
26. C. Hu[#], J. D. Varner, **J. B. Lucks*** (2015). Generating effective models and parameters for RNA genetic circuits. ACS Synthetic Biology, doi:10.1021/acssynbio.5b00077.

Non-Peer Reviewed Publications

1. **J. B. Lucks**, Y. Kafri* (2007). Dynamics of RNA Translocation through a Nanopore. http://arxiv.org/abs/q-bio/0703028 .
2. **J. B. Lucks*** (2008). Python - All a Scientist Needs. http://arxiv.org/abs/0803.1838 .

PATENT APPLICATIONS

1. A. P. Arkin, **J. B. Lucks**, L. S. Qi, W. P. Whitaker (2010). "A family of antisense-RNA-mediated transcription logic devices for RNA regulatory circuits."
2. **J. B. Lucks**, J. Chappell, M. K. Takahashi (2014). "Small RNAs (sRNAs) that activate transcription." (Provisional Appl No. 61/981,241).

INVITED SEMINARS

1. **J. B. Lucks**. "A Versatile RNA-Based Platform for Gene Network Engineering (With a SHAPE-Seq Interlude.)" Cold Spring Harbor Asia Conference on the Design and Synthesis of Biological Systems, Suzhou, China (October 2011).
2. **J. B. Lucks**. "SHAPE-Seq: High-Throughput Characterization of RNA Structures and Interactions." Cornell Department of Molecular Medicine Seminar, Ithaca, NY (March 2012).
3. **J. B. Lucks**. "Engineering the RNA sequence/structure/function code for synthetic biology." Synthetic Biology Engineering Research Center Retreat, UC Berkeley, CA (March 2012).

4. **J. B. Lucks** “SHAPE-Seq: High-Throughput Characterization of RNA Structures and Interactions.” Upstate New York Illumina Users Group Meeting, Cornell University, Ithaca NY (May 2012).
5. **J. B. Lucks** “Chimeric RNA Regulators for Engineering Gene Networks.” Donald Danforth Plant Science Center Annual Symposium, St Louis, MS (September 2012).
6. **J. B. Lucks** “A Platform for Engineering RNA Regulatory Networks Using High Throughput RNA Structure Characterization.” Center for Computational Molecular Biology, Brown University, Providence, RI (March 2013).
7. **J. B. Lucks** “Towards a Platform for Engineering RNA Regulatory Networks Using High Throughput RNA Structure Characterization.” Computational Biology Seminar, MIT, Cambridge, MA (April 2013).
8. **J. B. Lucks** “Towards a Platform for Engineering RNA Regulatory Networks Using High Throughput RNA Structure Characterization.” Department of Biochemistry and Biophysics, University of Rochester Medical Center, Rochester, NY (May 2013).
9. **J. B. Lucks** “Towards Unraveling the RNA Sequence-Structure Code Using High Throughput RNA Structure Characterization.” Biochemistry, Molecular and Cell Biology Field Seminar, Cornell University, Ithaca NY (May 2013).
10. **J. B. Lucks** “Towards Programming Dynamic Cellular Behavior with Engineered RNA Networks.” Cornell CBE 4th Annual Graduate Research Symposium, Keynote Speaker, Cornell University, Ithaca NY (October 2013).
11. **J. B. Lucks** “Controlling Cells with RNA Folding.” Laboratory for Atomic and Solid State Physics, Cornell University, Ithaca NY (March 2014).
12. **J. B. Lucks** “Controlling Cells with RNA Folding.” Ithaca College Biology Seminar, Ithaca College, Ithaca NY (March 2014).
13. **J. B. Lucks** “Controlling Cells with RNA Folding.” Widely Applied Math Seminar, Harvard University, Cambridge MA (April 2014).
14. **J. B. Lucks** “Controlling Cells with RNA Folding.” Biomedical Engineering Field Seminar, Cornell University, Ithaca NY (May 2014).
15. **J. B. Lucks** “Controlling Cells with RNA Folding.” Synthetic Biology: Engineering, Evolution and Design, Los Angeles, CA (July 2014).
16. **J. B. Lucks** “Controlling Cells with RNA Folding.” RNA Institute and Department of Chemistry, University of Albany, Albany, NY (October 2014).
17. **J. B. Lucks** “Controlling Cells with RNA Folding.” Middlebury College, Middlebury, VT (October 2014).
18. **J. B. Lucks** “Controlling Cells with RNA Folding.” Rensselaer Polytechnic Institute, Rensselaer, NY (February 2015).
19. **J. B. Lucks** “Controlling Cells with RNA Folding.” Rice University, Houston, TX (February 2015).
20. **J. B. Lucks** “Controlling Cells with RNA Folding.” Northwestern University, Evanston, Il (March 2015).
21. **J. B. Lucks** “Standardizing the RNA World.” Nuts and Bolts of Biological Systems Standardization Workshop, Valencia, Spain (March 2015).
22. **J. B. Lucks** “Controlling Cells with RNA Folding.” California Institute of Technology, Pasadena, CA (April 2015).
23. **J. B. Lucks** “Controlling Cells with RNA Folding.” California Institute of Technology, Pasadena, CA (April 2015).
24. **J. B. Lucks** “Controlling Cells with RNA Folding.” UC Irvine, Irvine, CA (May 2015).
25. **J. B. Lucks** “Controlling Cells with RNA Folding.” Princeton, Princeton, NJ (November 2015).

CONTRIBUTED PRESENTATIONS AT TECHNICAL MEETINGS * = presenting author

1. **J. B. Lucks***, S. Warner, T. Schwander, P. Ginsparg. “arXiv.org e-Print Application Programming Interface”, Microsoft Research eScience Workshop, Chapel Hill, NC (September 2007).
2. **J. B. Lucks***. “Python - All A Scientist Needs”. Pycon, Chicago, IL, (February 2008).

3. **J. B. Lucks***, L. S. Qi, S. Richardson, A. P. Arkin. “Engineering an Antisense-RNA-Mediated Transcription Control System”. Synthetic Biology 4.0, Hong Kong, China, (October 2008).
4. **J. B. Lucks***. “Towards Scalable Control of Gene Expression: The Quest for Orthogonality”. Synthetic Biology Engineering Research Center Retreat, MIT, Cambridge, MA (September 2009).
5. **J. B. Lucks*,** L. S. Qi, V. K. Mutalik, D. Wang, A. P. Arkin. “An RNA-Based Platform for Gene Network Engineering.” International Conference on Biomolecular Engineering, San Francisco, CA, (February 2011)
6. S. Aviran*, **J. B. Lucks**, L. Pachter. “RNA Structural Characterization from Chemical Mapping Experiments.” Allerton Conference on Communication, Control and Computing, Urbana-Champaign, IL, (September 2011).
7. **J. B. Lucks*.** “SHAPE-Seq: High-Throughput Characterization of RNA Structures and Interactions – v0.1.” Benasque RNA Bioinformatics Meeting, Benasque, Spain, (July 2012).
8. M. K. Takahashi*#, **J. B. Lucks**. “Engineering Families of Orthogonal RNA Transcription Regulators Through Chimeric Fusions”. Synthetic Biology Engineering Research Center Retreat, Cambridge, MA, (September 2012).
9. **J. B. Lucks***. “A systems strategy for engineering families of orthogonal RNA transcription regulators for engineering gene networks.” AIChE Conference, Pittsburg, PA (October 2012).
10. **J. B. Lucks***. “A family of orthogonal chimeric antisense RNA transcription regulators.” International Conference on Biomolecular Engineering, Ft. Lauderdale, FL (January 2013).

POST-DOCTORAL SCHOLARS SUPERVISED - past and current

1. **Yueting Zhuang**, Ph.D. Cornell University (2012-2013)
2. **James Chappell**, Ph.D. Imperial College London (2013-Present)
3. **Eric Strobel**, Ph.D. Cornell University (2015-Present)

PHD DISSERTATIONS DIRECTED - past and current

1. **Melissa K. Takahashi**, Ph.D. Chemical Engineering (2010-Present)
2. **David A. Loughrey**, Ph.D. Chemical Engineering (2010-Present)
3. **Kyle E. Watters**, Ph.D. Chemical Engineering (2011-Present)
4. **Sarai I. Meyer**, Ph.D. Chemical Engineering (2011-Present)
5. **Alexandra Westbrook**, Ph.D. Chemical Engineering (2013-Present)
6. **Paul Carlson**, Ph.D. Chemical Engineering (2013-Present)
7. **Cameron Glasscock**, Ph.D. Chemical Engineering (2013-Present) (Co-Advised with Prof. Matt DeLisa)
8. **Chelsea Hu**, Ph.D. Chemical Engineering (2013-Present) (Co-Advised with Prof. Jeff Varner)
9. **Karl Brennan**, Ph.D. Chemical Engineering (2014-Present)

PHD COMMITTEES - past and current

1. **Michael-Paul Robinson**, Ph. D. Chemical and Biomolecular Engineering (2010-Present)
2. **Bill Bedell**, Ph. D. Chemical and Biomolecular Engineering (2012-Present)
3. **Erin Stephens**, Ph.D. Biochemistry, Molecular and Cellular Biology (2013-Present)
4. **May Taw**, Ph. D. Microbiology (2013-Present)
5. **Tara Srinivasan**, Ph. D. Biomedical Engineering (2012-Present)
6. **Daniel Tapias-Rojas**, Ph. D. Microbiology (2013-Present)

TEACHING ACTIVITIES

1. **CHEME 3240** - Heat and Mass Transfer (Fall 2011 - Present)
2. **CHEME 7900** - Chemical and Biomolecular Engineering Department Seminar Coordinator (2014-Present)
3. **CHEME 7920** - Principles and Practices of Graduate Research (Fall 2011 - Present)
4. **CHEME 7770** - Advanced Principles of Biomolecular Engineering (Spring 2013 - Present)
5. **Cold Spring Harbor Course on Synthetic Biology** (Co-creator) - Cold Spring Harbor Laboratory, July-August 2013, 2014, 2015.

SERVICE - CONFERENCE / SYMPOSIUM / COLLOQUIUM ORGANIZATION

1. **Synthetic Biology 5.0: The Fifth International Meeting on Synthetic Biology**
   - Co-organizer, June 15-17 2011, Stanford, Palo Alto, CA
2. **4th International Conference on Biomolecular Engineering**
   - Poster session co-chair, January 13-16 2013, Fort Lauderdale, FL
3. **American Institute for Chemical Engineering (AIChE) National Meeting**
   - Co-chair, “Gene Regulation Engineering” & “Paradigms in Systems and Synthetic Biology”, Section 15c, October 2013, San Francisco, CA
4. **Metabolic Engineering X Meeting**
   - Poster session co-chair, June 2014, Vancouver BC
5. **American Institute for Chemical Engineering (AIChE) National Meeting**
   - Co-chair, Topical A “Paradigms in Systems and Synthetic Biology”, October 2014, Atlanta, GA
   - Chair, Topical A “Paradigms in Systems and Synthetic Biology”, 2015, Salt Lake City, Utah
6. **5th International Conference on Biomolecular Engineering**
   - Co-chair “High-Throughput Biological Design”, January 13-16 2014, Austin, TX
7. **The Nuts and Bolts of Bioengineered Systems: A Workshop on Standards in Synthetic Biology**
   - Meeting Co-organizer, March 8-12, 2015, Valencia Spain
8. **6th International Conference on Biomolecular Engineering**
   - Organizing Committee, January 13-16 2015, Singapore

SERVICE - PROFESSIONAL

1. **Synthetic Biology Engineering Research Center (SynBERC)**, Parts Thrust Co-Leader, 2010-2011
2. **Synthetic Biology Engineering Research Center (SynBERC)**, Leadership Task Force 2014-Present
3. **US Chair, EU/US Biotechnology Task Force Synthetic Biology Working Group** (2014-Present)
4. **Board of Directors, SB2 (2015-Present)**

SERVICE - PROPOSAL AND MANUSCRIPT REVIEW

1. **National Science Foundation**
   - CBET *ad hoc* reviewer, 2011 and 2015
   - MCB *ad hoc* reviewer, 2014
2. **Journal Advisory and Editorial Boards**
   - ACS Synthetic Biology, 2011-Present
   - bioRxiv, 2014-Present
3. **Journal Reviews**
   ACS Chemical Biology, ACS Synthetic Biology, Biophysical Journal, Biotechnology and Bioengineering, Cell, Journal of Biological Engineering, Molecular Cell, Molecular Systems Biology, Nature Biotechnology, Nature Chemical Biology, Nature Methods, Nature Protocols, Nature Reviews

Microbiology, Nucleic Acids Research, PLoS ONE, PLoS Pathogens, Proceedings of the National Academy of Sciences USA, Science

SERVICE - OUTREACH

1. **J. B. Lucks*,** M. K. Takahashi#, J. Saathoff. “An Introduction to Chemical and Biomolecular Engineering”. CATALYST Academy for Under Represented Minorities, Cornell University, Ithaca NY (June 2011).
2. **J. B. Lucks*,** S. I. Meyer#, K. E. Watters#. “An Introduction to Chemical and Biomolecular Engineering”. CATALYST Academy for Under Represented Minorities, Cornell University, Ithaca NY (June 2012).
3. **J. B. Lucks*.** “Optimization of Biosynthetic Pathways”. NSF GK-12 Grass Roots: Advancing Education in Renewable Energy and Cleaner Fuels through Collaborative Graduate Fellow/Teacher/Grade-School Student Interactions, Cornell University, Ithaca NY (July 2012).
4. **J. B. Lucks.** “Mastering Your Future - Learning to Read (Scientific Papers).” Cornell College of Engineering. Panelist. (February 2013).
5. **Cold Spring Harbor Course on Synthetic Biology**
    - Co-organizer, July-August 2013, 2014, 2015.

SERVICE - UNIVERSITY

1. Cornell CBE Graduate Field Committee, 2011-Present
2. Cornell CBE Faculty Search Committee, 2012
3. Cornell CBE Awards Committee, 2012-Present
4. Cornell CBE Policy Committee, 2012-2013
5. Cornell CBE Seminar Series Coordinator, 2014-Present
6. Cornell MBG Faculty Search Committee, 2013-2014
7. Cornell CBE Undergraduate Academic Advisor, 2012-Present
8. Cornell Churchill Scholarship Internal Selection Committee, 2013-Present

MEDIA COVERAGE AND RESEARCH HIGHLIGHTS

Media Coverage

1. E. Check Hayden (2011). Life hackers seek new tools, Nature 474, 261.
2. S. Cohen (2012). The Sceintist: Prof. Lucks Researches RNA to Build Biological Circuitry. Cornell Daily Sun, September 12 2012.

Research Highlights

1. K. M. Weeks (2011). RNA structure probing dash seq. Proceedings of the National Academy of Sciences, 108, 10933-10934.
2. M. Eisenstein (2011). A SHAPE in the Crowd. Biopolymers, 95, iii-iv.
3. J. J. Tabor (2012). Modular gene-circuit design takes two steps forward. Nature Methods, 9, 1061-1063.
4. Cornell Engineering ‘Breaking the Rules’ web and video stories (2014). http://www.engineering.cornell.edu/brand/independent/
5. L. Cahoon (2014). Code Breaker: Julius Lucks Unlocks the Secrets of RNA to Advance Human Health. Cornell Engineering Magazine, Summer, 2014.
6. S. Adams (2015). Cornell’s new genetic “switch” could detect deadly diseases. IthacaWeek, http://www.ithacaweek-ic.com/cornell-researchers-engineer-on-switch-for-genes/ .
7. N. Rusk (2015). RNA that activates transcription. Nature Methods, 12, 290.

8. Sharing Science: Watching the STARS (Small Transcription Activating RNAs). NSF MCB Blog, April 10, 2015. https://nsfmcb.wordpress.com/2015/04/01/sharing-science-watching-the-stars-small-transcription-activating-rnas/

Quoted In

1. DARPA to Offer $30 Million to Jump-Start Cellular Factories, Science Insider (2011), June 29.
2. Tailor-Made Genome, The Scientist (2011), July 14.
3. Defense Research Agency Hunts for Biotech Innovators, The Chronicle of Higher Education (2013), October 7.
4. What Are Genetically Recoded Organisms?, Popular Science (2013), October 17.
5. Synthetic Biologists Create Paper-Based Diagnostic for Ebola, MIT Technology Review (2014), October 24.
6. Bringing Synthetic Biology to (Freeze-Dried) Paper, Biotechniques (2014), December 3.