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## EDUCATION

**Ph.D. Molecular Genetics.** University of California at Davis, CA, December 1997

**Dissertation:** Biochemical characterization of the initiation of homologous recombination in *Escherichia coli*. Advisor: Prof. Stephen Kowalczykowski.

**MS Molecular Genetics.** University of California at Davis, CA, June 1995

**B.A. Math and Biology double major,** University of California at Santa Cruz, September 1992

## COLLEGE HONORS

### Graduate

Jastro-Shields Fellowship  
National Institute of Health Biotechnology Fellowship  
National Science Foundation Honors  
University of California at Davis Graduate Fellowship  
Sigma Xi Biology Honors Society Membership

### Undergraduate

College Honors  
Highest Honors, Biology  
Honors in the Senior Requirement in Biology

## PROFESSIONAL EXPERIENCE

**Associate Professor,** Chemical Engineering, Health Science Technology, David H. Koch Institute for Integrative Cancer Research, MIT, Cambridge, MA 2010-

**Associate Member,** Ragon Institute 2015-

**Associate Member,** Broad Institute 2011-

**Adjunct Investigator,** Joslin Institute 2010-

**Associate Scientific Staff Member,** Department of Anesthesiology, Children's Hospital, Harvard, Boston, MA 2007-

**Goldblith Associate Professor,** 2012-2015

**Research Associate.** David H. Koch Institute for Integrative Cancer Research, MIT, Cambridge, MA 2006 – 2010

**Research Associate.** Prof. Robert Langer, Mentor. Department of Chemical Engineering, MIT, Cambridge, MA 2003 - 2006

**Postdoctoral Fellow.** Prof. Robert Langer, Mentor. Department of Chemical Engineering, MIT, Cambridge, MA 1999 - 2003

**Postdoctoral Researcher.** Prof. Stephen Kowalczykowski, Mentor. Department of Microbiology, UCD, Davis, CA. 1998-1999

**Graduate Student.** Prof. Stephen Kowalczykowski, Mentor. Department of Microbiology, UCD, Davis, CA. 1992-1997.

**Undergraduate Researcher.** Prof. Jerry Feldman, Mentor. Department of Biology, UCSC, Santa Cruz, CA.

1990-1992.

## EDITORIAL BOARDS

<b>Gene Therapy</b>	<b>2008-</b>
<b>Human Gene Therapy</b>	<b>2009-</b>
<b>Advanced Healthcare Materials</b>	<b>2011-</b>
<b>Molecular Therapy, Nucleic Acids</b>	<b>2011-</b>

## PUBLICATIONS

1. Anderson, D.G., Kowalczykowski, S.C. The translocating RecBCD enzyme stimulates recombination by directing RecA protein onto ssDNA in a chi-regulated manner. *Cell*. 1997; 90(1):77-86. PMID: 9230304.
2. Anderson, D.G., Kowalczykowski, S.C. The recombination hot spot chi is a regulatory element that switches the polarity of DNA degradation by the RecBCD enzyme. *Genes and Development*. 1997; 11(5):571-81. PMID: 9119222.
3. Anderson, D.G., Churchill, J.J., Kowalczykowski, S.C. Chi-activated RecBCD enzyme possesses 5'->3' nucleolytic activity, but RecBC enzyme does not: evidence suggesting that the alteration induced by Chi is not simply ejection of the RecD subunit. *Genes to Cells*. 1997; 2(2):117-28. PMID: 9167969.
4. Anderson, D.G., Kowalczykowski, S.C. Reconstitution of an SOS response pathway: derepression of transcription in response to DNA breaks. *Cell*. 1998; 95(7):975-9. PMID: 9875851.
5. Anderson, D.G., Kowalczykowski, S.C. SSB protein controls RecBCD enzyme nuclease activity during unwinding: a new role for looped intermediates. *Journal of Molecular Biology*. 1998; 282(2):275-85. doi: 10.1006/jmbi.1998.2013. PMID: 9735287.
6. Anderson, D.G., Churchill, J.J., Kowalczykowski, S.C. A single mutation, RecB(D1080A,) eliminates RecA protein loading but not Chi recognition by RecBCD enzyme. *Journal of Biological Chemistry*. 1999; 274(38):27139-44. PMID: 10480929.
7. Churchill, J.J., Anderson, D.G., Kowalczykowski, S.C. The RecBC enzyme loads RecA protein onto ssDNA asymmetrically and independently of chi, resulting in constitutive recombination activation. *Genes and Development*. 1999; 13(7):901-11. PMCID: PMC316600.
8. Lynn, D.M., Anderson, D.G., Putnam, D., Langer, R. Accelerated discovery of synthetic transfection vectors: parallel synthesis and screening of a degradable polymer library. *Journal of the American Chemical Society*. 2001; 123(33):8155-6. PMID: 11506588.
9. Akinc, A., Lynn, D.M., Anderson, D.G., Langer, R. Parallel synthesis and biophysical characterization of a degradable polymer library for gene delivery. *Journal of the American Chemical Society*. 2003; 125(18):5316-23. doi: 10.1021/ja034429c. PMID: 12720443.

10. Anderson, D.G., Lynn, D.M., Langer, R. Semi-automated synthesis and screening of a large library of degradable cationic polymers for gene delivery. *Angew Chem Int Ed Engl.* 2003; 42(27):3153-8. doi: 10.1002/anie.200351244. PMID: 12866105.
11. Akinc, A., Anderson, D.G., Lynn, D.M., Langer, R. Synthesis of poly(beta-amino ester)s optimized for highly effective gene delivery. *Bioconjugate Chemistry.* 2003; 14(5):979-88. doi: 10.1021/bc034067y. PMID: 13129402.
12. Jon, S., Anderson, D.G., Langer, R. Degradable poly(amino alcohol esters) as potential DNA vectors with low cytotoxicity. *Biomacromolecules.* 2003; 4(6):1759-62. doi: 10.1021/bm034176f. PMID: 14606906.
13. Kohane, D.S., Anderson, D.G., Yu, C., Langer, R. pH-triggered release of macromolecules from spray-dried polymethacrylate microparticles. *Pharmaceutical Research.* 2003; 20(10):1533-8. PMID: 14620503.
14. Little, S.R., Lynn, D.M., Ge, Q., Anderson, D.G., Puram, S.V., Chen, J., Eisen, H.N., Langer, R. Poly-beta amino ester-containing microparticles enhance the activity of nonviral genetic vaccines. *Proc Natl Acad Sci U S A.* 2004; 101(26):9534-9. doi: 10.1073/pnas.0403549101. PMCID: PMC470709.
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16. Anderson, D.G., Burdick, J.A., Langer, R. Materials science. Smart biomaterials. *Science.* 2004; 305(5692):1923-4. doi: 10.1126/science.1099987. PMID: 15448260.
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18. Anderson, D.G., Peng, W., Akinc, A., Hossain, N., Kohn, A., Padera, R., Langer, R., Sawicki, J.A. A polymer library approach to suicide gene therapy for cancer. *Proc Natl Acad Sci U S A.* 2004; 101(45):16028-33. doi: 10.1073/pnas.0407218101. PMCID: PMC528737.
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Combinatorial Polymers. *Macromolecular Rapid Communications*. 2008; 29(15):1298-302. doi: 10.1002/marc.200800171.

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60. Nguyen, D.N., Kim, P., Martinez-Sobrido, L., Beitzel, B., Garcia-Sastre, A., Langer, R., Anderson, D.G. A novel high-throughput cell-based method for integrated quantification of type I interferons and in vitro screening of immunostimulatory RNA drug delivery. *Biotechnology and Bioengineering*. 2009; 103(4):664-75. doi: 10.1002/bit.22312. PMID: PMC2771114.
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Advanced Functional Materials. 2009; 19(19):3112-8. doi: 10.1002/adfm.200900519. PMID: PMC3564673.

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## BOOK CHAPTERS

1. Lynn, D. M.; **Anderson, D. G.**; Akinc, A. B.; Langer, R. "Degradable Poly( $\beta$ -amino ester)s for Gene Delivery." in *Polymeric Gene Delivery: Principles and Applications* (M. Amiji, Ed.), CRC Press, New York, **2004**.
2. Little, S. R.; **Anderson, D. G.**; Langer, R. "Non-Viral Genetic Vaccines for Cancer." in *Gene Therapy for Cancer*, Humana Press, New Jersey, **2005**.
3. Zugates, G. T., **Anderson, D. G.**, and Langer, R. High-throughput methods for screening polymeric transfection reagents, in *Gene Transfer: Delivery and Expression of DNA and RNA* (Friedmann, T., and Rossi, J., ed.), Cold Spring Harbor Laboratory Press, New York, NY, pp. 547 – 54, 2007
4. Green, J. J., Zugates, G. T., Langer, R., and **Anderson, D. G.** Poly(Beta-amino esters): Procedures for Synthesis and Gene Delivery, *Methods in Molecular Biology, Macromolecular drug Delivery methods and Protocols*, Volume 480, pages 1-11, 2009

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## ISSUED PATENTS AND PATENT APPLICATIONS(US ONLY)

number	Title
1	<a href="#"><u>9,556,110</u></a> <a href="#"><u>Aminoalcohol lipidoids and uses thereof</u></a>
2	<a href="#"><u>9,555,413</u></a> <a href="#"><u>Cell rolling separation</u></a>
3	<a href="#"><u>9,555,007</u></a> <a href="#"><u>Multi-layer hydrogel capsules for encapsulation of cells and cell aggregates</u></a>
4	<a href="#"><u>9,512,073</u></a> <a href="#"><u>Amino acid-, peptide-and polypeptide-lipids, isomers, compositions, and uses thereof</u></a>
5	<a href="#"><u>9,439,968</u></a> <a href="#"><u>Amine-containing lipidoids and uses thereof</u></a>
6	<a href="#"><u>9,422,373</u></a> <a href="#"><u>Modified alginates for cell encapsulation and cell therapy</u></a>
7	<a href="#"><u>9,339,529</u></a> <a href="#"><u>Glucose-responsive microgels for closed loop insulin delivery</u></a>
8	<a href="#"><u>9,315,472</u></a> <a href="#"><u>1,3,5-triazinane-2,4,6-trione derivatives and uses thereof</u></a>
9	<a href="#"><u>9,238,716</u></a> <a href="#"><u>Conjugated lipomers and uses thereof</u></a>
10	<a href="#"><u>9,236,556</u></a> <a href="#"><u>Polymer composite actuator and generator driven by water gradients</u></a>
11	<a href="#"><u>9,227,917</u></a> <a href="#"><u>Amine-containing lipidoids and uses thereof</u></a>
12	<a href="#"><u>9,193,827</u></a> <a href="#"><u>Poly(beta-amino alcohols), their preparation, and uses thereof</u></a>
13	<a href="#"><u>9,111,320</u></a> <a href="#"><u>Automated location-based information recall</u></a>
14	<a href="#"><u>9,101,666</u></a> <a href="#"><u>Biodegradable poly(beta-amino esters) and uses thereof</u></a>
15	<a href="#"><u>9,006,487</u></a> <a href="#"><u>Amine-containing lipids and uses thereof</u></a>
16	<a href="#"><u>8,986,988</u></a> <a href="#"><u>Cell rolling separation</u></a>
17	<a href="#"><u>8,969,353</u></a> <a href="#"><u>Aminoalcohol lipidoids and uses thereof</u></a>
18	<a href="#"><u>8,808,681</u></a> <a href="#"><u>Crosslinked, degradable polymers and uses thereof</u></a>
19	<a href="#"><u>8,562,966</u></a> <a href="#"><u>End-modified poly(beta-amino esters) and uses thereof</u></a>
20	<a href="#"><u>8,557,231</u></a> <a href="#"><u>Biodegradable poly(beta-amino esters) and uses thereof</u></a>
21	<a href="#"><u>8,450,298</u></a> <a href="#"><u>Aminoalcohol lipidoids and uses thereof</u></a>
22	<a href="#"><u>8,417,534</u></a> <a href="#"><u>Automated location-based information recall</u></a>
23	<a href="#"><u>8,287,849</u></a> <a href="#"><u>Biodegradable poly(beta-amino esters) and uses thereof</u></a>
24	<a href="#"><u>RE43,612</u></a> <a href="#"><u>Biodegradable poly(.beta.-amino esters) and uses thereof</u></a>
25	<a href="#"><u>8,071,082</u></a> <a href="#"><u>End-modified poly(beta-amino esters) and uses thereof</u></a>
26	<a href="#"><u>7,943,179</u></a> <a href="#"><u>pH triggerable polymeric particles</u></a>
27	<a href="#"><u>7,427,394</u></a> <a href="#"><u>Biodegradable poly(.beta.-amino esters) and uses thereof</u></a>
28	<a href="#"><u>6,998,115</u></a> <a href="#"><u>Biodegradable poly(.beta.-amino esters) and uses thereof</u></a>
29	<a href="#"><u>9,192,553</u></a> <a href="#"><u>Hair care compositions and methods of treating hair using same</u></a>
30	<a href="#"><u>9,175,114</u></a> <a href="#"><u>Beta-amino ester compounds and uses thereof</u></a>
31	<a href="#"><u>8,748,551</u></a> <a href="#"><u>.beta.-amino ester compounds and uses thereof</u></a>
32	<a href="#"><u>8,557,223</u></a> <a href="#"><u>Hair care compositions and methods of treating hair using same</u></a>
33	<a href="#"><u>8,551,463</u></a> <a href="#"><u>Hair care compositions and methods of treating hair</u></a>

34	<a href="#"><u>8,545,818</u></a>	<a href="#"><u>Hair care compositions and methods of treating hair using same</u></a>
35	<a href="#"><u>8,362,175</u></a>	<a href="#"><u>Beta-amino ester compounds and uses thereof</u></a>
36	<a href="#"><u>8,318,138</u></a>	<a href="#"><u>Hair care compositions and methods of treating hair using same</u></a>
37	<a href="#"><u>8,226,934</u></a>	<a href="#"><u>Hair care compositions and methods of treating hair using same</u></a>
38	<a href="#"><u>8,163,861</u></a>	<a href="#"><u>Beta-amino ester compounds and uses thereof</u></a>
39	<a href="#"><u>7,785,575</u></a>	<a href="#"><u>Hair care compositions and methods of treating hair using same</u></a>
40	<a href="#"><u>7,763,240</u></a>	<a href="#"><u>Hair care compositions and methods of treating hair using same</u></a>
41	<a href="#"><u>7,967,702</u></a>	<a href="#"><u>Golf ball with water immersion indicator</u></a>
42	<a href="#"><u>20170117312</u></a>	<a href="#"><u>NANOWIRE FET IMAGING SYSTEM AND RELATED TECHNIQUES</u></a>
43	<a href="#"><u>20170095514</u></a>	<a href="#"><u>Multi-Layer Hydrogel Capsules for Encapsulation of Cells and Cell Aggregates</u></a>
44	<a href="#"><u>20170079916</u></a>	<a href="#"><u>COMPOSITIONS AND METHODS FOR MODIFIED DENDRIMER NANOPARTICLE DELIVERY</u></a>
45	<a href="#"><u>20160324793</u></a>	<a href="#"><u>MODIFIED ALGINATES FOR CELL ENCAPSULATION AND CELL THERAPY</u></a>
46	<a href="#"><u>20160280827</u></a>	<a href="#"><u>POLYMERS, HYDROGELS, AND USES THEREOF</u></a>
47	<a href="#"><u>20160206740</u></a>	<a href="#"><u>CONJUGATED LIPOMERS AND USES THEREOF</u></a>
48	<a href="#"><u>20160158363</u></a>	<a href="#"><u>MULTI-TAILED LIPIDS AND USES THEREOF</u></a>
49	<a href="#"><u>20160137785</u></a>	<a href="#"><u>POLY(BETA-AMINO ALCOHOLS), THEIR PREPARATION, AND USES THEREOF</u></a>
50	<a href="#"><u>20160114042</u></a>	<a href="#"><u>AMINE-CONTAINING LIPIDOIDS AND USES THEREOF</u></a>
51	<a href="#"><u>20160067346</u></a>	<a href="#"><u>BRUSH-POLY (GLYCOAMIDOAMINE)-LIPIDS AND USES THEREOF</u></a>
52	<a href="#"><u>20160067190</u></a>	<a href="#"><u>INJECTABLE NANO-NETWORK GELS FOR DIABETES TREATMENT</u></a>
53	<a href="#"><u>20160030360</u></a>	<a href="#"><u>MODIFIED ALGINATES FOR ANTI-FIBROTIC MATERIALS AND APPLICATIONS</u></a>
54	<a href="#"><u>20160030359</u></a>	<a href="#"><u>Multi-Layer Hydrogel Capsules for Encapsulation of Cells and Cell Aggregates</u></a>
55	<a href="#"><u>20160022821</u></a>	<a href="#"><u>BIODEGRADABLE POLY (BETA-AMINO ESTERS) AND USES THEREOF</u></a>
56	<a href="#"><u>20160009657</u></a>	<a href="#"><u>AMINE-CONTAINING LIPIDS AND USES THEREOF</u></a>
57	<a href="#"><u>20150322432</u></a>	<a href="#"><u>COMPOSITIONS AND METHODS FOR FUNCTIONAL NUCLEIC ACID DELIVERY</u></a>
58	<a href="#"><u>20150320837</u></a>	<a href="#"><u>INSULIN DERIVATIVES FOR DIABETES TREATMENT</u></a>
59	<a href="#"><u>20150246354</u></a>	<a href="#"><u>Cell Rolling Separation</u></a>
60	<a href="#"><u>20150232883</u></a>	<a href="#"><u>DELIVERY, USE AND THERAPEUTIC APPLICATIONS OF THE CRISPR-CAS SYSTEMS AND COMPOSITIONS FOR TARGETING DISORDERS AND DISEASES USING PARTICLE DELIVERY COMPONENTS</u></a>
61	<a href="#"><u>20150203439</u></a>	<a href="#"><u>AMINOALCOHOL LIPIDOIDS AND USES THEREOF</u></a>
62	<a href="#"><u>20150030641</u></a>	<a href="#"><u>GLUCOSE-RESPONSIVE MICROGELS FOR CLOSED LOOP INSULIN DELIVERY</u></a>
63	<a href="#"><u>20150025005</u></a>	<a href="#"><u>SELF-REGULATED PEPTIDE HYDROGEL FOR INSULIN DELIVERY</u></a>
64	<a href="#"><u>20140329884</u></a>	<a href="#"><u>1,3,5-TRIAZINANE-2,4,6-TRIONE DERIVATIVES AND USES THEREOF</u></a>
65	<a href="#"><u>20140322309</u></a>	<a href="#"><u>ALPHA-AMINOAMIDINE POLYMERS AND USES THEREOF</u></a>
66	<a href="#"><u>20140314826</u></a>	<a href="#"><u>NOVEL POLYMERS WHICH RESIST BACTERIAL ATTACHMENT</u></a>
67	<a href="#"><u>20140271843</u></a>	<a href="#"><u>Multi-Layer Hydrogel Capsules for Encapsulation of Cells and Cell Aggregates</u></a>
68	<a href="#"><u>20140228715</u></a>	<a href="#"><u>Method and Apparatus for Delivering a Substance</u></a>
69	<a href="#"><u>20140220346</u></a>	<a href="#"><u>MODULAR POLYMER HYDROGEL NANOPARTICLES AND METHODS OF THEIR MANUFACTURE</u></a>
70	<a href="#"><u>20140212503</u></a>	<a href="#"><u>DELIVERY SYSTEM</u></a>
71	<a href="#"><u>20140125196</u></a>	<a href="#"><u>Polymer Composite Actuator and Generator Driven by Water Gradients</u></a>
72	<a href="#"><u>20140105960</u></a>	<a href="#"><u>HYDROGELS FOR TISSUE REGENERATION</u></a>
73	<a href="#"><u>20140094399</u></a>	<a href="#"><u>BIODEGRADABLE POLY(BETA-AMINO ESTERS) AND USES THEREOF</u></a>
74	<a href="#"><u>20130302401</u></a>	<a href="#"><u>POLY(BETA-AMINO ALCOHOLS), THEIR PREPARATION, AND USES THEREOF</u></a>

75 [20130196948](#) [POLYMERS FOR BIOMATERIALS AND THERAPEUTICS](#)

76 [20130165772](#) [MICRONEEDLE DEVICES AND USES THEREOF](#)

77 [20130158021](#) [AMINO ACID-, PEPTIDE-AND POLYPEPTIDE-LIPIDS, ISOMERS, COMPOSITIONS, AND USES THEREOF](#)

78 [20120308650](#) [MODIFIED ALGINATES FOR CELL ENCAPSULATION AND CELL THERAPY](#)

79 [20120251560](#) [CONJUGATED LIPOMERS AND USES THEREOF](#)

80 [20120213708](#) [HYDROGEL ENCAPSULATED CELLS AND ANTI-INFLAMMATORY DRUGS](#)

81 [20120149630](#) [END-MODIFIED POLY\(BETA-AMINO ESTERS\) AND USES THEREOF](#)

82 [20120065358](#) [BIODEGRADABLE POLY\(BETA-AMINO ESTERS\) AND USES THEREOF](#)

83 [20120009222](#) [MODULATION OF THE IMMUNE RESPONSE](#)

84 [20110293703](#) [AMINOALCOHOL LIPIDOIDS AND USES THEREOF](#)

85 [20110280912](#) [DEGRADABLE POLYMER NANOSTRUCTURE MATERIALS](#)

86 [20110183867](#) [Polymer arrays for biofilm adhesion testing](#)

87 [20110163469](#) [HIGH-THROUGHPUT FABRICATION OF MICROPARTICLES](#)

88 [20110077216](#) [COMPOSITIONS AND METHODS FOR THE TREATMENT OF ATHEROSCLEROSIS AND OTHER RELATED DISEASES](#)

89 [20110009641](#) [Amine-containing lipids and uses thereof](#)

90 [20100331234](#) [AMINOALCOHOL LIPIDOIDS AND USES THEREOF](#)

91 [20100304485](#) [CELL ROLLING SEPARATION](#)

92 [20100273259](#) [SUBSTRATES AND METHODS FOR CULTURING STEM CELLS](#)

93 [20100234244](#) [USES AND METHODS OF MAKING MICROARRAYS OF POLYMERIC BIOMATERIALS](#)

94 [20100196492](#) [ELECTROSTATIC COATING OF PARTICLES FOR DRUG DELIVERY](#)

95 [20100036084](#) [BIODEGRADABLE POLY\(BETA-AMINO ESTERS\) AND USES THEREOF](#)

96 [20080242626](#) [End-Modified Poly\(beta-amino esters\) and Uses Thereof](#)

97 [20080182240](#) [Uses And methods of making Microarrays of Polymeric biomaterials](#)

98 [20080157990](#) [AUTOMATED LOCATION-BASED INFORMATION RECALL](#)

99 [20080145338](#) [CROSSLINKED, DEGRADABLE POLYMERS AND USES THEREOF](#)

100 [20060228404](#) [Compositions and methods for treatment of hypertrophic tissues](#)

101 [20060083711](#) [Methods and products related to the intracellular delivery of polysaccharides](#)

102 [20050265961](#) [Biodegradable poly\(beta-amino esters\) and uses thereof](#)

103 [20050244504](#) [pH triggerable polymeric particles](#)

104 [20050215507](#) [Therapeutic anti-cancer DNA](#)

105 [20050136536](#) [Embryonic epithelial cells](#)

106 [20050123596](#) [pH-triggered microparticles](#)

107 [20050019747](#) [Nanoliter-scale synthesis of arrayed biomaterials and screening thereof](#)

108 [20040071654](#) [Biodegradable poly\(beta-amino esters\) and uses thereof](#)

109 [20040028804](#) [Production of polymeric microarrays](#)

110 [20020150626](#) [Lipid-protein-sugar particles for delivery of nucleic acids](#)

111 [20020142304](#) [Uses and methods of making microarrays of polymeric biomaterials](#)

112 [20020131951](#) [Biodegradable poly\(beta-amino esters\) and uses thereof](#)

113 [20160002406](#) [BETA-AMINO ESTER COMPOUNDS AND USES THEREOF](#)

114 [20140256885](#) [BETA-AMINO ESTER COMPOUNDS AND USES THEREOF](#)

115 [20130344022](#) [HAIR CARE COMPOSITIONS AND METHODS OF TREATING HAIR USING SAME](#)

116 [20130336913](#) [HAIR CARE COMPOSITIONS AND METHODS OF TREATING HAIR](#)



117	<a href="#">20130121947</a>	<a href="#">BETA-AMINO ESTER COMPOUNDS AND USES THEREOF</a>
118	<a href="#">20120251471</a>	<a href="#">HAIR CARE COMPOSITIONS AND METHODS OF TREATING HAIR USING SAME</a>
119	<a href="#">20120164095</a>	<a href="#">BETA-AMINO ESTER COMPOUNDS AND USES THEREOF</a>
120	<a href="#">20110008265</a>	<a href="#">In Situ Polymerization For Hair Treatment</a>
121	<a href="#">20100284953</a>	<a href="#">HAIR CARE COMPOSITIONS AND METHODS OF TREATING HAIR USING SAME</a>
122	<a href="#">20100284939</a>	<a href="#">HAIR CARE COMPOSITIONS AND METHODS OF TREATING HAIR USING SAME</a>
123	<a href="#">20100278769</a>	<a href="#">HAIR CARE COMPOSITIONS AND METHODS OF TREATING HAIR</a>
124	<a href="#">20100178267</a>	<a href="#">BETA-AMINO ESTER COMPOUNDS AND USES THEREOF</a>
125	<a href="#">20090226382</a>	<a href="#">HAIR CARE COMPOSITIONS AND METHODS OF TREATING HAIR USING SAME</a>
126	<a href="#">20090220436</a>	<a href="#">IN SITU POLYMERIZATION FOR SKIN TREATMENT</a>
127	<a href="#">20090194125</a>	<a href="#">ULTRASOUND HAIR TREATMENT</a>
128	<a href="#">20090191141</a>	<a href="#">HAIR CARE COMPOSITIONS AND METHODS OF TREATING HAIR USING SAME</a>
129	<a href="#">20090145452</a>	<a href="#">DEVICES AND METHODS OF USE FOR TREATMENT OF SKIN AND HAIR</a>

## INVITED LECTURES AND AWARDS

Cornell, School of Chemical and Biomolecular Engineering, Ithaca NY	2003
Spherics	2003
Puretech	2003
Jim Pillsbury Show, Natick, MA	2004
Gore	2004
Polaris	2004
Pall	2004
Rutgers, NJ	2005
“Cell and Tissue Dynamics”, Physikzentrum Bad Honnef, Germany	2005
Massachusetts Institute of Technology, Life Sciences Conference	2005
University of Nottingham, Dept. of Pharmacy	2005
Imperial College London, Dept. of Material Sciences	2005
Guidant	2005
Quest Diagnostics	2005
Massachusetts Institute of Technology, Dept. of Mechanical Engineering	2005
USAMRMC Command Conference, FL	2005
Yale, Dept of Biomedical Engineering	2005
MITRE Corporation	2005
“Chips to Hits 2005”, MA	2005
“Nanomedicine - Commercializing Drug Discovery, Delivery and Diagnostics”, MA	2005
Lankenau Medical Institute, PA	2005
“Life Matters: Conversations in Bionanotechnology”, Goteborg, Sweden	2005
Lester Wolf Symposia – Massachusetts General Hospital	2005
George O’Brien Speaker — Harvard	2005
8 <sup>th</sup> annual US-Japan Symposium on Drug Delivery, HI	2005
Northeastern, Dept. of Pharmacy, MA	2006
Massachusetts Institute of Technology, Center for Cancer Research	2006
“Bio2006”, Chicago IL	2006
“Tissue Engineering and Cell Based Therapies”, London	2006

Bristol Meyers Squibb, New Jersey	2006
Shire, Cambridge, MA	2006
“Celebrating 30 years of Robert Langer’s Science”, Cambridge, MA	2006
“CELLutions summit”, Boston, MA	2006
“Association of Medical Laboratory Immunologist 19th Annual Meeting” Washington DC	2006
“Distinguished Speakers in Bioengineering”, University of Toronto	2006
“8 <sup>th</sup> New Jersey Symposia on Biomaterials”, Rutgers, NJ	2006
Merck, PA	2006
Keystone Symposia “RNAi for Target Validation and as a Therapeutic”, Keystone, CO	2007
“New Developments in Laser Scanning Cytometry”, Cambridge, MA	2007
American Chemical Society, Chicago, IL	2007
American Association for Cancer Research, Los Angeles, CA	2007
RNAi 2007, Waltham MA	2007
Bio2007, Boston, MA	2007
Center for Biotechnology, RPI, Troy NY	2007
Keynote Speaker, 3 <sup>rd</sup> World Congress on Regenerative Medicine, Leipzig, Germany	2007
9 <sup>th</sup> annual US-Japan Symposium on Drug Delivery, HI	2007
Keynote Speaker, Society for physical regulation in biology and medicine, Miami, FL	2008
SBE First International Conference on Stem Cell Engineering, San Diego, CA	2008
Genzyme, Waltham MA	2008
Keynote Speaker, 8 <sup>th</sup> World Biomaterials Congress, Amsterdam	2008
Utrecht University, Department of Pharmaceutical Sciences, Utrecht	2008
Pohang University of Science and Technology, Biotech Center, Pohang, Korea	2008
Keynote Speaker, A3 Foresight Meeting, Korea	2008
Invited Speaker, Annual Controlled Release Society Meeting, New York, NY	2008
Nature Publishing Group Award for Outstanding Research Achievement, Cambridge, MA	2008
Genzyme, Framingham, MA	2008
Alnylam Delivery Summit, Cambridge, MA	2008
“9 <sup>th</sup> New Jersey Symposia on Biomaterials”, Rutgers, NJ	2008
Convergence: Science, Technology, and Medicine in the Liver, MIT, Cambridge, MA	2008
Tissue Engineering and Regenerative Medicine “TERMIS”, San Diego, CA	2008
Armed Forces Institute of Regenerative Medicine, Tampa, FL	2009
Massachusetts General Hospital, Gastroenterology Department Boston, MA	2009
Keystone Symposia “Therapeutic Modulation of RNA using Oligonucleotides”, Session Chair and Plenary Speaker, Lake Louise, AB, Canada	2009
Massachusetts General Hospital, Neuro-oncology, Boston, MA	2009
Oregon National Primate Center, Beaverton, OR	2009
Stanford Seminar –“Frontiers in gene and cellular therapies”, Palo Alto, CA	2009
35 <sup>th</sup> Northeast Bioengineering Conference, Invited speaker and Session chair, Boston, MA	2009
Human Pluripotent Stem Cells Symposium: interrogating disease and development, Dublin, Ireland	2009
American Association of Pharmaceutical Scientists National Biotechnology Conference, Seattle, WA	2009
Biomedical Engineering Materials and Application Meetings, National Research Council of the National Academies, Woods Hole, MA	2009
Invited Speaker, Mount Desert Island Stem Cell Symposium, Bar Harbor, ME	2009
Keynote Speaker, RNAi Workshop, Saint Louis, MO	2009
Invited Speaker, Technology Tutorial, Society for Biomolecular Sciences, Boston, MA	2009

The Wyss Institute, Boston MA	2009
Invited Speaker, Seventh International Discovery on Target, Boston, MA	2009
Invited Speaker, Sanofi Aventis Scientific Networking Meetings, Cambridge, MA	2009
Invited Speaker, MIT ILP Research and Development Conference, Cambridge, MA	2009
Invited Speaker, University of Massachusetts Medical School, Worcester, MA	2009
Invited Speaker, Materials Research Society Annual Meeting, Boston, MA	2009
Session chair, 10 <sup>th</sup> annual US-Japan Symposium on Drug Delivery, HI	2009
Invited Speaker, Broad Institute Program in Medical and Population Genetics, Cambridge, MA	2010
Plenary Speaker, Keystone Symposia “RNA Silencing: Mechanism, Biology, and Application”, Keystone, CO	2010
Boston University, Medical School, Boston, MA	2010
Invited Speaker and Session Chair, 7 <sup>th</sup> World PBP meetings, Valletta, Malta	2010
Plenary Speaker, Keystone Symposia “New Paradigms in Cancer Therapeutics”, Victoria, British Columbia	2010
Invited Speaker, Mount Sinai Medical School, Translational and Molecular Imaging Institute, New York, NY	2010
Invited Speaker, TIDES Oligonucleotide Therapeutics Discovery Conference, Boston, MA	2010
Invited Speaker, American Society of Gene and Cell Therapy 13 <sup>th</sup> annual meeting, Washington DC	2010
Keynote Speaker, Tissue Engineering and Regenerative Medicine Society, Galway, Ireland	2010
Invited Speaker, University of Ulster, Ireland	2010
Invited Speaker, JDRF Tolerogenic Nanoparticle Workshop, Chicago, IL	2010
Invited Speaker, Third Rock Trust Meeting, Boston, MA	2010
Invited Speaker, International Liposome Research Days and Lipids, Liposomes, & Membrane Biophysics, University of British Columbia, Vancouver, Canada	2010
Invited Speaker, 9 <sup>th</sup> Annual Mount Desert Island Stem Cell Symposium, Epigenetics and Regeneration, MDI Biological Laboratory, Salisbury Cove, Maine	2010
Invited Speaker, 2010 International Quantitative Imaging Cytometry Symposium, Boston, MA	2010
Invited Speaker, American Chemical Society, Boston, MA	2010
Invited Speaker, From the RNA World to the Clinic, HHMI Janelia Farm, VA	2010
Invited Speaker, 116 <sup>th</sup> Annual Meeting of the Association of Military Surgeons in the US, Phoenix, AZ	2010
Invited Speaker, Cambridge Healthtech Institute’s Sixth Annual Stem Cells, Molecular Medicine Tri-Conference, San Francisco, CA	2011
Invited Speaker, JDRF Encapsulation Workshop, New York, NY	2011
Keynote Speaker, Bristol-Myers Squibb RADAR Symposium, Punta Cana, Dominican Republic	2011
Invited Speaker, Annual meeting of the American Association of Cancer Researchers, Orlando, FL	2011
Invited Speaker, Materiomics Symposium, Amsterdam, Netherlands	2011
Invited Speaker, Massachusetts General Hospital, Boston, MA	2011
Invited Speaker, Department of Chemical and Biological Engineering, Northwestern University	2011
Invited Speaker, MIT-Dana Farber Cancer Center Symposium, Boston, MA	2011
Invited Speaker, 2 <sup>nd</sup> RNAi Research & Therapeutics Conference, San Francisco, CA	2011
Invited Speaker, 16 <sup>th</sup> Annual Future of Health Technology Summit, Cambridge, MA	2011
Invited Speaker, TEDxDelMar, Preventing and Curing Diabetes, San Diego, CA	2011
Speaker, Koch Annual Retreat, Sturbridge, MA	2011
Plenary Speaker, Cell Transplantation Society Annual Meeting, Miami, FL	2011
Invited Speaker, Annual Helmsley Investigator Meeting, Chicago, IL	2011

Invited Chair, 11 <sup>th</sup> Annual US-Japan Drug Delivery Symposium, Maui, HI	2011
Invited Speaker, Orthopedic Research Society Annual Meeting, San Francisco, CA	2012
Invited Speaker, IBC's AsiaTIDES Symposium on Oligonucleotide and Peptides, Tokyo, Japan	2012
Plenary Speaker, 5 <sup>th</sup> T2C, Translation to Clinical Wound Care Conference, Columbus, Ohio	2012
Session Chair and Speaker, American Association for Cancer Research 12 <sup>th</sup> Annual Meeting Chicago, IL	2012
Keynote Speaker, 2012 CC@I Symposium, Urbana, IL	2012
Invited Speaker, NeuroOncology Department, Dana-Farber Cancer Institute, Boston, MA	2012
Invited Speaker, Juvenile Diabetes Research Foundation Spring Research Briefing, Newton, MA	2012
Invited Speaker, Topics in Bioengineering (TIB), at the School of Engineering and Applied Sciences (SEAS) at Harvard University Cambridge, MA	2012
Invited Speaker, 2012 MGH Center for Systems Biology Lecture Series, Boston, MA	2012
Invited Speaker, BU Pharmacology & Experimental Therapeutics - Pfizer Symposium on "Therapeutic Innovation: The Next Generation of Discovery" Boston, MA	2012
Invited Speaker, TIDES 2012: Oligonucleotide Therapeutics Conference, Las Vegas, NV	2012
Invited Speaker, 3rd RNAi Research and Therapeutics Conference, Boston, MA	2012
Invited Speaker, 39th Annual Meeting & Exposition of the Controlled Release Society, Québec City, Canada	2012
Invited Speaker, 2012 Scientific Sessions-American Heart Association Council on Basic Cardiovascular Sciences, New Orleans, LA	2012
Invited Speaker, 3rd TERMIS World Congress, Vienna, Austria	2012
Speaker and Session leader, Koch Annual Retreat, Hyannis, MA	2012
Invited Speaker, 14 <sup>th</sup> Annual Frontiers in Diabetes Research, Columbia Medical School, NY	2012
Monsanto, Saint Louis, MO	2012
Invited Speaker, CT3N seminar series, University of Pennsylvania, Philadelphia, PA	2012
Invited Speaker, Third Annual JDRF Type 1 Diabetes Research Summit, Washington, DC	2013
Invited Speaker, JDRF Encapsulation Symposium, New York, NY	2013
Lunch Seminar, Chemical Engineering Department, MIT	2013
Alnylam Annual Meeting, Cambridge, MA	2013
Invited Speaker, University of California Los Angeles, Stem Cell Center, Los Angeles, CA	2013
Invited Speaker, FNANO Conference, Snowbird, UT	2013
Keynote Speaker, Bristol Meyers Squibb South American Conference, Playa del Mar Mexico	2013
Invited Speaker 10th International RNAi, MicroRNAs, Single Cell Biology-Boston- 2013 Meeting, Waltham, MA	2013
Invited Speaker, IBC's 5th annual conference: Oligonucleotide Therapeutics Discovery, Boston, MA	2013
Invited Speaker, American Society of Gene & Cell Therapy 16th Annual Meeting, Salt Lake City, UT	2013
Invited Speaker, T1D Exchange Annual Meeting, Cambridge, MA	2013
Invited Speaker, The Mushett Family Foundation, The Nanotechnology Center at Memorial Sloan-Kettering Cancer Center and the New York Academy of Sciences: Nanotechnologies in Cancer Diagnosis, Therapy, and Prevention Conference, New York, NY	2013
Invited Speaker, 2013 Cancer Nanotechnology Gordon Research Conference, West Dover, VT	2013
Invited Speaker, IMES Inaugural Symposium " <i>Converge, Create, Cure: Advancing Human Health through Medicine, Engineering and Science,</i> " Cambridge, MA	2013
Keynote Speaker, Create Biointerfaces Training Program at McMaster University Annual General Meeting, Hamilton, ON	2013
Invited Speaker, Bristol-Myers Squibb Mexico Orenicia SC Launch, Cancun, Mexico	2013

Invited Speaker, 2013 NYSCF Annual Translational Research Conference, New York, NY	2013
Invited Speaker, 11th International Nanomedicine and Drug Delivery Symposium (NanoDDS), San Diego, CA	2013
Invited Speaker, 2013 AIChE Annual Meeting, San Francisco, CA	2013
Session Chair, 12th US-Japan Symposium on Drug Delivery Systems Maui, HI	2013
Invited Speaker, 14th Annual Rachmiel Levine Diabetes and Obesity Symposium, Pasadena, CA	2014
Invited Speaker, Tufts University, Biomedical Engineering Department Seminar, Medford, MA	2014
Invited Speaker, DARPA PROTECT open session, Cambridge, MA	2014
Invited Speaker, Keystone Symposium on <i>Engineering Cell Fate and Function</i> , Olympic Valley, CA	2014
Plenary Speaker, 13th European Symposium on Controlled Drug Delivery, Egmond aan Zee, Netherlands	2014
Seminar Speaker, The Netherlands Cancer Institute, Amsterdam, Netherlands	2014
Invited Speaker, The Skoltech Biomedical Conference: Towards Therapies of the Future Moscow, Russia	2014
Invited Speaker, M+Vision Conference, Madrid, Spain	2014
Invited Speaker, TERMIS-EU, Genova, Italy	2014
Invited Speaker, Koch Institute 2014 Symposium, Cambridge, MA	2014
Invited Speaker, 7th European Summit for Clinical Nanomedicine and Targeted Medicine Basel, Switzerland	2014
Invited Speaker, XII International Conference on Nanostructured Materials (NANO 2014) Moscow, Russia	2014
Invited Speaker, Northeastern Nanomedicine Lecture Series, Boston, MA	2014
Invited Speaker, City of Hope Leading Edge Lecture Series, Duarte, CA	2014
Invited Speaker, Vertex Gene Editing Day, Vertex Pharmaceuticals, Boston, MA	2015
Invited Speaker, Symposium on "New Frontiers in Gene Editing," part of the 22nd Annual Molecular Medicine Tri-conference, San Francisco, CA	2015
Invited Speaker, CRISPR Precision Gene Editing Congress 2015, Cambridge, MA	2015
Invited Speaker, IBC's Genome Editing Applications Meeting, Boston, MA	2015
Invited Speaker, 2015 MRS Spring Meeting and Exhibit, San Francisco, CA	2015
Invited Seminar Speaker, Emory University Genetics and Molecular Biology Program, Atlanta, GA	2015
Keynote Speaker, World Orphan Drug Congress, Washington, DC	2015
Invited Speaker, 3rd Annual NanoMedicine Symposium, Boston, MA	2015
Invited Speaker, 3rd Annual NanoMedicine Symposium, Boston, MA	2015
Invited Lecture Seminar, University of California, Irvine, Irvine, CA	2015
Invited Speaker, American Diabetes Association's 75th Scientific Sessions, Boston, MA	2015
Invited Speaker, JDRF New England Chapter Annual Meeting, Needham, MA	2015
Genome Editing Panel, BioPharm America 2015, Boston, MA	2015
Invited Speaker, Cambridge Healthtech Institute's 13th Annual Discovery On Target, Boston, MA	2015
Invited Speaker, Cold Spring Harbor Laboratory for the Genome Engineering – The CRISPR/Cas 9 Revolution Meeting, Cold Spring Harbor, NY	2015
Seminar Speaker, University of California Berkeley Nanoscale Science and Engineering (NSE), Berkeley, CA	2015
Invited Speaker, The New York Stem Cell Foundation Tenth Annual Translational Stem Cell Conference, New York, NY	2015
Invited Speaker, Crossing Biological Barriers Conference, Dresden, Germany	2015

Invited Speaker, 2nd Euro Asian Experts Conference on Immune Biomarkers for Personalized Medicine in Oncology, Shanghai, China	2015
Seminar Speaker, Hong Kong University of Science and Technology, Hong Kong, China	2015
Invited Speaker, 3rd Canton Nucleic Acids Forum, Guangzhou (Canton), China	2015
Invited Speaker, Kowalczykowski Symposium, University of California Davis, Davis, CA	2016
Invited Speaker, 2nd Annual CRISPR Precision Gene Editing Congress, Boston, MA	2016
Invited Speaker, Annual Meeting of the French Society of Cell and Gene Therapy, Marseille, France	2016
Invited Speaker, Society for General Microbiology (SGM) Annual Conference, Liverpool, UK	2016
Invited Speaker, JDRF Encapsulation Consortium Spring 2016 Meeting, New York, NY	2016
Invited Speaker, Dartmouth College Course ENGS 5. Healthcare and Biotechnology in the 21st Century, Hanover, NH	2016
Invited Speaker, Stem Cell Summit, Boston, MA	2016
Keynote Speaker, Precision Medicine Symposia-2016 on RNAi/Genome Editing Meeting & Neuron to Synapse/Optogenetics/Structural Biology Meeting, Burlington, MA	2016
Invited Speaker, American Society of Gene & Cell Therapy 19th Annual Meeting, Washington, DC	2016
Invited Speaker, 7th Annual D CURE Symposium, Herzliya, Israel	2016
Invited Speaker, Squishy Physics Seminar Series, The School of Engineering and Applied Sciences (SEAS) at Harvard University, Cambridge, MA	2016
Invited Speaker, American Diabetes Association's 76th Scientific Sessions, New Orleans, LA	2016
Invited Speaker, The Precision Agriculture Professional Studies program at MIT, Cambridge, MA	2016
Invited Speaker, Translational Gene Editing at the World Preclinical Congress, Boston, MA	2016
Invited Speaker, Patient-Driven Precision Medicine Conference, Boston, MA	2016
Invited Speaker, AACR Special Conference on Engineering and Physical Sciences in Oncology, Boston, MA	2016
Keynote Speaker, TERMIS EU 2016, Uppsala, Sweden	2016
Invited Speaker, Fourth Workshop in micro- and nanotechnologies for Medicine at The Biomaterials Innovation Research Center (BIRC), Cambridge, MA	2016
Plenary Speaker, Innovations in Biomedical Materials 2016 Conference, Chicago, IL	2016
Invited Speaker, FDA Office of Cellular Tissue and Gene Therapies (OCTGT) Educational Symposium, Silver Spring, MD	2016
Invited Speaker, The Collaborative Research Center 1066 International Symposium Nanodimensional Polymeric Therapeutics for Tumor Immunotherapy, Mainz, Germany	2016
Invited Speaker, International Pancreas and Islet Transplant Association (IPITA) Key Opinion Leaders Meeting on Stem Cell Derived Beta Cells, Boston, MA	2016
Invited Speaker, Gene Therapy Breakthroughs Conference at the 14 <sup>th</sup> Annual Drug Delivery on Target, Boston, MA	2016
Invited Speaker, JDRF Encapsulation Consortium Fall 2016 Meeting, Boston, MA	2016
Invited Speaker, CRISPR & Precision Genome Editing Congress Europe 2016, Berlin, Germany	2016
Invited Speaker, 42nd International Society for Pediatric and Adolescent Diabetes Conference Valencia, Spain	2016
Invited Speaker, MassBiologics Seminar Series, Boston, MA	2016
Invited Speaker, 2017 Keystone Symposia on Precision Genome Engineering, Breckenridge, CO	2017
Invited Speaker, Inaugural Biomaterials Discovery Workshop, Nottingham, UK	2017
Invited Speaker, 2nd Annual Genome Editing & Engineering Conference, San Diego, CA	2017
Invited Speaker, Association for Research in Otolaryngology 40th Annual Midwinter Meeting,	

Baltimore, MD	2017
Invited Speaker, 3rd CRISPR Precision Genome Congress, Boston, MA	2017
Keynote Speaker, JDRF Kentucky TypeOneNation Summit, Louisville, KY	2017
Invited Speaker, 2017 Carolina Nanof ormulation Workshop, Chapel Hill, NC	2017
Invited Speaker, Colorado Center for Nanomedicine and Nanosafety Symposium, Aurora, CO	2017
Keynote Speaker, Society for Biomaterials Meeting, Minneapolis, MN	2017
Keynote Speaker, Materials Research Society Spring Meeting, Phoenix, AZ	2017
Keynote Speaker, Skoltech & MIT Conference: "Shaping the Future: Big Data, Biomedicine and Frontier Technologies, Moscow, Russia	2017
Plenary Speaker, TIDES 2017, San Diego, CA	2017
Invited Speaker, Mammalian Synthetic Biology Workshop, Boston, MA	2017
Invited Speaker, 2017 American Urological Association Urologic Oncology Research Symposium, Boston, MA	2017
Invited Speaker, Dartmouth College Course ENGS 5. Healthcare and Biotechnology in the 21st Century, Hanover, NH	2017
Invited Speaker, Center for Nucleic Acids Science and Technology (CNASt) at Carnegie Mellon University, Pittsburgh, PA	2017
Keynote Speaker, 2017 Preclinical Form and Formulation for Drug Discovery Gordon Research Conference, Stowe, VT	2017
Invited Speaker, The Wake Forest Institute for Regenerative Medicine (WFIRM) 4 <sup>th</sup> Annual Regenerative Medicine Essentials Course: The Fundamentals to the Future, Winston-Salem, NC	2017
Invited Speaker, Cambridge Healthtech Institute's Second Annual NanoDelivery symposium, part of the World Preclinical Congress, Boston, MA	2017
Keynote Speaker, 2017 Cancer Nanotechnology Gordon Research Conference, Mount Snow, VT	2017
Invited Speaker, Changchun Institute of Applied Chemistry, Changchun, China	2017
Invited Speaker, Beijing University of Chemical Technology, Beijing, China	
Invited Speaker, Beth Israel Deaconess Medical Center Surgical Horizons Seminar, Boston, MA	2017
Invited Speaker, 15th International Nanomedicine & Drug Delivery Symposium, Ann Arbor, MI	2017
Invited Speaker, GTCbio Genomics & Big Data Summit, San Diego, CA	2017
Keynote Speaker, Mayo Clinic Center for Regenerative Medicine -Accelerating Pathways to Clinical Trials: An International Conference on Islet Regeneration and Replacement, Rochester, MN	2017
Plenary Speaker, 3rd Annual Applied Pharmaceutical Nanotechnology Conference, Cambridge, MA	2017
Invited Speaker, 2017 International Society for Vaccines (ISV) Annual Meeting, Paris France	2017
Invited Speaker, 2017 Basic Research Workshop at The American Association for the Study of Liver Diseases (AASLD) Meeting, Washington, DC	2017
Invited Speaker, The New York Stem Cell Foundation Annual Translational Stem Cell Research Conference, New York, NY	2017
Invited Speaker, JDRF Encapsulation Consortium Fall 2017 Meeting, Long Beach, CA	2017

## **FOUNDED COMPANIES**

Living Proof, Inc  
Olivo Labs, Inc  
Preceres, Inc  
CRISPR Therapeutics, Inc

Verseau Therapeutics, Inc  
Combined Therapeutics, Inc  
Sigilon, Inc  
Tiba, Inc.

## **SCIENTIFIC ADVISORY BOARD MEMBERSHIP**

Living Proof, Inc.  
Stemgent, Inc.  
Termis-EU  
Alnylam BioTherapeutics, Inc.  
Drug Delivery and Formulation Summit, 2012  
CRISPR & Genome Engineering Conference, 2016  
Stem Cell Summit, 2017

## **OTHER ACTIVITY**

Biomedical Engineering Society Meeting, 2010, Track and Session Chair, Austin, TX  
American Society of Gene & Cell Therapy, 2011, Coordinating Reviewer  
Proctor Chemical Engineering Qualifications  
Member, Chemical Engineering Graduate Student Admissions Committee 2011  
Member, HST MEMPS Admissions Committee 2011-2012  
American Society of Gene & Cell Therapy Organizing Committee 2012-2013  
American Society of Gene & Cell Therapy Presidential Conference Committee 2013  
MIT, Poitras Fellowship selection committee  
HST M.D. Curriculum Committee 2016-2017

## **ACADEMIC ALUMNI**

Jordan Green, Associate Professor, John Hopkins University  
Fan Yang, Assistant Professor, Stanford University  
Jae-Seung Lee, Assistant Professor, Korea University  
Haeshin Lee, Assistant Professor, KAIST  
Seung-Woo Cho, Associate Professor, Yonsei University  
Wendy Liu, Assistant Professor, University of Irvine  
Qiaobing Xu, Assistant Professor, Tufts  
Akihiko Kusanagi, Assistant Professor, Shiga Medical School  
Katie Bratlie, Assistant Professor, Iowa State  
Christian Kastrup, Assistant Professor, University of British Columbia  
Nathan Hwang, Assistant Professor, Seoul National University  
Ying Mei, Assistant Professor, Clemson University  
Hyukjin Lee, Assistant Professor, Ewha Womans University, Korea  
Kyung-sun Son, Assistant Professor, Chungnam National University  
Carolina Salvador Morales, Assistant Professor, George Mason University  
Daniel Siegwart, Assistant Professor, University of Texas Southwestern Medical Center  
Hao Cheng, Assistant Professor, Drexel University  
Avi Schroeder, Senior Lecturer of Chemical Engineering, Technion - Israel Institute of Technology



Daniel Heller, Assistant Member, Memorial Sloan-Kettering Cancer Center  
Zhen Gu, Associate Professor, University of North Carolina at Chapel Hill and North Carolina State University  
Omar Fisher, Assistant Professor, Temple University  
Kathryn Whitehead, Assistant Professor, Carnegie Mellon University  
Zhiqiang Cao, Assistant Professor, Wayne State University  
Christopher A. Alabi, Assistant Professor, Cornell University  
Janet Zoldan, Assistant Professor, The University of Texas at Austin  
Minglin Ma, Assistant Professor, Cornell University  
Liang Guo, Assistant Professor, The Ohio State University  
Beata Chertok, Assistant Professor, University of Michigan  
Yi Chen, Assistant Professor, University of California, San Diego  
Hung-Chieh (Danny) Chou, Assistant Professor, University of Utah  
Yizhou Dong, Assistant Professor, The Ohio State University  
Gaurav Sahay, Assistant Professor, Oregon State University  
Thuy Tram Dang, Assistant Professor, Nanyang Technological University  
Siddharth Jhunjunwala, Assistant Professor, Indian Institute of Science  
James Dahlman, Assistant Professor, Georgia Institute of Technology  
Matthew Webber, Assistant Professor, University of Notre Dame  
Xi Xie, Faculty, Sun Yat-Sen University

## **TEACHING**

10.444/10.644 Frontiers in Therapeutics and Drug Delivery – Created new class for Chemical Engineering Undergraduates and Graduate Students. 2012—Co-listed with HST  
10.990 Chemical Engineering Lecture  
10.29 (2 Teams) Biological Engineering Laboratories Spring 2011  
HST 500 Guest Lecturer 5/5/11  
HST 500 Discussion Leader 5/6/11  
Graduate Chemical Engineering Course at Northwestern—“Advances in Biotechnology” 6/1/11  
HST 521 Guest Lecturer 3/7/12  
10.29 (2 Teams) Biological Engineering Laboratories Spring 2012  
HST 500 Guest lecture 4/19/2012  
10.591 Case Studies in Bioengineering Guest Lecturer 10/23/2013  
HST 500 Guest lecture 05/06/2014  
10.467 - Polymer Science Laboratory  
HST.500 Frontiers in Biomedical Engineering and Physics Guest Lecturer 02/25/2016  
10.585 Engineering Nanotechnology on drug delivery Guest Lecturer 11/17/2016