

Appendix A

Agency	Agency Project ID #	Project Title	Funding Level	Start Date	End Date
DOE	NA	Manipulation of Lignin Biosynthesis to Maximize Ethanol Production from Populus Feedstocks	\$1,400,000	2006	2009
DOE	NA	Systematic Modification of Monolignol Pathway Gene Expression for Improved Lignocellulose Utilization	\$800,000	2006	2009
DOE	NA	Sorghum Biomass/Feedstock Genomics Research for Bioenergy	\$800,000	2006	2009
DOE	NA	Streamlined Method for Biomass Whole-Cell-Wall Structural Profiling	\$330,000	2006	2009
DOE	NA	Development of a Proteoglycan Chip for Plant Glycomics	\$359,100	2006	2009
DOE	NA	Biochemical Genomics of Wood Formation: O-Acyltransferases for Alteration of Lignocellulosic Property and Enhancement of Carbon Deposition in Poplar	\$300,000	2006	2009
DOE	NA	Genomic Knowledgebase for Facilitating the Use of Woody Biomass for Fuel Ethanol Production	\$700,000	2006	2009
DOE	NA	Genetic Dissection of the Lignocellulosic Pathway of Wheat to Improve Biomass Quality of Grasses as a Feedstock for Biofuel	\$700,000	2006	2009

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Agency	Agency Project ID #	Project Title	Funding Level	Start Date	End Date
DOE	NA	Using Association Mapping to Identify Markers for Cell-Wall Constituents and Biomass Yield in Alfalfa	\$445,000	2006	2009
DOE	NA	Towards a Map of Populus Biomass Protein-Protein Interaction Network	\$1,200,000	2007	2010
DOE	NA	Analysis of Small RNAs and mRNAs Associated with Abiotic Stress Responses in <i>Brachypodium distachyon</i>	\$600,000	2007	2010
DOE	NA	Development of Brown Midrib Sweet Sorghum as a Dual-Source Feedstock for Ethanol Production	\$750,000	2007	2010
DOE	NA	A Functional Genomics Approach to Altering Crown Architecture in Populus: Maximizing Carbon Capture in Trees Grown in Dense Plantings	\$1,040,000	2007	2010
DOE	NA	Identification of Cell Wall Synthesis Regulatory Genes Controlling Biomass Characteristics and Yield in Rice (<i>Oryza sativa</i>)	\$1,300,000	2007	2010
DOE	NA	Development of Genomic Tools to Improve Prairie Cordgrass (<i>Spartina pectinata</i>), a Highly Productive Bioenergy Feedstock Crop	\$420,000	2007	2010
DOE	NA	Resource Development in Switchgrass, an Important Bioenergy Crop for the U.S.A.	\$400,000	2007	2010

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Agency	Agency Project ID #	Project Title	Funding Level	Start Date	End Date
DOE	NA	Strategies for Using Molecular Markers to Simultaneously Improve Corn Grain Yield and Stover Quality for Ethanol Production	\$715,000	2007	2010
DOE	NA	Joint Genomics Institute	\$64,565,000	2008	2008
DOE	NA	Joint Genomics Institute	\$65,000,000	2009	2009
DOE	NA	Joint Genomics Institute	\$69,000,000	2010	2010
DOE	NA	Genomic Science Program	\$164,085,000	2008	2008
DOE	NA	Genomic Science Program	\$169,858,000	2009	2009
DOE	NA	Genomic Science Program	\$165,626,000	2010	2010
DOE	NA	ELSI	\$5,000,000	2008	2008
DOE	NA	ELSI	\$5,000,000	2009	2009
DOE	NA	ELSI	\$5,000,000	2010	2010
HHS/NIH	1R13AI067245-01	13TH ANNUAL INTERNATIONAL CONFERENCE ON MICROBIAL GENOMES	\$24,000	2005	2006
HHS/NIH	1R13GM076943-01	SIXTH INTERNATIONAL CONFERENCE ON SYSTEMS BIOLOGY (ICSB 2005)	\$17,325	2005	2006
HHS/NIH	1R13GM073377-01	CONFERENCE ON SYSTEMS & BIOLOGY	\$10,000	2005	2006
HHS/NIH	9R01GM077040-05	GENETIC CIRCUITS BASED ON ALLOSTERIC RIBOZYMES	\$272,370	2006	2006
HHS/NIH	1PN2EY018241-01	NDC FOR THE OPTICAL CONTROL OF BIOLOGICAL FUNCTION	\$1,187,584	2006	2006
HHS/NIH	1R21EB005844-01	WATER-SOLUBLE ARRAYS FOR PERSONALIZED MEDICINE	\$183,553	2006	2006
HHS/NIH	1R13AI071706-01	FOURTEENTH MICROBIAL GENOMICS CONFERENCE-2006	\$9,000	2006	2006

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Agency	Agency Project ID #	Project Title	Funding Level	Start Date	End Date
HHS/NIH	1F32GM076964-01	DIRECTED EVOLUTION OF LUXR TO REFOCUS SPECIFICITY	\$43,996	2006	2006
HHS/NIH	1R01GM074712-01A1	ENGINEERING SYNTHETIC MULTICELLULAR SYSTEMS	\$461,572	2006	2006
HHS/NIH	1R01CA118486-01A1	COORDINATING CELL KILLING BY COMMUNICATION: BIOLOGICAL CONTROL AND CANCER THERAPY	\$220,899	2006	2006
HHS/NIH	1R01GM081527-01	ARTIFICIAL GENETIC SYSTEMS	\$387,352	2007	2008
HHS/NIH	1R13AI077246-01	15TH ANNUAL INTERNATIONAL CONFERENCE ON MICROBIAL GENOMICS	\$19,000	2007	2008
HHS/NIH	1DP1OD003644-02	A NETWORK BIOLOGY APPROACH TO ANTIBIOTIC ACTION AND BACTERIAL DEFENSE MECHANISMS	\$406,250	2007	2008
HHS/NIH	5R01GM077040-06	GENETIC CIRCUITS BASED ON ALLOSTERIC RIBOZYMES	\$264,471	2007	2009
HHS/NIH	1R01GM079333-01A1	METABOLIC CONTROL IN A DYNAMIC ENVIRONMENT	\$283,433	2007	2008
HHS/NIH	1R13GM083497-01	EIGHTH INTERNATIONAL CONFERENCE ON SYSTEMS BIOLOGY (ICSB 2007)	\$10,000	2007	2008
HHS/NIH	2R01GM070923-04	CONTINUED SUPPORT AND DEVELOPMENT OF SBML AND ESSENTIAL SBML INFRASTRUCTURE	\$397,167	2007	2008
HHS/NIH	5PN2EY018241-02	NDC FOR THE OPTICAL CONTROL OF BIOLOGICAL FUNCTION	\$1,714,887	2007	2008

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Agency	Agency Project ID #	Project Title	Funding Level	Start Date	End Date
HHS/NIH	5R21EB005844-02	WATER-SOLUBLE ARRAYS FOR PERSONALIZED MEDICINE	\$178,101	2007	2008
HHS/NIH	1F32GM079974-01A1	CHARACTERIZATION OF NATURAL MRNA GENETIC SWITCHES THAT BIND METABOLITES	\$46,826	2007	2008
HHS/NIH	1F32GM080898-01	SYNTHETIC BIOLOGY: RESTRUCTURING THE ESCHERICHIA COLI GENOME	\$46,826	2007	2008
HHS/NIH	5F32GM076964-02	DIRECTED EVOLUTION OF LUXR TO REFOCUS SPECIFICITY	\$45,976	2007	2008
HHS/NIH	5R01GM074712-02	ENGINEERING SYNTHETIC MULTICELLULAR SYSTEMS	\$463,885	2007	2008
HHS/NIH	5R01CA118486-02	COORDINATING CELL KILLING BY COMMUNICATION: BIOLOGICAL CONTROL AND CANCER THERAPY	\$208,675	2007	2008
HHS/NIH	F32GM080887-01	Elucidating the fundamental principles of cell polarity using synthetic biology	\$46,826	2007	2008
HHS/NIH	5F32GM077002-03	TRACKING MORPHOGENESIS FROM SINGLE CELLS TO STRUCTURES	\$48,796	2008	2009
HHS/NIH	5R01GM081527-02	ARTIFICIAL GENETIC SYSTEMS	\$265,487	2008	2009
HHS/NIH	2R01GM036481-22A1	TRANSPOSITION MECHANISMS	\$519,318	2008	2009
HHS/NIH	1DP2OD004690-01	ENGINEERING MOLECULAR MOTORS	\$960,000	2008	2013
HHS/NIH	1DP2OD004690-01	ENGINEERING MOLECULAR MOTORS	\$1,440,000	2008	2013

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Agency	Agency Project ID #	Project Title	Funding Level	Start Date	End Date
HHS/NIH	2R44HG004284-02	MICROARRAY TECHNOLOGY FOR GENOMIC ASSAYS	\$810,710	2008	2009
HHS/NIH	5DP1OD003644-02	A NETWORK BIOLOGY APPROACH TO ANTIBIOTIC ACTION AND BACTERIAL DEFENSE MECHANISMS	\$406,250	2008	2010
HHS/NIH	1R01GM086881-01	COLLABORATIVE RESEARCH: MULTISTABILITY IN BIOLOGICAL NETWORKS	\$321,583	2008	2009
HHS/NIH	1R01DK083756-01	SYSTEMS BIOLOGY OF CROHN'S DISEASE	\$373,469	2008	2009
HHS/NIH	5R01EB000657-06	NANOSENSING AND ACTUATION USING CELL MIMETICS	\$402,478	2008	2009
HHS/NIH	2R01GM034985-23	GENETIC AND MOLECULAR DISSECTION OF THE NEUROSPORA CLOCK	\$679,492	2008	2009
HHS/NIH	5R01GM036262-22	DYNAMICS AND BIOLOGY OF SYNTHETIC CATION CHANNELS	\$286,351	2008	2010
HHS/NIH	5R01GM079333-02	METABOLIC CONTROL IN A DYNAMIC ENVIRONMENT	\$282,927	2008	2009
HHS/NIH	5DP1OD000122-05	NIH DIRECTOR'S PIONEER AWARD (RMI)	\$751,905	2008	2010
HHS/NIH	5F32GM078901-03	NONCODING RNA BASED PLATFORMS FOR IN VIVO BIOSENSORS	\$53,992	2008	2009
HHS/NIH	5R01GM070923-05	CONTINUED SUPPORT AND DEVELOPMENT OF SBML AND ESSENTIAL SBML INFRASTRUCTURE	\$563,618	2008	2009

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Agency	Agency Project ID #	Project Title	Funding Level	Start Date	End Date
HHS/NIH	7PN2EY018241-03	NDC FOR THE OPTICAL CONTROL OF BIOLOGICAL FUNCTION	\$5,246,633	2008	2009
HHS/NIH	5P41RR006009-18	BIOMOLECULAR INTERACTION AND GENE NETWORK SIMULATIONS		2008	2009
HHS/NIH	5T90DA022881-03	TRAINING FOR A NEW INTERDISCIPLINARY RESEARCH WORKFORCE IN REGENERATIVE MEDICINE	\$331,407	2008	2009
HHS/NIH	5PN2EY016546-05	CELLULAR CONTROL:SYNTHETIC SIGNALING/MOTILITY (RMI)	\$4,610,000	2008	2009
HHS/NIH	5R21EB005844-03	WATER-SOLUBLE ARRAYS FOR PERSONALIZED MEDICINE	\$174,408	2008	2010
HHS/NIH	5F32GM079974-02	CHARACTERIZATION OF NATURAL MRNA GENETIC SWITCHES THAT BIND METABOLITES	\$49,646	2008	2009
HHS/NIH	1K99GM083155-01	MICROFLUIDIC PROCESSORS FOR DIRECTED EVOLUTION AND SYNTHETIC BIOLOGY	\$78,983	2008	2009
HHS/NIH	1Z01BC011061-01	COMPUTATIONAL RNA NANODESIGN	\$512,890	2008	2009
HHS/NIH	5F32GM080898-02	SYNTHETIC BIOLOGY: RESTRUCTURING THE ESCHERICHIA COLI GENOME	\$49,646	2008	2009
HHS/NIH	1Z01AI000934-06	VACCINES, IMMUNOPROPHYLAXIS, AND IMMUNOTHERAPY FOR SARS	\$306,045	2008	2009

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Agency	Agency Project ID #	Project Title	Funding Level	Start Date	End Date
HHS/NIH	5F32GM076964-03	DIRECTED EVOLUTION OF LUXR TO REFOCUS SPECIFICITY	\$48,796	2008	2009
HHS/NIH	5F32GM080887-02	Elucidating the fundamental principles of cell polarity using synthetic biology	\$24,823	2008	2009
HHS/NIH	5R01GM074712-03	ENGINEERING SYNTHETIC MULTICELLULAR SYSTEMS	\$450,940	2008	2009
HHS/NIH	2R01HL055672-11A2	THE BIOLOGY OF INOSITOL POLYPHOSPHATE SIGNALING	\$390,000	2008	2009
HHS/NIH	5R01CA118486-03	COORDINATING CELL KILLING BY COMMUNICATION: BIOLOGICAL CONTROL AND CANCER THERAPY	\$208,402	2008	2009
HHS/NIH	5P41RR002301-24	ATFS, POLYAMIDE SYNTHESIS	\$76	2009	2010
HHS/NIH	5R01GM081527-03	ARTIFICIAL GENETIC SYSTEMS	\$266,882	2009	2010
HHS/NIH	5R01GM036481-23	TRANSPOSITION MECHANISMS	\$512,815	2009	2010
HHS/NIH	5R44HG004284-03	MICROARRAY TECHNOLOGY FOR GENOMIC ASSAYS	\$612,202	2009	2010
HHS/NIH	5DP1OD003644-03	A NETWORK BIOLOGY APPROACH TO ANTIBIOTIC ACTION AND BACTERIAL DEFENSE MECHANISMS	\$406,250	2009	2012
HHS/NIH	5DP1OD003644-03	A NETWORK BIOLOGY APPROACH TO ANTIBIOTIC ACTION AND BACTERIAL DEFENSE MECHANISMS	\$406,250	2009	2012
HHS/NIH	5R01GM086881-02	COLLABORATIVE RESEARCH: MULTISTABILITY IN BIOLOGICAL NETWORKS	\$315,516	2009	2010

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Agency	Agency Project ID #	Project Title	Funding Level	Start Date	End Date
HHS/NIH	1RC2GM092561-01	TRANSCRIPTOME CHARACTERIZATION OF MEDICINAL PLANTS RELEVANT TO HUMAN HEALTH	\$1,459,447	2009	2010
HHS/NIH	5R01DK083756-02	SYSTEMS BIOLOGY OF CROHN'S DISEASE	\$375,594	2009	2010
HHS/NIH	2U54AI057157-07	PLATFORMS FOR SYNTHESIS AND TESTING OF EMERGING AND ZOO NOTIC VIRUSES	\$237,013	2009	2010
HHS/NIH	5R01EB000657-07	NANOSENSING AND ACTUATION USING CELL MIMETICS	\$405,019	2009	2010
HHS/NIH	5R01GM034985-24	GENETIC AND MOLECULAR DISSECTION OF THE NEUROSPORA CLOCK	\$704,253	2009	2010
HHS/NIH	5R01GM077040-07	GENETIC CIRCUITS BASED ON ALLOSTERIC RIBOZYMES	\$265,083	2009	2010
HHS/NIH	5R01GM079333-03	METABOLIC CONTROL IN A DYNAMIC ENVIRONMENT	\$282,396	2009	2010
HHS/NIH	1F32GM087860-01	DETECTING HISTONE MODIFICATION TURNOVER IN LIVING CELLS	\$51,710	2009	2010
HHS/NIH	1RC1GM092031-01	RIBOSWITCH DESIGN PRINCIPLES: INTERPLAY BETWEEN SWITCHING, LIGAND BINDING AND FOL	\$443,846	2009	2010
HHS/NIH	1DP2OD006466-01	ENGINEERING OF CELL SHAPE AND INTRACELLULAR ORGANIZATION	\$2,400,000	2009	2014

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Agency	Agency Project ID #	Project Title	Funding Level	Start Date	End Date
HHS/NIH	3R01GM070923-05S1	CONTINUED SUPPORT AND DEVELOPMENT OF SBML AND ESSENTIAL SBML INFRASTRUCTURE	\$28,890	2009	2010
HHS/NIH	5R01GM070923-06	CONTINUED SUPPORT AND DEVELOPMENT OF SBML AND ESSENTIAL SBML INFRASTRUCTURE	\$693,618	2009	2010
HHS/NIH	3PN2EY018241-03S1	NDC FOR THE OPTICAL CONTROL OF BIOLOGICAL FUNCTION	\$500,000	2009	2010
HHS/NIH	5PN2EY018241-04	NDC FOR THE OPTICAL CONTROL OF BIOLOGICAL FUNCTION	\$4,293,367	2009	2010
HHS/NIH	1ZIAES102625-01	GENE REGULATORY ELEMENTS, NETWORKS, AND MECHANISMS	\$270,789	2009	2010
HHS/NIH	1R01GM086865-01A2	MULTISCALE MODELS FOR SYNTHETIC BIOLOGY	\$249,550	2009	2010
HHS/NIH	5P41RR006009-19	BIOMOLECULAR INTERACTION AND GENE NETWORK SIMULATIONS	\$771	2009	2010
HHS/NIH	5P41RR015301-07	CRYSTALLOGRAPHIC STUDIES OF DESIGNED COILED COILS	\$2,540	2009	2010
HHS/NIH	5T90DA022881-04	TRAINING FOR A NEW INTERDISCIPLINARY RESEARCH WORKFORCE IN REGENERATIVE MEDICINE	\$90,899	2009	2010
HHS/NIH	3PN2EY016546-05S1	CELLULAR CONTROL:SYNTHETIC SIGNALING/MOTILITY (RMI)	\$225,570	2009	2011

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Agency	Agency Project ID #	Project Title	Funding Level	Start Date	End Date
HHS/NIH	1P30GM092423-01	FACULTY POSTION IN COMPUTATIONAL PROTEIN DESIGN AND EVOLUTION	\$360,000	2009	2010
HHS/NIH	5F32GM079974-03	CHARACTERIZATION OF NATURAL MRNA GENETIC SWITCHES THAT BIND METABOLITES	\$51,710	2009	2010
HHS/NIH	1R01HG004708-01A1	BIOPHYSICAL MODELS FOR PREDICTION AND DESIGN OF EUKARYOTIC CHROMATIN STRUCTURE AN	\$266,859	2009	2010
HHS/NIH	4R00GM083155-02	MICROFLUIDIC PROCESSORS FOR DIRECTED EVOLUTION AND SYNTHETIC BIOLOGY	\$249,000	2009	2010
HHS/NIH	1R01GM085286-01	SINGLE-MOLECULE AND SINGLE-CELL ANALYSIS OF TRANSCRIPTION FACTOR-DNA COMPLEXES	\$342,125	2009	2010
HHS/NIH	3R01GM085286-01S1	SINGLE-MOLECULE AND SINGLE-CELL ANALYSIS OF TRANSCRIPTION FACTOR-DNA COMPLEXES	\$422,234	2009	2011
HHS/NIH	5P41RR006009-19	PREDICTING PROTEIN TRANSLATION RATE FROM DNA SEQUENCE: A WEB SERVICE	\$771	2009	2010
HHS/NIH	1R13GM088843-01	ALBANY 2009: THE 16TH CONVERSATION	\$5,000	2009	2010
HHS/NIH	1R01GM081410-01A1	COMPUTATIONAL STUDIES OF IN VITRO SELECTION OF RNAS	\$311,020	2009	2010

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Agency	Agency Project ID #	Project Title	Funding Level	Start Date	End Date
HHS/NIH	1ZIABC011061-02	COMPUTATIONAL RNA NANODESIGN	\$642,958	2009	2010
HHS/NIH	1F32GM089102-01	TRACKING THE FATE OF MICRORNA-REGULATED MRNA	\$45,218	2009	2010
HHS/NIH	5F32GM080898-03	SYNTHETIC BIOLOGY: RESTRUCTURING THE ESCHERICHIA COLI GENOME	\$51,710	2009	2010
HHS/NIH	1RC1GM091298-01	MOLECULAR PLATFORMS FOR THE DEVELOPMENT OF INTELLIGENT THERAPEUTICS TARGETED TO D	\$499,996	2009	2010
HHS/NIH	1R13AR057685-01	25TH ANNUAL MEETING OF THE AMERICAN SOCIETY FOR GRAVITATIONAL AND SPACE BIOLOGY	\$9,988	2009	2010
HHS/NIH	1R13AR057685-01	25TH ANNUAL MEETING OF THE AMERICAN SOCIETY FOR GRAVITATIONAL AND SPACE BIOLOGY	\$6,987	2009	2010
HHS/NIH	1R13AR057685-01	25TH ANNUAL MEETING OF THE AMERICAN SOCIETY FOR GRAVITATIONAL AND SPACE BIOLOGY	\$3,000	2009	2010
HHS/NIH	1R01GM085323-01A1	METABOLIC ENGINEERING FOR MICROBIAL TAXOL BIOSYNTHESIS	\$667,475	2009	2010
HHS/NIH	5R01GM074712-04	ENGINEERING SYNTHETIC MULTICELLULAR SYSTEMS	\$450,486	2009	2010
HHS/NIH	1R21AI068999-01A2	DIRECTED EVOLUTION OF A MURINE MODEL OF HEPATITIS C VIRUS REPLICATION	\$211,771	2009	2010

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Agency	Agency Project ID #	Project Title	Funding Level	Start Date	End Date
HHS/NIH	3R01HL055672-12S1	THE BIOLOGY OF INOSITOL POLYPHOSPHATE SIGNALING	\$49,048	2009	2010
HHS/NIH	5R01HL055672-12	THE BIOLOGY OF INOSITOL POLYPHOSPHATE SIGNALING	\$390,000	2009	2010
HHS/NIH	5R01CA118486-04	COORDINATING CELL KILLING BY COMMUNICATION: BIOLOGICAL CONTROL AND CANCER THERAPY	\$208,402	2009	2010
NSF	448244	CAREER: Artificial Pattern Formation with Synthetic Gene Networks	\$626,350	2005	2010
NSF	611927	BIC: Collaborative Research: Rational Design of Synthetic Gene Networks using Formal Analysis of Hybrid Systems	\$98,118	2005	2007
NSF	522831	BIC: Collaborative Research: Evolutionary Optimization of Biological Circuits: Towards Cellular Programming	\$268,250	2005	2008
NSF	523195	BIC: Collaborative Research: Evolutionary Optimization of Biological Circuits: Towards Cellular Programming	\$262,000	2005	2010
NSF	540879	Synthetic Biology Engineering Research Center (SynBERC)	\$14,362,011	2006	2012
NSF	620997	Synthetic Biology: Status, Outlook and Public Perception	\$60,000	2006	2010
NSF	644463	CAREER: Probabilistic Decision-Making in Natural and Synthetic Gene Circuits	\$479,998	2007	2009

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Agency	Agency Project ID #	Project Title	Funding Level	Start Date	End Date
NSF	640642	Genome-wide Changes in Bacterial Transcription Units as a Function of Oxygen Limitation	\$840,885	2007	2010
NSF	730817	Digital Microfluidic Artificial Golgi for Glycan Synthesis	\$300,000	2007	2010
NSF	639962	Development of Computational Tools and Experimental Verifications for Protein Design	\$375,000	2007	2010
NSF	644792	CAREER: Mathematics for Biological Engineering	\$400,000	2007	2012
NSF	730955	Multiscale Modeling of Protein Mediated Membrane Phase and Dynamical Behavior	\$200,000	2007	2009
NSF	733952	Collaborative Research: UBM Group: Synthetic Biology Research for Undergraduates (SyBR-U)	\$173,000	2007	2010
NSF	733955	Collaborative Research: UBM Group: Synthetic Biology Research for Undergraduates (SyBR-U)	\$170,000	2007	2010
NSF	741371	Conference: Eighth International Conference on Systems Biology (ICSB 2007) to be held October 1-6, 2007 in Long Beach, CA	\$10,000	2007	2008
NSF	749931	SGER: SCIF: Securing the Computing and Information Future: Principled Foundations and New Cryptographic Abstractions	\$199,375	2007	2010

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Agency	Agency Project ID #	Project Title	Funding Level	Start Date	End Date
NSF	744541	CAREER: A Computational Design Approach for Predicting and Reengineering Plasticity and Selectivity in Protein-protein Interfaces	\$280,000	2008	2010
NSF	822659	Synthetic Biology Workshop will be held April 3-4, 2008 at the Howard Hughes Medical Institute Janelia Farms campus in Ashburn, Virginia	\$32,420	2008	2009
NSF	750075	Gordon Research Conference on Science and Technology Policy	\$60,000	2008	2009
NSF	756801	Engineering Eukaryotic Protein Scaffolds to Reprogram Prokaryotic Signaling and Metabolic Pathways	\$540,000	2008	2011
NSF	817651	Catalytically Active De Novo Proteins From Designed Combinatorial Libraries	\$503,257	2008	2011
NSF	754010	Synthetic Biology Undergraduate Research Experience	\$199,434	2008	2011
NSF	850898	Planning Future Research in Network Science and Engineering	\$50,400	2008	2009
NSF	804183	Robustness in Biological Networks	\$180,000	2008	2010
NSF	821032	Investigation into the Evolution of a Protein Enzyme from Random Sequence Origin	\$270,580	2008	2010
NSF	829900	EMT/BSSE Synthetic Biological Integrated Circuits for Computing	\$450,000	2008	2011
NSF	828630	Delivery of Bacterial Therapeutics to Solid Tumors	\$240,000	2009	2012

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NSF	846964	CAREER: Systems biology and engineering of Clostridium beijerinckii for enhance butanol production	\$400,000	2009	2014
NSF	847853	Doctoral Dissertation Research: Crafting Life: A Sensory Ethnography of Constructive Biologies	\$14,929	2009	2010
NSF	825686	IGMS: Dynamic Models in Synthetic Biology	\$100,000	2009	2010
NSF	838748	Opportunities and Challenges for the Emerging Field of Synthetic Biology	\$100,000	2009	2010
NSF	923691	Students Participation for Emergence in Chemical Systems 2.0 Conference	\$14,475	2009	2009
NSF	935932	"Sandpit" to address grand challenge topics in synthetic biology	\$28,800	2009	2010
NSF	962520	Planning Future Research in Network Science and Engineering	\$50,400	2009	2010
NSF	846453	CAREER: Inter-kingdom Signaling as a Paradigm for Molecular Systems Biology	\$400,000	2009	2014
NSF	846618	CAREER: Integrated Microsystems for Synthetic Biology	\$400,000	2009	2014
NSF	912541	SBIR Phase I: Volatile gene expression reporters for use during fermentation	\$99,981	2009	2009

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Agency	Agency Project ID #	Project Title	Funding Level	Start Date	End Date
NSF	916042	CIF:SMALL:COLLABORATIVE: Soft-Logic Modeling and Design for Synthetic Biology	\$262,000	2009	2012
NSF	916105	CIF:SMALL:COLLABORATIVE: Soft-Logic Modeling and Design for Synthetic Biology	\$188,000	2009	2012
NSF	941078	Real-Time Coupling of Gene Networks in Single Cells	\$100,000	2009	2010
NSF	853031	ARS Synthetica - A Multimedia Forum Exploring the Artful Design of Living Things	\$74,902	2009	2010
NSF	937721	EFRI HyBi: Algal Oils to 'Drop-in' Replacements for Petroleum-derived Transportation Fuels	\$1,999,172	2009	2013
NSF	943383	Collaborative Research: Engineering Genetically Augmented Polymers (GAPS)	\$490,574	2009	2012
NSF	943393	Collaborative Research: Engineering Genetically Augmented Polymers (GAPS)	\$576,425	2009	2012
NSF	922714	Cultural Cognition of Synthetic Biology Risks	\$398,990	2009	2011
NSF	934074	Workshop on Minimal Life; Arlington, VA, August 2009	\$49,994	2009	2010
NSF	850100	GenoCAD: A Computer Assisted Design Environment for Synthetic Biology	\$1,421,725	2009	2012
NSF	910771	Heme distortion in the H-NOX family: From basic chemical and physical properties to signal transduction	\$585,000	2009	2014

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Agency	Agency Project ID #	Project Title	Funding Level	Start Date	End Date
NSF	943269	COLLABORATIVE RESEARCH: Programming the rhizosphere through highly integrated genetic, spatio-temporal control systems	\$300,000	2009	2012
NSF	943302	Collaborative Research: Cyberplasm - An autonomous micro-robot constructed using synthetic biology	\$419,747	2009	2012
NSF	943343	Collaborative Research: Cyberplasm - An autonomous micro-robot constructed using synthetic biology	\$765,488	2009	2012
NSF	943345	Collaborative Research: Cyberplasm - An autonomous micro-robot constructed using synthetic biology	\$538,562	2009	2012
NSF	943385	COLLABORATIVE RESEARCH: Programming the rhizosphere through highly integrated genetic, spatio-temporal control systems	\$591,974	2009	2012
NSF	943386	COLLABORATIVE RESEARCH: Programming the rhizosphere through highly integrated genetic, spatio-temporal control systems	\$310,054	2009	2012
NSF	943390	Collaborative Research: Synthetic integrins for continuous directed evolution of complex genetic ensembles	\$473,293	2009	2012

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Agency	Agency Project ID #	Project Title	Funding Level	Start Date	End Date
NSF	943392	Collaborative Research: Synthetic integrons for continuous directed evolution of complex genetic ensembles	\$433,116	2009	2012
NSF	944139	Synthetic Aesthetics: Connecting Synthetic Biology and Creative Design	\$244,560	2009	2011
NSF	845650	CAREER: Computing with Things Small, Wet, and Random - Design Automation for Digital Computation with Nanoscale Technologies and Biological Processes	\$500,000	2009	2014
NSF	903894	Collaborative Research: Engineering yeast consortia for surface-display of complex cellulosome structures: A consolidated bioprocessing approach from cellulosic biomass to ethanol	\$600,000	2009	2012
NSF	925449	Transatlantic Exploratory Workshop on the Implications of Cutting-Edge Biotechnologies for Sustainability Science and Policy	\$53,810	2009	2010
NSF	946510	SynBERC BioFAB Facility	\$1,400,000	2009	2011
NSF	945221	SBIR Phase I: Standardizing Microbial Water Quality Monitoring Using Synthetic Biology	\$101,684	2010	2010
NSF	946147	SBIR Phase I: Bioethanol from Seaweed	\$150,000	2010	2010

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Agency	Agency Project ID #	Project Title	Funding Level	Start Date	End Date
NSF	960533	Prediction Markets - An Experimental Application to Synthetic Biology	\$25,000	2010	2010
DOA	CA-B*-PLB-7163-H	PHOTOSYNTHESIS AND PHOTO-OXIDATIVE STRESS RESPONSES	NA	2008	2013
DOA	ILLU-741-308	BIOINFORMATICS AND NANOTECHNOLOGY APPLICATIONS IN BIOLOGICAL SYSTEMS	\$41,441	2005	2010
DOA	MICL01940	REGULATION OF LIPID METABOLISM IN PLANTS AND ALGAE	NA	2009	2014
DOA	MICL02197	ETHICAL ISSUES IN AGRICULTURE	NA	2009	2014
DOA	NC06739	PLANT SIGNALING: ALTERING PLANT RESPONSES TO STRESS	\$362,930	2009	2014
DOA	SD00H348-09	ENGINEERING CYANOBACTERIA AS A FACTORY TO PRODUCE METHYLBUTENOL FOR BIOFUEL AND ISOPRENE FOR BIORUBBER	NA	2009	2014
DOA	NA	Developing Association Mapping in Polyploid Perennial Biofuel Grasses	\$700,000	2007	2010
DOA	NA	Linkage Analysis Appropriate for Comparative Genome Analysis and Trait Selection in Switchgrass	\$600,000	2007	2010

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Agency	Agency Project ID #	Project Title	Funding Level	Start Date	End Date
DOA	NA	Insertional Mutagenesis of <i>Brachypodium distachyon</i>	\$600,000	2007	2010
DOD	NA	DARPA	\$20,000,000	2011	
DOD	Office of Naval Research/Naval Biosciences and Biocentric Technology Program	Multiplexed Pathway and Organism Engineering	NA	NA	NA
DOD	Office of Naval Research/Naval Biosciences and Biocentric Technology Program	Controlling Information Flow in Plant Detector Systems	NA	NA	NA
DOD	Office of Naval Research/Naval Biosciences and Biocentric Technology Program	Combining Synthetic Biology with Biofabrication for "Smart" Sensor-Actuator Devices	NA	NA	NA
DOD	Office of Naval Research/Naval Biosciences and Biocentric Technology Program	Using <i>Magnetospirillum magnetotacticum</i> as a Probe for Non-Destructive Evaluation of Submerged Surface Structural Integrity	NA	NA	NA
DOD	Office of Naval Research/Naval Biosciences and Biocentric Technology Program	Engineering rapidly adapting bacteria for phenotype engineering	NA	NA	NA

Agency	Agency Project ID #	Project Title	Funding Level	Start Date	End Date
DOD	Office of Naval Research/Naval Biosciences and Biocentric Technology Program	Diatom-based Sensors for Detecting Environmental Threats from Explosives	NA	NA	NA
DOD	Office of Naval Research/Naval Biosciences and Biocentric Technology Program	Programmed Pathogen Sense-and-Destroy Circuits	NA	NA	NA
DOD	Office of Naval Research/Naval Biosciences and Biocentric Technology Program	Programmed Pathogen Sense-and-Destroy Circuits (renewal)	NA	NA	NA
DOD	Office of Naval Research/Naval Biosciences and Biocentric Technology Program	Powerful Combinatorial Sensors To Program Microbes	NA	NA	NA

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Agency	Agency Project ID #	Project Title	Funding Level	Start Date	End Date
Europe					
EC	NA	Engineered Modular Bacterial Photoproduction of Hydrogen	\$2,724,368	2007	2010
EC	NA	A Biological Nanoactuator as a Molecular Switch for Biosensing	\$2,716,345	2006	2010
EC	NA	Biological Computation Built on Cell Communication Systems	\$2,339,923	2007	2011
EC	NA	Engineering and Control of Biological Systems: a New Way to Tackle Complex Diseases and Biotechnological Innovation	\$2,814,040	2007	2010
EC	NA	A Foundation for Synthetic Biology in Europe	\$2,044,815	2006	2009
EC	NA	A modular platform for biosynthesis of complex molecules	\$1,718,054	2005	2008
EC	NA	Functionalised Synthetic Membranes for GPCR Based Screening	\$1,908,494	2006	2009
EC	NA	Human monoclonal antibodies from a library of hybridomas	\$2,725,772	2005	2009
EC	NA	Synthetic Biomimetic Nanoengines: a Modular Platform for Engineering of Nanomechanical Actuator Building Blocks	\$3,067,223	2006	2009
EC	NA	Self-assembly of synthetic nuclei: key modules for semibiotic chemosynthetic systems	\$2,656,896	2005	2009

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Agency	Agency Project ID #	Project Title	Funding Level	Start Date	End Date
EC	NA	Design and Engineering of gene networks to respond to and correct alterations in signal transduction pathways.	\$1,799,873	2005	2008
EC	NA	An Orthogonal Episome: an Artificial Genetic System Based on a Novel Type of Nucleic Acids	\$1,339,802	2006	2009
EC	NA	Programmable Bacterial Catalysts	\$2,590,099	2006	2009
EC	NA	Towards a European Synthetic Biology Community	\$360,705	2006	2008
EC	NA	An Analysis of Synthetic Biology Research in Europe and North America	\$308,358	2005	2006
EC	NA	Safety and Ethical Aspects of Synthetic Biology	\$321,720	2001	2008
EC	NA	Approaches to the Bioengineering of Synthetic Minimal Cells	\$1,936,766	2007	2010
EC	NA	Towards a European Strategy for Synthetic Biology	\$316,548	2007	2009
EC	NA	Targeting environmental pollution with engineered microbial systems a la carte (TARPOL)	\$1,359,413	2008	2010
EC	NA	Bacterial synthetic minimal genomes for Biotechnology	\$4,089,630	NA	NA
EC	NA	Strategy for the preservation of plastic artefacts in museum collections (POPART) Synthethics	\$723,865	2008	2012
EC	NA	Synthetic biology for human health: Ethical and legal issues (SYBHEL)	\$1,095,458	2009	2012

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Agency	Agency Project ID #	Project Title	Funding Level	Start Date	End Date
Netherlands	NA	Universities and Research Councils	\$89,808,000	2008	NA
Germany	NA	Deutsche Forschungsgemeinschaft	\$3,592,148	2009	NA
United Kingdom	BBC0080731	A systems biology approach to homeostasis in single cells, exemplified by bacterial plasmids of Escherichia coli	\$397,976	2006	2009
United Kingdom	BBE0242031	Bioengineering of complex metabolic pathways	\$1,137,812	2008	2012
United Kingdom	BBF0184601	SPPI-NET: a Network for Synthetic Plant Products for Industry	\$162,635	2008	2011
United Kingdom	BBF0184791	From Robust Synthetic Biological Parts to Whole Systems: Theoretical, Practical and Ethical Challenges	\$163,627	2008	2011
United Kingdom	BBF01855X1	SynBioNT: A Synthetic Biology Network for Modelling and Programming Cell-Cell Interactions	\$112,987	2008	2011
United Kingdom	BBF0186651	'Synbion' The UCL Network in Synthetic Biology	\$17,174	2008	2011
United Kingdom	BBF0186811	MATEs - Microbial Applications to Tissue Engineering: An Exemplar of Synthetic Biology	\$205,290	2008	2011
United Kingdom	BBF0187031	'Synbion' The UCL Network in Synthetic Biology	\$196,966	2008	2011
United Kingdom	BBF0187461	Standards for the Design and Engineering of Modular Biological Devices	\$285,061	2008	2011

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Agency	Agency Project ID #	Project Title	Funding Level	Start Date	End Date
United Kingdom	BBG0088331	A biomolecular-design approach in synthetic biology: towards synthetic cytoskeletons	\$1,035,982	2009	2013
United Kingdom	BBG0143611	Mechanism of dimethylenzimidazole (DMB) synthesis and the metabolic engineering of a dietary useful form of cobalamin in Lactobacillus	\$624,204	2009	2012
United Kingdom	BBG0144261	Synthetic Biology Pathways to Isoquinoline Alkaloids	\$1,093,171	2009	2012
United Kingdom	BBG0166581	Creating and evaluating a library of effector modules for synthetic morphology	\$641,724	2009	2012
United Kingdom	BBG0173951	Engineering biobutanol production in a cellulosic clostridium using synthetic biology principles	\$112,719	2009	2013
United Kingdom	BBG02040X1	A synthetic and recombinant approach to the production and characterisation of IAPV, an associated agent of honey bee Colony Collapse Disorder	\$492,485	2009	2012
United Kingdom	BBG0204341	Mapping combinatorial stress responses in bacteria using chimeric proteins and probabilistic modelling	\$4,481,316	2009	2013
United Kingdom	BBH0037461	High-throughput engineering of proteins: Sampling extended chemical diversity by combining directed evolution with an expanded genetic code.	\$475,914	2009	2012

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Agency	Agency Project ID #	Project Title	Funding Level	Start Date	End Date
United Kingdom	EP/G042462/1	"The CHELL": A Bottom-Up approach to in vitro and in silico Minimal Life-like Constructs	\$1,104,947	2009	2013
United Kingdom	EP/G026130/1	"The CHELL": A Bottom-Up approach to in vitro and in silico Minimal Life-like Constructs	\$565,410	2009	2013
United Kingdom	EP/G026688/1	"The CHELL": A Bottom-Up approach to in vitro and in silico Minimal Life-like Constructs	\$869,497	2009	2012
United Kingdom	EP/H000291/1	Bridging the Gaps: Nano-Info-Bio	\$437,930	2009	2011
United Kingdom	EP/H019081/1	Sandpit: Cyberplasm	\$451,890	2009	2012
United Kingdom	EP/H01912X/1	Sandpit: Synthetic aesthetics: connecting synthetic biology and creative design	\$199,250	2009	2011
United Kingdom	EP/H019162/1	Sandpit: The Programmable Rhizosphere	\$1,473,792	2009	2012