

I. PERSONAL INFORMATION

RYAN T. GILL

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Chemical and Biological Engineering
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II. EMPLOYMENT HISTORY

2008-Present	Associate Professor with Tenure, Chemical and Biological Engineering, University of Colorado, Boulder, CO
2007-Present	Dupont Young Professor
2006-Present	Managing Director, Colorado Center for Biorefining and Biofuels
2005-2008	Patten Assistant Professor. Chemical and Biological Engineering. University of Colorado, Boulder, CO.
2001-2005	Assistant Professor. Chemical and Biological Engineering. University of Colorado, Boulder, CO.
1993-1995	Chemical Engineer, K&M Engineering and Consulting, Washington D.C.

III. EDUCATION

1999-2001.	Post-doctoral Associate. Chemical Engineering. Massachusetts Institute of Technology. Advisor: Professor Gregory Stephanopoulos
1997-1999.	<i>Doctor of Philosophy.</i> Chemical Engineering. University of Maryland. College Park, MD. Advisor: Professor William E. Bentley Thesis: <i>Dynamic analysis of global stress gene transcription during recombinant Escherichia coli fermentation.</i>
1995-1997.	<i>Masters of Science.</i> Chemical Engineering. University of Maryland. College Park, MD. Advisor: Professor William E. Bentley Thesis: <i>An investigation of E. coli stress: The physiological response to DTT addition and the partial purification of a stress induced protease.</i>
1989-1993.	<i>Bachelor of Science.</i> Chemical Engineering. The Johns Hopkins University, Baltimore, MD.

IV. ACADEMIC AND PROFESSIONAL ACTIVITIES

Honors and Awards

2009	Visiting Professor, Ecole Polytechnique Federal de Lausanne
2008	University of Colorado Faculty Fellowship
2007	Dupont Young Professor Award
2007	Rising Star Award, Big 12 Center for Economic Dev., Innovation and Commercialization
2006	Provosts Award for Achievement (CU)
2005	National Science Foundation CAREER Award
2005	National Institutes of Health CAREER (K) Development Award
2004	Subaru Educator Spotlight Award
2003	CU-Boulder, Department of Chemical Engineering, Undergraduate Advising Award

2001 Vern Norviel Junior Faculty Award

Entrepreneurial Activities

- 2005-Pres. OpX Bioproducts, Inc. Co-founder.
- A spinout of Gill lab research.
- Exclusively licensed a package of 10 patent (pending) from Gill lab.
- 2005 Lucigen, Inc.
- Licensed from CU genetic vectors developed in the Gill lab

National and International Service Activities

- 2010-Present Editorial Advisory Board, Biotechnology and Bioengineering
- 2008-Present Editorial Advisory Board, Metabolic Engineering
- 2008-Present Biomolecular Engineering II International Conference, Society for Biological Engineering (AIChE). Conference Chair.
- 2008-Present Scientific Advisory Board, International Conference on Metabolic Engineering
- 2008-Present Strategic Planning Board, American Chemical Society, Biotechnology Division.
- 2007-Present Chair, Scientific Advisory Board, Opx biotechnologies.
- 2007 Biomolecular Engineering I International Conference, San Diego, CA. Society for Biological Engineering (AIChE), Session Chair. Molecular Methods in Strain Engineering
- 2005 Biochemical Engineering XIV International Conference. Harrison Hot Springs, B.C., Canada. Session chair. Evolutionary approaches in biochemical engineering.
- 2005 American Chemical Society (ACS). National Meeting. Co-chair. Session on Microbial Process Development – Application of New Tools in Process R&D.
2004. Metabolic Engineering V International Conference. Lake Tahoe, Ca. Co-Chair for session on Evolutionary approaches in Metabolic Engineering.
2004. Guest Editor *Metabolic Engineering*. Special Edition on Inverse Metabolic Engineering.
2003. American Chemical Society (ACS). National Meeting. Chair. Session on Advances in Metabolic Engineering
2002. American Institute of Chemical Engineers (AIChE). National Meeting. Chair. Session on Advances in Genomics
2001. American Institute of Chemical Engineering National Meeting. Co-chair. Session on Advances in Genomics

Reviews and Panels: Nature Biotechnology, Applied Environmental Microbiology, Journal of Bacteriology, Biotechnology and Bioengineering, Metabolic Engineering, Physiological Genomics, Biotechnology Progress, Biochemical Engineering Journal, Environmental Science and Technology, Genomics, National Science Foundation, National Institutes of Health.

Memberships: American Institute for Chemical Engineers, American Chemical Society, American Society for Microbiology, Society for Industrial Microbiology.

Consulting: Cargill, Inc., Shell Global Solutions (Shell Oil), Cystic Fibrosis Foundation, Merck, Inc., OpX Biotechnologies, LLC., VantagePoint (Goldman Sachs),

University Service Activities

- Co-Founder, Managing Director, Colorado Center for Biorefining and Biofuels (2006-Present)
- ChBE, Faculty Search Committee (2006-07, 2007-08)
- Advisory Board for HHMI/CU Biological Sciences Initiative (2006-present)
- ChBE Society for Biological Engineering Advisor (2005-present)
- ChBE Graduate Committee (2004-2005 recruiting only)

ChBE Undergraduate Lab Committee, Head (2003-2004)
 University of Colorado Biosafety committee (2003-2004)
 ChBE Undergraduate Advising (2002-2005, 2007)
 Genomics Advisory Committee for the HHMI/CU Biological Sciences Initiative (2002-present)
 University of Colorado Molecular Biotechnology Initiative (2003-present)
 Co-founder and Co-director of CU-Boulder Gene Expression Core Facility (2002-present)
 ChBE Biomedical Engineering Society Advisor (2002-present)
 University of Colorado College of Engineering's committee on Bioengineering (2001-present)

V. TEACHING EXPERIENCE

Term	Course	Name
Spring, 2010	EPFL	Bioprocess Engineering (1/3 of class)
Spring, 2009	CHEN 4300	Blokinetics
Fall, 2008	CHEN 2120	Mass and Energy Balances
Spring, 2008	CHEN3500	Biokinetics
Fall, 2007	CHEN	Creative Technology (1/3 of class)
Fall, 2007	CHEN4838/5838	Metabolic Engineering
Fall, 2006	CHEN 4130	ChBE Senior Laboratory
Spring, 2006	CHEN 3838	Biology for Engineers
Fall, 2005	CHEN 5333	Research Methods
Fall, 2005	CHEN 4130	ChBESenior Laboratory
Spring, 2005	CHEN 3838	Biology for Engineers
Fall, 2004	MCDB	Bioinformatics (3 lectures)
Spring, 2004	CHEN 3838	Biology for Engineers
Fall, 2003	CHEN 4130	ChBE Senior Laboratory
Fall, 2003	MCDB	Bioinformatics (3 lectures)
Spring, 2003	CHEN 4/5800	Bioprocess Engineering
Fall, 2002	CHEN 4130	ChBE Senior Laboratory
Fall, 2002	MCDB	Bioinformatics (3 lectures)
Fall, 2001	CHEN 4/5800	Bioprocess Engineering

VI. PUBLICATIONS

1. **Gill R.T.**, Cha H., Jain A., Rao G., Bentley, W.E.*1998. Physiological Effects of DTT addition to *E. coli* including growth rate, specific oxygen uptake, heat shock protein expression, and specific activity of recombinant protein. *Biotechnology and Bioengineering*. 59:249-259.
2. Bentley, W.E.* Madurawe, R.D., **Gill, R.T.**, Shiloach, M.¹, Chase, T., Pulliam-Holoman, T.R., and Valdes, J.J. 1998. Generation of a histidine-tagged antitubulin toxin antibody fragment in *E. coli*: effects of post-induction temperature on yield and IMAC binding affinity. *Journal of Industrial Microbiology and Biotechnology*. 21: 275-282.
3. **Gill, R.T.**, Valdes, J., and Bentley, W.E.* 1999. Reverse Transcription-PCR Differential Display of *Escherichia coli* Global Gene Regulation in response to Heat Shock. *Applied Environmental Microbiology*. 65:5386-5393.
4. **Gill, R.T.**, Valdes, J.J., and Bentley, W.E.* 2000. A comparative study of global stress gene regulation in response to overexpression of recombinant proteins in *Escherichia coli*. *Metabolic Engineering*. 2:3:178-189.

5. **Gill, R.T.**, Shiloach, M.¹, Delisa, M.P., Holoman, T.R., and Bentley, W.E.* 2000. A Novel OmpT Activity: Increased proteolytic activity in response to foreign protein overproduction and amino acid limitation. *Journal of Microbiology and Molecular Biotechnology*. 2:3:283-289.
6. **Gill, R.T.**, DeLisa, M.P., Valdes, J.J., and Bentley, W.E.* 2000. Genomic Analysis of High Cell Density Recombinant *Escherichia coli* Fermentation and "Cell Conditioning" for Improved Recombinant Protein Yield. *Biotechnology and Bioengineering*. 72:1:85-95.
7. Stephanopoulos, G.* and **Gill, R.T.** 2000. After a Decade of Progress, an Expanded Role for Metabolic Engineering. *Advances in Biochemical Engineering*. 73:1-8. Springer. New York, NY.
8. Taroncher-Oldenburg, G., **Gill, R.T.** and Stephanopoulos, G.* 2000 Green biosynthesis of polyhydroxyalkanoates: Engineering of cyanobacteria for biopolymer production. In: Proceedings 4th annual green chemistry and engineering conference. American Chemical Society, Washington, D.C., June 2000, pp. 61-4.
9. **Gill, R.T.**, Katsoulakis, E. ¹, Schmitt, W., Taroncher-Oldenburg, G., and Stephanopoulos, G.* 2002. Whole Genome Dynamic Transcriptional Profiling of the Light-Dark Transition in *Synechocystis* sp. PCC6803. *Journal of Bacteriology*. 184:3671-3681.
10. **Gill, R.T.**, Wildt, S., Yang, Y., Ziesman, S., and Stephanopoulos, G.* 2002. Genome wide screening for trait conferring genes using DNA micro-arrays. *Proceedings of the National Academy of Sciences*.99:10:7033-7038. (IF=10.2)
 (Ziesman(Gall), S. and Gill, R.T. finished final aspects of this work at CU).
11. **Gill, R.T.*** 2003. Enabling Inverse Metabolic Engineering through Genomics. *Current Opinions in Biotechnology*. 14:5:484-490. (IF=6.8)
12. Lynch, M., **Gill, R.T.***, and Stephanopoulos, G. 2004. Mini-Review: Mapping phenotypic landscapes using DNA micro-arrays. *Metabolic Engineering*. 6:177-185. (IF=3.0)
13. **Gill, R.T.** and Dodge, T. 2004. Foreword to the special issue on inverse metabolic engineering. 6:175-176. (not peer reviewed)
14. Bonomo, J. and **Gill, R.T.*** 2005. Metabolic engineering: Applying systems biology to a clinically relevant problem. *Computers and Chemical Engineering*.29:509-517. (IF=1.4)
15. Dai, M., Ziesman, S., Ratcliffe, T. ¹, **Gill, R.T.**, and Copley, S.C*. 2005. Visualization and Quantification of protoplast fusion in *E. coli*. *Metabolic Engineering*.7:45-52. (IF=3.0)
16. Bonomo, J. and **Gill, R.T.*** 2005. Amino-acid content of recombinant proteins influences the metabolic burden response. *Biotechnology and Bioengineering*. 90:116-126.(IF=2.4)
17. Warnecke, T. and **Gill, R.T.*** 2005. Organic acid toxicity, tolerance, and production in biorefining platform applications. *Microbial Cell Factories*. 4:25-33. (IF=2.1).
18. Struble, J. and **Gill, R.T.***. 2006. Reverse engineering sensitivity in a resistant isolate of *Pseudomonas aeruginosa*. *Antimicrobial Agents and Chemotherapy*. 50:2506-2515.(IF=4.5)
 - Cited as Exceptional (top 1% of publications) in the Faculty of 1000 Biology
19. Lynch, M. and **Gill, R.T.*** 2006. A series of broad host range plasmids for genomic library construction and maintenance. *Biotechnology and Bioengineering*.94:151-158. (IF=2.4)
20. Bonomo, J. Warnecke, T., Hume, P. Marizcurrena, A. and **Gill, R.T.***2006. A comparative study of engineering antimetabolite tolerance in *E. coli*. *Metabolic Engineering*.8:4:300-310. (IF=3.0).
21. Leiske, D., Karimpour-Fard, A., Hume,P., Fairbanks, B. and Gill, R.T.* 2006. A comparative analysis of alternative oligonucleotide probe sequences for DNA microarray studies. *BMC Genomics*.4:7:72. (IF=4.1).

22. Lynch, M., Warnecke, T., and **Gill, R.T.*** 2007. SCALES: SCAr Analysis of Library Enrichments. *Nature Methods*.4:87-93. (IF = 15.0)
23. Karimpour-Fard, A., Deitweiler, C., Hunter, L. and Gill, R.T.* 2007. Cross-Species Clustered Co-Conservation: A new method for generating protein interaction networks. *Genome Biology*. 8:R185. (IF=7.2)
 - Designated as Highly Accessed by Genome Biology internet site
24. Coenye, T., Drevinek, P., Mahenthalingam, E., Ali-Shah, S., **Gill, R.T.**, Vandamme, P., and Ussery, D.* 2007. Identification of putative non-coding RNA genes in the *Burkholderia cenocepacia* J2315 genome. *FEMS Microbiology Letters*. 276:1:83-92. (IF=2.1).
25. Bonomo, J., Lynch, M., Warnecke, T., Price, J., and **Gill, R.T.***2008.Genome-scale analysis of anti-metabolite directed strain engineering. *Metabolic Engineering*. 10:109-120. (IF=3.0).
26. Karimpour-Fard, A., Hunter, L., and **Gill, R.T.***. 2008. Investigation of factors affecting prediction of protein-protein interaction networks by phylogenetic profiling. *BMC Genomics*. 8:393. (IF=4.1).
27. Warnecke, T., Lynch, M., Karimpour-Fard, A., Sandoval, N., and **Gill, R.T.**2008. A genomics approach to improve the analysis and design of strain selections. *Metabolic Engineering*. 10:3:154-165. (IF=3.4)
 - Selected as Cover Article for May-July, 2008 issue
28. Karimpour-Fard, A., Leach, S., Hunter, L., and Gill, R.T.* 2008. The topology of the bacterial co-conserved protein network and its implication for predicting protein function. *BMC Genomics*. 9:313. (IF=4.1)
29. Drevinek, P., Holden, M., Ge, Z., Jones, A., Ketchell, I., Gill, R.T., and Mahenthalingam, E. 2008. Gene expression changes of *Burkholderia cenocepacia* strains by growth in cystic fibrosis sputum. *BMC Infectious Diseases*. 8:121
30. Gall, S. Lynch, M., Sandoval, N., and **Gill, R.T.*** 2008. Decomposing fitness into fractions by genomics-enabled parallel evolution experiments. *Metabolic Engineering*. 10:6. IF=3.4
31. Karimpour-Fard, A., Leach, S., Gill, R.T., and Hunter, L. 2008. Predicting protein interactions in bacteria: which method is best depends on task. *BMC-Bioinformatics*. 9:397. (IF=3.5)
 - Designated as Highly Accessed by BMC-Bioinformatics
32. Struble, J., Handke, P., and **Gill, R.T.*** 2009. Construction of Genomic Libraries. *Desk Encyclopedia of Microbiology*. Editor: M. Schaechter. 3rd Edition.
33. Struble, J. and Gill, R.T.* 2009. Genome-scale identification of cryptic aminoglycoside resistance genes in *Pseudomonas aeruginosa*. *PLOS-One*. Appeared on-line July, 2009.
34. Mills, T., Sandoval, N. and Gill. R.T. 2009. Lignocellulosic hydrolysate toxicity in *Escherichia coli*. *Biotechnology for Biofuels*. 2:26.
35. Warner, J., Patnaik, R., and Gill. R.T. 2009. Current genomic approaches in strain engineering. *Current Opinion in Microbiology*.12:223-230.
36. Prior, J., Shokati, T., Christians, U., and Gill.R.T.2009. Identification and characterization of a bacterial cytochrome P450 for the metabolism of diclofenac. *Applied Microbiology and Blotechnology* Appeared on line July 2009.
37. Singh, A., Lynch, M.D, and Gill, R.T. 2009. Genes restoring redox balance in fermentation deficient *E. coli*. *Metabolic Engineering*. 11:347-354.

38. Warnecke, T., Lynch, M.D., Karimpour-Fard, A., Lipscomb, M.L., and Gill, R.T. 2010. Rapid decomposition and re-engineering of a complex phenotype through genomic-scale mapping of fitness altering genes. *Metabolic Engineering*. *Appeared Jan 5, 2010 online*.
 39. Prior, J., Lynch, M.D., and Gill, R.T. 2010. Broad-host range vectors for protein expression across Gram-negative hosts. *Biotechnology and Bioengineering*. In press.
 40. Singh, A., Fard, A.K., and Gill, R.T. 2010. *rpoS* and *relA* mediated DNA repair increases DNA mutation rate in redox-impaired *Escherichia coli*. Accepted pending revisions.
 41. Warnecke, T., Lynch, M.D., Lipscomb, M.L., and Gill, R.T. 2010. Discovery of a novel 21 amino-acid peptide conferring 3-hydroxypropionic acid stress tolerance in *E. coli*. Submitted.
 42. Singh, A. and Gill, R.T. 2010. Manipulating redox and ATP balancing for improved production of succinate in *E. coli*. *Metabolic Engineering*. Submitted.
 43. Warner, J., Karimpour-Fard, A., Andrews, L, and Gill, R.T. 2010. Molecular Barcode Enabled Multiplex Recombineering. Submitted.
- *corresponding author; ¹undergraduate author

Intellectual Property

1. Gill, R.T. and Bentley, W.E. 1999. RTPCR Kit for Prokaryotic Differential Display. Patent awarded in Summer, 2004.
2. Gill, R.T., Wildt, S., and Stephanopoulos, G. 2001. A parallel gene-trait mapping method using DNA micro-arrays. Patent Pending.
3. Lynch, M. and Gill, R.T. 2004. Broad host range plasmid vectors. Patent Pending.
4. Copley, S., Dai, M. and Gill, R.T. 2004. Protoplast fusion techniques in gram-negative bacteria. Patent pending.
5. Lynch, M., Warnecke, T. and Gill, R.T. 2004. Mixed Library Parallel Gene-Trait Mapping. Patent Pending.
6. Lynch, M. and Gill, R.T. 2004. A panel of growth enhancing genes. Patent pending.
7. Lynch, M. and Gill, R.T. 2006. A novel tool for linking screens with selections. Patent Pending.
8. Warnecke, T. and Gill, R.T. 2006. Patent Pending.
9. Warnecke, T., Lynch, M., and Gill, R.T. 2008. Patent Pending.
10. Warnecke, T., Lynch, M., and Gill, R.T. 2008. Patent Pending.
11. Sandoval, N. and Gill, R.T. 2008. Methods for engineering acetate tolerance. Provisional filed May, 2008.
12. Prior, J, Christians, U. and Gill, R.T. P450 enzyme for drug modification. Provisional Patent filed February, 2009.
13. Mills, T. and Gill, R.T. 2009. Methods for engineering aldehyde tolerance. Provisional filed July, 2009.

14. Gill, R.T. and Medlin, W. 2009. Molecular biorefining approach to biofuels. Provisional filed in July, 2009.

Licenses

1. 2005. Lynch, M. and Gill, R.T. 2006. Broad host range plasmid vectors. Exclusive license granted to Lucigen, Inc., Middleton, Wisconsin.
2. 2007. Intellectual property 7 pending patents exclusively licensed to Opx Biotechnologies.

Invited Seminars (last 5 years)

1. Cargill, Inc. Biotechnology Development Center, Corporate R&D, August, 2005.
2. The Johns Hopkins University, Dept. of Chemical and Biomolecular Engineering, Oct. 2005.
3. University of Colorado Health Sciences Center, Dept. of Microbiology, January, 2006.
4. Cornell University, Department of Chemical and Biomolecular Engineering, February, 2006.
5. University of Wisconsin, Dept. of Chemical and Biomolecular Engineering, March, 2006.
6. University of Colorado, Molecular Biotechnology Initiative Symposium, May, 2006
7. University of Pennsylvania, Department of Chemical Engineering. April, 2007.
8. Colorado School of Mines. Department of Chemical Engineering. April, 2007.
9. Merck, Inc., May, 2007
10. Dupont, Inc., June, 2007
11. Genencor, Inc., June, 2007
12. University of Tennessee, Department of Chemical Engineering, October, 2007
13. Shell Oil, Exeter, United Kingdom, July, 2008.
14. Dupont, Inc. August, 2008.
15. Ecole Polytechnique Federal Lausanne (EPFL), December, 2008
16. Opx Bioproducts, March 2009.
17. Codexis, Inc. California, March 2009.
18. Joint Bioenergy Institute, Univ. California Berkeley, LBNL, Sandia Nat. Lab. December 2009
19. Chalmers University, Sweden. May 2010.

Invited National and International Presentations (last 5 years)

1. Summer, 2005. *Society for Industrial Microbiology National Meeting*. Chicago, IL.
2. Summer, 2005. *Biochemical Engineering XIV*. Harrison Hot Springs, Canada.
3. Fall, 2006. *Metabolic Engineering VI*. Amsterdam, Netherlands. (New Tools Workshop)
4. Fall, 2006. Invited PodCast for the Journal *Genetic Engineering News*.
5. January, 2007. 1st International Conference on Biomolecular Engineering. San Diego, CA.
6. October, 2007. University of Colorado Energy Event. Houston, TX.
7. May, 2008. 5th Intl. Chemical Engineering Conference of Eastern Med. Countries. Italy.
8. August, 2008. TransAtlantic Froniers in Chemistry. United Kingdom.
9. September, 2008. Metabolic Engineering VI. Mexico. Strain Engineering Workshop (presentation by J. Warner).
10. May, 2009. International Conference on Microbial Stress Tolerance, Austria.
11. September 2009. Society for General Microbiology. Edinburgh, Scotland.

Contributed National and International Conference Presentations (last 5 years)

12. Spring, 2005. American Chemical Society National Meeting. San Diego, CA. Oral presentation. Lynch, M.*, Warnecke, T. and Gill, R.T.

13. Spring, 2005 American Chemical Society National Meeting. San Diego, CA. Poster presentation. Warnecke, T.* , Lynch, M. and Gill, R.T.
14. Spring, 2005 American Chemical Society National Meeting. San Diego, CA. Poster presentation. Prior, J.* , Christians, U. and Gill, R.T.
15. Spring, 2005 American Chemical Society National Meeting. San Diego, CA. Oral presentation. Gill, R.T.*
16. Spring, 2005 American Chemical Society National Meeting. San Diego, CA. Poster presentation. Struble, J. and Gill, R.T.
17. Summer, 2005. *American Society for Microbiology Conference on Prokaryotic Development*. Vancouver, BC, Canada. Poster Presentation. Lynch, M. and Gill, R.T.
18. Summer, 2005. *Pseudomonas 2005 International Meeting*. Marseille, France. Poster Presentation. Struble, J. and Gill, R.T.
19. Summer, 2005. *Pseudomonas 2005 International Meeting*. Marseille, France. Poster Presentation. Lynch, M. and Gill, R.T.
20. Fall, 2005. *North American Cystic Fibrosis Conference*. Baltimore, MD. Poster Presentation. Struble, J. and Gill, R.T.
21. Fall, 2005. *North American Cystic Fibrosis Conference*. Baltimore, MD. Poster Presentation. Leiske, D. and Gill, R.T.
22. Fall, 2005. *American Institute of Chemical Engineering National Meeting*. Cincinnati, OH. Oral Presentation. Lynch, M. and Gill, R.T.
23. Fall, 2005. *American Institute of Chemical Engineering National Meeting*. Cincinnati, OH. Oral Presentation. Ziesman, S. and Gill, R.T.
24. Fall, 2005. *American Institute of Chemical Engineering National Meeting*. Cincinnati, OH. Oral Presentation. Bonomo, J. and Gill, R.T.
25. Fall, 2005. *American Institute of Chemical Engineering National Meeting*. Cincinnati, OH. Poster Presentation. Struble, J. and Gill, R.T.
26. Fall, 2005. *American Institute of Chemical Engineering National Meeting*. Cincinnati, OH. Poster Presentation. Warnecke, T. and Gill, R.T.
27. Fall, 2005. *American Institute of Chemical Engineering National Meeting*. Cincinnati, OH. Poster Presentation. Prior, J. and Gill, R.T.
28. Fall, 2005. *American Institute of Chemical Engineering National Meeting*. Cincinnati, OH. Poster Presentation. Mills, T., Warnecke, T., and Gill, R.T.
29. Fall, 2005. *American Institute of Chemical Engineering National Meeting*. Cincinnati, OH. Poster Presentation. Sandoval, N., Warnecke, T. and Gill, R.T.
30. Spring, 2006. *International Burkholderia cepacia working group meeting*. Ghent, Belgium. Oral Presentation. Leiske, D., Karimpour-Fard, A., and Gill, R.T.
31. Spring, 2006. *International Burkholderia cepacia working group meeting*. Ghent, Belgium. Oral Presentation. Pavel, D., Gill, R.T., Jones, A. and Mahenthiralingam, E.
32. Fall, 2006. *North American Cystic Fibrosis Foundation Annual Meeting*. Denver, CO. Poster Presentation. Pavel, D., Gill, R.T., Jones, A., and Mahenthiralingam, E.
33. Fall, 2006. *North American Cystic Fibrosis Foundation Annual Meeting*. Denver, CO. Poster Presentation. Struble, J. and Gill, R.T.
34. Fall, 2006. American Chemical Society National Meeting. San Francisco, CA. Oral presentation. Warnecke, T. and Gill, R.T.
35. Fall, 2006. American Chemical Society National Meeting. San Francisco, CA. Poster presentation. Singh, A. and Gill, R.T.
36. Fall, 2006 American Chemical Society National Meeting. San Francisco, CA. Oral presentation. Prior, J.* , Strom, T., Christians, U. and Gill, R.T.
37. Fall, 2006 American Chemical Society National Meeting. San Francisco, CA. Poster presentation. Karimpour-Fard, A., and Gill, R.T.*
38. Fall, 2006. *American Institute of Chemical Engineering National Meeting*. San Francisco, CA. Oral Presentation. Lynch, M., Mills, T. and Gill, R.T.

39. Fall, 2006. *American Institute of Chemical Engineering National Meeting*. San Francisco, CA. Oral Presentation. Lynch, M. Warnecke, T. Singh, A. and Gill, R.T.
40. Fall, 2006. *American Institute of Chemical Engineering National Meeting*. San Francisco, CA. Poster Presentation. Singh, A. and Gill, R.T.
41. Fall, 2006. *American Institute of Chemical Engineering National Meeting*. San Francisco, CA.. Poster Presentation. Warnecke, T. and Gill, R.T.
42. Fall, 2006. *American Institute of Chemical Engineering National Meeting*. San Francisco, CA.. Poster Presentation. Prior, J. and Gill, R.T.
43. Winter, 2006. *Rocky Mountain Bioinformatics Conference*. Aspen, CA. A. Karimpour Fard and Gill, R.T.
44. Spring, 2007. International B. Cepacia Working Group Meeting. Ann Arbor, MI. Pavel Drevinek¹, Zhaoping Ge², Ryan Gill³, Andrew Jones⁴, Ian Ketchell⁵ and Eshwar Mahenthiralingam¹
45. Spring, 2007. BIO World Congress on Industrial Biotechnology. Moderator. Panel on Industrial, University, Government Centers for Industrial Biotechnology Research and Training.
46. Summer, 2007. *Society for Industrial Microbiology*. Poster Presentation. T. Warnecke.
47. Summer, 2007. *Society for Industrial Microbiology*. Poster Presentation. A. Singh.
48. Summer, 2007. *Biochemical Engineering*. Quebec City, CA. Poster Presentation. Gill, R.T.
49. Fall, 2007. *American Institute of Chemical Engineering National Meeting*. Salt Lake, UT. Oral Presentation. Prior, J. , Christians, U. and Gill, R.T.
50. Fall, 2007. *American Institute of Chemical Engineering National Meeting*. Salt Lake, UT. Poster Presentation. Singh, A., Warnecke, T. and Gill, R.T.
51. 2008. CU Energy Initiative Research Symposium. Hunegnaw, S., Sandoval, N., Mills, T. and Gill, R.T. Poster Presentation.
52. 2008. NIH Leadership Training Grant Annual Meeting. Hunegnaw, S. and Gill, R.T. Oral Presentation for Hunegnaw.
53. 2008. Colorado Center for Biorefining and Biofuels Semi-Annual Meeting. Hunegnaw, S., Shede, P., Reardon, K. and Gill, R.T. Poster Presentation.
54. 2008. Colorado Center for Biorefining and Biofuels Semi-Annual Meeting. Hunegnaw, S., Shede, P., Reardon, K. and Gill, R.T. Oral Presentation.
55. 2008. Colorado Center for Biorefining and Biofuels Semi-Annual Meeting. Hunegnaw, S., Shede, P., Reardon, K. and Gill, R.T. Poster Presentation.
56. Karimpour-Fard, A., Leach, S. M., Gill, R.T. and Hunter, L., The topology of the Bacterial co-conserved protein network and its implications for predicting protein function, *Rocky Mountain Regional Bioinformatics 2008. Oral Presentation*.
57. Karimpour-Fard, A., Gill, R.T, and Hunter, L., Prediction of protein-protein interactions and function in bacteria, *NLM Informatics Training Conference 2008. Oral Presentation*.
58. Karimpour-Fard, A., Deitweiler, C., Gill, R.T, and Hunter, L., Cross-species cluster co-conservation: a new method for generating protein interaction networks, *ISMB 2008. Poster*.
59. 2008. AICHE National Meeting. Warner, J., Karimpour-Fard, A., and Gill, R.T. Oral presentation.
60. 2008. Metabolic Engineering VII. Warner, J., Karimpour-Fard, A., and Gill, R.T. Poster Presentation.
61. 2008. ACS National Meeting. Warner, J., Andrews, L., and Gill, R.T. Oral presentation.
62. 2008. C2B2 Semi-Annual Meeting. Fort Collins, CO. "Tirzah Y. Mills, Min Zhang, and Ryan T. Gill. Poster Presentation.
63. 2008. NIH Leadership Training Grant. Handke, P. and Gill, R.T. Oral Presentation.
64. 2008. CU Student Research Symposium. Sandoval, N. and Gill, R.T. Oral Presentation.
65. 2008. Society for Industrial Microbiology. Fuels and Chemicals Meeting. Sandoval, N. and Gill, R.T. Poster Presentation.
66. 2008. ACS National Meeting. Sandoval, N. and Gill, R.T. Poster Presentation.
67. 2008. AICHE National Meeting. Sandoval, N. and Gill, R.T. Oral Presentation.
68. 2008. AICHE National Meeting. Prior, J., Shokati, T., Christians, U. and Gill, R.T. Oral presentation.
69. 2008. ACS national meeting. Prior, J., Shokati, T., Christians, U. and Gill, R.T. Oral Presentation.

70. 2008. Natural Products Discovery and Production II. Prior, J., Christian, U. and Gill, R.T. Poster Presentation.
71. 2008. ASM ICAAC/IDSA Annual Meeting. Spindler, E., Hale, J. Hancock, B. and Gill, R.T. Poster Presentation.
72. 2008. SIM Biotechnology for Fuels and Chemicals. Singh, A, Price, V., and Gill, R.T. Poster Presentation.
73. 2008. ACS National Meeting. Singh, A. and Gill, R.T. Poster Presentation.
74. 2008. AIChE National Meeting. Singh, A. and Gill, R.T. Oral Presentation.
75. 2008. Metabolic Engineering VII. Warnecke. T., Lynch, M., Karimpour, A., Sandoval, N., and Gill, R.T. Poster Presentation.
76. 2009. ACS national meeting. Sandoval, N., Mills, T. and Gill, R.T. Oral Presentation.
77. 2009. ACS national meeting. Handke, P. and Gill R.T. Oral Presentation.