

Dr. Mary Goll, CURRICULUM VITAE

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Education

1998-2006 Ph.D. Columbia University, Graduate School of Arts and Sciences,
Department of Genetics and Development, New York, NY
with distinction

1994-1998 B.A. Cornell University, College of Arts and Sciences,
Biology, Department of Genetics and Development, Ithaca, NY
cum laude

Positions and Appointments

2017-present Assistant Professor, Department of Genetics
University of Georgia, Athens, GA

2010-2017 Assistant Member, Developmental Biology Program,
Memorial Sloan Kettering Cancer Center; Sloan Kettering Institute, New York, NY

2010-2017 Assistant Professor, Cell and Developmental Biology Program,
Weill Cornell Graduate School of Medical Sciences, New York, NY

Research and Professional Experience

2006-2010 Carnegie collaborative postdoctoral fellow
Carnegie Institution for Science, Baltimore, MD
Co-Mentors: Dr. Marnie Halpern and Dr. Allen Spradling

1998-2006 Ph.D. candidate
Columbia University, New York, NY
Mentor: Dr. Tim Bestor

1995-1998 Undergraduate research assistant
Boyce Thompson Institute for Plant Research, Ithaca, NY
Mentor: Dr. Robert Last

Honors and Awards

2017-present American Cancer Society Research Scholar

2012-2014 March of Dimes Basil O'Connor Scholar

2011-2014 Louis V. Gerstner, Jr. Young Investigator

2007-2010 Damon Runyon Cancer Research Postdoctoral Fellow

2006 Deans Award for Research Excellence, Columbia University

2006 Rover Award for Scholarship in Genetics and Development, Columbia University

Presentations

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| 2017 | Selected talk | Gordon Conference on Epigenetics, NH |
| 2017 | Invited speaker | Queens College, NY |
| 2017 | Selected talk | Strategic Conference of Zebrafish Investigators |
| 2016 | Invited speaker | Society for Developmental Biology, Regional Meeting |
| 2016 | Invited speaker | Weill Cornell Medical College, NY |
| 2016 | Presentation | Cold Spring Harbor Epigenetics meeting |
| 2015 | Selected plenary session talk | Strategic Conference of Zebrafish Investigators |
| 2015 | Presentation | Epigenetics Gordon Conference |

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| 2015 | Invited speaker | Columbia University, NY |
| 2013 | Invited speaker | Janelia Farm Workshop on Zebrafish Genetics |
| 2013 | Invited speaker | Epiconcept Workshop: Barcelona, Spain |
| 2013 | Invited speaker | Washington University School of Medicine |
| 2013 | Selected plenary session talk | Strategic Conference of Zebrafish Investigators |
| 2013 | Presentation | Epigenetics Gordon Conference |
| 2012 | Invited speaker | Janelia Farm Workshop on Zebrafish Genetics |
| 2011 | Selected short talk | Strategic Conference of Zebrafish Investigators |
| 2011 | Invited speaker | University of Texas, Austin |
| 2011 | Presentation | Epigenetics Gordon Conference |
| 2011 | Invited speaker | Society for Developmental Biology, Regional Meeting |
| 2009 | Invited speaker | National Institutes of Health |
| 2009 | Invited speaker | Mount Desert Island Stem Cell Symposium |
| 2008 | Invited speaker | Mount Desert Island Stem Cell Symposium |
| 2008 | Selected speaker | International Zebrafish Meeting |
| 2008 | Selected speaker | Mid-Atlantic Regional Zebrafish Meeting |

Publications

Research Articles

- Li C, Lan Y, Schwartz-Orbach L, Korol E, Tahiliani M, Evans T, **Goll MG**. (2015) Overlapping requirements for Tet2 and Tet3 in normal development and hematopoietic stem cell emergence. *Cell Reports* 12(7):1133-43.
- Majoram L, Ashley A, Deerhake ME, Bagwell J, Mankiewicz J, Cocchiaro J, Beerman R, Willer J, Katsanis N, Tobin D, Rawls J, **Goll MG**, Bagnat M. (2015) Loss of uhrf1 function results in intestinal inflammation and IBD in zebrafish. *Proceedings of the National Academy of Science U S A*. USA 112(9):2770-5.
- Subedi A, Macurak M, Gee ST, Monge E, **Goll MG**, Potter CJ, Parsons MJ, Halpern ME (2014) Adoption of the Q transcriptional regulatory system for zebrafish transgenesis. *Methods*. 66(3):433-40.
- Wang WJ, Tay HG, Soni R, Perumal GS, **Goll MG**, Macaluso FP, Asara JM, Amack JD, Bryan Tsou MF. (2013) CEP162 is an axoneme-recognition protein promoting ciliary transition zone assembly at the cilia base. *Nature Cell Biology* 5(6):591-601.
- Hu, G, **Goll MG**, and Fisher S. ΦC31 integrase mediates efficient cassette exchange in the zebrafish germline. (2011) *Developmental Dynamics* 240(9):2101-7.
- Akitake CM., Macurak M, Halpern ME and **Goll MG**. (2011) Transgenerational analysis of transcriptional silencing in zebrafish. *Developmental Biology* 352(2): 191-201.
- Feng S, Cokus SJ, Zhang X, Chen PY, Bostick M, **Goll MG**, Hetzel J, Jain J, Strauss SH, Halpern ME, Ukomadu C, Sadler KC, Pradhan S, Pellegrini M, Jacobsen SE. (2010) Conservation and divergence of methylation patterns in plants and animals. *Proceedings of the National Academy of Science U S A*. 107(19):8689-94.
- Goll MG**, Anderson RM, Stainier DY, Spradling AC, Halpern ME. (2009) Transcriptional Silencing and Reactivation in Transgenic Zebrafish. *Genetics* 182(3):747-55.
- Anderson RM, Bosch JA, **Goll MG**, Hesselson D, Dong DS, Chi D, Shin D, Shin CH, Schlegel A, Verkade H, Halpern ME, Stainier DY. (2009) Loss of Dnmt1 catalytic activity reveals multiple roles for DNA methylation during pancreas development and regeneration. *Developmental Biology* 334(1):213-23.
- Davison JM, Akitake CM, **Goll MG**, Rhee JM, Gosse N, Baier H, Halpern ME, Leach SD, Parsons MJ. (2007) Transactivation from Gal4-VP16 transgenic insertions for tissue-specific cell labeling and ablation in zebrafish. *Developmental Biology* 15;304(2):811-24.

11. **Goll MG**, Kirpekar F, Maggert K, Yoder J, Hsieh CL, Zhang X, Golic KG, Jacobsen SE, Bestor TH. (2006) Methylation of tRNA^{Asp} by the DNA methyltransferase homologue Dnmt2. *Science* 311(5759):395-8.

12. O'Neill DW, Schoetz SS, Lopez RA, Castle M, Rabinowitz L, Shor E, Krawchuk D, **Goll MG**, Renz M, Seelig M, Han S, Seong RH, Park SD, Agalioti T, Munshi N, Thanos D, Erdjument-Bromage H, Tempst P, Bank A. (2000) An ikaros-containing chromatin-remodeling complex in adult-type erythroid cells. *Molecular and Cellular Biology* 20:7572-82.

Reviews and commentaries

1. Li C., Evans T, **Goll MG**. (2016) Epigenetic Regulation of Hematopoietic Stem Cell Development. *Methods in Cell Biology* 135:431-48.

2. **Goll MG** and Halpern ME. (2011) DNA methylation in zebrafish. *Progress in Molecular Biology and Translational Science* 101:193-218.

3. Halpern ME, Rhee J, **Goll MG**, Akitake CM, Parsons M, Leach SD. (2008) Gal4/UAS transgenic tools and their application to zebrafish. *Zebrafish* 5(2):97-110.

4. **Goll MG** and Bestor TH. (2005) Eukaryotic cytosine methyltransferases. *Annual Review of Biochemistry* 74:481-514.

5. **Goll MG** and Bestor TH. (2002) Histone modification and replacement in chromatin activation. *Genes and Development* 16:1739-42.

Research Support:

Current:

National Institutes of Health/NIGMS
R01GM110092

Heterochromatin in the developing vertebrate embryo 06/2014-05/2019
Role: PI

American Cancer Society
Zbtb24 mutation and pericentromeric hypomethylation in malignancy 07/2017-06/2021
Role: PI

Completed:

Geoffrey Beene Cancer Research Center
Identifying suppressors of Tet mutation in development and disease 08/2015-07/2017
Role: PI

Tri-Institutional Stem Cell Initiative
Epigenetic regulation of hematopoietic stem cells by 5-hydroxymethylcytosine 10/2014-09/2016
Role: Co-PI with Dr. Todd Evans (Weill Cornell)

Functional Genomics Initiative
Targets of Tet2/Tet3 regulation in normal development and myeloid malignancy 04/2015-03/2016
Role: PI

March of Dimes Basil O'Connor Starter Scholar Award
DNA methylation in terminal organ differentiation 01/2012-12/2014
Role: PI

Louis V. Gerstner, Jr. Young Investigators Award
Tools for in vivo monitoring of transcriptional silencing 02/2011-01/2014
Role: PI

Damon Runyon Cancer Research Foundation Postdoctoral Fellowship
Genetic analysis of transcriptional silencing in the vertebrate brain
Role: Postdoctoral Fellow

01/2006-01/2009