

(updated September 2018)

**NICOLE KING**

Howard Hughes Medical Institute  
Department of Molecular and Cell Biology  
University of California, Berkeley  
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**Professional Experience:**

2014 – *Full Professor*  
Department of Molecular and Cell Biology, University of California, Berkeley  
2013 – *Investigator*  
Howard Hughes Medical Institute  
2010 – 2014 *Associate Professor*  
Department of Molecular and Cell Biology, University of California, Berkeley  
2003 – 2010 *Assistant Professor, University of California, Berkeley*  
Depts. of Molecular and Cell Biology and Integrative Biology, University of California, Berkeley  
2000 – 2003 *Ruth L. Kirschstein NIH–NRSA Postdoctoral Fellow*  
Department of Genetics, University of Wisconsin, Madison

**Education:**

1999 Ph.D. Biochemistry, Harvard University  
1992 B.S. Biology (awarded with High Distinction and Honors), Indiana University

**Honors and Fellowships:**

2018 – 2019 Miller Institute Professorship  
2015 Honorary Doctorate of Science, Lehigh University  
2012 – 2017 Senior Fellow, Canadian Institute for Advanced Research, Program in Integrated Microbial Biodiversity  
2007 – 2012 Scholar, Canadian Institute for Advanced Research, Program in Integrated Microbial Biodiversity  
2005 MacArthur Fellow, John D. and Catherine T. MacArthur Foundation  
2004 George A. Bartholomew Award for Research in Comparative Physiology, Society for Integrative and Comparative Biology  
2004 – 2008 Pew Scholar in the Biomedical Sciences  
1993 – 1996 National Science Foundation Graduate Research Fellow  
1992 Bachelor's degree awarded with High Distinction and Honors  
1992 Phi Beta Kappa Honor Society, Indiana University  
1992 Fernandus and Elizabeth Payne Scholarship, Indiana University  
1992 HHMI Undergraduate Initiative Research Grant, Indiana University  
1991 Indiana University Honors Division Research Grant

**Professional service:**

2019 – 2023 Physiology Summer Course Co-Director, Marine Biological Laboratories  
2018 Moore Foundation, Aquatic Symbiosis Advisory Committee  
2017 – 2021 External Expert Advisory Board member, Marie Skłodowska Curie European Innovative Training Network IGNITE  
2018,16,15,14 Physiology Summer Course Faculty, Marine Biological Laboratories

2017 – Fellows Advisory Committee, Marine Biological Laboratories  
2016 – Faculty Scholars Mentoring Board, Howard Hughes Medical Institute  
2015 – College of Reviewers, Canada Research Chairs Program  
2014 – Senior Editor, Evolution Section, *PLOS Genetics*  
2011 – 2012 – Editorial Board, *Biology Letters* (The Royal Society)  
2011,10,08,07 – Embryology Summer Course Faculty, Marine Biological Laboratories  
2010 – 2013 – Editorial Board, *Eukaryotic Cell* (ASM)  
2009 – Editorial Board, *Evo-Devo* (BioMed Central)

#### **Meetings/Symposia Organized:**

2019 – Co-organizer, EMBO|EMBL Symposium “Identity and Evolution of Cell Types”  
2017,15,11,09 – Faculty Organizer, International Choanoflagellate Workshop  
2016 – Co-organizer, Emerging Model Systems Subgroup, ASCB Annual Meeting  
2015 – Co-organizer, Janelia Conference on Evolutionary Cell Biology  
2012 – Session Organizer, “Ecology and evolution of unicellular eukaryotes,” American Society for Microbiology General Meeting  
2011 – Co-organizer, Keystone Symposium on Evolutionary Developmental Biology  
2002 – Co-organizer, BBSRC International Workshop on “Choanoflagellates and Origin of the Animal Cell”

#### **Publications:**

[View up-to-date publication list in Google Scholar->](#)

Wetzel L, Levin T, Hulett RE, Chan D, King G, Aldayafleh R, Booth D, Sigg MA, King N: G Glycosyltransferases promote development and prevent promiscuous cell aggregation in the choanoflagellate *S. rosetta*. *bioRxiv* 2018, 384453 (and in review).

Booth D, Middleton H, King N: Choanoflagellate transfection illuminates their cell biology and the ancestry of animal septins. *bioRxiv* 2018, 343111 (and in review).

Richter DJ, Fozouni P, Eisen MB, King N: Gene family conservation, innovation and loss on the animal stem lineage. *eLife* 2018, 7:e34226.

Woznica A, King N: Lessons from simple marine models on the bacterial regulation of eukaryotic development. *Current Opinion in Microbiology* 2018, 43:108-116.

Brunet T, King N: The origin of animal multicellularity and cell differentiation. *Developmental Cell* 2017, 43: 124-140.

King N, Rokas A: Embracing Uncertainty in Reconstructing Early Animal Evolution. *Current Biology* 2017, 27:R1081-R1088.

Woznica A, Gerdt P, Hulett RE, Clardy J, King N: Mating in the Closest Living Relatives of Animals Is Induced by a Bacterial Chondroitinase. *Cell* 2017, 170: 1059-1061.

Simion P, Philippe H, Baurain D, Jager M, Richter DJ, Di Franco A, Roure B, Satoh N, Quéinnec É, Ereskovsky A, Lapébie P, Corre E, Delsuc F, King N, Wörheide G, Manuel M: A Large and Consistent Phylogenomic Dataset Supports Sponges as the Sister Group to All Other Animals. *Current Biology* 2017, 27: 958-967.

Miño GL, Koehl MAR, King N and Stocker R: Finding patches in a heterogeneous aquatic environment: pH-taxis by the dispersal stage of choanoflagellates. *Limnology and Oceanography Letters* 2017, 2: 37-46.

Marron AO, Ratcliffe S, Wheeler GL, Goldstein RE, King N, Not F, De Vargas C, Richter DJ: The Evolution of Silicon Transport in Eukaryotes. *Mol Biol Evol* 2016, 33: 3226-3248.

Goldstein B and King N: The future of cell biology: emerging model organisms. *Trends in Cell Biology* 2016, 26: 818-824.

King N: From chemistry to communities. *Cell* 2016, 3: 528–529.

Booth and King N: Gene regulation in transition. *Nature* 2016. 534: 482–483.

Woznica A, Cantley AM, Beemelmans C, Freinkman E, Clardy J and King N: Bacterial lipids activate, synergize and inhibit a developmental switch in choanoflagellates. *PNAS* 2016. 113: 7894–7899.

Cantley AM, Woznica A, Beemelmans C, King N, Clardy J: Isolation and synthesis of a bacterially produced inhibitor of rosette development in choanoflagellates. *J Am Chem Soc.* 2016, 138: 4326–4329.

Anderson DP, Whitney DS, Hanson-Smith V, Woznica A, Campodonico-Burnett W, Volkman BF, King N, Prehoda KE, Thornton JW: Evolution of an ancient protein function involved in organized multicellularity in animals. *eLife* 2016, 5: e10147.

King N, Müller S: Environmental microbiology: Revisiting the physiology of microorganisms on the single cell scale. *Current Opinion in Microbiology* 2015, 25: v–vi.

Levin TC, Greaney AJ, Wetzel L, King N: The *rosetteless* gene controls development in the choanoflagellate *S. rosetta*. *eLife* 2014, 3: e04070.

Alegado RA, King N: Bacterial influences on animal origins. *Cold Spring Harb Perspect Biol* 2014, 6: a016162.

Beemelmans C, Woznica A, Alegado RA, Cantley AM, King N, Clardy J: Synthesis of the rosette-inducing factor RIF-1 and analogs. *J Am Chem Soc* 2014, 136:10210–10213.

Dayel MJ, King N: Prey capture and phagocytosis in the choanoflagellate *Salpingoeca rosetta*. *PLoS ONE* 2014, 9:e95577.

Burkhardt P, Grønborg M, McDonald K, Sultur T, Wang Q, King N: Evolutionary insights into premetazoan functions of the neuronal protein Homer. *Mol Biol Evol* 2014, 31:2342–2355.

Richter DJ, King N: The Genomic and Cellular Foundations of Animal Origins. *Annu Rev Genet* 2013, 47:527–555.

Levin TC, King N: Evidence for sex and recombination in the choanoflagellate *Salpingoeca rosetta*. *Curr Biol* 2013, 23:2176–2180.

McFall-Ngai M, Hadfield MG, Bosch TCG, Carey HV, Domazet-Loso T, Douglas AE, Dubilier N,

Eberl G, Fukami T, Gilbert SF, Hentschel U, King N, Kjelleberg S, Knoll AH, Kremer N, Mazmanian SK, Metcalf JL, Nealon K, Pierce NE, Rawls JF, Reid A, Ruby EG, Rumpho M, Sanders JG, Tautz D, Wernegreen JJ: Animals in a bacterial world, a new imperative for the life sciences. *Proc Natl Acad Sci USA* 2013, 110:3229–3236.

Sebé-Pedrós A, Burkhardt P, Sánchez-Pons N, Fairclough SR, Lang BF, King N, Ruiz-Trillo I: Insights into the origin of metazoan filopodia and microvilli. *Mol Biol Evol* 2013, 30:2013–2023.

Fairclough SR, Chen Z, Kramer E, Zeng Q, Young S, Robertson HM, Begovic E, Richter DJ, Russ C, Westbrook MJ, Manning G, Lang BF, Haas B, Nusbaum C, King N: Premetazoan genome evolution and the regulation of cell differentiation in the choanoflagellate *Salpingoeca rosetta*. *Genome Biol* 2013, 14:R15.

Alegado RA, Grabenstatter JD, Zuzow R, Morris A, Huang SY, Summons RE, King N: *Algoriphagus machipongonensis* sp. nov. co-isolated with a colonial choanoflagellate. *Int J Syst Evol Microbiol* 2013, 63:163–168.

Nichols SA, Roberts BW, Richter DJ, Fairclough SR, King N: Origin of metazoan cadherin diversity and the antiquity of the classical cadherin/ $\beta$ -catenin complex. *Proc Natl Acad Sci USA* 2012, 109:13046–13051.

Alegado RA, Brown LW, Cao S, Dermenjian RK, Zuzow R, Fairclough SR, Clardy J, King N: A bacterial sulfonolipid triggers multicellular development in the closest living relatives of animals. *elife* 2012, 1:e00013.

Young SL, Diolaiti D, Conacci-Sorrell M, Ruiz-Trillo I, Eisenman RN, King N: Premetazoan ancestry of the Myc-Max network. *Mol Biol Evol* 2011, 28:2961–2971.

Dayel MJ, Alegado RA, Fairclough SR, Levin TC, Nichols SA, McDonald K, King N: Cell differentiation and morphogenesis in the colony-forming choanoflagellate *Salpingoeca rosetta*. *Dev Biol* 2011, 357:73–82.

Alegado RA, Ferriera S, Nusbaum C, Young SK, Zeng Q, Imamovic A, Fairclough SR, King N: Complete genome sequence of *Algoriphagus* sp. PR1, bacterial prey of a colony-forming choanoflagellate. *J Bacteriol* 2011, 193:1485–1486.

Abedin M, King N: Diverse evolutionary paths to cell adhesion. *Trends Cell Biol* 2010, 20:734–742.

King N: Nature and nurture in the evolution of cell biology. *Mol Biol Cell* 2010, 21:3801–3802.

Fairclough SR, Dayel MJ, King N: Multicellular development in a choanoflagellate. *Curr Biol* 2010, 20:R875–6.

Sebé-Pedrós A, Roger AJ, Lang FB, King N, Ruiz-Trillo I: Ancient origin of the integrin-mediated adhesion and signaling machinery. *Proc Natl Acad Sci USA* 2010, 107:10142–10147.

Nichols SA, Dayel MJ, King N: Genomic, phylogenetic, and cell biological insights into metazoan origins. In *Animal Evolution: Genomes, Fossils, and Trees*. Edited by Littlewood DTJ, Telford MJ. Oxford University Press; 2009.

King N, Young SL, Abedin M, Carr M, Leadbeater BS: Isolation of single choanoflagellate cells from field samples and establishment of clonal cultures. *Cold Spring Harb Protoc* 2009, 2009:pdb.prot5147.

King N, Young SL, Abedin M, Carr M, Leadbeater BSC: Preparation of high-molecular-weight genomic DNA from *Monosiga brevicollis* and other choanoflagellates. *Cold Spring Harb Protoc* 2009, 2009:pdb.prot5153.

King N, Young SL, Abedin M, Carr M, Leadbeater BSC: Preparation of total RNA from *Monosiga brevicollis* and other choanoflagellates. *Cold Spring Harb Protoc* 2009, 2009:pdb.prot5151.

King N, Young SL, Abedin M, Carr M, Leadbeater BSC: Rapid preparation of genomic DNA from *Monosiga brevicollis* and other choanoflagellates. *Cold Spring Harb Protoc* 2009, 2009:pdb.prot5152.

King N, Young SL, Abedin M, Carr M, Leadbeater BSC: Starting and maintaining *Monosiga brevicollis* cultures. *Cold Spring Harb Protoc* 2009, 2009:pdb.prot5148.

King N, Young SL, Abedin M, Carr M, Leadbeater BSC: Visualizing the subcellular localization of actin, beta-tubulin, and DNA in *Monosiga brevicollis*. *Cold Spring Harb Protoc* 2009, 2009:pdb.prot5150.

King N, Young SL, Abedin M, Carr M, Leadbeater BSC: Separation of choanoflagellate and bacterial genomic DNA. *Cold Spring Harb Protoc* 2009, 2009:pdb.prot5154.

Grimson A, Srivastava M, Fahey B, Woodcroft BJ, Chiang HR, King N, Degan BM, Rokhsar DS, Bartel DP: Early origins and evolution of microRNAs and Piwi-interacting RNAs in animals. *Nature* 2008, 455:1193–1197.

Kodner RB, Summons RE, Pearson A, King N, Knoll AH: Sterols in a unicellular relative of the metazoans. *Proc Natl Acad Sci USA* 2008, 105:9897–9902.

Li W, Young SL, King N, Miller WT: Signaling properties of a non-metazoan Src kinase and the evolutionary history of Src negative regulation. *J Biol Chem* 2008, 283:15491–15501.

Abedin M, King N: The premetazoan ancestry of cadherins. *Science* 2008, 319:946–948.

King N, Westbrook MJ, Young SL, Kuo A, Abedin M, Chapman J, Fairclough S, Hellsten U, Isogai Y, Letunic I, Marr M, Pincus D, Putnam N, Rokas A, Wright KJ, Zuzow R, Dirks W, Good M, Goodstein D, Lemons D, Li W, Lyons JB, Morris A, Nichols S, Richter DJ, Salamov A, Sequencing JGI, Bork P, Lim WA, Manning G, et al.: The genome of the choanoflagellate *Monosiga brevicollis* and the origin of metazoans. *Nature* 2008, 451:783–788.

Ruiz-Trillo I, Burger G, Holland PWH, King N, Lang BF, Roger AJ, Gray MW: The origins of multicellularity: a multi-taxon genome initiative. *Trends Genet* 2007, 23:113–118.

Nichols SA, Dirks W, Pearse JS, King N: Early evolution of animal cell signaling and adhesion genes. *Proc Natl Acad Sci USA* 2006, 103:12451–12456.

Carniol K, Ben-Yehuda S, King N, Losick R: Genetic dissection of the sporulation protein SpoIIIE and its role in asymmetric division in *Bacillus subtilis*. *J Bacteriol* 2005, 187:3511–3520.

King N: Choanoflagellates. *Curr Biol* 2005, 15:R113–4.

King N: The unicellular ancestry of animal development. *Dev Cell* 2004, 7:313–325.

Rokas A, Williams BL, King N, Carroll SB: Genome-scale approaches to resolving incongruence in molecular phylogenies. *Nature* 2003, 425:798–804.

King N, Hittinger CT, Carroll SB: Evolution of key cell signaling and adhesion protein families predates animal origins. *Science* 2003, 301:361–363.

Rokas A, King N, Finnerty J, Carroll SB: Conflicting phylogenetic signals at the base of the metazoan tree. *Evol Dev* 2003, 5:346–359.

King N: Comparative biology and genomics join forces to decipher the diversity of life. *Genome Biol* 2002, 3:REPORTS4023.

King N, Carroll SB: A receptor tyrosine kinase from choanoflagellates: molecular insights into early animal evolution. *Proc Natl Acad Sci USA* 2001, 98:15032–15037.

King N, Dreesen O, Stragier P, Pogliano K, Losick R: Septation, dephosphorylation, and the activation of sigma(F) during sporulation in *Bacillus subtilis*. *Genes Dev* 1999, 13:1156–1167.

Widmer J, Fassihi KS, Schlichter SC, Wheeler KS, Crute BE, King N, NutileMcMenemy N, Noll WW, Daniel S, Ha J, Kim KH, Witters LA: Identification of a second human acetyl-CoA carboxylase gene. *Biochem J* 1996, 316:915–922.

Gindhart JG, King AN, Kaufman TC: Characterization of the Cis-Regulatory Region of the *Drosophila* Homeotic Gene *Sex Combs Reduced*. *Genetics* 1995, 139:781–795.

Witters LA, Widmer J, King AN, Fassihi K, Kuhajda F: Identification of Human Acetyl-Coa Carboxylase Isozymes in Tissue and in Breast-Cancer Cells. *Int J Biochem* 1994, 26:589–594.

Witters LA, Christensen A, Fassihi K, King AN, Widmer J, Quistorff B: Application of dual-digitonin-pulse perfusion to the study of hepatic mRNA zonation. *Biochem J* 1993, 294 ( Pt 3):809–812.

**Select Named or Distinguished Lectures:**

- 2017 Duke University Distinguished Investigator Seminar  
2016 NIH Director's Wednesday Afternoon Lecture  
2016 Marine Biological Laboratory Friday Evening Lecture  
2016 Fairfield Osborn Memorial Lecture, Rockefeller University  
2016 Jean and Katsuma Dan Endowed Lectureship in Embryology/Physiology, Marine Biological Laboratory  
2013 HHMI-Janelia Symposium, "Making Your Own Way: Pathbreaking Careers in Science"  
2010 Kavli Foundation Lecturer, Life Sciences Research Foundation Annual Meeting  
2009 National Academy of Sciences Symposium, Darwin Would Be Amazed: Recent Developments in Evolutionary Biology  
2007 25<sup>th</sup> Joan Wood Memorial Lecture, Biology Department, Indiana University  
2007 Linnean Tercentenary Celebration: the Evolution of the Animals. Royal Society.  
2005 Bartholomew Award Lecture, Society for Integrative and Comparative Biology  
2005 Donald Abbott Memorial Lecture, Hopkins Marine Station, Stanford University

**Complete list of Invited lectures and workshops (including named lectures above):**

- 2018 Chan Zuckerberg Biohub. Beyond the Cell Atlas: Frontiers in Cell Biology Driven by New Technology  
Signaling By Adhesion Receptors - Gordon Research Conference  
UCSF Symposium on Developmental and Stem Cell Biology  
Molecular Evolution and the Cell, SMBE Satellite Mtg  
Princeton University, Molecular Biology  
Stanford University Hopkins Marine Station  
2017 27th Solvay Conference on Physics "The Physics of Living Matter: Space, Time and Information in Biology"  
EMBO Comparative Genomics of Eukaryotic Microorganisms  
Microbial Diversity Symposium, Marine Biological Laboratory  
Society for Developmental Biology Annual Meeting  
Integrated Microbial Biodiversity, CIFAR  
Fred Hutchinson Cancer Research Center  
Duke University Distinguished Investigator Seminar  
CIFAR-GBMF Workshop in Marine Microbial Ecology and Evolution  
2016 NIH Director's Wednesday Afternoon Lecture Series  
MBL Friday Evening Lecture  
Stanford University, Frontiers in Biology Seminar  
Fairfield Osborn Memorial Lecture, Rockefeller University  
University of Washington, Biology Department  
Plant Gene Expression Center, USDA  
Stanford University, Center for Computational, Evolutionary, and Human Genomics  
Carnegie Institute of Embryology

HHMI/Janelia Director's Seminar  
 Yale University, Department of Genetics  
 Yale University, MCDB  
 MBL Katsuma Dan Memorial Lecture  
 Santa Cruz Developmental Biology meeting  
 NASA Astrobiology Institute  
 Harvard University, MCB  
 Harvard University, OEB  
 UCSF Developmental and Stem Cell Biology retreat keynote speaker  
 2015 Keynote speaker, Darwin Day Celebration, Washington University-St. Louis  
 Department of Biology, Washington University-St. Louis  
 Institute of Ecology and Evolution, University of Oregon (selected by grad students)  
 Janelia Evolutionary Cell Biology Conference  
 Vienna Biocenter  
 Max Planck Institute (MPI) for Developmental Biology, Tuebingen, Germany  
 10th Anniversary Symposium of the Center for Integrative Genomics, University of Lausanne  
 Gordon Research Conference on Molecular Mechanisms in Evolution  
 Society for Molecular Biology and Evolution annual meeting, session on "The origins of multicellularity under the light of functional genomics"  
 Faculty lecture, Physiology, Marine Biological Laboratory  
 Kavli Institute for Theoretical Physics, The Course of Cellular Evolution, Santa Barbara Advanced School of Quantitative Biology  
 EMBO/EMBL Symposium in Microbiology, Heidelberg, Germany  
 Max Planck Institute for Molecular Cell Biology and Genetics, Dresden, Germany  
 2014 Pasteur Institute, eLife sponsored seminar  
 International Titisee Conference on Microbiome-host mutualism in the shaping of host immunity, concept talk  
 Keynote Speaker, Signaling and Cellular Regulation Graduate Training Program Symposium, University of Colorado, Boulder  
 EMBO Symposium – Microbiology after the genomics revolution, Pasteur Institute  
 Faculty lecture, Physiology, Marine Biological Laboratory  
 University of Chicago, Committee on Immunology  
 Caltech, Department of Biology  
 2013 Keynote Speaker, EMBO Symposium on Comparative Genomics of Lower Eukaryotes, San Feliu de Guixols (Costa Brava), Spain  
 Honors Program Lecture Series, New York University School of Medicine, Skirball Institute



Jean and Katsuma Dan Endowed Lectureship in Embryology/Physiology,  
Marine Biological Laboratory, Woods Hole, MA

HHMI-Janelia Farm Symposium, "Making Your Own Way: Pathbreaking  
Careers in Science"

Keynote Speaker, 2013 International Choanoflagellate Workshop, Cologne,  
Germany

Princeton University, Departments of Molecular Biology and Ecology and  
Evolutionary Biology

UCSF Annual Symposium on Developmental and Stem Cell Biology, "New  
Frontiers in Developmental and Stem Cell Biology"

2012

President's Symposium on "New Model Systems for Biology". American  
Society for Cell Biology Annual Meeting, San Francisco, CA

Session on Evolutionary Cell Biology, American Society for Cell Biology  
Annual Meeting, San Francisco, CA.

Departmental Seminar, Instituto Gulbenkian de Ciencia, Oeiras, Portugal.  
American Society for Microbiology Beneficial Microbes Conference, San  
Antonio, TX.

Life Science Seminar Series, Department of Molecular Biology, Universite  
de Geneve, Switzerland

School of Life Sciences, Ecole Polytechnique Federale de Lausanne  
(EPFL), Switzerland.

Presidential Symposium, Society for Developmental Biology Annual  
Meeting, Montreal, Canada

Symposium on "Ecology and evolution of unicellular eukaryotes", San  
Francisco, CA, sponsored by American Society for Microbiology (General  
Meeting)

Plenary Session, American Society for Microbiology (General Meeting), San  
Francisco, CA

2011

MIT, Biology Department Colloquium, February 2011

Keystone Symposium on Evolutionary Developmental Biology, February  
2011

Keynote Speaker, Stowers Institute Young Investigator Research Days,  
March 2011

Keynote Speaker, University of Utah, Developmental Biology Retreat, April  
2011

Cancer and Evolution Conference, UCSF, June 2011

q-Bio Conference on Cellular Information Processing, Santa Fe Institute,  
August 2011

Invited participant, Animal-Microbe Interactions Workshop, NESCent  
Meeting, October 2011

Departmental Seminar, UC Davis, sponsored by Department of Ecology and  
Evolution.

2010

Dartmouth University, Biology Department, January 2010

AAAS Meeting, Science and Entertainment Symposium, "Science of Superheroes, February 2010  
UC Irvine, Department of Biological Chemistry, February 2010  
Keynote speaker, UCSF Developmental Biology retreat, February 2010  
UC San Diego, March 2010  
Keynote speaker, Washington University, St. Louis, Developmental Biology retreat, May 2010  
Chlamydomonas meeting, guest speaker, June 2010  
Broad Institute, Harvard/MIT, June 2010  
Santa Cruz Developmental Biology meeting, June 2010  
Evolution Institute, UC Berkeley, August 2010  
HHMI Evolution and Development Workshop, September 2010  
Kavli Foundation Lecturer, 2010 Life Sciences Research Foundation Annual Meeting

2009

Princeton University, joint EEB/Mol Bio seminar, February 2009 (Invited by Manuel Llinas)  
Duke University, Program in Genetics and Genomics, February 2009 (Invited by Paul Magwene)  
Cell LabLinks Symposium on Epithelial Biology, UCSF, March 2009 (invited by Keith Mostov)  
Harvard University, Dept. of MCB, March 2009  
Microbial Science Initiative, Harvard University, April 2009 (Invited by Colleen Cavanaugh)  
National Academy of Sciences symposium, April 2009 (Invited by Nancy Moran)  
Evolution: The Molecular Landscape, the 74th Cold Spring Harbor Symposium on Quantitative Biology, CSHL, June 2009  
Symposium on Body Plan Evolution, annual meeting of the Society for Developmental Biology, July 2009 (Invited by Marianne Bronner-Fraser)  
Gordon Research Conference, Microbial Population Biology, July 2009  
University of Wisconsin, Madison, September 2009  
EMBO Meeting, Genomics of Lower Eukaryotes, Sant Feliu de Guixols, Spain, October 2009  
Stanford Bio-X, October 2009

2008

ASCB panel on "What is Life", San Diego, CA, December 2009  
Systems Biology, Harvard Medical School, April 2008(Hosted by Marc Kirschner)  
Special Seminar Series, The Rockefeller University, April 2008 (Hosted by Cori Bargmann)  
Gordon Research Conference on "Signaling by Cell Adhesion Receptors," Mt Holyoke College (Organized by James Nelson, Stanford University)

- Integrating Evolution, Development, and Genomics conference, UC Berkeley (organized by graduate students) May 28-30, 2008.
- ICREA Conference on the Origin and Early Evolution of Metazoans, Institució Catalana de Recerca i Estudis Avançats, Barcelona, Spain, October 2008
- 2007 Department of Biology, University of Richmond, Richmond, VA (Feb. 26, 2007)  
 25<sup>th</sup> Joan Wood Memorial Lecture, Biology Department, Indiana University, Bloomington, IN (April 4, 2007)  
 Quantitative Systems Biology Group, UC Merced, Merced, CA (April 6, 2007)  
 Center for Integrative Genomics Workshop: Where did the chordate body plan come from?, Gump Field Station, Moorea, April 16-20. (Organized by Mike Levine)  
 Linnean tercentenary celebration: the evolution of the animals. June 18-19. London, England. (Hosted by the Royal Society, organized by Max Telford and Tim Littlewood.)  
 Botany Department, University of British Columbia, Vancouver, Canada. (Hosted by Patrick Keeling)
- 2006 CIFAR Integrated Microbial Biodiversity Meeting, Vancouver, Canada.  
 Friday Harbor Labs Research Symposium: Genomics and the Life Aquatic, Sept. 9-13, 2006 (Organized by Katie Peichel and Chris Amemiya).  
 AIBS Special Symposium. Macroevolution: Evolution above the species level. Oct. 14, 2006. Albuquerque, New Mexico. (Organized by American Institute of Biological Sciences and National Association of Biology Teachers.)  
 Monterey Bay Aquarium Research Institute, Moss Landing, CA (March 15, 2006)
- 2005 Microbial Biodiversity Workshop, Canadian Institute for Advanced Research, Banff, Canada (March 24, 2006)  
 Bartholomew Award Lecture, SICB Annual Meeting, San Diego, California, January 5, 2005  
 Department of Biology, Washington University, St. Louis (October 3, 2005)  
 Donald Abbott Memorial Lecture, Hopkins Marine Station, Stanford University, Pacific Grove, CA (October 14, 2005)  
 Frontiers in Interdisciplinary Bioscience Lecture, Stanford University (October 19, 2005)  
 Earth History and Paleobiology Seminar Series, Department of Earth and Planetary Sciences, Harvard University (December 6, 2005)
- 2004 Society for Developmental Biology, Alberta, Canada, July 24-28, 2004  
 Sixth Annual Beckman Scholars Symposium, Arnold and Mabel Beckman Foundation, Irvine, California, July 29 - 31, 2004  
 UC Berkeley Microbial Biology Seminar Series, October 20, 2004.

- NASA Astrobiology seminar series, University of Colorado, Boulder, April 28, 2004
- 2003 CDB Symposium: The Origin and Formation of Multicellular Systems, RIKEN Center for Developmental Biology, Kobe, Japan (March 2003)
- 2002 University Museum of Zoology, Cambridge University (April 2002)
- 1999 Departmental seminar, Biology Department, University of Massachusetts. Boston, MA (October 1999)

### Select Outreach Activities:

- ongoing Lectures in local public schools on becoming a scientist
- 2015 – Collaborating with Exploratorium staff on new exhibit: "From Cells to Self"
- 2015 Darwin Day Celebration, Keynote speaker, Institute for School Partnership, Washington University-St. Louis
- 2015 Pint of Science, Invited Speaker. Public science presentation on origin of animals
- 2014 iBioseminars on "Choanoflagellates and the Origin of Animal Multicellularity"
- 2013 Advisory board for "Nature's Greatest Inventions"
- 2010 Panelist/speaker, "Watching the Watchmen and Cheering the Heroes: The Science of Superheroes." AAAS Annual Meeting, organized by National Academy of Sciences' Science and Entertainment Exchange
- 2010 Think Evolution: Summer Institute for Science Educators
- 2006 Invited speaker at American Institute of Biological Sciences and National Association of Biology Teachers. Macroevolution: Evolution above the species level

### Select features of Nicole King and King lab research

- 2017 Nature News [Martin B \(2017\) Bacterial 'aphrodisiac' sends single-celled organism into mating frenzy. Nature doi:10.1038/nature.2017.22549](#)
- Journal [Umen J, Goodenough U, Heitman J \(2017\) Eukaryotic Sexual Reproduction Evoked "with a Little Help from My Friends." Cell 170: 1175-1183.e11.](#)
- Education resource [Famous Women Scientists](#)
- 2016 Blog [ASCB Post: John Fleischman \(2016\) Bacteria Produce Aphrodisiac That Sets Off Protozoan Mating Swarm](#)
- Book [Yong E \(2016\) I Contain Multitudes: The Microbes Within Us and a Grander View of Life](#)
- Radio [WCAI/NPR \(2016\) How bacteria may have jumpstarted the first animal life](#)
- Journal [Ravindran S \(2016\) Inner Workings: Tiny organisms could reveal how animals evolved. PNAS 113: 12889-12890](#)
- Journal [Larsen L \(2016\) Bacteria manipulate their predators through chemistry. J. Am. Chem. Soc. 138 \(17\), pp 5465–5466](#)
- 2014 Magazine [Quanta Magazine \(2014\) Where Animals Come From](#)

- Journal [Mendoza A and Ruiz-Trillo I \(2014\) Multicellularity: forward genetics for back-in-time questions. eLife 3: e05218](#)
- 2013 Journal [Umen J and Heitman J \(2013\) Evolution of sex: mating rituals of a pre-metazoan. Current Biology 23: R1006 – R1008](#)
- 2012 Magazine [Discover Magazine - Not Exactly Rocket Science \(2012\): Bacteria transform the closest living relatives of animals from single cells into colonies](#)
- Journal [Science \(2012\): Multicellularity Driven by Bacteria](#)
- Radio [National Public Radio Germany \(2012\): Die Rolle der Bakterien bei der Entstehung von Mehrzellern](#)
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