

## Rebecca D. Burdine, Ph.D.

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### Education

- 1990-1997     **Ph.D., M.Phil.**  
Department of Cell Biology  
Yale University School of Medicine  
New Haven, CT
- 1987-1990     **B.S.**  
Recombinant Genetics Technology Major, Chemistry Minor  
Graduate *Summa cum laude*  
Western Kentucky University  
Bowling Green, KY

### Research and Professional Experience

- 2013-present     **Associate Professor**
- 2003-2013     **Assistant Professor**  
Princeton University  
Department of Molecular Biology
- 1998-2002     **Postdoctoral Research**  
Left-right axis formation and patterning in the vertebrate embryo.  
Dr. Alexander F. Schier, advisor  
Developmental Genetics Program, Skirball Institute of Biomolecular Medicine  
New York University School of Medicine
- 1997-1998     **Postdoctoral Research**  
Dr. Michael J. Stern, advisor  
Department of Genetics, Yale University School of Medicine
- 1994-1997     **Graduate Research**  
Analysis of *egl-17* encoded FGF and the role of FGF signaling in *Caenorhabditis elegans* sex myoblast migration  
Dr. Michael J. Stern, thesis advisor  
Department of Genetics, Yale University School of Medicine
- 1991-1994     **Graduate Research**  
Replication of Vesicular Stomatitis Virus From a cDNA Clone  
Dr. John K. Rose, thesis advisor  
Department of Cell Biology and Pathology, Yale University School of Medicine

### Research Interests

The genetics of left-right axis determination in zebrafish; asymmetric organ morphogenesis; congenital heart defects; Primary Ciliary Dyskinesia; zebrafish pronephric development; pronephric cyst formation in zebrafish; Polycystic Kidney Disease; function of cilia in development and disease; cilia and CSF flow in idiopathic scoliosis; left-right patterning of the brain; development of the nervous system

### **Honors and Awards**

National Academies Education Mentor in the Life Sciences	2016-2017
National Academies Education Fellow in the Life Sciences	2013-2014
Appointed to the Editorial Board, <i>Cell Reports</i>	2012
Invited Speaker for Yale University Biology Alumni Reunion	2012
Invited Speaker for NICHD National Advisory Meeting as an ARRA Success Story	2011
44 <sup>th</sup> Mallinckrodt Scholar, Edward Mallinckrodt Jr. Foundation	2003
Scientist Development Award, American Heart Association	2003
Santa Cruz Developmental Biology Meeting: Poster Competition Winner	2002
American Heart Association Postdoctoral Fellowship	2001
59 <sup>th</sup> Society for Developmental Biology Meeting: Poster Competition Honorable Mention	2000
Selected speaker Yale Graduate Student Research Symposium	1997
Anna Fuller Fund Fellowship in Molecular Oncology	1997
Howard Hughes Medical Institute Predoctoral Fellow	1991
Graduate <i>Summa cum laude</i>	1990
President, Association of Undergraduate Geneticists, Western Kentucky University	1989-1990
Department of Biology Scholarship, Western Kentucky University	1989
Phi Eta Sigma Honor Society (Induction)	1988
President's Honor List (3.8-4.0 GPA), Western Kentucky University	1987-1990
Western Kentucky University Regents Scholarship	1987-1990
Florence and Basil C. Cole Scholarship, Western Kentucky University	1987

### **Professional Associations**

American Association for the Advancement of Science (AAAS)	since 2010
American Association of Undergraduate Professors (AAUP)	2003-2011
American Physiological Society (APS)	2006-2009
American Society for Cell Biology (ASCB)	since 1995
American Society of Nephrology (ASN)	2008-2015
Genetics Society of America (GSA)	since 2014
International Zebrafish Society (IZFS)	since 2015
Society for Developmental Biology (SDB)	since 1999
Society for Neuroscience (SFN)	since 2011

### **Professional Development**

The National Academies Summer Institutes on Undergraduate Education, Facilitator	2016
National Center for Faculty Diversity and Development Bootcamp	2016
The National Academies Summer Institutes on Undergraduate Education, Leader Princeton U.	2015
The National Academies Summer Institutes on Undergraduate Education, Attendee	2014
The National Academies Summer Institutes on Undergraduate Education, Participant	2013
Public Voices Thought Leadership Project, Princeton University, Participant	2011-2012
Oasis II STEM Leadership Program, WISEM Rutgers University, Participant	2009
Professional Grant Development Workshop, Grant Training Center, Participant	2007
Burroughs Wellcome Fund/HHMI Course in Scientific Management, Participant	2002

### **Teaching**

Mol 506 Cell and Developmental Biology (graduate), Princeton University	since 2014
Panel member, McGraw Center, Master Class on Lecturing, Princeton University	2012
Mol348 Cell and Developmental Biology (undergraduate), Princeton University	since 2011
Guest lecturer, McGill University, Graduate course: "Animal Models of Human Disease"	2007
Panel member, McGraw Center, Professor 101, Princeton University	2005
Mol507 Cell and Developmental Biology (graduate), Princeton University	2004 - 2013
Teaching Assistant, EMBO Practical Course: Developmental Genetics	2000

Teaching Assistant, Cell Biology/Histology (medical/graduate) Department of Cell Biology, Yale University School of Medicine	1997
Teaching Assistant, AIDS in Society (undergraduate) Department of Molecular, Cellular, and Developmental Biology, Yale University	1992
Teaching Assistant, Cell Biology/Histology (medical/graduate) Department of Cell Biology, Yale University School of Medicine	1991-1994

#### **Educational Outreach**

Mentoring Roundtable Leader, TAGC Meeting, Genetics Society of American	2016
Science Day Demonstration, Riverside Elementary School, Princeton New Jersey	2015-2016
Panel Discussion for Women in Science, Mathematics, and Engineering, Princeton University	2010
NICHD Scholars Summer Workshop Lecture on Mentoring	2010
Princeton Molecular Biology Outreach Program, TIGER Talk	2005
Princeton Molecular Biology Outreach Program, Summer Workshop Lecture	2003-2011

#### **University and Departmental Committees and Service**

Princeton University, Council for Science and Technology	since 2013
Princeton University, Institutional Animal Care and Use Committee	since 2013
Princeton University, Undergraduate Advisor and Fellow, Whitman College	since 2007
Princeton University, Committee on Discipline	2013-2016
Princeton University, Course of Study Committee	2013
Molecular Biology Department, Undergraduate Department Representative	2012-2015
Princeton University, Faculty Discussion on Gender and Academic Life at Princeton	2010
Princeton University, Liberal Arts at Princeton Panel for Parents	2010
Princeton University, Women in Science Panel for Undergraduates	2010
Molecular Biology Department, Undergraduate Department Representative	2009-2010
Princeton University, Course of Study Committee	2009-2010
Molecular Biology Department, Undergraduate Committee	2006-2015
Molecular Biology Department, Faculty Advisor for the TEM & Histology Facility	2004-2011
Princeton University, Course of Study Committee	2004-2008
Princeton University, Undergraduate Advisor and Fellow, Rockefeller College	2004-2007
Molecular Biology Department, Graduate Fellowship Committee, Head	2003-2008
Molecular Biology Department, Strategic Committee (Faculty Recruiting/Retention)	2003-2004

#### **Service on Extramural Committees, Editorial Boards and Foundations**

Board Member, International Zebrafish Society (IZFS)	since 2016
Editorial Board, <i>Cell Reports</i>	since 2012
Pitt Hopkins Syndrome Foundation, Chief Science Officer	since 2012
Faculty of 1000, Faculty Member, Developmental Biology Section	since 2008
Invited Participant for NICHD Scientific Vision Development Workshop	2011
Foundation Angelman Syndrome Therapeutics Australia, Science Advisory Board	2011-2015
NICHD Developmental Biology, Genetics, and Teratology Branch Expert Panel Member	2010
Foundation for Angelman Syndrome Therapeutics (FAST), Chief Science Officer	2008-2016
Zebrafish TILLING Consortium Advisory Board	2008-2013
Angelman Syndrome Foundation, Science Advisory Council	2007-2011
New York University Postdoctoral Council	1999-2002

#### **Study Section Service**

NIH, NICHD Initial Review Group, Developmental Biology Subcommittee	2012-2018
Proposal Review NSF IOS Animal Development & Evo/Devo Panel	2015

Review Member NSF IOS Animal Development & Evo/Devo Panel	2014
Review Member Special Emphasis Panel for Zebrafish Research Tools and Techniques	2012
Review Member NSF IOS Animal Development Panel	2012
Review Member NICHD Developmental Basis of Structural Birth Defects P01	2011
Review Member NICHD Special Emphasis Panel for Program Project Review (2 sessions)	2010
Review Member NIDDK PKD Research and Translational Core Centers	2010
Ad Hoc Member NICHD Developmental Biology Subcommittee	2009
Subject Matter Expert, Stage I Review Panel for NIH Challenge Grants	2009
Ad Hoc Member NIGMS Special Emphasis Panel - MBRS Support of Competitive Research	2007
Ad Hoc Member NIDDK Centers for Polycystic Kidney Disease Research Review	2005

#### **Other Service Activities**

External Reviewer, Developmental Biology Training Grant, U.Penn	2016
Society for Developmental Biology Mid-Atlantic meeting: Presentation Judge	2010
Society for Developmental Biology Mid-Atlantic Meeting: Presentation Judge	2009
International Zebrafish Development and Genetics Meeting: Poster Judge	2006
Society for Developmental Biology Mid-Atlantic Meeting: Poster Judge	2006
Annual Biomedical Research Conference for Minority Students (ABRCMS) University and Departmental Representative	2004
Society for Developmental Biology Poster Judge	
Annual Biomedical Research Conference for Minority Students (ABRCMS) University and Departmental Representative	2003
Society for Developmental Biology Poster Judge	

#### **Meeting Organization and Chairing Sessions**

Co-Chair Steering Committee for the 11 <sup>th</sup> NICHD Structural Birth Defects Meeting	for 2017
International Zebrafish Development and Genetics Conference Organizing Committee; and TAGC Community Representative	2016
National Academies Summer Institute on Undergraduate Education Organizer (held at Princeton University)	2015
Society for Developmental Biology, Mid-Atlantic Meeting Co-organizer	2015
Strategic Conference for Zebrafish Investigators, Organizing Committee	2015
International Zebrafish Development and Genetics Conference, Chair	2014
FASEB Summer Conference on the Biology of Cilia and Flagella, Chair	2013
MidAtlantic Regional Zebrafish (MARZ) Meeting, Co-organizer	2013
Strategic Conference for Zebrafish Investigators, Organizing Committee	2013
10 <sup>th</sup> International Zebrafish Development and Genetics Conference Session Chair - Cilia, Cell and Tissue Polarity	2012
Society for Developmental Biology, Mid-Atlantic Meeting Co-organizer	2007
Molecular Biology Departmental Retreat Chair	2004
Molecular Biology Departmental Retreat Vice-Chair	2003

#### **Reviewing Activities 2003-2015**

BBA-Gene Structure and Expression, BBSRC, Bioessays, BMC Developmental Biology, Cell, Cell Reports, Cell Research, Cellular Physiology and Biochemistry, Cold Spring Harbor Protocols, Critical Reviews in Oral and Biological Medicine, Current Biology, Development, Developmental Biology, Developmental Cell, Developmental Dynamics, Disease Models and Mechanisms, Evolution and Development, FEBS Journal, Frontiers in Bioscience, Genes & Development, Genesis, Human Molecular Genetics, Israel Science Foundation, JEZ Part B: Molecular and Developmental Evolution, Journal of the American Society of Nephrology (JASN), Kidney International, Mechanisms of Development, National Science Foundation, Nature Reviews Neuroscience, Nature Genetics, PLoS Genetics, PLoS One, Proceeding of the National Academy (PNAS), Progress in Biophysics and Molecular Biology,

Science, Swiss National Science Foundation, Trends in Genetics, U.S.-Israel Binational Science Foundation, Wellcome Trust, Zebrafish

## **Publications**

### ***Since arriving at Princeton***

Grimes DT\*, Boswell CW\*, Morante NFC\*, Henkelman RM, **Burdine RD**, and Ciruna B. (2016) Zebrafish models of idiopathic scoliosis link cerebrospinal fluid flow defects to spine curvature. *Science* 352(6291): 1341-4 PMID:27284198 *\*These authors contributed equally to this study*

Jaffe KM\*, Grimes DT\*, Schottenfeld-Roames J\*, Werner ME, Ku T-S, Kim SK, Pelliccia JL, Morante NFC, Mitchell BJ, and **Burdine RD**. (2016) *c21orf59 (kurlly)* controls both cilia motility and polarization. *Cell Reports* 14(8):1841-9 PMCID:PMC4775428 *\*These authors contributed equally to this study*

Jindal GA, Goyal Y, **Burdine RD**, Rauen KA, and Shvartsman SY. (2015) RASopathies: unraveling mechanisms with animal models. *Dis Model Mech.* **8**(8): 769-82. PMCID: PMC4527292

Kim CK, Miri A, Leung LC, Berndt A, Mourrain P, Tank DW, and **Burdine RD**. (2014) Prolonged, brain-wide expression of nuclear-localized GCaMP3 for functional circuit mapping. *Front Neural Circuits* 8:138 PMCID: PMC4244806

Hjeij R\*, Onoufriadis A\*, Watson CM\*, Slagle CE\*, Klena NT\*, Dougherty GW, Kurkowiak M, Loges NT, Diggle CP, Morante NF, Gabriel GC, Lemke KL, Li Y, Pennekamp P, Menchen T, Konert F, Marthin JK, Mans DA, Letteboer SJ, Werner C, Burgoyne T, Westermann C, Rutman A, Carr IM, O'Callaghan C, Moya E, Chung EM, UK10K Consortium, Sheridan E, Neilsen KG, Roepman R, Bartscherer K, **Burdine RD**, Lo CW, Omran H, Mitchison HM. (2014) CCDC151 Mutations Cause Primary Ciliary Dyskinesia by Disruption of the Outer Dynein Arm Docking Complex Formation. *Am J Hum Genet* **95**(3): 257-274 PMCID: PMC4157146 *\*These authors contributed equally to this study*

**Burdine RD** and Caspary T. (2013) Left-right asymmetry: lessons from Cancun. *Development* **140**(22):4465-4470 PMCID: PMC3817937

Tarkar A\*, Loges NT\*, Slagle CE\*, Francis, R, Dougherty GW, Tamayo JV, Shook B, Cantino M, Schwartz D, Jahnke C, Olbrich H, Werner C, Raidt J, Pennekamp P, Abouhamed M, Hjeij R, Kohler G, Griesse M, Li Y, Lemke K, Klena N, Liu X, Gabriel G, Tobita K, Jaspers M, Morgan LC, Shapiro AJ, Letteboer SJF, Mans DA, Carson JL, Leigh MW, Wolf WE, Chen S, Lucas JS, Onoufriadis A, Plagnol V, Schmidts M, Boldt K, UK10K, Roepman R, Zariwala M, Lo CW, Mitchison HM, Knowles MR, **Burdine RD**, LoTurco J, and Omran H. (2013) DYX1C1 is required for axonemal dynein assembly and ciliary motility. *Nature Genetics* **45**(9): 995-1003 PMCID: PMC23872636 *\*These authors contributed equally to this study*

Park CY, Wong AK, Greene CS, Rowland J, Guan Y, **Burdine RD**, and Troyanskaya O.G. (2013) Functional knowledge transfer for high-accuracy prediction of under-studied biological processes. *PLoS Comput Biol* **9**(3):e1002957 PMCID: PMC3597527

Lenhart KB, Holtzman NG, Williams JR, and **Burdine RD**. (2013) Integration of Nodal and BMP signals in the heart requires FoxH1 to create left-right differences in cell migration rates that direct cardiac asymmetry. *PLoS Genetics* **9**(1):e1003109 PMCID: PMC3554567

Panizzi JR, Becker-Heck A, Castleman VH, Al-Mutairi D, Liu Y, Loges NT, Pathak N, Austin-Tse C, Sheridan E, Schmidts M, Olbrich H, Werner C, Haffner K, Hellman N, Chodhari R, Gupta A, Kramer-Zucker A, Olale F, **Burdine RD**, Schier AF, O'Callaghan C, Chung EMK, Reinhardt R, Mitchison HM, King SM, Omran H, and Drummond IA. (2012) *CCDC103* mutations cause primary ciliary dyskinesia by disrupting assembly of ciliary dynein arms. *Nature Genetics* **44**(6):714-9 PMCID: PMC3371652

- Daily J, Nash K, Jinwal U, Golde T, Rogers J, Peters MM, **Burdine RD**, Dickey C, Banko J, and Weeber EJ. (2011) Adenovirus-mediated rescue of the cognitive defects in a mouse model for Angelman Syndrome. *PLoS One* **6**(12):e27221 PMCID: PMC3235088
- Lenhart KB, Lin SY, Titus TA, Postlethwait JH, and **Burdine RD**. (2011) Two additional midline barriers function with midline *lefty1* expression to maintain asymmetric Nodal signaling during left-right axis specification in zebrafish. *Development* **138**(20):4405-10 PMCID: PMC3177310
- McSheene JC and **Burdine RD**. (2011) Examining the establishment of cellular axes using intrinsic chirality. *Proc. Natl. Acad. Sci. USA* **108**(30):12191-2 PMCID: PMC3145736
- Slagle CE, Aoki T, and **Burdine RD**. (2011) Nodal-dependent mesendoderm specification requires the combinatorial activities of FoxH1 and Eomesodermin. *PLoS Genetics* **7**(5):e1002072 PMCID: PMC3102743
- Fogelgren B\*, Lin SY\*, Zuo X, Jaffe KM, Park KM, Reichert RJ, Bell PD, **Burdine RD**, and Lipschutz JH. (2011) The exocyst protein Sec10 interacts with polycystin-2 and knockdown causes PKD phenotypes. *PLoS Genetics* **7**(4):e1001361 PMCID: PMC3072367 \*These authors contributed equally to this study
- Sullivan-Brown J, Bisher ME, and **Burdine RD**. (2011) Embedding, serial sectioning and staining of zebrafish embryos using JB-4 resin. *Nat Protoc* **6**(1):46-55 PMCID: PMC3122109
- Miri A, Daie K, **Burdine RD**, Aksay E, and Tank DW. (2011) Regression-based identification of behavior-encoding neurons during large scale optical imaging of neural activity at cellular resolution. *J. Neurophysiol.* **105**(2):964-980 PMCID: PMC3059183
- Becker-Heck A\*, Zohn IE\*, Okabe N\*, Pollack A\*, Lenhart KB, Sullivan-Brown J, McSheene J, Loges NT, Olbrich H, Haeffner K, Fliegauf M, Horvath J, Nielsen KG, Marthin JK, Baktai G, Anderson KV, Geisler R, Niswander L, Omran H, and **Burdine RD**. (2011) The novel coiled-coil domain containing protein CCDC40 is essential for motile cilia function and left-right axis formation. *Nature Genetics* **43**(1):79-84 PMCID: PMC3132183 \*These authors contributed equally to this study
- Xu B, Feng X and **Burdine RD**. (2010) Categorical data analysis in experimental biology. *Dev Biol* **348** (1): 3-11 PMCID: PMC3021327
- Jaffe KM, Thiberge SY, Bisher ME, and **Burdine RD**. (2010) Imaging cilia in zebrafish. *Methods in Cell Biol.* **97**:415-435 PMID:20719283
- Jaffe KM and **Burdine RD**. (2010) More than maintenance? A role for IFT genes in planar cell polarity. *J. Amer. Soc. Nephrol.* **21**(8):1240-1 PMID:20651164
- Serluca FC\*, Xu B\*, Okabe N, Baker K, Lin SY, Sullivan-Brown J, Konieczkowski DJ, Jaffe KM, Bradner J, Fishman M, and **Burdine RD**. (2009) Mutations in zebrafish leucine-rich repeat-containing six-like affect cilia motility and result in pronephric cysts, but have variable effects on left-right patterning. *Development* **136**(10):1621-31 PMCID: PMC2673758 \*These authors contributed equally to this study
- Okabe N, Xu B and **Burdine RD**. (2008) Fluid dynamics in zebrafish Kupffer's vesicle. *Dev Dynamics*, **237**(12):3602-12 PMCID: PMC2829604
- Baker K, Holtzman NG, and **Burdine RD**. (2008) Direct and indirect roles for Nodal signaling in two axis conversions during asymmetric morphogenesis of the zebrafish heart. *Proc. Natl. Acad. Sci. USA* **105**(37):13924-12929 PMCID: PMC2544555
- Weber S, Taylor JC, Winyard P, Baker KF, Sullivan-Brown J, Schild R, Knüppel T, Zurowska AM, Caldas-Alfonso A, Litwin M, Emre S, Ghiggeri GM, Bakaloglu A, Mehls O, Antignac C, ESCAPE Network, Schaefer F, and **Burdine**

**RD.** (2008) SIX2 and BMP4 mutations associate with anomalous kidney development *J. Amer. Soc. Nephrol.* **19**(5):891-903 PMCID: PMC2386720

Schoetz EM, **Burdine RD**, Jülicher F, Steinberg MS, Heisenberg CP, and Foty RA. (2008) Quantitative differences in tissue surface tension influence zebrafish germ layer positioning. *HFSP Journal* **2**(1):42-56 PMCID: PMC2640996

(Article selected for the *Virtual Journal of Biological Physics Research* **15**(4), 2008)

Sullivan-Brown J, Schottenfeld J, Okabe N, Hostetter CL, Serluca FC, Thiberge SY, and **Burdine RD**. (2008) Zebrafish mutations affecting cilia motility share similar cystic phenotypes and suggest a mechanism of cyst formation that differs from *pkd2* morphants. *Dev Biol* **314**(2):261-275 PMCID: PMC2453220

Fan X, Hagdos EG, Xu B, Sias C, Kawakami K, **Burdine RD**, and Dougan ST. (2007) Nodal signals mediate interactions between the extra-embryonic and embryonic tissues in zebrafish. *Dev Biol* **310**(2):363-378 PMCID: PMC2044568

Schottenfeld J, Sullivan-Brown J, and **Burdine RD**. (2007) Zebrafish *curly up* encodes a *pkd2* ortholog that restricts left-side-specific expression *southpaw*. *Development* **134**(8):1605-1615 PMID:17360770

Lin SY and **Burdine RD**. Brain asymmetry: switching from left to right. *Current Biol* **15**(9):R343-345 (2005) PMID:15886094

Dutta S, Aspöck G, Dietrich J-E, **Burdine RD**, Schier AF, Westerfield M, and Varga ZM. (2005) *pitx3* defines a Hedgehog regulated equivalence domain for lens and anterior pituitary placode. *Development* **132**(7):1579-1590 PMID:15728669

Hostetter CL, Sullivan-Brown JL, and **Burdine RD**. (2003) The Zebrafish Pronephros: A Model for Understanding Cystic Kidney Disease. *Developmental Dynamics* **228**(3):514-522 PMID:14579389

Goodman SJ, Branda CS, Robinson MK, **Burdine RD**, and Stern MJ. (2003) Alternative splicing affecting a novel domain in the *C. elegans* EGL-15 FGF receptor confers functional specificity. *Development* **130**(16):3757-3766 PMID:1285392

#### ***Prior to arriving at Princeton***

dela Cruz JM, Bamford RN, **Burdine RD**, Roessler E, Barkovich AJ, Donnai D, Schier AF, and Muenke M. (2002) A loss-of-function mutation in the CFC domain of *TDGF-1* is associated with human forebrain defects. *Human Genetics* **110**(5):422-428 PMID:12073012

Concha ML<sup>\*</sup>, **Burdine RD**<sup>\*</sup>, Russell C, Schier AF, and Wilson SW. A Nodal signaling pathway regulates the laterality of neuroanatomical asymmetries in the zebrafish forebrain. *Neuron* **28**(2):399-409 (2000) PMID: 11144351

<sup>\*</sup>*These authors contributed equally to this study*

Bamford RN, Roessler E<sup>\*</sup>, **Burdine RD**<sup>\*</sup>, Saplakoglu U<sup>\*</sup>, dela Cruz J, Splitt M, Towbin J, Bowers P, Marino B, Schier AF, Shen MM, Muenke M, and Casey B. (2000) Loss of function mutations in the EGF-CFC gene CRYPTIC are associated with human left-right laterality defects. *Nature Genetics* **26**(3):365-369 PMID:11062482 <sup>\*</sup>*These authors contributed equally to this study*

**Burdine RD** and Schier AF. (2000) Conserved and divergent mechanisms in left-right axis formation. *Genes Dev.* **14**(7):763-776 PMID:10766733

Yan Y-T, Gritsman K, Ding J, **Burdine RD**, Corrales JD, Price SM, Talbot WS, Schier AF, Shen MM. (1999) Conserved requirement for *EGF-CFC* genes in vertebrate left-right axis formation. *Genes Dev.* **13**(19):2527-2537 PMCID: PMC317064

**Burdine RD**, Branda CS, and Stern MJ. (1998) EGL-17(FGF) expression coordinates the attraction of the migrating sex myoblasts with vulval induction in *C. elegans*. *Development* **125**(6):1083-1093 PMID:9463355

**Burdine RD**, Chen EB, Kwok SF and Stern MJ. (1997) *egl-17* encodes an invertebrate fibroblast growth factor family member required specifically for sex myoblast migration in *Caenorhabditis elegans*. *Proc. Natl. Acad. Sci. U.S.A.* **94**(6):2433-2437 PMCID: PMC20105

**Manuscripts submitted or in revision**

Chen H, Henley CL, Xu B, and **Burdine RD**. (2012) Propagating left/right asymmetry in the zebrafish embryo: one-dimensional model. *submitted arxiv.org; to be submitted to Physical Biology*