# Rebecca D Burdine

List of Publications by Year
in descending order



| 53 | 5,008 | 101543 | 138484 |
|---|---|---|---|
| papers | citations | 36 h-index | 58 g-index |

| 69 | 69 | 69 | 7007 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Loss-of-function mutations in the EGF-CFC gene CFC1 are associated with human left-right laterality defects. Nature Genetics, 2000, 26, 365-369. | 21.4 | 319 |
| 2 | The coiled-coil domain containing protein CCDC40 is essential for motile cilia function and left-right axis formation. Nature Genetics, 2011, 43, 79-84. | 21.4 | 292 |
| 3 | A Nodal Signaling Pathway Regulates the Laterality of Neuroanatomical Asymmetries in the Zebrafish Forebrain. Neuron, 2000, 28, 399-409. | 8.1 | 257 |
| 4 | DYX1C1 is required for axonemal dynein assembly and ciliary motility. Nature Genetics, 2013, 45, 995-1003. | 21.4 | 256 |
| 5 | Guidelines for morpholino use in zebrafish. PLoS Genetics, 2017, 13, e1007000. | 3.5 | 255 |
| 6 | Zebrafish models of idiopathic scoliosis link cerebrospinal fluid flow defects to spine curvature. Science, 2016, 352, 1341-1344. | 12.6 | 235 |
| 7 | CCDC103 mutations cause primary ciliary dyskinesia by disrupting assembly of ciliary dynein arms. Nature Genetics, 2012, 44, 714-719. | 21.4 | 228 |
| 8 | Conserved requirement for EGF-CFC genes in vertebrate left-right axis formation. Genes and Development, 1999, 13, 2527-2537. | 5.9 | 223 |
| 9 | SIX2 and BMP4 Mutations Associate With Anomalous Kidney Development. Journal of the American Society of Nephrology: JASN, 2008, 19, 891-903. | 6.1 | 177 |
| 10 | Conserved and divergent mechanisms in leftâ€“right axis formation. Genes and Development, 2000, 14, 763-776. | 5.9 | 159 |
| 11 | CCDC151 Mutations Cause Primary Ciliary Dyskinesia by Disruption of the Outer Dynein Arm Docking Complex Formation. American Journal of Human Genetics, 2014, 95, 257-274. | 6.2 | 149 |
| 12 | Zebrafish curly up encodes a Pkd2 ortholog that restricts left-side-specific expression of southpaw. Development (Cambridge), 2007, 134, 1605-1615. | 2.5 | 142 |
| 13 | Quantitative differences in tissue surface tension influence zebrafish germ layer positioning. HFSP Journal, 2008, 2, 42-56. | 2.5 | 132 |
| 14 | Regression-Based Identification of Behavior-Encoding Neurons During Large-Scale Optical Imaging of Neural Activity at Cellular Resolution. Journal of Neurophysiology, 2011, 105, 964-980. | 1.8 | 125 |
| 15 | Zebrafish mutations affecting cilia motility share similar cystic phenotypes and suggest a mechanism of cyst formation that differs from pkd2 morphants. Developmental Biology, 2008, 314, 261-275. | 2.0 | 119 |
| 16 | egl-17 encodes an invertebrate fibroblast growth factor family member required specifically for sex myoblast migration in Caenorhabditis elegans. Proceedings of the National Academy of Sciences of the United States of America, 1997, 94, 2433-2437. | 7.1 | 116 |
| 17 | pitx3 defines an equivalence domain for lens and anterior pituitary placode. Development (Cambridge), 2005, 132, 1579-1590. | 2.5 | 115 |
| 18 | Leftâ€“Right Patterning: Breaking Symmetry to Asymmetric Morphogenesis. Trends in Genetics, 2017, 33, 616-628. | 6.7 | 106 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Embedding, serial sectioning and staining of zebrafish embryos using JB-4 resin. Nature Protocols, 2011, 6, 46-55. | 12.0 | 95 |
| 20 | A loss-of-function mutation in the CFC domain of TDGF1 is associated with human forebrain defects. Human Genetics, 2002, 110, 422-428. | 3.8 | 93 |
| 21 | Adeno-Associated Virus-Mediated Rescue of the Cognitive Defects in a Mouse Model for Angelman Syndrome. PLoS ONE, 2011, 6, e27221. | 2.5 | 92 |
| 22 | The Exocyst Protein Sec10 Interacts with Polycystin-2 and Knockdown Causes PKD-Phenotypes. PLoS Genetics, 2011, 7, e1001361. | 3.5 | 76 |
| 23 | c21orf59/kurly Controls Both Cilia Motility and Polarization. Cell Reports, 2016, 14, 1841-1849. | 6.4 | 76 |
| 24 | Direct and indirect roles for Nodal signaling in two axis conversions during asymmetric morphogenesis of the zebrafish heart. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 13924-13929. | 7.1 | 72 |
| 25 | RASopathies: unraveling mechanisms with animal models. DMM Disease Models and Mechanisms, 2015, 8, 769-782. | 2.4 | 66 |
| 26 | Fluid dynamics in zebrafish Kupffer's vesicle. Developmental Dynamics, 2008, 237, 3602-3612. | 1.8 | 65 |
| 27 | Functional Knowledge Transfer for High-accuracy Prediction of Under-studied Biological Processes. PLoS Computational Biology, 2013, 9, e1002957. | 3.2 | 62 |
| 28 | ZNRF3 functions in mammalian sex determination by inhibiting canonical WNT signaling. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 5474-5479. | 7.1 | 62 |
| 29 | Integration of Nodal and BMP Signals in the Heart Requires FoxH1 to Create Leftâ€“Right Differences in Cell Migration Rates That Direct Cardiac Asymmetry. PLoS Genetics, 2013, 9, e1003109. | 3.5 | 60 |
| 30 | Gdf3 is required for robust Nodal signaling during germ layer formation and left-right patterning. ELife, 2017, 6, . | 6.0 | 53 |
| 31 | Nodal signals mediate interactions between the extra-embryonic and embryonic tissues in zebrafish. Developmental Biology, 2007, 310, 363-378. | 2.0 | 52 |
| 32 | Nodal-Dependent Mesendoderm Specification Requires the Combinatorial Activities of FoxH1 and Eomesodermin. PLoS Genetics, 2011, 7, e1002072. | 3.5 | 52 |
| 33 | Divergent effects of intrinsically active MEK variants on developmental Ras signaling. Nature Genetics, 2017, 49, 465-469. | 21.4 | 51 |
| 34 | 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 (Cambridge), 2009, 136, 1621-1631. | 2.5 | 50 |
| 35 | Alternative splicing affecting a novel domain in the C. elegansEGL-15 FGF receptor confers functional specificity. Development (Cambridge), 2003, 130, 3757-3766. | 2.5 | 48 |
| 36 | In vivo severity ranking of Ras pathway mutations associated with developmental disorders. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 510-515. | 7.1 | 44 |

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|---|---|---|---|
| 37 | Two additional midline barriers function with midline lefty1 expression to maintain asymmetric Nodal signaling during left-right axis specification in zebrafish. Development (Cambridge), 2011, 138, 4405-4410. | 2.5 | 41 |
| 38 | Modeling Syndromic Congenital Heart Defects in Zebrafish. Current Topics in Developmental Biology, 2017, 124, 1-40. | 2.2 | 36 |
| 39 | Zebrafish pronephros: A model for understanding cystic kidney disease. Developmental Dynamics, 2003, 228, 514-522. | 1.8 | 34 |
| 40 | Measuring What Matters to Individuals with Angelman Syndrome and Their Families: Development of a Patient-Centered Disease Concept Model. Child Psychiatry and Human Development, 2021, 52, 654-668. | 1.9 | 34 |
| 41 | Imaging Cilia in Zebrafish. Methods in Cell Biology, 2010, 97, 415-435. | 1.1 | 32 |
| 42 | Prolonged, brain-wide expression of nuclear-localized GCaMP3 for functional circuit mapping. Frontiers in Neural Circuits, 2014, 8, 138. | 2.8 | 32 |
| 43 | Optimizing photoswitchable MEK. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 25756-25763. | 7.1 | 30 |
| 44 | Categorical data analysis in experimental biology. Developmental Biology, 2010, 348, 3-11. | 2.0 | 29 |
| 45 | Bicc1 and Dicer regulate left-right patterning through post-transcriptional control of the Nodal inhibitor Dand5. Nature Communications, 2021, 12, 5482. | 12.8 | 24 |
| 46 | Left-right asymmetric heart jogging increases the robustness of dextral heart looping in zebrafish. Developmental Biology, 2020, 459, 79-86. | 2.0 | 19 |
| 47 | How activating mutations affect MEK1 regulation and function. Journal of Biological Chemistry, 2017, 292, 18814-18820. | 3.4 | 15 |
| 48 | The STARS Phase 2 Study. Neurology, 2021, 96, e1024-e1035. | 1.1 | 12 |
| 49 | Antagonistic interactions in the zebrafish midline prior to the emergence of asymmetric gene expression are important for leftâ€“right patterning. Philosophical Transactions of the Royal Society B: Biological Sciences, 2016, 371, 20150402. | 4.0 | 11 |
| 50 | Swimming toward solutions: Using fish and frogs as models for understanding <scp>RASopathies</scp>. Birth Defects Research, 2020, 112, 749-765. | 1.5 | 10 |
| 51 | Brain Asymmetry: Switching from Left to Right. Current Biology, 2005, 15, R343-R345. | 3.9 | 5 |
| 52 | Examining the establishment of cellular axes using intrinsic chirality. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 12191-12192. | 7.1 | 4 |
| 53 | More than Maintenance? A Role for IFT Genes in Planar Cell Polarity. Journal of the American Society of Nephrology: JASN, 2010, 21, 1240-1241. | 6.1 | 1 |