# Michael J Welsh

## List of Publications by Year in Descending Order



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| 283 papers | 37,632 citations | 100 h-index | 190 g-index |
| 298 ext. papers | 40,893 ext. citations | 13.4 avg, IF | 6.94 L-index |

| # | Paper | IF | Citations |
|---|---|---|---|
| 283 | Cellular and molecular architecture of submucosal glands in wild-type and cystic fibrosis pigs.. *Proceedings of the National Academy of Sciences of the United States of America*, **2022**, 119, | 11.5 | 2 |
| 282 | A Single-Cell Atlas of Large and Small Airways at Birth in a Porcine Model of Cystic Fibrosis.. *American Journal of Respiratory Cell and Molecular Biology*, **2022**, | 5.7 | 1 |
| 281 | Elastic mucus strands impair mucociliary clearance in cystic fibrosis pigs.. *Proceedings of the National Academy of Sciences of the United States of America*, **2022**, 119, e2121731119 | 11.5 | 1 |
| 280 | A pilot to assess target engagement of terazosin in Parkinson's disease. *Parkinsonism and Related Disorders*, **2021**, 94, 79-83 | 3.6 | 2 |
| 279 | Association of Glycolysis-Enhancing 1 Blockers With Risk of Developing Parkinson Disease. *JAMA Neurology*, **2021**, 78, 407-413 | 17.2 | 12 |
| 278 | Amphotericin B induces epithelial voltage responses in people with cystic fibrosis. *Journal of Cystic Fibrosis*, **2021**, 20, 540-550 | 4.1 | 5 |
| 277 | Inflammatory cytokines TNF- and IL-17 enhance the efficacy of cystic fibrosis transmembrane conductance regulator modulators. *Journal of Clinical Investigation*, **2021**, 131, | 15.9 | 3 |
| 276 | Combining Ivacaftor and Intensive Antibiotics Achieves Limited Clearance of Cystic Fibrosis Infections.. *MBio*, **2021**, e0314821 | 7.8 | 3 |
| 275 | TNF and IL-17 alkalinize airway surface liquid through CFTR and pendrin. *American Journal of Physiology - Cell Physiology*, **2020**, 319, C331-C344 | 5.4 | 7 |
| 274 | Paracellular bicarbonate flux across human cystic fibrosis airway epithelia tempers changes in airway surface liquid pH. *Journal of Physiology*, **2020**, 598, 4307-4320 | 3.9 | 6 |
| 273 | Lack of airway submucosal glands impairs respiratory host defenses. *ELife*, **2020**, 9, | 8.9 | 13 |
| 272 | Cystic fibrosis carriers are at increased risk for a wide range of cystic fibrosis-related conditions. *Proceedings of the National Academy of Sciences of the United States of America*, **2020**, 117, 1621-1627 | 11.5 | 47 |
| 271 | Acidic Submucosal Gland pH and Elevated Protein Concentration Produce Abnormal Cystic Fibrosis Mucus. *Developmental Cell*, **2020**, 54, 488-500.e5 | 10.2 | 12 |
| 270 | Small-molecule ion channels increase host defences in cystic fibrosis airway epithelia. *Nature*, **2019**, 567, 405-408 | 50.4 | 45 |
| 269 | Mucus strands from submucosal glands initiate mucociliary transport of large particles. *JCI Insight*, **2019**, 4, | 9.9 | 19 |
| 268 | Enhancing glycolysis attenuates Parkinson's disease progression in models and clinical databases. *Journal of Clinical Investigation*, **2019**, 129, 4539-4549 | 15.9 | 63 |
| 267 | Inflammatory Cytokines IL-13 or IL-17/TNF Do Not Alter the Low Paracellular Bicarbonate Permeability of Cystic Fibrosis Airway Epithelia. *FASEB Journal*, **2019**, 33, 544.15 | 0.9 | 1 |

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| 266 | Lack of cystic fibrosis transmembrane conductance regulator disrupts fetal airway development in pigs. *Laboratory Investigation*, **2018**, 98, 825-838 | 5.9 | 23 |
| 265 | Motile cilia of human airway epithelia contain hedgehog signaling components that mediate noncanonical hedgehog signaling. *Proceedings of the National Academy of Sciences of the United States of America*, **2018**, 115, 1370-1375 | 11.5 | 13 |
| 264 | Ivacaftor-induced sweat chloride reductions correlate with increases in airway surface liquid pH in cystic fibrosis. *JCI Insight*, **2018**, 3, | 9.9 | 13 |
| 263 | The vagal ganglia transcriptome identifies candidate therapeutics for airway hyperreactivity. *American Journal of Physiology - Lung Cellular and Molecular Physiology*, **2018**, 315, L133-L148 | 5.8 | 6 |
| 262 | Nominal carbonic anhydrase activity minimizes airway-surface liquid pH changes during breathing. *Physiological Reports*, **2018**, 6, e13569 | 2.6 | 7 |
| 261 | Restoring Cystic Fibrosis Transmembrane Conductance Regulator Function Reduces Airway Bacteria and Inflammation in People with Cystic Fibrosis and Chronic Lung Infections. *American Journal of Respiratory and Critical Care Medicine*, **2017**, 195, 1617-1628 | 10.2 | 191 |
| 260 | AJRCCM: 100-Year Anniversary. Progress along the Pathway of Discovery Leading to Treatment and Cure of Cystic Fibrosis. *American Journal of Respiratory and Critical Care Medicine*, **2017**, 195, 1092-1099 | 10.2 | 13 |
| 259 | Postnatal airway growth in cystic fibrosis piglets. *Journal of Applied Physiology*, **2017**, 123, 526-533 | 3.7 | 3 |
| 258 | Gel-forming mucins form distinct morphologic structures in airways. *Proceedings of the National Academy of Sciences of the United States of America*, **2017**, 114, 6842-6847 | 11.5 | 98 |
| 257 | Transient acidosis while retrieving a fear-related memory enhances its lability. *ELife*, **2017**, 6, | 8.9 | 12 |
| 256 | Electrolyte transport properties in distal small airways from cystic fibrosis pigs with implications for host defense. *American Journal of Physiology - Lung Cellular and Molecular Physiology*, **2016**, 310, L670-9 | 5.8 | 27 |
| 255 | Airway acidification initiates host defense abnormalities in cystic fibrosis mice. *Science*, **2016**, 351, 503-7 | 33.3 | 197 |
| 254 | Immunohistochemical Detection of Markers for Translational Studies of Lung Disease in Pigs and Humans. *Toxicologic Pathology*, **2016**, 44, 434-41 | 2.1 | 25 |
| 253 | Acute administration of ivacaftor to people with cystic fibrosis and a mutation reveals smooth muscle abnormalities. *JCI Insight*, **2016**, 1, e86183 | 9.9 | 24 |
| 252 | Repurposing tromethamine as inhaled therapy to treat CF airway disease. *JCI Insight*, **2016**, 1, | 9.9 | 19 |
| 251 | Lentiviral-mediated phenotypic correction of cystic fibrosis pigs. *JCI Insight*, **2016**, 1, | 9.9 | 56 |
| 250 | Acidic pH increases airway surface liquid viscosity in cystic fibrosis. *Journal of Clinical Investigation*, **2016**, 126, 879-91 | 15.9 | 160 |
| 249 | Acid-Sensing Ion Channel 1a Contributes to Airway Hyperreactivity in Mice. *PLoS ONE*, **2016**, 11, e0166089 | 3.7 | 15 |

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| 248 | gene transfer with AAV improves early cystic fibrosis pig phenotypes. *JCI Insight*, **2016**, 1, e88728 | 9.9 | 53 |
| 247 | Ivacaftor-Induced Proteomic Changes Suggest Monocyte Defects May Contribute to the Pathogenesis of Cystic Fibrosis. *American Journal of Respiratory Cell and Molecular Biology*, **2016**, 54, 594-7 | 5.7 | 26 |
| 246 | Newborn Cystic Fibrosis Pigs Have a Blunted Early Response to an Inflammatory Stimulus. *American Journal of Respiratory and Critical Care Medicine*, **2016**, 194, 845-854 | 10.2 | 25 |
| 245 | Relationships among CFTR expression, HCO3- secretion, and host defense may inform gene- and cell-based cystic fibrosis therapies. *Proceedings of the National Academy of Sciences of the United States of America*, **2016**, 113, 5382-7 | 11.5 | 47 |
| 244 | Origins of cystic fibrosis lung disease. *New England Journal of Medicine*, **2015**, 372, 351-62 | 59.2 | 368 |
| 243 | Breathing Inhibited When Seizures Spread to the Amygdala and upon Amygdala Stimulation. *Journal of Neuroscience*, **2015**, 35, 10281-9 | 6.6 | 121 |
| 242 | Glycaemic regulation and insulin secretion are abnormal in cystic fibrosis pigs despite sparing of islet cell mass. *Clinical Science*, **2015**, 128, 131-42 | 6.5 | 50 |
| 241 | Origins of cystic fibrosis lung disease. *New England Journal of Medicine*, **2015**, 372, 1574-5 | 59.2 | 94 |
| 240 | Mutating the Conserved Q-loop Glutamine 1291 Selectively Disrupts Adenylate Kinase-dependent Channel Gating of the ATP-binding Cassette (ABC) Adenylate Kinase Cystic Fibrosis Transmembrane Conductance Regulator (CFTR) and Reduces Channel Function in Primary Human Airway Epithelia. *Journal of Biological Chemistry*, **2015**, 290, 14140-53 | 5.4 | 7 |
| 239 | Medical reversal of chronic sinusitis in a cystic fibrosis patient with ivacaftor. *International Forum of Allergy and Rhinology*, **2015**, 5, 178-81 | 6.3 | 28 |
| 238 | Impaired mucus detachment disrupts mucociliary transport in a piglet model of cystic fibrosis. *Science*, **2014**, 345, 818-22 | 33.3 | 263 |
| 237 | Acid-sensing ion channels contribute to synaptic transmission and inhibit cocaine-evoked plasticity. *Nature Neuroscience*, **2014**, 17, 1083-91 | 25.5 | 128 |
| 236 | Chemosensory functions for pulmonary neuroendocrine cells. *American Journal of Respiratory Cell and Molecular Biology*, **2014**, 50, 637-46 | 5.7 | 89 |
| 235 | Neonates with cystic fibrosis have a reduced nasal liquid pH; a small pilot study. *Journal of Cystic Fibrosis*, **2014**, 13, 373-7 | 4.1 | 55 |
| 234 | Protons are a neurotransmitter that regulates synaptic plasticity in the lateral amygdala. *Proceedings of the National Academy of Sciences of the United States of America*, **2014**, 111, 8961-6 | 11.5 | 154 |
| 233 | Antibacterial properties of the CFTR potentiator ivacaftor. *Journal of Cystic Fibrosis*, **2014**, 13, 515-9 | 4.1 | 60 |
| 232 | pH modulates the activity and synergism of the airway surface liquid antimicrobials β-defensin-3 and LL-37. *Proceedings of the National Academy of Sciences of the United States of America*, **2014**, 111, 18703-8 | 11.5 | 132 |
| 231 | Assessing mucociliary transport of single particles in vivo shows variable speed and preference for the ventral trachea in newborn pigs. *Proceedings of the National Academy of Sciences of the United States of America*, **2014**, 111, 2355-60 | 11.5 | 50 |

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| 230 | Neuronal necrosis is regulated by a conserved chromatin-modifying cascade. *Proceedings of the National Academy of Sciences of the United States of America*, **2014**, 111, 13960-5 | 11.5 | 22 |
| 229 | A genomic signature approach to rescue ΔF508-cystic fibrosis transmembrane conductance regulator biosynthesis and function. *American Journal of Respiratory Cell and Molecular Biology*, **2014**, 51, 354-62 | 5.7 | 12 |
| 228 | Expression and activity of acid-sensing ion channels in the mouse anterior pituitary. *PLoS ONE*, **2014**, 9, e115310 | 3.7 | 10 |
| 227 | Computational identification of operon-like transcriptional loci in eukaryotes. *Computers in Biology and Medicine*, **2013**, 43, 738-43 | 7 | 1 |
| 226 | Fear and panic in humans with bilateral amygdala damage. *Nature Neuroscience*, **2013**, 16, 270-2 | 25.5 | 213 |
| 225 | Post-transcriptional regulation of cystic fibrosis transmembrane conductance regulator expression and function by microRNAs. *American Journal of Respiratory Cell and Molecular Biology*, **2013**, 49, 544-51 | 5.7 | 78 |
| 224 | CFTR-deficient pigs display peripheral nervous system defects at birth. *Proceedings of the National Academy of Sciences of the United States of America*, **2013**, 110, 3083-8 | 11.5 | 35 |
| 223 | ATP and AMP mutually influence their interaction with the ATP-binding cassette (ABC) adenylate kinase cystic fibrosis transmembrane conductance regulator (CFTR) at separate binding sites. *Journal of Biological Chemistry*, **2013**, 288, 27692-27701 | 5.4 | 4 |
| 222 | Loss of Acid sensing ion channel-1a and bicarbonate administration attenuate the severity of traumatic brain injury. *PLoS ONE*, **2013**, 8, e72379 | 3.7 | 34 |
| 221 | Intestinal CFTR expression alleviates meconium ileus in cystic fibrosis pigs. *Journal of Clinical Investigation*, **2013**, 123, 2685-93 | 15.9 | 96 |
| 220 | Requirements for ion and solute transport, and pH regulation during enamel maturation. *Journal of Cellular Physiology*, **2012**, 227, 1776-85 | 7 | 60 |
| 219 | Pancreatic damage in fetal and newborn cystic fibrosis pigs involves the activation of inflammatory and remodeling pathways. *American Journal of Pathology*, **2012**, 181, 499-507 | 5.8 | 43 |
| 218 | Sinus hypoplasia precedes sinus infection in a porcine model of cystic fibrosis. *Laryngoscope*, **2012**, 122, 1898-905 | 3.6 | 53 |
| 217 | Pancreatic and biliary secretion are both altered in cystic fibrosis pigs. *American Journal of Physiology - Renal Physiology*, **2012**, 303, G961-8 | 5.1 | 32 |
| 216 | Reduced airway surface pH impairs bacterial killing in the porcine cystic fibrosis lung. *Nature*, **2012**, 487, 109-13 | 50.4 | 569 |
| 215 | Simultaneous disruption of mouse ASIC1a, ASIC2 and ASIC3 genes enhances cutaneous mechanosensitivity. *PLoS ONE*, **2012**, 7, e35225 | 3.7 | 52 |
| 214 | CFTR is required for maximal transepithelial liquid transport in pig alveolar epithelia. *American Journal of Physiology - Lung Cellular and Molecular Physiology*, **2012**, 303, L152-60 | 5.8 | 24 |
| 213 | ppk23-Dependent chemosensory functions contribute to courtship behavior in Drosophila melanogaster. *PLoS Genetics*, **2012**, 8, e1002587 | 6 | 98 |

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| 212 | A microRNA network regulates expression and biosynthesis of wild-type and DeltaF508 mutant cystic fibrosis transmembrane conductance regulator. *Proceedings of the National Academy of Sciences of the United States of America*, **2012**, 109, 13362-7 | 11.5 | 100 |
| 211 | Human-mouse cystic fibrosis transmembrane conductance regulator (CFTR) chimeras identify regions that partially rescue CFTR-ΔF508 processing and alter its gating defect. *Proceedings of the National Academy of Sciences of the United States of America*, **2012**, 109, 917-22 | 11.5 | 20 |
| 210 | Demonstration of phosphoryl group transfer indicates that the ATP-binding cassette (ABC) transporter cystic fibrosis transmembrane conductance regulator (CFTR) exhibits adenylate kinase activity. *Journal of Biological Chemistry*, **2012**, 287, 36105-10 | 5.4 | 7 |
| 209 | Safety assessment of nebulized xylitol in beagle dogs. *Inhalation Toxicology*, **2012**, 24, 365-72 | 2.7 | 4 |
| 208 | Detecting activity-evoked pH changes in human brain. *Proceedings of the National Academy of Sciences of the United States of America*, **2012**, 109, 8270-3 | 11.5 | 116 |
| 207 | Dissecting the fetal development of cystic fibrosis tracheal abnormalities. *FASEB Journal*, **2012**, 26, 143.10 | 5.9 | |
| 206 | An activated immune and inflammatory response targets the pancreas of newborn pigs with cystic fibrosis. *Pancreatology*, **2011**, 11, 506-15 | 3.8 | 18 |
| 205 | Concentration of the antibacterial precursor thiocyanate in cystic fibrosis airway secretions. *Free Radical Biology and Medicine*, **2011**, 50, 1144-50 | 7.8 | 54 |
| 204 | Human cystic fibrosis airway epithelia have reduced Cl- conductance but not increased Na+ conductance. *Proceedings of the National Academy of Sciences of the United States of America*, **2011**, 108, 10260-5 | 11.5 | 95 |
| 203 | Enamel pathology resulting from loss of function in the cystic fibrosis transmembrane conductance regulator in a porcine animal model. *Cells Tissues Organs*, **2011**, 194, 249-54 | 2.1 | 15 |
| 202 | The ΔF508 mutation causes CFTR misprocessing and cystic fibrosis-like disease in pigs. *Science Translational Medicine*, **2011**, 3, 74ra24 | 17.5 | 153 |
| 201 | Cystic fibrosis transmembrane conductance regulator with a shortened R domain rescues the intestinal phenotype of CFTR-/- mice. *Proceedings of the National Academy of Sciences of the United States of America*, **2011**, 108, 2921-6 | 11.5 | 12 |
| 200 | Cystic fibrosis pigs develop lung disease and exhibit defective bacterial eradication at birth. *Science Translational Medicine*, **2010**, 2, 29ra31 | 17.5 | 356 |
| 199 | Pigs and humans with cystic fibrosis have reduced insulin-like growth factor 1 (IGF1) levels at birth. *Proceedings of the National Academy of Sciences of the United States of America*, **2010**, 107, 20571-5 | 11.5 | 85 |
| 198 | Loss of cystic fibrosis transmembrane conductance regulator function produces abnormalities in tracheal development in neonatal pigs and young children. *American Journal of Respiratory and Critical Care Medicine*, **2010**, 182, 1251-61 | 10.2 | 147 |
| 197 | Loss of anion transport without increased sodium absorption characterizes newborn porcine cystic fibrosis airway epithelia. *Cell*, **2010**, 143, 911-23 | 56.2 | 193 |
| 196 | Pathology of gastrointestinal organs in a porcine model of cystic fibrosis. *American Journal of Pathology*, **2010**, 176, 1377-89 | 5.8 | 112 |
| 195 | The Drosophila gene CheB42a is a novel modifier of Deg/ENaC channel function. *PLoS ONE*, **2010**, 5, e9395 | 3.7 | 19 |

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| 194 | Introduction of Francis M. Abboud. *Journal of Clinical Investigation*, **2010**, 120, 4155-61 | 15.9 | |
| 193 | Oxidant regulated inter-subunit disulfide bond formation between ASIC1a subunits. *Proceedings of the National Academy of Sciences of the United States of America*, **2009**, 106, 3573-8 | 11.5 | 61 |
| 192 | The cytoskeletal protein alpha-actinin regulates acid-sensing ion channel 1a through a C-terminal interaction. *Journal of Biological Chemistry*, **2009**, 284, 2697-2705 | 5.4 | 30 |
| 191 | TRPA channels distinguish gravity sensing from hearing in Johnston's organ. *Proceedings of the National Academy of Sciences of the United States of America*, **2009**, 106, 13606-11 | 11.5 | 107 |
| 190 | Acute regulation of tight junction ion selectivity in human airway epithelia. *Proceedings of the National Academy of Sciences of the United States of America*, **2009**, 106, 3591-6 | 11.5 | 51 |
| 189 | ASIC2 subunits target acid-sensing ion channels to the synapse via an association with PSD-95. *Journal of Neuroscience*, **2009**, 29, 8438-46 | 6.6 | 79 |
| 188 | The amygdala is a chemosensor that detects carbon dioxide and acidosis to elicit fear behavior. *Cell* , **2009**, 139, 1012-21 | 56.2 | 296 |
| 187 | The ion channel ASIC2 is required for baroreceptor and autonomic control of the circulation. *Neuron*, **2009**, 64, 885-97 | 13.9 | 149 |
| 186 | Motile cilia of human airway epithelia are chemosensory. *Science*, **2009**, 325, 1131-4 | 33.3 | 504 |
| 185 | Development of a porcine model of cystic fibrosis. *Transactions of the American Clinical and Climatological Association*, **2009**, 120, 149-62 | 0.9 | 55 |
| 184 | ASIC2 Subunits Target Acid-Sensing Ion Channels to the Synapse via an Association with PSD-95. *FASEB Journal*, **2009**, 23, LB94 | 0.9 | |
| 183 | Oxidant Regulated Intersubunit Disulfide Bond Formation between ASIC1a Subunits. *FASEB Journal* , **2009**, 23, LB226 | 0.9 | |
| 182 | Seizure termination by acidosis depends on ASIC1a. *Nature Neuroscience*, **2008**, 11, 816-22 | 25.5 | 267 |
| 181 | A mutation in CFTR modifies the effects of the adenylate kinase inhibitor Ap5A on channel gating. *Biophysical Journal*, **2008**, 95, 5178-85 | 2.9 | 5 |
| 180 | Disruption of the CFTR gene produces a model of cystic fibrosis in newborn pigs. *Science*, **2008**, 321, 1837-41 | 33.5 | 595 |
| 179 | Acid-Sensing Ion Channels (ASICs) and pH in Synapse Physiology **2008**, 661-681 | | 8 |
| 178 | Loss of Bardet-Biedl syndrome proteins alters the morphology and function of motile cilia in airway epithelia. *Proceedings of the National Academy of Sciences of the United States of America*, **2008**, 105, 3380-5 | 11.5 | 88 |
| 177 | Acid-sensing ion channels interact with and inhibit BK K+ channels. *Proceedings of the National Academy of Sciences of the United States of America*, **2008**, 105, 3140-4 | 11.5 | 31 |

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| 176 | The porcine lung as a potential model for cystic fibrosis. *American Journal of Physiology - Lung Cellular and Molecular Physiology*, **2008**, 295, L240-63 | 5.8 | 176 |
| 175 | Acid-sensing ion channel 3 (ASIC3) cell surface expression is modulated by PSD-95 within lipid rafts. *American Journal of Physiology - Cell Physiology*, **2008**, 295, C732-9 | 5.4 | 23 |
| 174 | Production of CFTR-null and CFTR-DeltaF508 heterozygous pigs by adeno-associated virus-mediated gene targeting and somatic cell nuclear transfer. *Journal of Clinical Investigation*, **2008**, 118, 1571-7 | 15.9 | 250 |
| 173 | Adeno-associated virus-targeted disruption of the CFTR gene in cloned ferrets. *Journal of Clinical Investigation*, **2008**, 118, 1578-83 | 15.9 | 117 |
| 172 | ASIC Channels Inhibit BK Potassium Channels by a Toxin-Like Extracellular Motif. *FASEB Journal*, **2008**, 22, 937.26 | 0.9 | |
| 171 | Acid-sensing ion channel-1 contributes to axonal degeneration in autoimmune inflammation of the central nervous system. *Nature Medicine*, **2007**, 13, 1483-9 | 50.5 | 316 |
| 170 | Drosophila hygrosensation requires the TRP channels water witch and nanchung. *Nature*, **2007**, 450, 294-8 | 50.4 | 138 |
| 169 | Role of CFTR's intrinsic adenylate kinase activity in gating of the Cl(-) channel. *Journal of Bioenergetics and Biomembranes*, **2007**, 39, 473-9 | 3.7 | 6 |
| 168 | Eukaryotic operon-like transcription of functionally related genes in Drosophila. *Proceedings of the National Academy of Sciences of the United States of America*, **2007**, 104, 222-7 | 11.5 | 39 |
| 167 | Vaccinia Virus Entry, Exit, and Interaction with Differentiated Human Airway Epithelia. *Journal of Virology*, **2007**, 81, 13278-13278 | 6.6 | 78 |
| 166 | Basolateral chloride current in human airway epithelia. *American Journal of Physiology - Lung Cellular and Molecular Physiology*, **2007**, 293, L991-9 | 5.8 | 9 |
| 165 | Processing and function of CFTR-DeltaF508 are species-dependent. *Proceedings of the National Academy of Sciences of the United States of America*, **2007**, 104, 15370-5 | 11.5 | 101 |
| 164 | Vaccinia virus entry, exit, and interaction with differentiated human airway epithelia. *Journal of Virology*, **2007**, 81, 9891-9 | 6.6 | 18 |
| 163 | Acid-sensing ion channel 1a is a postsynaptic proton receptor that affects the density of dendritic spines. *Proceedings of the National Academy of Sciences of the United States of America*, **2006**, 103, 16556-61 | 11.5 | 149 |
| 162 | erbB1 functions as a sensor of airway epithelial integrity by regulation of protein phosphatase 2A activity. *Journal of Biological Chemistry*, **2006**, 281, 1725-30 | 5.4 | 12 |
| 161 | Acid-sensing ion channels: advances, questions and therapeutic opportunities. *Trends in Neurosciences*, **2006**, 29, 578-86 | 13.3 | 459 |
| 160 | Curcumin stimulates cystic fibrosis transmembrane conductance regulator Cl- channel activity. *Journal of Biological Chemistry*, **2005**, 280, 5221-6 | 5.4 | 74 |
| 159 | Gene transfer of CFTR to airway epithelia: low levels of expression are sufficient to correct Cl- transport and overexpression can generate basolateral CFTR. *American Journal of Physiology - Lung Cellular and Molecular Physiology*, **2005**, 289, L1123-30 | 5.8 | 97 |

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| 158 | Adenylate kinase activity in ABC transporters. *Journal of Biological Chemistry*, **2005**, 280, 34385-8 | 5.4 | 14 |
| 157 | A shortened adeno-associated virus expression cassette for CFTR gene transfer to cystic fibrosis airway epithelia. *Proceedings of the National Academy of Sciences of the United States of America*, **2005**, 102, 2952-7 | 11.5 | 72 |
| 156 | ADP inhibits function of the ABC transporter cystic fibrosis transmembrane conductance regulator via its adenylate kinase activity. *Proceedings of the National Academy of Sciences of the United States of America*, **2005**, 102, 2216-20 | 11.5 | 23 |
| 155 | Lysozyme secretion by submucosal glands protects the airway from bacterial infection. *American Journal of Respiratory Cell and Molecular Biology*, **2005**, 32, 548-52 | 5.7 | 78 |
| 154 | Normal gating of CFTR requires ATP binding to both nucleotide-binding domains and hydrolysis at the second nucleotide-binding domain. *Proceedings of the National Academy of Sciences of the United States of America*, **2005**, 102, 455-60 | 11.5 | 80 |
| 153 | Extracellular acidosis increases neuronal cell calcium by activating acid-sensing ion channel 1a. *Proceedings of the National Academy of Sciences of the United States of America*, **2004**, 101, 6752-7 | 11.5 | 310 |
| 152 | Propagation of infectious human papillomavirus type 16 by using an adenovirus and Cre/LoxP mechanism. *Proceedings of the National Academy of Sciences of the United States of America*, **2004**, 101, 2094-9 | 11.5 | 47 |
| 151 | PSD-95 and Lin-7b interact with acid-sensing ion channel-3 and have opposite effects on H+- gated current. *Journal of Biological Chemistry*, **2004**, 279, 46962-8 | 5.4 | 49 |
| 150 | Overexpression of acid-sensing ion channel 1a in transgenic mice increases acquired fear-related behavior. *Proceedings of the National Academy of Sciences of the United States of America*, **2004**, 101, 3621-6 | 11.5 | 163 |
| 149 | Acid-sensing ion channel 2 (ASIC2) modulates ASIC1 H+-activated currents in hippocampal neurons. *Journal of Biological Chemistry*, **2004**, 279, 18296-305 | 5.4 | 182 |
| 148 | The ion channel ASIC1 contributes to visceral but not cutaneous mechanoreceptor function. *Gastroenterology*, **2004**, 127, 1739-47 | 13.3 | 123 |
| 147 | Neuroprotection in ischemia: blocking calcium-permeable acid-sensing ion channels. *Cell*, **2004**, 118, 687-98 | 5.82 | 816 |
| 146 | Inactivation of a Pseudomonas aeruginosa quorum-sensing signal by human airway epithelia. *Proceedings of the National Academy of Sciences of the United States of America*, **2004**, 101, 3587-90 | 11.5 | 241 |
| 145 | Large-scale gene discovery in human airway epithelia reveals novel transcripts. *Physiological Genomics*, **2004**, 17, 69-77 | 3.6 | 21 |
| 144 | Effects of C-terminal deletions on cystic fibrosis transmembrane conductance regulator function in cystic fibrosis airway epithelia. *Proceedings of the National Academy of Sciences of the United States of America*, **2003**, 100, 1937-42 | 11.5 | 55 |
| 143 | Drosophila DEG/ENaC pickpocket genes are expressed in the tracheal system, where they may be involved in liquid clearance. *Proceedings of the National Academy of Sciences of the United States of America*, **2003**, 100, 2128-33 | 11.5 | 80 |
| 142 | Acid-sensing ion channel 1 is localized in brain regions with high synaptic density and contributes to fear conditioning. *Journal of Neuroscience*, **2003**, 23, 5496-502 | 6.6 | 355 |
| 141 | ASIC3 and ASIC1 mediate FMRFamide-related peptide enhancement of H+-gated currents in cultured dorsal root ganglion neurons. *Journal of Neurophysiology*, **2003**, 89, 2459-65 | 3.2 | 74 |

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| 140 | Enhanced locomotion caused by loss of the Drosophila DEG/ENaC protein Pickpocket1. *Current Biology*, **2003**, 13, 1557-63 | 6.3 | 159 |
| 139 | Segregation of receptor and ligand regulates activation of epithelial growth factor receptor. *Nature*, **2003**, 422, 322-6 | 50.4 | 310 |
| 138 | Identification and function of thermosensory neurons in Drosophila larvae. *Nature Neuroscience*, **2003**, 6, 267-73 | 25.5 | 150 |
| 137 | An intrinsic adenylate kinase activity regulates gating of the ABC transporter CFTR. *Cell*, **2003**, 115, 837-50 | 56.2 | 44 |
| 136 | Chronic hyperalgesia induced by repeated acid injections in muscle is abolished by the loss of ASIC3, but not ASIC1. *Pain*, **2003**, 106, 229-239 | 8 | 358 |
| 135 | Contribution of Drosophila DEG/ENaC genes to salt taste. *Neuron*, **2003**, 39, 133-46 | 13.9 | 138 |
| 134 | cAMP-dependent protein kinase phosphorylation of the acid-sensing ion channel-1 regulates its binding to the protein interacting with C-kinase-1. *Proceedings of the National Academy of Sciences of the United States of America*, **2003**, 100, 2029-34 | 11.5 | 75 |
| 133 | DRASIC contributes to pH-gated currents in large dorsal root ganglion sensory neurons by forming heteromultimeric channels. *Journal of Neurophysiology*, **2002**, 87, 2835-43 | 3.2 | 79 |
| 132 | A component of innate immunity prevents bacterial biofilm development. *Nature*, **2002**, 417, 552-5 | 50.4 | 815 |
| 131 | Discovery of five conserved beta -defensin gene clusters using a computational search strategy. *Proceedings of the National Academy of Sciences of the United States of America*, **2002**, 99, 2129-33 | 11.5 | 423 |
| 130 | CFTR with a partially deleted R domain corrects the cystic fibrosis chloride transport defect in human airway epithelia in vitro and in mouse nasal mucosa in vivo. *Proceedings of the National Academy of Sciences of the United States of America*, **2002**, 99, 3093-8 | 11.5 | 44 |
| 129 | Heteromultimers of DEG/ENaC subunits form H+-gated channels in mouse sensory neurons. *Proceedings of the National Academy of Sciences of the United States of America*, **2002**, 99, 2338-43 | 11.5 | 308 |
| 128 | Mutations that change the position of the putative gamma-phosphate linker in the nucleotide binding domains of CFTR alter channel gating. *Journal of Biological Chemistry*, **2002**, 277, 2125-31 | 5.4 | 20 |
| 127 | An in vitro model of differentiated human airway epithelia. Methods for establishing primary cultures. *Methods in Molecular Biology*, **2002**, 188, 115-37 | 1.4 | 260 |
| 126 | Interaction of the synaptic protein PICK1 (protein interacting with C kinase 1) with the non-voltage gated sodium channels BNC1 (brain Na+ channel 1) and ASIC (acid-sensing ion channel). *Biochemical Journal*, **2002**, 361, 443-50 | 3.8 | 77 |
| 125 | Interaction of the synaptic protein PICK1 (protein interacting with C kinase 1) with the non-voltage gated sodium channels BNC1 (brain Na+ channel 1) and ASIC (acid-sensing ion channel). *Biochemical Journal*, **2002**, 361, 443-450 | 3.8 | 89 |
| 124 | Biochemical basis of touch perception: mechanosensory function of degenerin/epithelial Na+ channels. *Journal of Biological Chemistry*, **2002**, 277, 2369-72 | 5.4 | 98 |
| 123 | Adenovirus fiber disrupts CAR-mediated intercellular adhesion allowing virus escape. *Cell*, **2002**, 110, 789-99 | 56.2 | 301 |

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