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Key publications

Year of publication 2019

Morabito Morgane, Larcher Magalie, Cavalli Florence MG, Foray Chloé, Forget Antoine, Mirabal-Ortega Liliana, Andrianteranagna Mamy, Druillennec Sabine, Garancher Alexandra, Masliah-Planchon Julien, Leboucher Sophie, Debalkew Abel, Raso Alessandro, Delattre Olivier, Puget Stéphanie, Doz François, Taylor Michael D, Ayrault Olivier, Bourdeaut Franck, Eychène Alain & Pouponnot Celio (2019 Jul 22)

An autocrine ActivinB mechanism drives TGFb/Activin signaling in Group3medulloblastoma

EMBO Molecular Medicine : 11 : e9830 : [DOI : 10.15252/emmm.201809830](https://doi.org/10.15252/emmm.201809830)

Chia-Hsiang Chang, Marco Zanini, Hamasseh Shirvani, Jia-Shing Cheng, Hua Yu, Chih-Hsin Feng, Audrey L Mercier, Shiue-Yu Hung, Antoine Forget, Chun-Hung Wang, Sara Maria Cigna, I-Ling Lu, Wei-Yi Chen, Sophie Leboucher, Won-Jing Wang, Martial Ruat, Nathalie Spassky, Jin-Wu Tsai, Olivier Ayrault (2019 Jan 30)

Atoh1 Controls Primary Cilia Formation to Allow for SHH-Triggered Granule Neuron Progenitor Proliferation.

Developmental cell : 184-199.e5 : [DOI : S1534-5807\(18\)31085-2](https://doi.org/10.1016/j.devcel.2018.11.012)

Year of publication 2018

Forget Antoine, Martignetti Loredana, Puget Stéphanie, Calzone Laurence, Brabetz Sebastian, Picard Daniel, Montagud Arnau, Liva Stéphane, Sta Alexandre, Dingli Florent, Arras Guillaume, Rivera Jaime, Loew Damaris, Besnard Aurore, Lacombe Joëlle, Pagès Mélanie, Varlet Pascale, Dufour Christelle, Yu Hua, L. Mercier Audrey, Indersie Emilie, Chivet Anaïs, Leboucher Sophie,

Sieber Laura, Beccaria Kevin, Gombert Michael, D. Meyer Frauke, Qin Nan, Bartl Jasmin, Chavez Lukas, Okonechnikov Konstantin, Sharma Tanvi, Thatikonda Venu, Bourdeaut Franck, Pouponnot Celio, Ramaswamy Vijay, Korshunov Andrey, Borkhardt Arndt, Reifenberger Guido, Pouillet Patrick, D. Taylor Michael, Kool Marcel, M. Pfister Stefan, Kawauchi Daisuke, Barillot Emmanuel, Remke Marc, Ayrault Olivier (2018 Sep 10)

Aberrant ERBB4-SRC Signaling as a Hallmark of Group 4 Medulloblastoma Revealed by Integrative Phosphoproteomic Profiling

Cancer Cell : 34 : 379-395 : [DOI : 10.1016/j.ccell.2018.08.002](https://doi.org/10.1016/j.ccell.2018.08.002)

Alexandra Garancher, Charles Y Lin, Morgane Morabito, Wilfrid Richer, Nathalie Rocques, Magalie Larcher, Laure Bihannic, Kyle Smith, Catherine Miquel, Sophie Leboucher, Nirmitha I Herath, Fanny Dupuy, Pascale Varlet, Christine Haberler, Christine Walczak, Nadine El Tayara, Andreas Volk, Stéphanie Puget, François Doz, Olivier Delattre, Sabine Druillennec, Olivier Ayrault, Robert J Wechsler-Reya, Alain Eychène, Franck Bourdeaut, Paul A Northcott, Celio Pouponnot (2018 Mar 14)

NRL and CRX Define Photoreceptor Identity and Reveal Subgroup-Specific Dependencies in Medulloblastoma.

Cancer cell : 435-449.e6 : [DOI : 10.1016/j.ccell.2018.02.006](https://doi.org/10.1016/j.ccell.2018.02.006)

Year of publication 2017

Neuerburg A, Friesen O, Zuckermann M, Rajendran V, Gronych J, Ayrault O, Korshunov A, Jones DT, Kool M, Northcott PA, Lichter P, Cortés-Ledesma F, Pfister SM, Liu HK (2017 Mar 20)

Chd7 is indispensable for mammalian brain development through activation of a neuronal differentiation programme.

Nature Communications : 8 : 14758 : [DOI : 10.1038/ncomms14758](https://doi.org/10.1038/ncomms14758)

Year of publication 2016

Noelia Urbán, Debbie L C van den Berg, Antoine Forget, Jimena Andersen, Jeroen A A Demmers, Charles Hunt, Olivier Ayrault, François Guillemot (2016 Jul 16)

Return to quiescence of mouse neural stem cells by degradation of a proactivation protein.

Science (New York, N.Y.) : 292-5 : [DOI : 10.1126/science.aaf4802](https://doi.org/10.1126/science.aaf4802)

Zhi-Yan Han, Wilfrid Richer, Paul Fréneaux, Céline Chauvin, Carlo Lucchesi, Delphine Guillemot, Camille Grison, Delphine Lequin, Gaele Pierron, Julien Masliah-Planchon, André Nicolas, Dominique Ranchère-Vince, Pascale Varlet, Stéphanie Puget, Isabelle Janoueix-Lerosey, Olivier Ayrault, Didier Surdez, Olivier Delattre, Franck Bourdeaut (2016 Jan 29)

The occurrence of intracranial rhabdoid tumours in mice depends on temporal control of Smarcb1 inactivation.

Signaling in development and brain tumors

Nature communications : 10421 : [DOI : 10.1038/ncomms10421](https://doi.org/10.1038/ncomms10421)

A Sorana Morrissy, Livia Garzia, David J H Shih, Scott Zuyderduyn, Xi Huang, Patryk Skowron, Marc Remke, Florence M G Cavalli, Vijay Ramaswamy, Patricia E Lindsay, Salomeh Jelveh, Laura K Donovan, Xin Wang, Betty Luu, Kory Zayne, Yisu Li, Chelsea Mayoh, Nina Thiessen, Eloi Mercier, Karen L Mungall, Yusanne Ma, Kane Tse, Thomas Zeng, Karey Shumansky, Andrew J L Roth, Sohrab Shah, Hamza Farooq, Noriyuki Kijima, Borja L Holgado, John J Y Lee, Stuart Matan-Lithwick, Jessica Liu, Stephen C Mack, Alex Manno, K A Michealraj, Carolina Nor, John Peacock, Lei Qin, Juri Reimand, Adi Rolider, Yuan Y Thompson, Xiaochong Wu, Trevor Pugh, Adrian Ally, Mikhail Bilenky, Yaron S N Butterfield, Rebecca Carlsen, Young Cheng, Eric Chuah, Richard D Corbett, Noreen Dhalla, An He, Darlene Lee, Haiyan I Li, William Long, Michael Mayo, Patrick Plettner, Jenny Q Qian, Jacqueline E Schein, Angela Tam, Tina Wong, Inanc Birol, Yongjun Zhao, Claudia C Faria, José Pimentel, Sofia Nunes, Tarek Shalaby, Michael Grotzer, Ian F Pollack, Ronald L Hamilton, Xiao-Nan Li, Anne E Bendel, Daniel W Fults, Andrew W Walter, Toshihiro Kumabe, Teiji Tominaga, V Peter Collins, Yoon-Jae Cho, Caitlin Hoffman, David Lyden, Jeffrey H Wisoff, James H Garvin, Duncan S Stearns, Luca Massimi, Ulrich Schüller, Jaroslav Sterba, Karel Zitterbart, Stephanie Puget, Olivier Ayrault, Sandra E Dunn, Daniela P C Tirapelli, Carlos G Carlotti, Helen Wheeler, Andrew R Hallahan, Wendy Ingram, Tobey J MacDonald, Jeffrey J Olson, Erwin G Van Meir, Ji-Yeoun Lee, Kyu-Chang Wang, Seung-Ki Kim, Byung-Kyu Cho, Torsten Pietsch, Gudrun Fleischhack, Stephan Tippelt, Young Shin Ra, Simon Bailey, Janet C Lindsey, Steven C Clifford, Charles G Eberhart, Michael K Cooper, Roger J Packer, Maura Massimino, Maria Luisa Garre, Ute Bartels, Uri Tabori, Cynthia E Hawkins, Peter Dirks, Eric Bouffet, James T Rutka, Robert J Wechsler-Reya, William A Weiss, Lara S Collier, Adam J Dupuy, Andrey Korshunov, David T W Jones, Marcel Kool, Paul A Northcott, Stefan M Pfister, David A Largaespada, Andrew J Mungall, Richard A Moore, Nada Jabado, Gary D Bader, Steven J M Jones, David Malkin, Marco A Marra, Michael D Taylor (2016 Jan 14)

Divergent clonal selection dominates medulloblastoma at recurrence.

Nature : 351-7 : [DOI : 10.1038/nature16478](https://doi.org/10.1038/nature16478)

Year of publication 2015

Lisa Ivanschitz, Yuki Takahashi, Florence Jollivet, Olivier Ayrault, Morgane Le Bras, Hugues de Thé (2015 Nov 19)

PML IV/ARF interaction enhances p53 SUMO-1 conjugation, activation, and senescence.

Proceedings of the National Academy of Sciences of the United States of America : 14278-83 : [DOI : 10.1073/pnas.1507540112](https://doi.org/10.1073/pnas.1507540112)

Year of publication 2013

Signaling in development and brain tumors

Antoine Forget, Laure Bihannic, Sara Maria Cigna, Coralie Lefevre, Marc Remke, Monia Barnat, Sophie Dodier, Hamasseh Shirvani, Audrey Mercier, Aurore Mensah, Mickael Garcia, Sandrine Humbert, Michael D Taylor, Anna Lasorella, Olivier Ayrault (2013 Oct 22)

Shh signaling protects Atoh1 from degradation mediated by the E3 ubiquitin ligase Huwe1 in neural precursors.

Developmental cell : 649-61 : [DOI : 10.1016/j.devcel.2014.05.014](https://doi.org/10.1016/j.devcel.2014.05.014)

Year of publication 2010

Olivier Ayrault, Haotian Zhao, Frederique Zindy, Chunxu Qu, Charles J Sherr, Martine F Roussel (2010 Jun 1)

Atoh1 inhibits neuronal differentiation and collaborates with Gli1 to generate medulloblastoma-initiating cells.

Cancer research : 5618-27 : [DOI : 10.1158/0008-5472.CAN-09-3740](https://doi.org/10.1158/0008-5472.CAN-09-3740)

Year of publication 2009

Olivier Ayrault, Michael D Godeny, Christopher Dillon, Frederique Zindy, Patrick Fitzgerald, Martine F Roussel, Helen M Beere (2009 Sep 23)

Inhibition of Hsp90 via 17-DMAG induces apoptosis in a p53-dependent manner to prevent medulloblastoma.

Proceedings of the National Academy of Sciences of the United States of America : 17037-42 : [DOI : 10.1073/pnas.0902880106](https://doi.org/10.1073/pnas.0902880106)

Year of publication 2008

Danny T Huang, Olivier Ayrault, Harold W Hunt, Asad M Taherbhoy, David M Duda, Daniel C Scott, Laura A Borg, Geoffrey Neale, Peter J Murray, Martine F Roussel, Brenda A Schulman (2008 Sep 9)

E2-RING expansion of the NEDD8 cascade confers specificity to cullin modification.

Molecular cell : 483-95 : [DOI : 10.1016/j.molcel.2009.01.011](https://doi.org/10.1016/j.molcel.2009.01.011)

Haotian Zhao, Olivier Ayrault, Frederique Zindy, Jee-Hae Kim, Martine F Roussel (2008 Mar 19)

Post-transcriptional down-regulation of Atoh1/Math1 by bone morphogenic proteins suppresses medulloblastoma development.

Genes & development : 722-7 : [DOI : 10.1101/gad.1636408](https://doi.org/10.1101/gad.1636408)